



ej

Access Covers,
Grates, and Frames
Catalog 18



Table of Contents

Access Covers, Grates, and Frames — Catalog 18

Section	Sub Section	Page
Introduction		3
	Overview	4-8
Innovative Access Solutions, Features, and Options		9
	Innovative Access Solutions	10-29
	Optimized Designs	31
	Safety and Security	32-33
	Ease of Use	34
	Custom Logo Covers	35
	Coating of Castings	35
	Fabricated Products	36
	Municipal and Construction Castings Load Ratings	37
	Flow Capacities of Inlet Grates	38-39
Municipal and Construction Castings		40-159
	Manhole Frames and Covers	40-159
	Drainage Grates, Frames, and Curb Inlets	160-276
	Miscellaneous Products	278-295
	Linear Trench Grates	296-309
Master Tables of Casting Dimensions		310
	Round Manhole Base Flange	311-320
	Round Manhole Top Flange	321-324
	Watertite Base Flange	324-327
	Watertite Top Flange	328
	Watertite Hatch	329
	Frost Proof	329
	Gasket Seal	330
	Square and Rectangular Covers	330-332
	Curb Inlets	333-336
	Catch Basins	337-340
	Drainage Tables	341-350
	Cross Reference Guide	351-362
Additional Information		364
	Additional Products Lines	365-370
	Buy American Provisions	371
	Suggested Specification	372
Index		374-380
	ejco.com	381

Access Covers, Grates, and Frames

Catalog 18



One Company. Many Solutions.

EJ is a family-owned company that has grown into a global supplier of infrastructure access solutions. Along the way, EJ acquired the strengths and talents of several reputable companies throughout the U.S. and Canada.

EJ customers can expect a robust portfolio of products and services designed to meet their specific needs—all backed by a legacy built on trust and reliability. Our ability to leverage the largest range of access solutions allows us to bring you more solutions with a focus on ergonomics, security and safety.

In addition, our castings meet Federal and State transportation departments and individual customer specifications throughout North America. This Access Covers, Grates, and Frames catalog contains products such as manhole frames and covers, drainage frames and grates, curb inlets, and trench products. A listing of available Individual product catalogs can be viewed in the Additional Information section (pages 365-370).

We Are EJ

EJ is the leader in the design, manufacture and distribution of access solutions for water, sewer, drainage, telecommunications and utility networks worldwide.

EJ offers the broadest range of high-quality infrastructure access solutions. Our distribution coverage continues to expand into new markets. As an entrepreneurial family-owned company, we have a long, successful heritage of meeting change with innovation.

Since our founding in 1883, we have grown by providing access solutions to meet the demands of the world’s growing infrastructure. Fueled by innovation, our design, manufacturing, and distribution processes continue to evolve—creating solutions that provide an unparalleled customer experience.

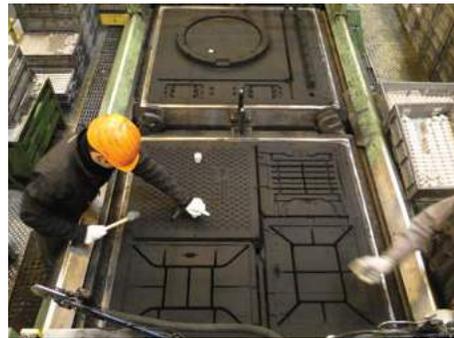
EJ is a family-owned company that has a long history of fostering strong customer relationships. These relationships are supported with personal contact from company representatives, a complete offering of product literature, a comprehensive web site (ejco.com), trade show exhibits, as well as seminars and training opportunities. All these services help to provide customers with the product information required for successful projects.

Wherever you are, EJ provides access solutions that adhere to the local specifications in a timely and competitive manner. We also work with our customers to produce access solutions to meet their specialized requirements. Our sales staff around the world understand the unique needs of your market.

Our people: our core strength. While working together, employees use their expertise, knowledge, and ability to achieve positive results. Core values at EJ include safety and security, honesty and integrity, environmental responsibility, respect for others, quality and excellence, and social responsibility. These core values are imbedded into our culture and are practiced daily throughout the organization.

Our state-of-the-art manufacturing plants employ world class machinery, systems, and processes to produce specified products efficiently and on time.

Wherever you are, whatever your specific requirement might be, EJ has the best access solutions for your infrastructure project.



Product Range

EJ offers a comprehensive portfolio of products and services, including municipal and construction castings, fabricated products, water distribution solutions, and other infrastructure access solutions.

Quality Manufacturing

Integrating technology, lean processes and over a century of experience in crafting metal castings and fabrications, keeps our facilities performing at peak efficiencies.

Distribution Network

Access solution products, including municipal and construction castings, are available worldwide at our internal stocking locations and from our extensive network of distribution partners.

A Legacy is Cast

The EJ legacy dates back to 1883 when William E. Malpass and his father-in-law Richard W. Round established a foundry on the shores of Lake Charlevoix, in the town of East Jordan, Michigan, USA. This foundry was called Round and Malpass Foundry and originally produced cast parts for the lumber industry, machinery, ships, agricultural equipment and railroads. In 1886, William's brother, James, joined the business and the company was renamed East Jordan Iron Works.

In the 1920s, when the lumbering era came to a close, the company welcomed the second generation to the business and expanded into new markets allowing continued success in changing times. Production shifted to street castings, water works valves, fire hydrants and various industrial castings.

Through World War II the foundry produced castings for the war effort. In the 1950s, semi-automation was introduced into the foundry.

During the 1960s, the third generation converted the foundry to an automated high-pressure molding line. By integrating automatic sand processing and mechanized casting handling systems, the company was operating the largest automated molding line in the United States and maximized production capabilities.

Since the late 1980s, the business has been led by the fourth generation descendants of the Malpass family. They have transformed the Midwest business into an international leader of providing access solutions to infrastructure systems.

Beginning in the 1990's, acquisitions throughout the United States allowed the company to expand product lines, sales offices, distribution capabilities, and customer services across North America. In 2001, a new foundry was built in Oklahoma providing additional capacity to service markets in the United States, as well as



William E. Malpass (standing back right, next to window) with employees during the 1920s.

Central and South America. Today, the company provides a full line of access solution products for the infrastructure systems of municipalities, utility companies, airport and port authorities, and private companies. Products include manhole covers and frames, catch basin and curb inlet grates and frames, trench grates, and tree grates; all produced in gray or ductile cast iron, fabricated steel or aluminum, or composites. In addition, the company provides products for water supply systems including fire hydrants and valves, valve and service boxes, and various other water supply products. The fifth generation of the Malpass family began joining the company in the late 1990's, continuing the strong family commitment to the company's success.

In the early 2000s, East Jordan Iron Works began turning its attention to expansion in other parts of the world, with the acquisition of Cavanagh Foundry in Ireland (2000), Norinco in France (2004), McCoy Construction Castings in Canada (2006) and HaveStock in Australia (2010).

In 2012, East Jordan Iron Works and its affiliated companies began doing business using the same name and brand, EJ. One global name and brand, supported by a single mission, vision, and set of values has unified the company. This action leverages all company resources to improve internal operations, as well as provide superior product offerings and services to its valued customers. EJ supplies products to infrastructure projects in 6 of the 7 continents.

EJ continues to be 100% owned by descendants of William E. Malpass, and members of the family continue to be active in managing the business. The fourth and fifth generation remain dedicated to maintaining the company's long-established culture and values, setting strategies and priorities allowing EJ to remain one of the most stable, progressive, well-tooled manufacturing companies in the world. The corporate headquarters is located in East Jordan, Michigan.

Product Lines

Street Castings

- Manhole Frames and Covers
- Curb Inlets and Frames
- Utility Castings
- Airport and Port Authority Castings
- Tree Grates
- Trench Grates
- Drainage Grates
- DURALAST® Detectable Warning Plates



Fabricated Products

- Grating
- Riser Rings
- INFRA-RISER® Adjustment Risers
- Aluminum Access Hatches
- Custom Fabrications



Water Products

- WaterMaster® Fire Hydrants
- FlowMaster® RW Gate Valves
- Valve Boxes
- Meter Boxes

Innovative Access Solutions

- Captive Hinge Grates/Covers
- ERGO® and ERGO® XL Access Assemblies
- Ductile Hinged Hatch Access Assemblies
- 5624 Heavy Duty Hinged Grates
- SELFLEVEL® Access Assemblies
- REVOLUTION® Access Assemblies
- ERMATIC® Modular Covers
- MULTILEAF™ Hinged Covers
- CAMPRESSION® Access Assemblies
- Composite Access Solutions



Innovative Features

- LOCKEO® Security Feature
- Mechanical Strut Lift Assist
- Cam Lock
- EON LOCK® Bolting
- EPIC® Pick Bar
- MPIC® Multi-tool Pick Bar



Capabilities

Service

- Employees with localized knowledge throughout the world
- On-site assistance
- Seminars and technical presentations
- Communicate new product innovations
- Assistance with specification process

Innovative Use of Technology

- Electronic invoicing and EDI transactions
- ejco.com—comprehensive product database with advanced search and browsing capabilities
- Electronic certification of materials provided upon request
- CAD and PDF drawings available electronically

Quality Manufacturing

- Product research and development
- Commitment to reinvestment
- North America ISO 9001 certified facilities
- Europe ISO 9001, ISO 14001, OHSAS 18001 certified facilities
- Australia ISO 9001 certified facilities

Foundry Facilities

- East Jordan, Michigan
- Ardmore, Oklahoma
- Picardie/St. Crepin, France

Fabrication Facilities

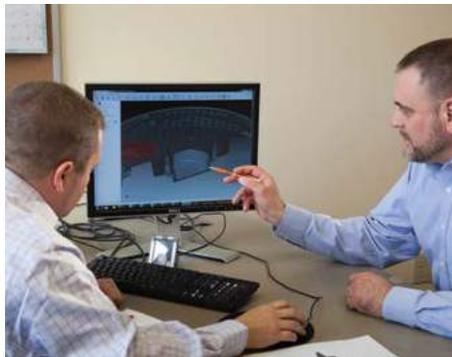
- Birr, Ireland
- Youngstown, Ohio
- Cicero, New York
- Tooele, Utah
- Ardennes/Bogny sur Meuse, France
- Geebung/Queensland, Australia
- Boppard, Germany

Water Products Manufacturing

- East Jordan, Michigan

Distribution

- Delivering products quickly and smoothly worldwide
- Stocking branch locations throughout U.S., Canada, Europe, and Australia
- Distribution centers located in Michigan, Oklahoma, Ireland, United Kingdom, France, Germany, and Australia



Environmentally Friendly

EJ is committed to continuous environmental improvement. Our castings contain over 85% recycled content and our foundries meet some of the most stringent environmental regulations in the world.

MACT Standards

Our foundries meet the Environmental Protection Agency's new air quality Maximum Achievable Control Technology (MACT) standards. The MACT rules require stack testing along with additional record keeping and reporting on several air pollution control systems.

Reclaimed Sand and Foundry Sand

Over 90% of our green sand is reclaimed daily and reused in our molding process. Foundry sands are recycled for use in cement production at nearby facilities.

Reuse

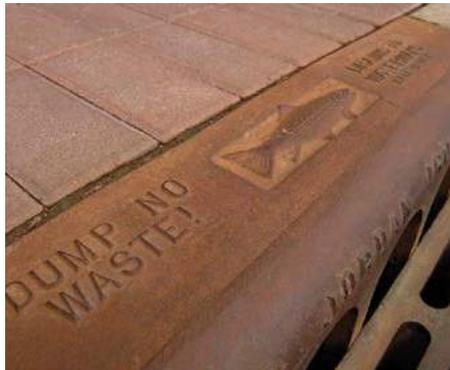
One of the best ways to reduce any environmental impact is to dispose of less waste. Heated air once lost to the environment is now captured and reused in the melting process, significantly reducing energy consumption.

Universal Waste

EJ participates in the safe management of all wastes. Paper, plastic, cardboard and numerous universal wastes, including computers, lamps and batteries, are collected and properly recycled.

Awards:

[Emmet County Recycler of the Year 2012](#)
[Charlevoix County Recycler of the Year 2007](#)



Messaging

Environmentally friendly messaging helps protect our waterways. Castings read "Dump No Waste! Drains to Waterways" accompanied by a fish image. These permanently cast messages and environmentally friendly designs serve as an enduring reminder against dumping into our waterways.



Recycled Tires

Recycled tires make up the majority of our INFRA-RISER® multi-purpose rubber composite adjustment risers. Boasting 92% recycled content, this environmentally friendly product also reduces unwanted storm water infiltration into sanitary sewer systems.



Scrap Metal

Thousands of tons of scrap metals, that otherwise may be strewn across the countryside or dumped in landfills, are recycled annually and turned into usable infrastructure products. Products produced at our foundries are 100% recyclable. [Post-consumer and post-industrial scrap metals are recycled into castings that build your infrastructure.](#)



Slag

EJ makes use of the by-products from the melt process whenever possible. One of these by-products, referred to as "slag", is known to other industries as "calcium stabilizer" because of its high calcium content and lack of metallic compounds. It is reused in other industries to replace fine aggregate in products such as asphalt and concrete. During harsh winter months, county road commissions use this for sanding roads to improve vehicle traction.

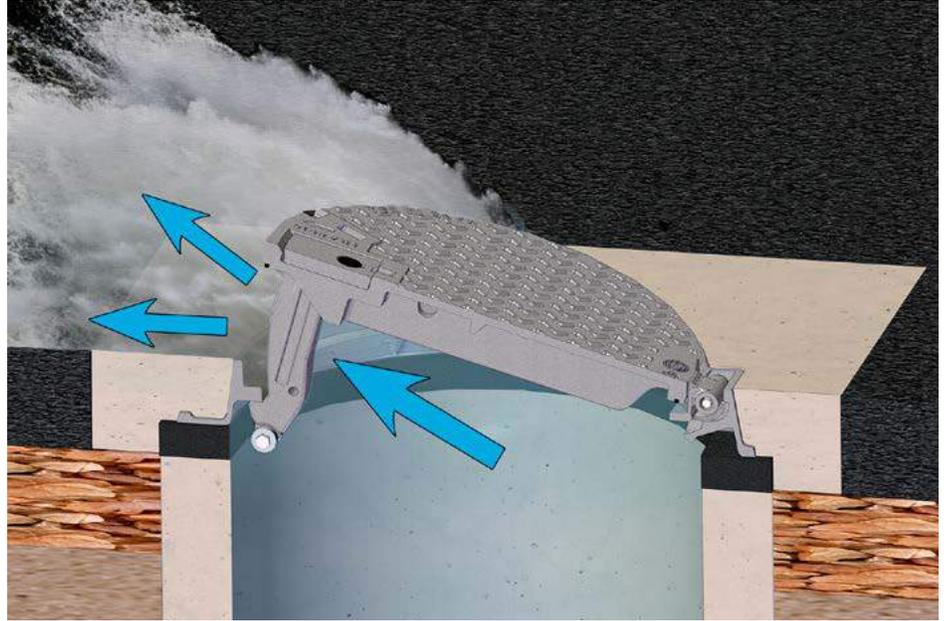
Innovative Access Solutions



STORMSURGE® ACCESS ASSEMBLY

In areas with flash-flooding or tidal concerns, manhole covers can become an unexpected concern for water systems and the general public. In the event of a major storm surge, the underground water pressure can be so powerful that it can force a cast iron manhole cover open and dislodge it during the event. This creates a hazard for both motorists and pedestrians, and it can leave an empty hole where the manhole cover once was.

EJ has developed a manhole access assembly to solve this problem. During a storm surge or backflow event, the cover is allowed to lift up to 16 degrees, enabling water to flow out and relieve the pressure. The locking arm and hinge restrain the cover, and allow it to return to the seated position once the surcharge subsides.



During a major rain or tidal event, the water pressure can be powerful enough to “push up” and dislodge a manhole cover, creating a hazard for the public and a serious concern for municipalities. EJ has developed a manhole access assembly specifically to combat this situation, by venting pressure and restraining the cover to the frame. As the surcharge subsides, the cover returns to the seated position.

Standard Features

- Heavy duty
- Ductile iron
- Cover permanently attached to frame
- Non-slip surface
- Safety catch at 90 degrees to prevent unintended closure
- Patented design features
- Made in the USA

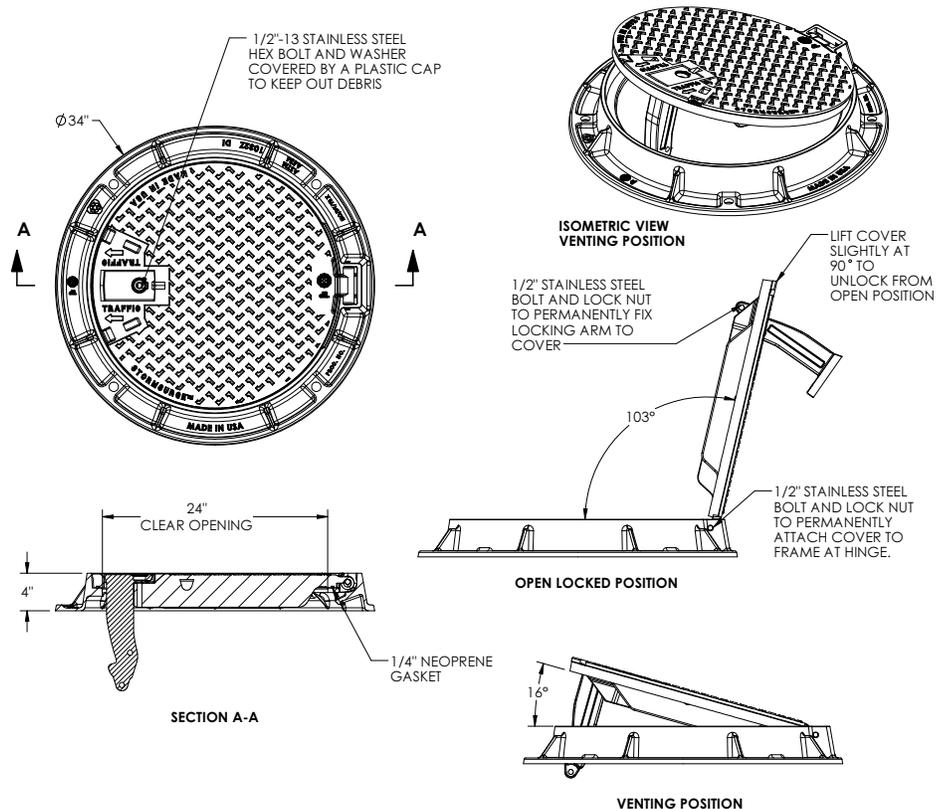
Options

- Solid or vented covers
- Custom logo covers
- Special lettered covers
- Security bolt for controlled access and theft deterrence



Illustrating the STORMSURGE® Access Assembly in the closed position.

U.S. PATENT 8,714,867 and 8,784,000



Illustrating 00103250A01. Contact your EJ Sales Representative for additional sizes and lettering options.

Benefits of Hinged Manhole Assemblies

Functionality

- Ergonomics—Cover easily opens for access. Also works great in situations where a cover can't be dragged out of the way due to space restrictions or the elevation of the access point.
- Time Savings—For secured covers, users don't have to spend time moving/finding the right cover orientation on the frame to re-bolt the cover.

Safety

- Resting Open Cover—Hinge design allows cover to rest in an upright and open position for clear access. The cover also acts as a visible barrier to one side of the structure.
- Safety Catch—Safety catch helps prevent the cover from inadvertently closing.*

Security

- One-Point Security—Connecting one side to the frame via the hinge, only one security option is needed to secure the cover, simplifying locking/unlocking the structure during service.
- Range of Security Options—Standard bolting can keep the cover secured to the frame. Upgrading locks and special security bolting can deter theft.

EJ offers a wide range of hinged manhole solutions. Please use this table below for highlights and comparisons between our hinged manhole product lines.

Hinged Manhole Assembly Comparison

Product	ERGO® ACCESS ASSEMBLY	ERGO® XL ACCESS ASSEMBLY	CAPTIVE HINGE	HINGECO® FRAME AND COVER
				
Clear Opening	24" and 28"	30" and 36"	24"	24"
Frame Height	4" (for 24" clear opening) 6" (for 24" clear opening) 7" (for 24" clear opening) 7" (for 28" clear opening)	4 1/2" (for 30" clear opening) 5 1/2" (for 30" clear opening) 6" (for 36" clear opening)	4"	4" bottom flange—round 4" bottom flange—square 6" top flange
Hinge Detail				
Top Flange Available	—	—	—	Yes
Lift Assist Available	—	Yes	—	—
Grate Available	Yes	Yes (30")	Yes	—
Security Options	Cam lock, bolts	Cam lock, bolts	Captive hinge pin, cam lock, bolts	Slam lock
Standard Iron Type	Ductile iron cover Gray iron frame	Ductile iron cover Gray iron frame	Ductile iron cover Ductile iron frame	Ductile iron cover Ductile iron frame
Load Rating	Heavy duty	Heavy duty	Heavy duty	Heavy duty†

*Complete removal of the cover is recommended when entering the access point.

†HINGECO is suggested for unintended vehicular traffic rated applications.

ERGO® ACCESS ASSEMBLY

The ERGO Access Solution has been designed with ergonomics in mind to optimize worker safety by incorporating a hinge feature.

The cover opens to 120°, where the cover securely rests and can be removed. The safety catch at 90° prevents accidental closure.

The ERGO access assembly is customizable to most city specifications with multiple frame openings and heights available. For clear openings greater than 28", please refer to the ERGO XL access assembly.

Standard Features

- Heavy duty
- Gasketed
- Patented hinge assembly
- Opens to and removes at 120°
- Safety catch at 90°
- Hinge design allows for flood pressure relief — lid remains attached
- Ductile iron cover
- MPIC® multi-tool pick bar

Options

- Available on SELFLEVEL®
- Special lettered covers
- Custom logo covers
- Environmental messaging
- Grates available
- Cam lock security
- EON LOCK® bolting
- Water resistant*
- Multiple frame openings and heights available (see table)



ERGO access assembly with custom logo cover in St. Cloud, Florida.



Showing 24" ERGO with cam lock



Drainage grate available for 24" ERGO



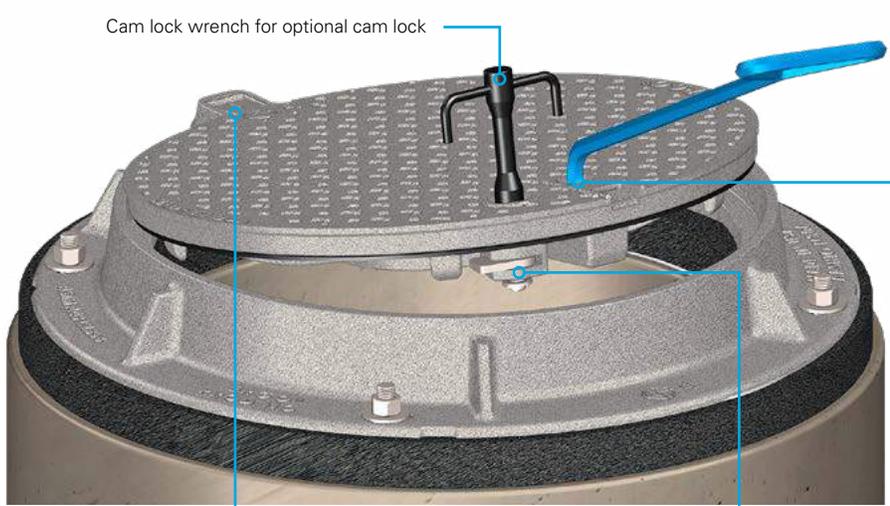
T-Gasket

The thick and durable gasket cushions traffic shock and resists infiltration.

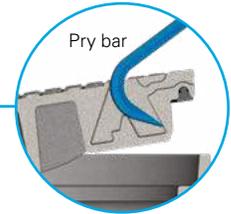


Important Safety Information
Complete removal of the cover is recommended when entering the access point.

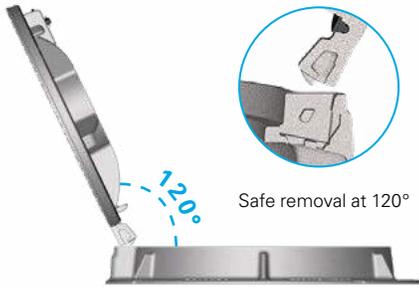
*Bolted cover, no cam lock, beaded gasket, and non-draining hinge pocket frame assembly required.



MPIC® Multi-tool Pick Bar



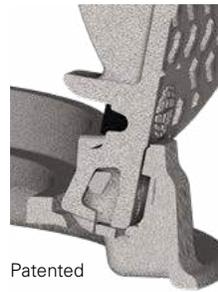
Safe Cover Removal



Safe removal at 120°

The patented hinge design allows the cover to open up to 120°, where it rests in a safe and secure position. From the 120° position, the cover can be safely removed.

Safety Catch



Patented

Patented ERGO hinge design has a safety catch at 90° to prevent accidental closure.

Cam Lock Security Option



The cam lock provides improved security to frame and cover assemblies, and also eliminates loose and missing fasteners. The cam lock wrench is only removable when the cover is in the locked position, ensuring it is engaged.



Custom logo cover made from a photo of Mt. Edgecumbe, by local photographer Tim Shobe, for the City of Sitka, Alaska.

ERGO Access Assembly Sizes

Clear Opening	Frame Height	Series No.
24	4	ERGO24
24	6	ERGO24
24	7	ERGO24
28	7	ERGO28

Note: All dimensions are in inches.



Visit our YouTube Channel for videos on this and other products at www.youtube.com/AccessInfrastructure

ERGO® XL ACCESS ASSEMBLY

The ERGO XL Access Assembly offers an advanced level of functionality and safety for 28" clear openings and above.

This product is easy to lift open, reduces excess strain, and promotes safe working conditions. To address ease of use, choose an optional stainless steel mechanical strut that reduces the lifting force to raise the cover to less than 35 lb.

Standard Features

- Heavy duty
- Gasketed
- Patented hinge assembly
- Opens to 120°
- Safety catch and removal at 90°
- Hinge design allows for flood pressure relief — lid remains attached
- Ductile iron cover
- MPIC® multi-tool pick bar

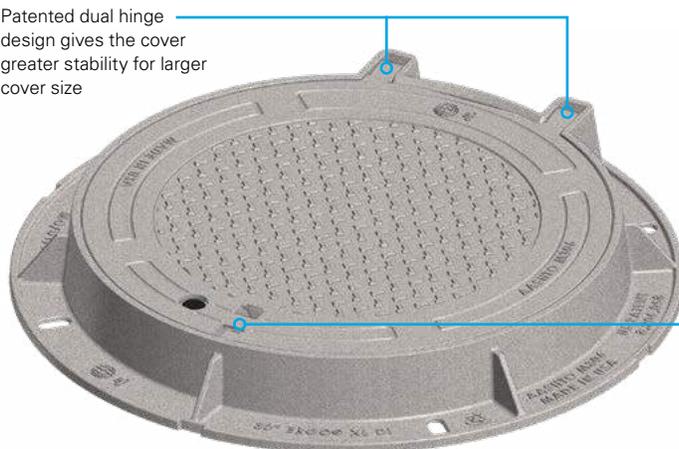
Options

- Airport extra heavy duty
- Special lettered covers
- Custom logo covers
- Environmental messaging
- Grates available
- Cam lock security
- EON LOCK® bolting
- Water resistant*
- Lift assist
- Multiple frame openings and heights available (see table)

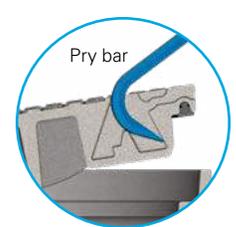


ERGO XL adds convenience to 30" and 36" access assemblies.

Patented dual hinge design gives the cover greater stability for larger cover size



MPIC® Multi-tool Pick Bar



ERGO XL Access Assembly Sizes

Clear Opening	Frame Height	Series No.
30	4 1/2	ERGO30
30	5 1/2	ERGO30
36	6	ERGO36

Note: All dimensions are in inches.

Important Safety Information

Complete removal of the cover is recommended when entering the access point.

*Bolted cover, no cam lock, beaded gasket, and non-draining hinge pocket frame assembly required.

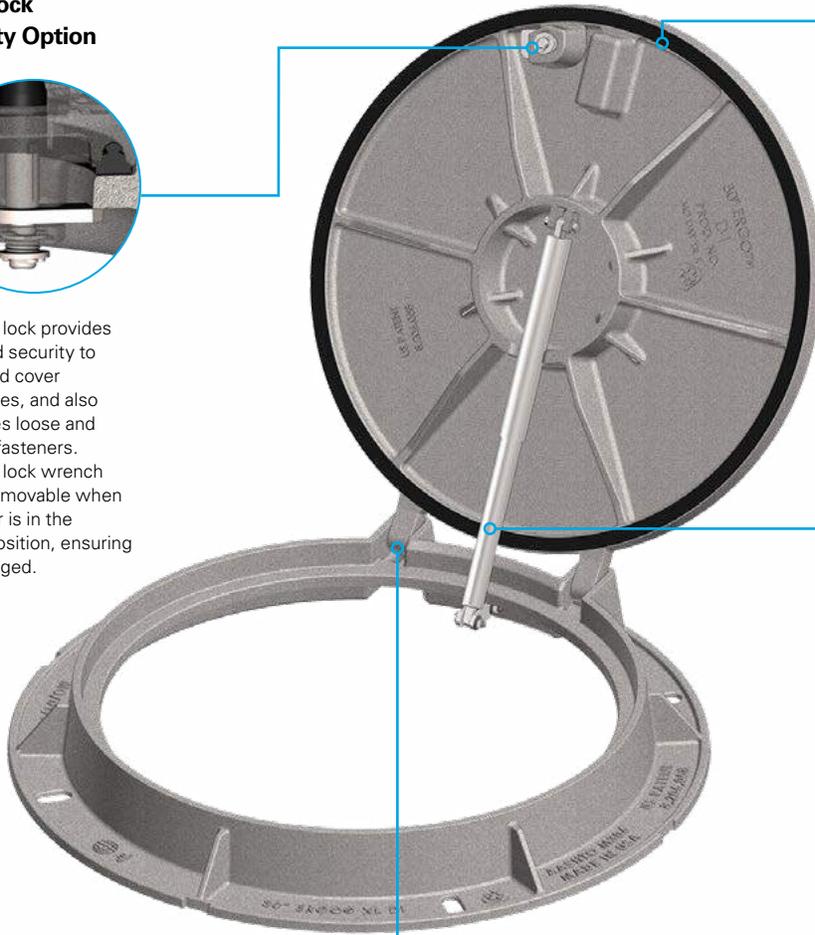
Cam Lock Security Option



The cam lock provides improved security to frame and cover assemblies, and also eliminates loose and missing fasteners. The cam lock wrench is only removable when the cover is in the locked position, ensuring it is engaged.

T-Gasket

The thick and durable gasket cushions traffic shock and resists infiltration.



Lift Assist

Optional lift assist is a corrosion-resistant stainless steel mechanical spring strut that reduces the lifting force of the cover to less than 35 lb. It is available only on the ERGO® XL.

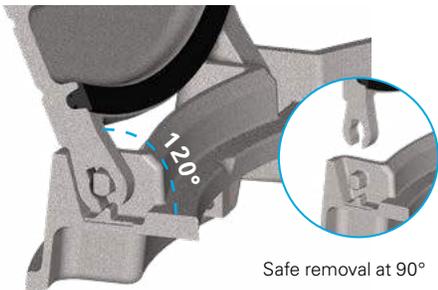
Mechanical Strut Lift Assist

The rugged design is clean and maintenance free. The strut takes up less space in the clear opening than a traditional spring assist. It is fully self-contained, protecting coils from exposure to the elements.

Made without internal gases or seals, the struts have an effective operating temperature range of -30° F to 400° F. The durability has been tested at over 150,000 cycles.



Opening Range and Safe Cover Removal



Our patented dual hinge design allows the cover to open up to 120°, where it rests in a safe and secure position. From the 90° position, the cover can be safely removed.



Visit our YouTube Channel for videos on this and other products at www.youtube.com/AccessInfrastructure

CAPTIVE HINGE ACCESS ASSEMBLY

The Captive Hinge Access Assembly is an advanced solution that addresses present concerns in the market such as cover theft, ergonomics, safety, pressure relief, and security. Once a cover with a captive hinge pin is installed, the cover cannot be removed.

Standard Features

- Heavy duty
- Gasketed
- Opens to 120°
- Safety catch at 90°
- Hinge design allows for flood pressure relief — lid remains attached
- Ductile iron frame and cover
- MPIC® multi-tool pick bar
- Patented hinge assembly
- Non-slip surface

Options

- Drainage grates
- Special lettered covers
- Custom logos
- Environmental messaging
- Wireless remote monitoring
- Security — Cam lock, bolting
- Multiple frame openings and frame heights available
- Captive hinge optional pin makes cover non-removable



Important Safety Information

If used without an installed pin, complete removal of the cover is recommended when entering the access point.

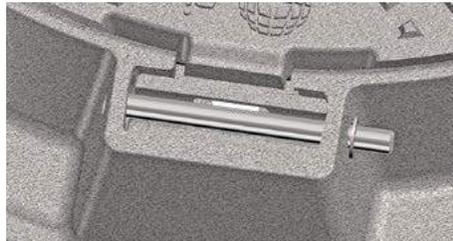


Safety and Security

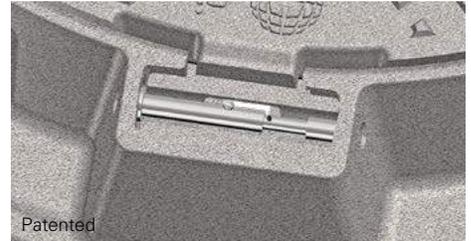
Integrated safety feature holds the cover open at 90°. Optional bolting and cam locks.

Theft Resistant Hinge Pin

The end user has the option to permanently connect the cover to the frame to prevent cover theft. A cover can be made captive before delivery or after installation.

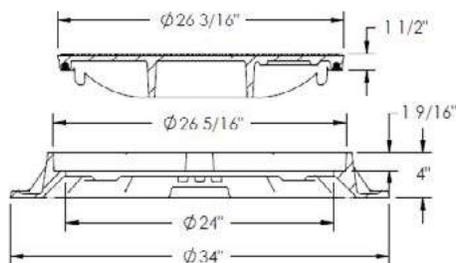


Option 1—Preinstalled (cutaway view shown)
Captive hinge pin installed during manufacturing by EJ.



Option 2—Retrofit (cutaway view shown)
The retrofitting captive hinge pin can be installed anytime if a preinstalled pin hasn't been used. The pin comes with a spring built within the pin, which sets during installation to permanently secure the hinge to the frame.

Note: The Captive Hinge pin is not a requirement for the hinging function of this product.



Optional drainage grate with cam lock

HINGECO® FRAME AND COVER

Combine ergonomics and security with the HINGECO frame and cover assembly.

The design of this cover allows it to pivot on the hinge and holds it at 120° to provide unobstructed access to the clear opening of the frame. In combination with the slam lock, there is no need for multiple cam locks to secure the cover. One slam lock keeps the cover secured and can be unlocked with a standard pry bar.

Precasting the HINGECO frame and cover assemblies is made easy with the top flange version. By casting the assembly upside down, getting a smooth, flat surface is simplified during the pouring process.

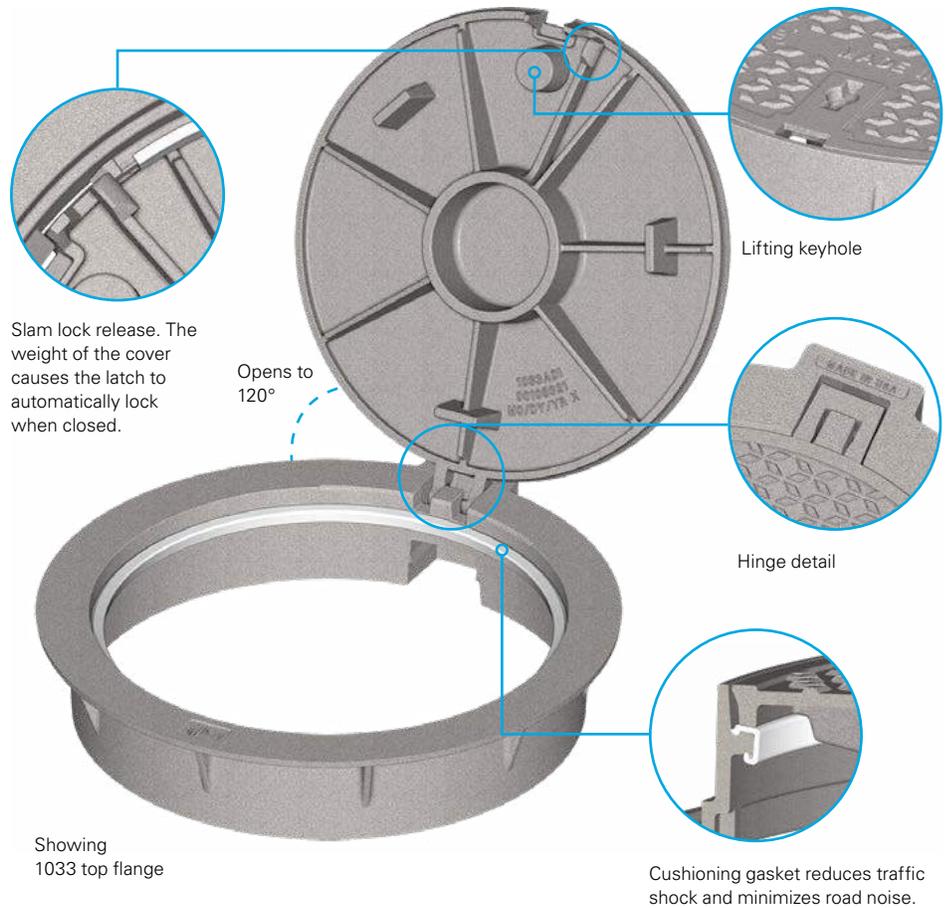
Standard Features

- Heavy duty
- Ductile iron frames and covers
- Proof load exceeds AASHTO M 306 40,000 lb requirement
- Hinged cover opens to 120°
- Cover locks in 90° open position, must be lifted to be released
- Cover removes at 90°
- Slam lock release feature, which automatically locks when closed

Options

- Round or square frames
- Special lettered and custom logo covers
- Cushioning gasket on bearing surfaces
- Lift handle
- Top flange available

Note: HINGECO is suggested for unintended vehicular traffic rated applications.



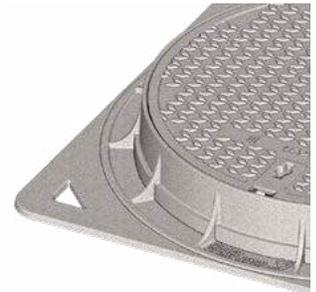
Frame Options



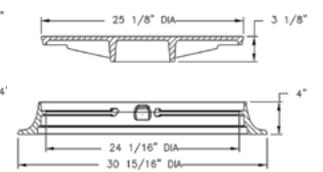
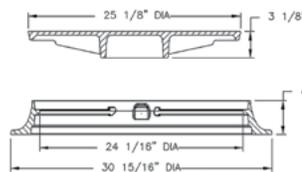
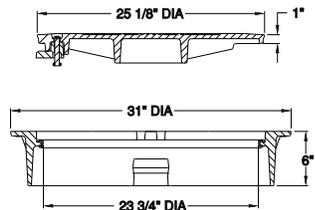
1033 top flange



1033 bottom flange



1034 bottom flange



Important Safety Information
Complete removal of the cover is recommended when entering the access point.

SELFLEVEL® ASPHALT ACCESS ASSEMBLY

The SELFLEVEL Access Assembly is a highly engineered infrastructure solution. Unlike traditional manhole units, its unique design allows for a range of movement that keeps the SELFLEVEL access assembly perfectly aligned with the finished road surface. This unit works for both retro fit and new installations.

Standard Features

- Heavy duty
- Upper frame is supported by road surface
- Unit stays level with the road surface, even when road heaves due to extreme temperature changes
- Up to 5° tip angle for top frame
- Proof load exceeds AASHTO M 306 standards
- Frame fits with existing manhole covers

Options

- Special lettered covers
- Custom logo covers
- ERGO® SELFLEVEL assembly
- Transitional frame (square base to round top)
- EON LOCK® bolting
- Cam lock
- Neoprene gasket for cover
- Watertight*
- INFRA-RISER® adjustment riser
- Multiple frame openings and heights available



After asphalt has been packed, the SELFLEVEL compacts level with the surrounding roadway for a smooth finish that will last longer than traditional manhole assemblies in situations where there can be frost heave and natural road settling.

Range To Move With Surface



Once installed, the unit will continue to move with the road surface. The road surface aids in absorption of traffic vibration and shock, further protecting the life of your infrastructure and critical underground structures.



SELFLEVEL has a range of motion of up to a 5° angle while still moving with surface.

Reduce Surface Movement Issues



SELFLEVEL® Access Assembly Helps Eliminate:

- Frost heave/uplift
- Manhole structure settling
- Site deterioration
- Pavement cracking

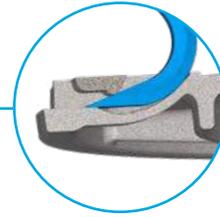
SELFLEVEL® Access Assembly also Provides:

- Improved ride quality to meet smooth street initiatives
- Inclined installations

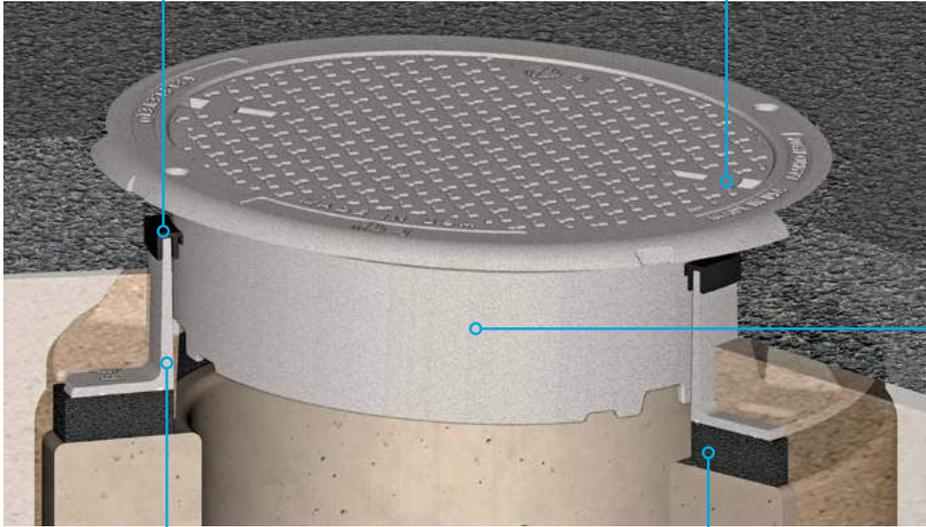
*Bolted assembly required.

Multi-functional Seal

The multi-functional seal helps keep the upper frame centered within the guide frame, which prevents the two pieces from touching. Seal protects against excess debris and material from entering the manhole.



EPIC® Pick Bar



Upper Frame

The upper frame of the SELFLEVEL assembly is supported by and moves with the surrounding road surface. This allows it to remain level with the road surface. This “floating” affect helps prevent road damage and protects the infrastructure underground by dispersing traffic vibrations and shock throughout the road surface, rather than into the structure below.

Guide Frame

This frame facilitates self-centering and keeps the upper frame centered over the manhole structure.

Optional INFRA-RISER adjustment riser



SELFLEVEL installed in Traverse City, Michigan.

ERGO® SELFLEVEL® Assembly



ERGO SELFLEVEL for asphalt combines the ergonomic and security benefits of the hinged cover with the roadway leveling benefits of the SELFLEVEL frame.

SELFLEVEL Asphalt Access Assembly Sizes

Cover Size	Clear Opening	Series No.
26	24	1205, 1037, 3024
29 5/8	27 15/16	3028
32	30	1322, 3027

Note: All dimensions are in inches.



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SELFLEVEL® CONCRETE ACCESS ASSEMBLY

The concrete SELFLEVEL Access Solution has been designed specifically for concrete applications. By incorporating adjustment brackets into the design, the frame can be held up during the concrete installation. After the concrete cures, the brackets should be removed, and the upper frame will move with the pavement.

This product is ideal for environments with frost heave, as the frame floats with the surface. It also works well for communities with a smooth street initiative, or inclined installations.

Standard Features

- Heavy duty
- Upper frame is supported by road surface, and can be installed with a maximum tip angle of 5°
- Steel sleeve protects the unit (SELFLEVEL) from concrete interference
- Lifting handles on upper frame allow for easier handling during installation
- Lower frame is bolted to structure below
- Proof load exceeds AASHTO M 306 standards
- Frame fits with existing manhole covers

Options

- Special lettered covers
- Custom logo covers
- Transitional frame (square base to round top)
- EON LOCK® bolting
- Cam lock
- Neoprene gasket for cover
- Watertight*
- INFRA-RISER® adjustment riser
- Multiple frame openings and heights available

*Bolted assembly required.

Showing 3025 assembly



The SELFLEVEL® access assembly is a highly engineered infrastructure solution. It provides additional benefits that a traditional manhole unit cannot provide. Its unique design allows a range of movement, providing installations that are perfectly aligned with the finished road surface.

Reduce Surface Movement Issues

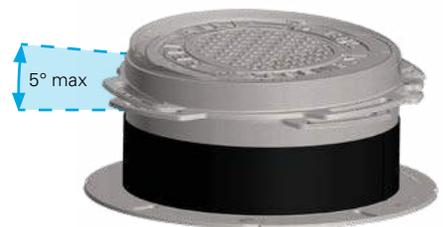


SELFLEVEL® Access Assembly Helps Eliminate:

- Frost heave/uplift
- Manhole structure settling
- Site deterioration
- Pavement cracking

SELFLEVEL® Access Assembly Also Provides:

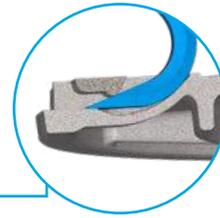
- Improved ride quality to meet smooth street initiatives
- Inclined installations



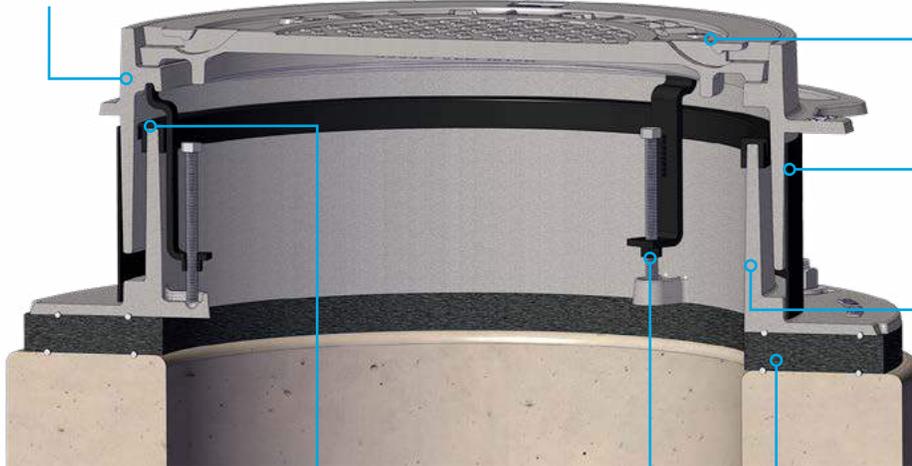
SELFLEVEL has a range of motion of up to a 5° tip angle while still moving with surface.

Upper Frame

The upper frame of the SELFLEVEL assembly is supported by and moves with the surrounding road surface. This allows it to remain level with the road surface. This “floating” effect helps prevent road damage and protects the infrastructure underground by dispersing traffic vibrations and shock throughout the road surface, rather than into the structure below.



EPIC® Pick Bar



Steel Sleeve

Creates a void, while pouring concrete, to allow upper frame to float with the road surface.

Guide Frame

This frame facilitates self-centering. The guide frame comes with a multi-functional seal. It reduces water infiltration and protects against excess debris and material from entering the manhole.

Showing 3025 assembly



Multi-functional Seal

The multi-functional seal helps keep the upper frame centered, which prevents the two pieces from touching.

Optional INFRA-RISER® Rubber Composite Adjustment Riser.



Adjustment Tab and Bracket

Adjustment bracket and bolt for raising the upper frame up off the lower frame during pouring, giving it clearance to ‘float’ when set in concrete. After concrete has cured, the bracket and bolt are removed and can be reused. Adjustment bolt tabs can be cut off for greater clear opening after installation.

SELFLEVEL Concrete Access Assembly Sizes

Cover Size	Clear Opening	Series No.
26	24	3025
32	30	3027

Note: All dimensions are in inches.



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REVOLUTION® ACCESS ASSEMBLY

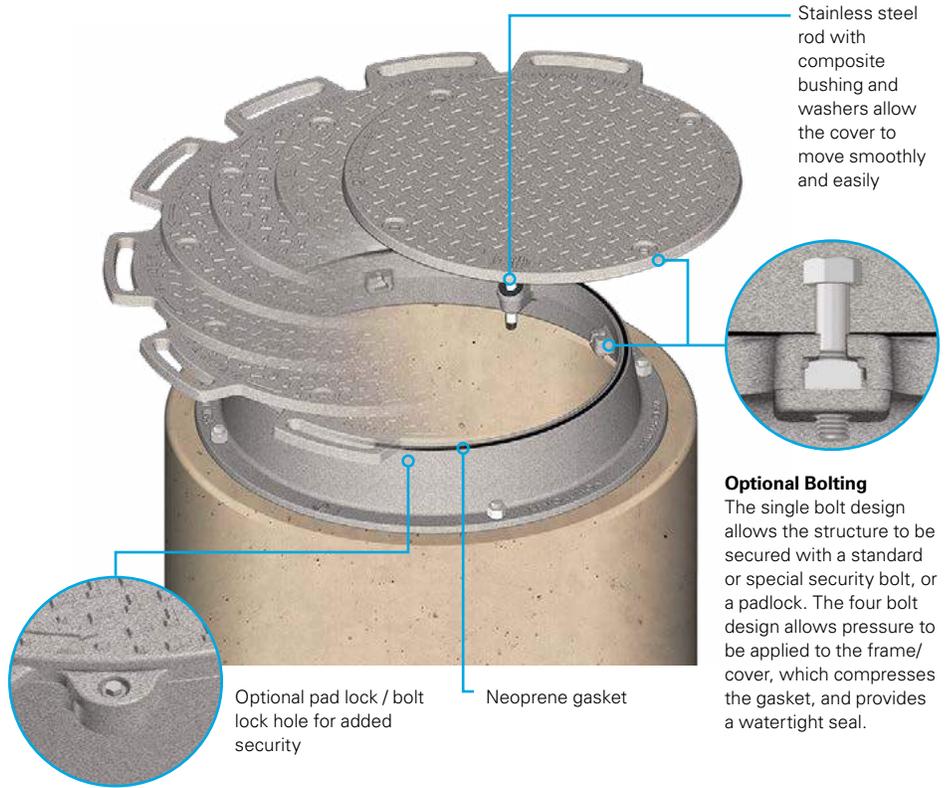
Discover the REVOLUTION Access Assembly — it is the perfect solution for elevated structures and raised access points. The cover pivots away from the hole opening, eliminating the need for manually raising or lowering the cover. It rotates in either direction on a cast-in stainless steel rod that ensures it remains attached to the frame. No special tools are required to open and close.

Features

- Non-traffic rated
- Lightweight cover — easy to open, no lifting required, and takes only one person to operate
- Stainless steel rod cast in cover
- Water resistant — cover overlaps frame
- A 1/4" round neoprene gasket is secured to prevent roll out and provides odor control
- 5" frame height

Options

- Special lettering
- Watertight
- Integrated hole for optional padlock
- EON LOCK® bolting
- Security bolting



Stainless steel rod with composite bushing and washers allow the cover to move smoothly and easily

Optional Bolting

The single bolt design allows the structure to be secured with a standard or special security bolt, or a padlock. The four bolt design allows pressure to be applied to the frame/cover, which compresses the gasket, and provides a watertight seal.

Optional pad lock / bolt lock hole for added security

Neoprene gasket

Lift and Rotate Cover



To open the cover, slightly lift, and rotate the cover. The patented design provides cover lift and rotation with minimal effort. Worker safety is improved by eliminating the need to hoist heavy covers when opening or closing the elevated unit.

Resists Water Infiltration



The surface of the cover extends slightly past the edge of the frame, and the neoprene gasket helps seal the unit against water infiltration. A watertight seal can be achieved with the four bolt design.

REVOLUTION Access Assembly Sizes

Clear Opening Dia.	Series No.
24	REVO24
28	REVO28
30	REVO30

Note: All dimensions are in inches.

Important Safety Information

Securely bolt the frame to manhole cone on 29 3/4" bolt circle
Do not subject cover to any load when in open position
Do not install in areas of vehicular traffic



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CAMPRESSION® ACCESS ASSEMBLY

The CAMPRESSION Access Assembly solution minimizes water infiltration, controls odor and provides improved security.

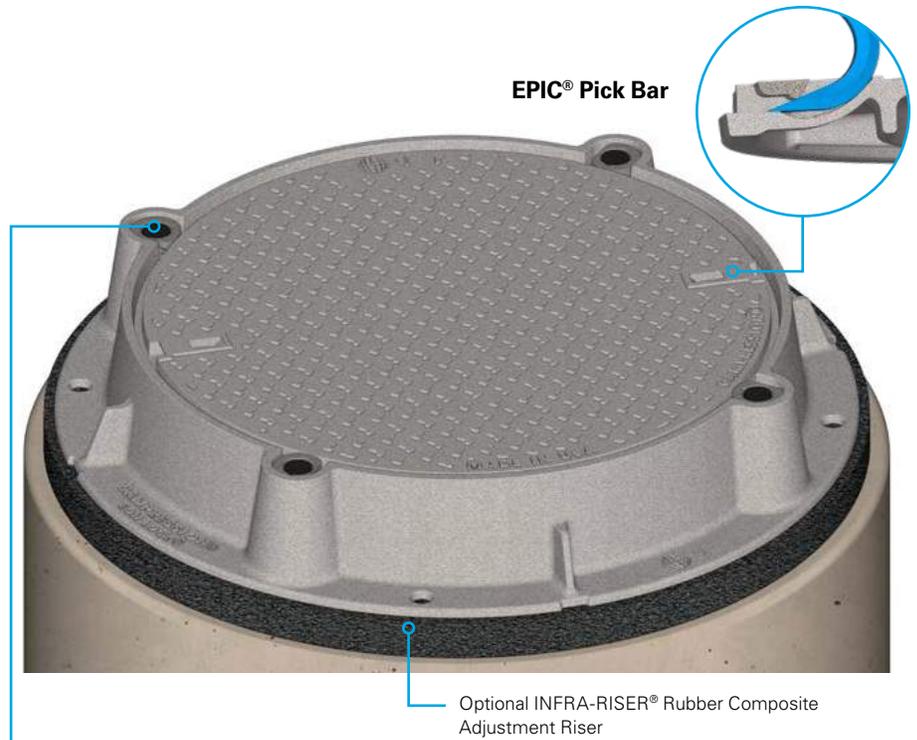
Evenly distributed cam locks apply pressure to the cover against a neoprene gasket, forming a tight seal to minimize water infiltration.

Standard Features

- Heavy duty load application meets AASHTO M 306 certification
- Ductile iron cam locks with EON LOCK® bolts provide water resistance and security features
- 1/4" round neoprene gasket
- EPIC® closed pick slots
- Lightweight ductile iron cover, per ASTM A 536
- 6" frame height

Options

- Custom logo cover
- Special lettered cover
- 2" adjustment riser available



EPIC® Pick Bar

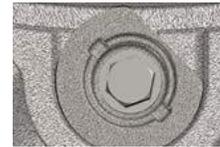
Optional INFRA-RISER® Rubber Composite Adjustment Riser

Cam Locks

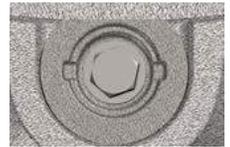
Ductile iron cam locks rotate to open cover, and back to tighten and secure cover. No need to completely remove the bolts—just loosen bolts and rotate cam.



Closed with cap on

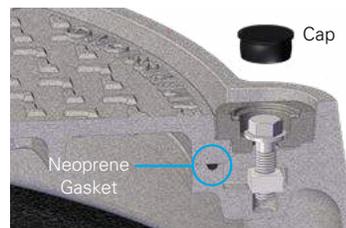


Cap off, loosen bolt, rotate cam



Rotate 90° to open

EON LOCK® Bolting



EON LOCK® replaceable threads.

Stackable Frames



Frames stack to improve safety and conserve space during handling, transit, and storage.



24" three bolt assembly (CAMP24 series)



30" four bolt assembly (CAMP30 series)



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DUCTILE IRON HINGED HATCH ACCESS ASSEMBLY

Ductile iron access hatches have been designed for improved ergonomics, and are available in heavy duty and airport extra heavy duty applications.

On a cover that can weigh as much as 550 lb, the lifting force required to open the cover is less than 35 lb due to the uniquely designed mechanical strut.

The self-engaging safety bar provides added protection while the underground infrastructure is accessed, and safety grates can be specified for added fall through protection.



Features

- Ductile iron frame and cover
- Cover opens to 105°, safety catch and removal at 90°
- Self-engaging safety bar
- EON LOCK® bolting
- MPIC® multi-tool pick bar
- Bolting

Options

- Mechanical lift assist (standard feature for airport rated models)
- Top and bottom flange designs
- Safety grate
- INFRA-RISER® adjustment riser
- Forming skirt

Wide Availability of Sizes

Shown below are just a sample of the various cover openings and sizes. See the table below for the full range of available clear opening sizes and load ratings.



8192 hinged hatch
24" x 36"



8198 hinged hatch
with dual lift assist
48" x 48"



8218 double assembly
48" x 48"



8196 double assembly
30" x 62"



8197 grate option
36" x 36"

Ductile Hinged Hatch Clear Opening Options

Clear Opening Size	Airport Extra Heavy Duty Series No.	Heavy Duty Series No.
24 x 24	8195	8215
24 x 36	8192	8212
30 x 30	8196	8216
30 x 62	8196—Double	8216—Double
36 x 36	8197	8217
36 x 74	8197—Double	8217—Double
48 x 48	8198	8218
48 x 48	—	8218—Double

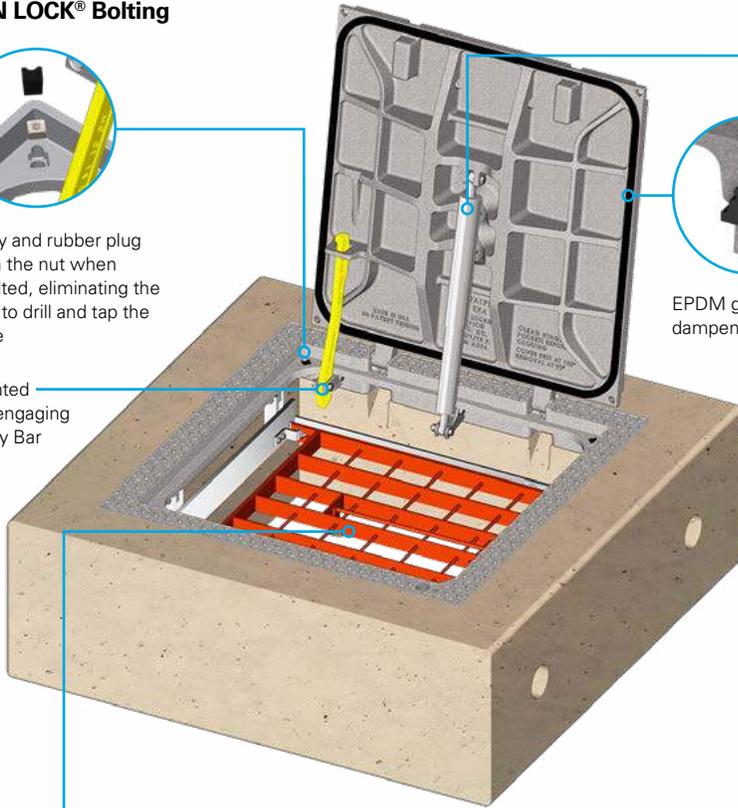
Note: All dimensions are in inches.

EON LOCK® Bolting



Cavity and rubber plug retain the nut when unbolted, eliminating the need to drill and tap the frame

Patented Self-engaging Safety Bar



EPDM gasket for sound dampening

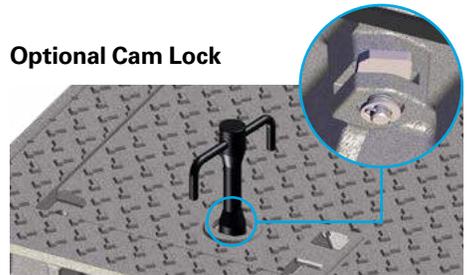
Lift Assist

Lift Assist is a corrosion-resistant stainless steel mechanical spring strut. The rugged design is clean and maintenance free. The strut takes up less space in the clear opening than a traditional spring assist. It is fully self-contained, protecting coils from exposure to the elements.

Made without internal gases or seals, the struts have an effective operating temperature range of -30° F to 400° F. The durability has been tested at over 150,000 cycles.



Optional Cam Lock



Security cam lock and wrench shown. Wrench is only removable when cover is in the locked position.

Optional Safety Grate

Provides additional safety features

- Doors cannot be closed unless the fall through protection has been put back in place (protecting the next operator).
- Visual inspections and limited maintenance can be done while safety grate is left in place.
- Orange safety grates create a visual barrier around the pit; promotes an awareness of the hazard.
- Grate can be locked independently of the hatch, adding another level of security when needed.

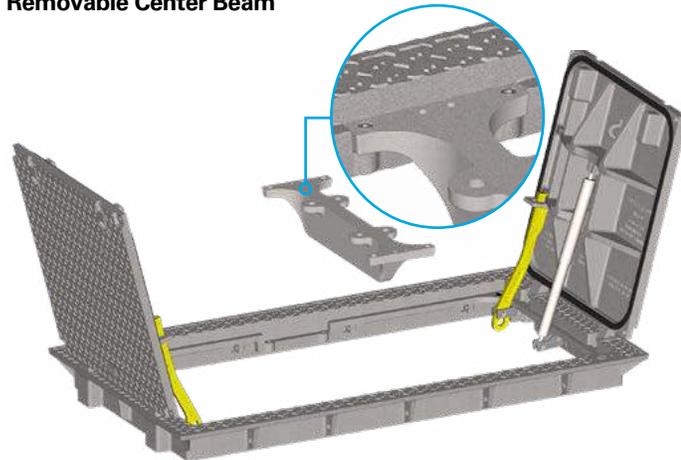


Optional Forming Skirt



Available forming skirt simplifies precasting the hatch in concrete—no need for added forming to protect the inner hatch. The leave-in-place aluminum skirt can be made to fit any concrete slab thickness. (Image showing hatch upside down with forming skirt.)

Removable Center Beam

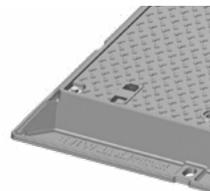


Removable center beam provides a much greater clear opening access on several double hatch models. Removal/replacement is simple with 4 bolts securing the beam to the frame.

Frame Options



Top flange frame



Bottom flange frame



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HINGED TRENCH ASSEMBLY

The hinged trench assembly simplifies access for supply lines and collection systems. Available with hinged covers or grates, the system can be configured to any length of trench needed.

Optional mechanical strut improves ergonomics by reducing lifting force to 35 lb or less for the entire range of motion—available for both cover and grate versions.

The covers offer optional cable cut outs for electrical, telecommunications, and other supply lines to be temporarily exposed for use while the covers remain in the closed position.

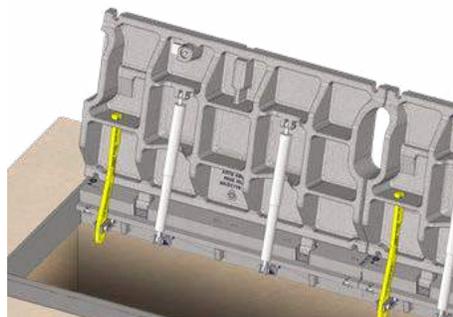
Features

- Airport extra heavy duty
- Top flange design
- Rail vent slots
- Self-engaging safety bar
- Rebar holes in gussets
- Bolt holes for connecting rails together

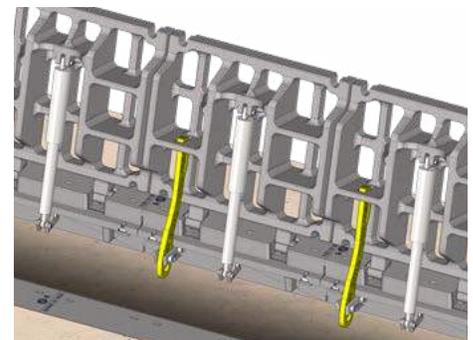


Self-engaging safety bar with optional mechanical lift assist make the hinged trench covers and grates safe and easy to use.

Covers



Grate



Hinged Trench Available Options

Options	Grate	Cover
Bolting	Yes	Yes
Cam Lock	—	Yes
Cable Cut Outs	—	Yes
Lift Assist	Yes	Yes
MPIC® Pick Bar	—	Yes



48" long solid cover



24" long grate

Hinged Trench Sizes

Type	Trench Width	Length	Series No.
Grate	18	24	6906
Cover	24	24, 36, 48	6808
Cover	36	24, 36, 48	6811



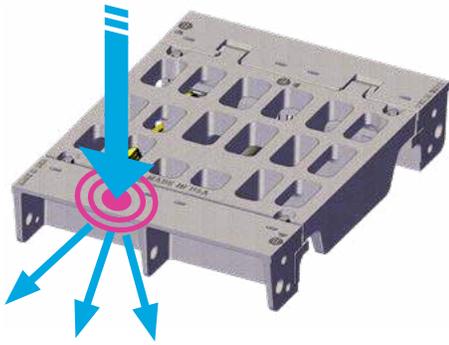
24" long solid cover



37 3/8" wide steel end plate

Note: All dimensions are in inches.

Top Flange Design

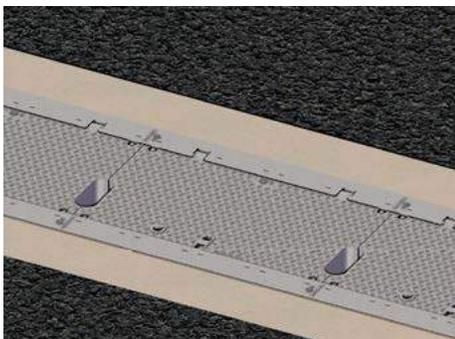


The top flange design with a wide flange, fully supported with concrete underneath, distributes heavy loads over a larger area which reduces cracking and spalling of the surrounding concrete.



Venting slots in the frame rail allow for air to escape during the pouring process, fully filling the voids with concrete for support and weight disbursement.

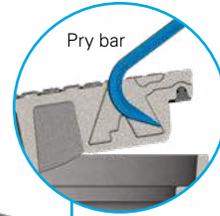
Cable Cut Outs*



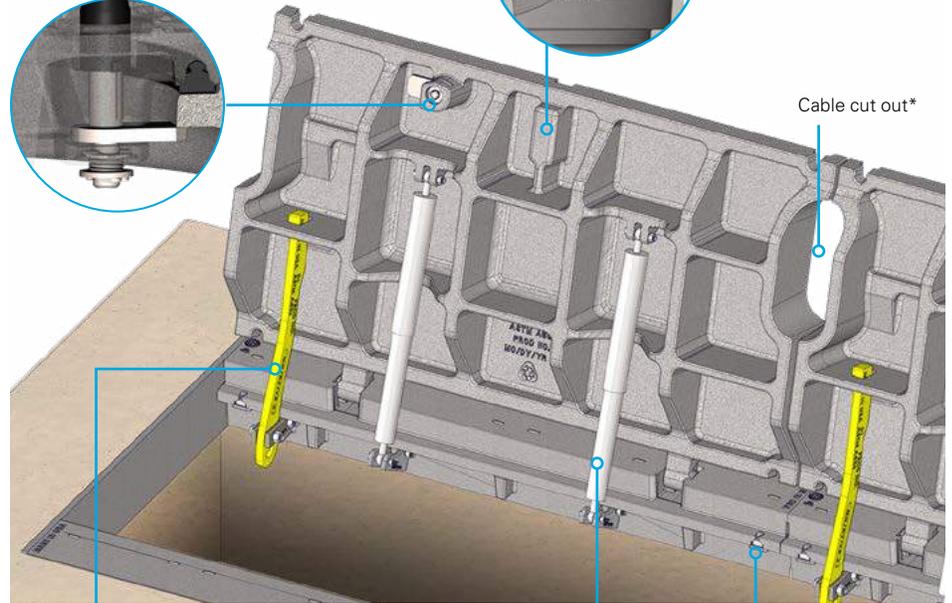
Optional cable cut outs for covers allow for temporary access to supply lines while keeping the covers closed.

*Not available for grates

Cam Lock Security Option*



MPIC® Multi-tool Pick Bar*



Safety Bar

Patented Self-engaging Safety Bar keeps the trench open and protects from unintended closure

Lift Assist Option

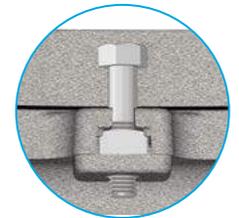
Lift Assist is a corrosion-resistant stainless steel mechanical spring strut. The rugged design is clean and maintenance free. The strut takes up less space in the clear opening than a traditional spring assist. It is fully self-contained, protecting coils from exposure to the elements.

Made without internal gases or seals, the struts have an effective operating temperature range of -30° F to 400° F. The durability has been tested at over 150,000 cycles.



EON LOCK® Bolting

Compatible with standard hex bolts or special security designs, the EON LOCK design retains the nut when the cover is unbolted and allows the nut to be removed in the future should it need to be replaced.



Designed to work with concrete trench forming systems that improve the speed of installation versus traditional installation. Using concrete, no liners are needed—eliminating combustible material in applications where fire suppression measures are needed.

HINGED GRATE ASSEMBLY WITH SLAM LOCK

The heavy duty Hinged Gate Assembly works great for drainage inlets that require a higher level of security than a stand alone frame and grate.

The heavy duty ductile iron frame and hinged grate, a part of the 5624 series, is typically installed in high traffic areas. The slam lock closure feature prevents the grate from opening inadvertently and conceals the lock from unauthorized access. Self wedge seating allows traffic to push the grate into the frame — preventing the grate from rocking.

The lightweight grate opens to 115° and removes at 90°.

Standard Features

- Heavy duty
- Square grate 290 sq. in. open area
- Ductile iron frame and grate meet ASTM A 536 requirements
- Lightweight grate opens to 115° and removes at 90°
- Self wedging grate seating
- Slam lock (locking feature)

Options

- 3 flange (including left and right hand variations) and 4 flange frames available
- Special lettering



Grate includes directional instruction markings and anti-slip texture. Special lettering options (including environmental messaging) are available.

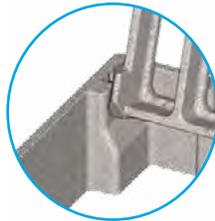


24" x 24" hinged grate comes with standard 4" height frame



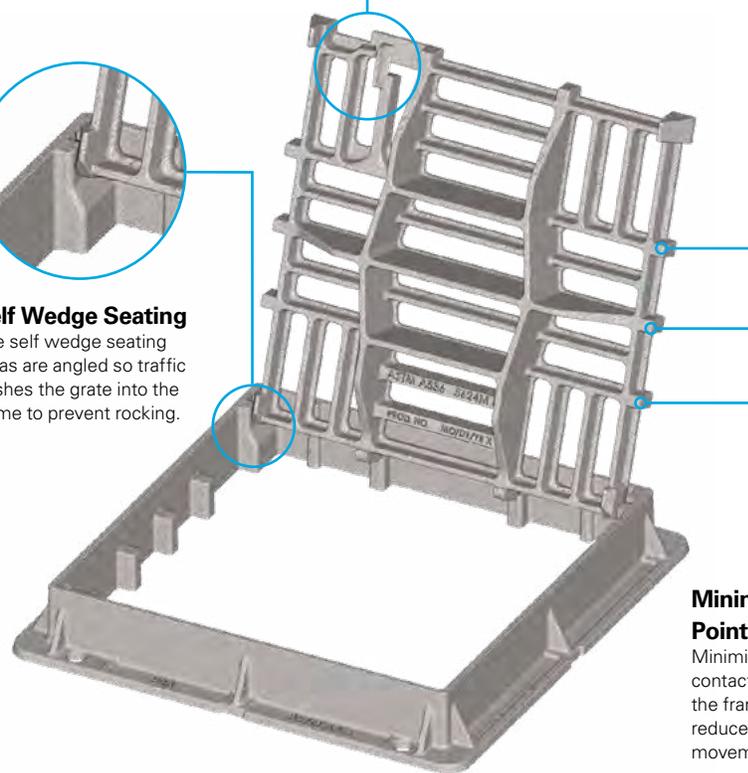
Slam Lock

The slam lock design is an integral arm that moves when the grate is shut preventing the grate from being opened inadvertently. When closed, the seamless design also makes the latch invisible to the untrained eye, providing greater security from unauthorized removal of the grate.



Self Wedge Seating

The self wedge seating areas are angled so traffic pushes the grate into the frame to prevent rocking.



Minimal Rest Points

Minimizing the contact points around the frame helps reduce noise and movement.



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ERMATIC® MODULAR COVERS

The ERMATIC Modular Cover system is a comprehensive and highly engineered range of access covers for a wide variety of underground services. This modular system can be customized to fit any underground vault dimension or cover configuration. The ERMATIC range leverages the global engineering and design experience within EJ, to enhance ergonomic design and security.

Features/Options

- Pedestrian to airport rated (or EN124 Standards – B125, C250, D400, E600, F900)
- Wide range of cover sizes from 24" x 24" and larger
- Water resistant
- Security locking
- Available with hinged and spring loaded struts for assisted opening
- Ergonomic lift handles for opening
- Available with safety grates and/or safety railings
- Cover options: solid cover with LLLL® slip resistant tread, recessed for concrete infill or brick pavers, or cover with removable inner hatch/cover
- Available with PREMARK® anti-skid coating

Project Applications

- Sewerage: inspection pits for sludge chambers, access shafts for large plants, etc.
- Telecommunications: cable jointing chambers, etc.
- Utility: lighting, signals, transformer pits, cable joint boxes, etc.

Project Types

- Airports and ports
- Railways
- Tunnels
- Power stations
- Water treatment and purification plants
- Manufacturing plants
- Exhibition centers, leisure parks, stadiums, and other public arenas

The ERMATIC range of modular covers are produced in France.



Modular Construction—The use of modular elements gives a vast range of sizes. Frame elements (side frames and end plates) are assembled using bolts and aluminium joints to provide linear openings for even the longest ducts. For clear openings wider than 47 3/16" (1200 mm), ERMATIC units use removable beams supported in boxes which are fixed to the frames. This allows the construction of units to suit the largest openings.

Ultimate Protection

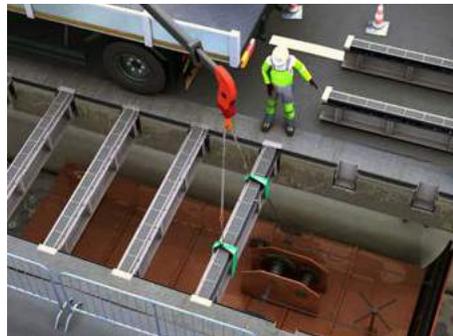
ERMATIC products assure protection against damage, debris or aggressive chemicals, and allow designers to conceal underground services.



1/2/3 covers unit



Continuous duct cover



Removable beams give unobstructed access to large vaults.



Modular design allows for infinite length to accommodate even the longest duct systems.

Features and Options



Optimized Designs

Years ago, castings were overbuilt to handle the inconsistencies of molding and iron quality. Now, with more controlled manufacturing processes and a better understanding of design practices, these antiquated designs can be updated.

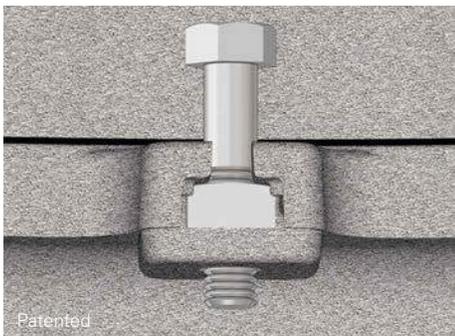
Our modern castings provide superior performance with reduced weight, saving energy and raw material.

Benefits

- Load ratings that exceed AASHTO M 306 proof load testing
- Reduced weight for ergonomic benefits
- Improved product functionality
- Added strength and durability
- Less raw material usage — a green product
- Interchangeability with your existing street castings



Stackable frames improve safety and conserve space during storage, in transit, and when handling.



EON LOCK® Bolting
EJ has developed a reliable, hassle-free way to ensure solid, long lasting security.



Ribbed modern cover design for ductile iron



Platen modern cover design for gray iron



Thinner wall thickness and stronger cover seating

Recessed region in flange design can reduce material and weight

Modern frame designs offer improved performance and safety. They are lighter weight and withstand higher load ratings.

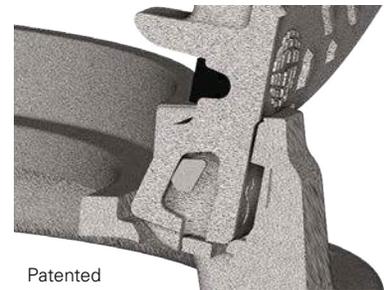
Safety and Security

Personal safety for all of our customers and employees is imperative. We incorporate safe practices into every process, product and service we provide—from design and manufacture, through distribution and end use.

Adding to safety is security. Infrastructure security is a concern for all government entities both large and small. EJ offers different levels of infrastructure security. In most cases, the simplest security is appropriate, however the end user has several innovative options.

Benefits

- Intuitive safety features and options that provide physical and visual barriers to protect both workers and the public
- Wide range of security options to protect against accidental opening or closing and prevent unauthorized access or removal



Safety Grate

Designed for fall through protection, safety grates offer access for visual inspections and limited maintenance while the safety grate is in place. When in the open position, the safety orange aluminum grates create a visual barrier around the pit. Safety grates can also be locked to prevent unauthorized entry.

Safety Bar

Self-engaging safety bar locks into place when the cover is fully opened and prevents accidental closure. The safety bar easily lifts up and out of the locking position, allowing the cover to close.

Safety Catch

Offered in our hinged manhole covers, the safety catch design helps prevent unintended closure. The design also allows for the cover to be removed and opened to angles greater than 90°, providing clear access to the structure below.

ADA Compliance

Provides safe walking and biking surfaces and equal access for all modes of transportation.





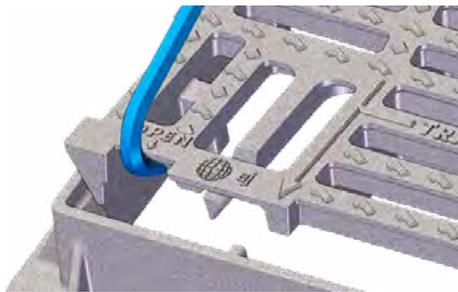
Missing and stolen covers are dangerous to pedestrians and motorists. Make sure they are properly secured against the hazards in their environment.



Cam Bolting

Available on the COMPRESSION® series, the arrangement of cam bolting locks applies pressure to the cover and gasket for a tight seal. The design does not require the bolt to be removed to open the cover. Simply loosen the bolt enough to rotate the cam to the open position to remove the cover. Cam bolting eliminates loose and missing fasteners.

Other Bolting Options



Slam Lock

The self engaging slam lock feature automatically locks the cover/grate to the frame when closed. To the untrained eye, the unlocking technique for the slam lock is not easily recognizable. With a standard pry bar, the latch releases when the pry bar is applied to the right location.



Standard Bolting—
The simplest way to secure covers or grates to the appropriate frame. Standard hex bolts or cap screws are the most common.



Pent Head Bolting—
Provides a bit more security over standard bolting. Pent head bolts are substituted for the standard hex head style. Tools for pent head bolts are commonly available.



Captive Hinge

Using a theft resistant hinge pin permanently secures the cover to the frame. This patented feature is referred to as our Captive Hinge design.



Cam or Keyed Locks

The cam lock provides improved security to frame and cover assemblies, while eliminating loose and missing fasteners. EJ offers various cam and lock options to fit your needs. (underside view shown)



Tamper Proof Bolting—
These type of bolts are used for situations that require special security above standard and pent head bolting. Tools required for removal are not as common.

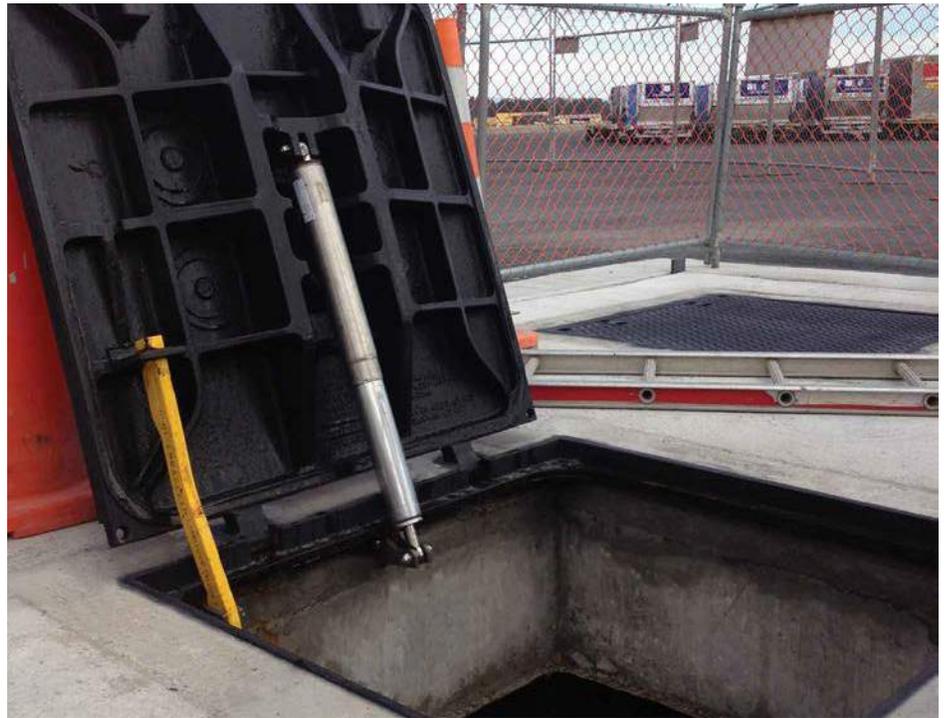
Ease of Use

Whether it is an access point you need to get into daily, or only on an occasional basis, ease of entry to the chamber is key for authorized personnel.

Our designs incorporate features that improve reliability and ergonomics to make use simple and reduce effort.

Benefits

- Ergonomically engineered to minimize effort and reduce strain
- Intuitive operation that requires minimal training
- Multiple handling options that can accommodate your existing tools



Mechanical Strut

Mechanical strut greatly reduces the effort required to open the cover. For example, a 550 pound cover can be lifted using less than 35 pounds of force at the handle. The fully contained, corrosion-resistant stainless steel strut takes up minimal space and is superior to exposed spring lift assist systems.



Hinged Covers and Hatches

Ranging from standard manholes to large hatches, EJ offers a wide range of solutions to fit your application's proof load and usage needs (see page 11 for benefits of hinge cover designs).

EPIC® Pick Bar

EPIC pick bar solution improves stability and increases leverage in this patented, closed hole design.

MULTILEAF™ Hinged Covers

To withstand heavy loads, large openings typically required heavy covers. Innovations from EJ, such as the MULTILEAF, use a multi-cover design to distribute the weight between several covers, making opening the large cover area much easier while retaining strength.

Custom Logo Covers

Promote Your Identity

Customize Your Casting

Always popular, custom covers may feature a slogan, logo, mascot or a popular characteristic. EJ provides custom logo and lettered covers for many municipalities, utilities and universities in a multitude of cover designs. Specialized lettering, in any language, lets you specify the city, corporation and type of structure beneath the cover. Customized logos and lettering are available on a wide selection of EJ manhole covers.



Coating of Castings

AASHTO M306 specifically calls for castings to be uncoated. Cast iron is a highly corrosion resistant product and coatings are not needed. Coatings have been applied in the past for aesthetic reasons and may hide castings defects.

EJ is dedicated and committed to environmental stewardship for clean air, water, and earth, while adhering to standard specifications designated by AASHTO.



Fabricated Products

EJ offers a variety of fabricated solutions for both on road and off road applications.

We manufacture an extensive range of access solutions in a variety of materials — including galvanized steel, stainless steel, aluminium, ductile iron and composite — in our world class production facilities.

Our range of fabricated steel drainage grating conforms to rigorous DOT and municipal standards. Approved products are used on federal highway projects across the USA.

Access hatches are designed to withstand heavy use. They are also available for lighter weight applications including pedestrian or unintended vehicular traffic.

Applications

- Infrastructure access
- Drainage and storm water management
- Utility and telecommunication vaults
- Pump and lift stations
- Decorative streetscapes

Services

- Knowledgeable customer support
- Experienced engineering
- High quality materials and hardware
- Automated welding and machining
- Hand fabrication
- Large volume production
- Custom solutions

Products

- Access hatches
- Infill floor doors
- Steel riser rings
- Roadway grates
- Reticuline grates
- Bar grates
- Trench frames
- Tree guards
- Hand rails and safety bars
- Trash racks and intake screens
- Other custom fabricated solutions to satisfy your specific application

Access Hatches



Fabricated aluminum and steel access hatches are available in a wide range of styles, equipped with the features you need for your project.

Infill Floor Doors



Infill hatches accommodate pavers or concrete of varying heights to maintain the flow and identity of a streetscape, campus, or park landscape.

Roadway Grates



Our fabricated grating can be customized to fit existing drainage structures.

Catch Basin and Curb Inlet Grates



Including galvanized riveted reticuline and bar grates.

Trench Frames and Grates



Build to any length of drainage required and incorporate cast iron trench or fabricated steel grates to meet your project needs.

Riser Rings



Adjust any manhole or catch basin to grade on your resurfacing projects, new installations, or rehabilitation work. Available in round, square, or rectangular sizes.

Municipal and Construction Casting Load Ratings

Loading Requirements

All products manufactured by EJ are designed to meet or exceed the specified loading requirements. They conform to AASHTO and ASTM standards. These standards specify material quality and load requirements.

Proof Load Testing

All H-20 heavy duty traffic rated construction castings must pass a proof load test conducted in accordance with AASHTO M306 guidelines. The proof load testing procedure calls for the load to be concentrated on a 9" x 9" contact area in the center of the cover or grate and hold 40,000 pounds for one minute. Following the test the casting is carefully inspected. Cracks or permanent deformation are cause for rejection. Frequently, EJ castings are tested far beyond the specified proof load, often to destruction.

Material Selection

Depending on the model, our construction castings can be manufactured using either gray iron or ductile iron. Gray iron has an unequalled record of success as a material for construction castings. Gray iron is highly resistant to corrosion and maintains compressive strength, abrasion resistance, vibration absorption, and low-notch sensitivity. Additionally, gray iron has a long service life and is very cost effective. Ductile iron combines the advantages of gray iron with greater strength, toughness, higher impact resistance and increased durability without additional weight. Because it has the ability to withstand greater loads without failure, it is often specified for extra-heavy load applications.

Gray and Ductile Iron Load Ratings and Descriptions

Rating	Acceptable Load Weight (lbs)	Description
Airport Extra Heavy Duty	Max. 200,000	Casting has been proof load tested to a minimum 200,000 lbs. This includes an additional safety factor over FAA design loading.
Extra Heavy Duty	Max. 100,000	Casting has been proof load tested to 100,000 - 200,000 lbs. This meets the design loading associated with the FAA wheel loading.
Heavy Duty	Max. 40,000	Casting must meet the requirements of AASHTO M306 to be classified as heavy duty. AASHTO M306 requires that castings bear a minimum of 40,000 lbs on a 9" x 9" area.
Medium Duty	Max. 16,000	Castings designated as medium duty accept loading from 16,000 - 40,000 lbs. These castings can accept standard traffic loading, and are in conformance with H-20/HS-20 (wheel load of 16,000 lbs. on a tire contact area of 10" x 20") or Federal Specification RR-F-621D (25,000 lbs. on a 9" x 9" load contact area).
Light Duty	Max. 2,500	Light duty castings are able to withstand some vehicular loading, but are not designed to accept roadway traffic. Items can accept loading from 2,500-16,000 lbs. These products may be subject to occasional traffic from process maintenance, mowers, etc.
Non-traffic	Under 2,500	Castings designated as non-traffic are intended for use in areas that are not subject to vehicle traffic. Generally nothing over 2,500 lbs. should be placed on these items. Duty rating is 0 - 2,500 lbs.

Flow Capacities of Inlet Grates

Selecting and specifying the proper type of inlet grates for drainage is an important part of a stormwater management design plan. EJ manufactures many different types and sizes of inlet drainage grates to meet your design needs. See a listing of EJ drainage tables for round grates and catch basins in the back of this catalog.

The flow capacity of any inlet grate in a sump or ponded condition is a function of the depth of water over the grate and the open area of the grate. For this calculation, the orifice equation is used. The orifice equation can be used to determine the flow through a grate.

$$Q = CA\sqrt{2gd}$$

where Q = flow

C = orifice coefficient

A = open area of grate (ft²)

g = acceleration due to gravity (32.2 ft/sec²)

d = depth of water over grate (feet)

Using an orifice coefficient of 0.67 and correcting open area from square feet to square inches and depth of water from feet to inches, this equation simplifies to:

$$Q = 0.0108 A\sqrt{d}$$

where Q = flow (CFS, cubic feet per second)

A = open area of grate (in²)

d = depth of water over grate (inches)

Note: This equation is valid for inlet grates in a sump condition where water depths are 4 inches or greater. At water depths less than 4 inches an inlet grate acts as a weir to incoming flow and requires different analysis to determine flow capacity. The weir equation used is listed below and it is used to determine how much water flows to the grate:

$$Q = 3.33 L(H)^{3/2}$$

where Q = flow (CFS)

L = perimeter of grate where flow is present (in feet)

H = depth of water above grate (in feet)

It is important to note that the orifice or weir calculations listed above do not compensate for any reduction in flow capacity due to clogging by debris. This adjustment may vary and is left up to the discretion of the specifying engineer. In traveled portions of roadways, inlets should be placed at low points and along slopes. The inlets placed along slopes are intended to reduce inlet bypass and to reduce or eliminate ponding which can be a hazard to traffic. Maximum allowable ponding varies between specifying bodies.

Example 1:

Calculate the flow capacity of an EJ model 5105 TYPE M1 Inlet Grate with 6 inches of water over it. Since depth exceeds 4" the orifice equation is applicable.

Recall: $Q = 0.0108 A\sqrt{d}$ $A = 175 \text{ in}^2$

$d = 6 \text{ inches}$

$$Q = 0.0108 \times 175 \times \sqrt{6}$$

$$Q = 4.6 \text{ CFS}$$



Example 2A:

Select a suitable EJ manhole catch basin unit with a grate to handle 6 CFS. Depth of water is 5 inches.

Recall: $Q = 0.0108 A \sqrt{d}$ $Q = 6 \text{ CFS}$

$d = 5 \text{ inches}$

Solve for A: $A = Q / (0.0108 \sqrt{d})$

$A = 6 / (0.0108 \sqrt{5})$

$A = 249 \text{ in}^2$



Choose EJ model V-5622 Grate with 266 sq. in. open area.

Sinusoidal and Vane grate flow characteristics

It is generally accepted that vane grates are more efficient than standard bar grates when capturing water that is moving across them. Sinusoidal and vane grates have greater efficiency due to better directional flow characteristics. Sinusoidal and vane grates typically allow less water to bypass the grate. Please note that if a vane grate is installed improperly (i.e. backwards) the grate will have poor flow characteristics, while sinusoidal grates accept water equally in either direction.

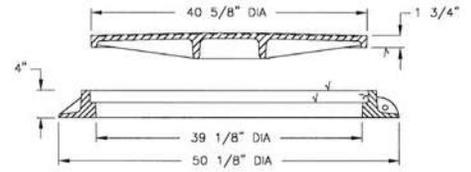


Manhole Frames and Covers



430 FRAME & COVER

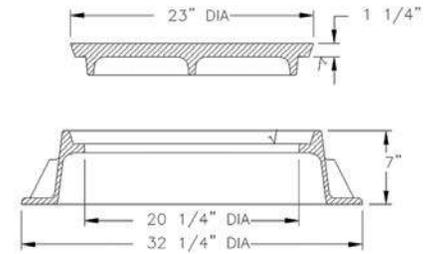
Heavy duty
Vertical and horizontal machined surfaces



1000 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Solid or vented covers
- Custom logo covers
- Special lettered covers
- Watertite assembly
- Adjusting risers
- Gasket seal covers
- Type E outer cover and Type F 8" diameter inner cover
- 4" height frame — 1000Z1
- Stackable frame



Type A solid cover 1 1/2" dia. flat bosses on cover face illustrated



Type B Vented Cover
20 – 1 1/4" dia. holes



Type C Vented Cover
2 – 1" dia. holes



Type M Radial Flat Grate
Approx. 140 sq. in. open area



Type N Oval Grate
Approx. 115 sq. in. open area
2 1/4" height above frame
"DUMP NO WASTE!" lettering and trout image



Type O1 Beehive Grate
Approx. 140 sq. in. open area
5 1/4" height above frame
"DUMP NO WASTE!" lettering and trout image



Type O2 Beehive Grate
7" height above frame

Available Frames for 1000 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
1000Z1	32 1/4	4
1000	32 1/4	7
1010Z	32 1/4	7
V-5665	34 13/16	7 1/4

Note: All dimensions are in inches.

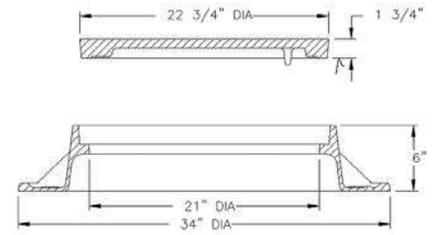
1020 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Solid, vented or custom logo covers
 - Special lettered covers
 - Watertite assembly
 - Adjusting risers
 - Gasket seal covers
 - Stackable frames



Type A solid cover illustrated



Type N Oval Grate
Approx. 135 sq. in. open area
2 1/2" height above frame



Type M1 Radial Flat Grate
Approx. 120 sq. in. open area
"DUMP NO WASTE!" lettering and trout image



Type P Concave Grate
Approx. 150 sq. in. open area
5/8" depth of concave



Type M2 Flat Bar Grate
Approx. 150 sq. in. open area



Type M3 ADA Grate
Approx. 120 sq. in. open area
"DUMP NO WASTE!" lettering



Type O1 Beehive Grate
Approx. 115 sq. in. open area
Height above frame 4"



Type O2 Beehive Grate
7" height above frame

Available Frames for 1020 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
1037	34	4
1885*	32 1/2	4
1077	36	4
2995	34	4
2996***	34TF	4 1/2
1020	34	6
1022-1	34	7
1022-2	34	7
1022-3	36	7
1076**	36	7
1550	34	8
1051	34	9
1050Z1	34	9
1050	36	9

Note: All dimensions are in inches.
*Special lock bar and mud ring (security)
**Special non-rocking feature
***Frame is reversible, can be installed as top flange

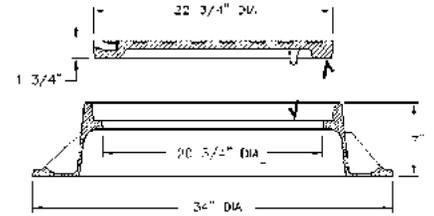
1022 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1020 covers and grates

- Options
- Solid, vented or custom logo covers
 - Special lettered covers
 - Watertite assembly
 - Adjusting risers
 - Gasket seal covers
 - 36" base flange — 1022Z2, 1022Z3



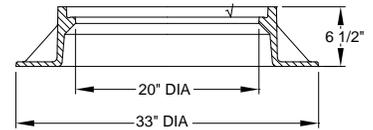
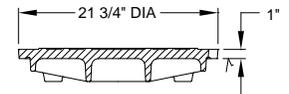
1022Z1 Illustrated



1030 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1060 covers and grates

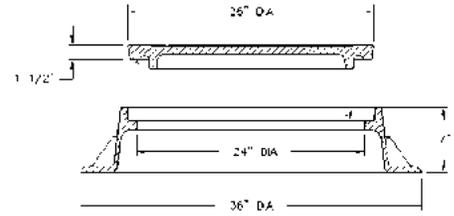
- Options
- Solid or vented covers
 - Special lettered covers
 - Adjusting risers
 - Grates



1040 — 1049 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Solid, vented or custom logo covers
- Heavy duty cover with square indent top
- Extra heavy duty cover — 1905
- Light weight composite cover — only available bolt down
- Watertite assembly
- Hinged unit
- Adjusting risers
- Gasket seal covers
- Frost proof
- Z1 frame available with centering lugs
- Stackable frames



Type A Solid Cover



Type B Vented Cover
16 hole



Type M1 Flat Grate
Approx. 190 sq. in. open area
"DUMP NO WASTE!" lettering and trout image



Type M2 Flat Bar Grate
Approx. 170 sq. in. open area
"DUMP NO WASTE!" lettering and trout image



Type M3 ADA Grate
Approx. 130 sq. in. open area
"DUMP NO WASTE!" lettering



Type N Oval Grate
Approx. 230 sq. in. open area
1" height above frame
"DUMP NO WASTE!" lettering and trout image



Type O2 Beehive Grate
Approx. 185 sq. in. open area
6" height above frame

Available Frames for 1040 — 1049 Covers and Grates

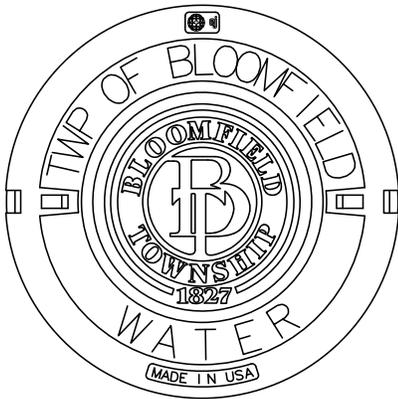
Catalog Number	Base Flange Diameter	Frame Height
1080	32 1/2	4
2800	33 1/2	TF
1046	36	4
2450	34	5**
1045	36	7
1045Z1	36	7
1045Z2	34	7
1040	39	7
1044*	38 3/4	7
1047	36	8
1048	36	9
1049	36	10
1795	36	adj.

Note: All dimensions are in inches.

*Frost proof

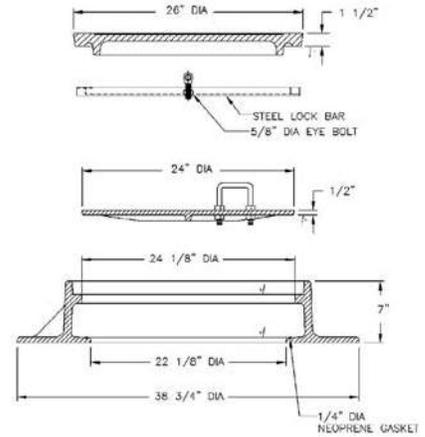
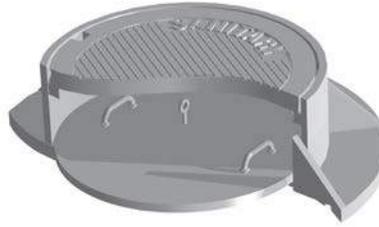
**Reversible frame

1040 — 1049 CUSTOM LOGO COVERS



1044 FRAME & COVER

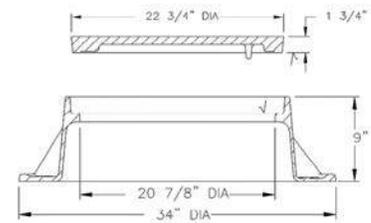
- Heavy duty
- Machined bearing surfaces
- Frost proof
- Lock bar
- Accepts 1040 covers



1050 FRAME & COVER

- Heavy duty
- Machined bearing surfaces
- Accepts 1020 covers and grates
- Light weight stackable frame

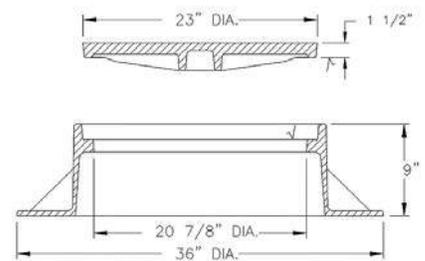
- Options
- Solid, vented or custom logo covers
 - Special lettered covers
 - Watertite assembly
 - Adjusting risers
 - Gasket seal covers



1058 FRAME & COVER

- Heavy duty
- Machined bearing surfaces

- Options
- Solid or vented covers
 - Special lettered covers
 - Watertite assembly
 - Grate
 - Logo cover — V-1370-1



Type M2 Grate
 Medium duty
 Approx. 120 sq. in.
 open area
 "DUMP NO WASTE!"
 lettering and fish
 image

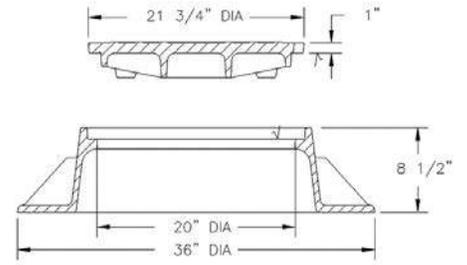


Solid Cover for Bolting

1060 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Stackable frame

Options
 Solid or vented covers
 Special lettered covers
 Custom logo covers
 Watertite assembly
 Adjusting risers
 Gasket seal covers



Type A Solid Cover illustrated

Available Frames for 1060 Covers and Grates

Catalog Number	Base Flange Dia.	Frame Height
1170	27 3/4	5
1171	26	5
1180	34 1/4	5
1190	40	5
1030	33	6 1/2
1060	36	8 1/2
2850	34 TF	4

Note: All dimensions are in inches.



Type A Solid Cover



Type B Vented Cover
 25 holes



Type M2 Radial Flat Grate
 Heavy duty
 Approx. 145 sq. in. open area



Type M1 Flat Grate
 Medium duty
 Approx. 115 sq. in. open area



Type N Oval Grate
 Approx. 135 sq. in. open area
 2 1/2" height above frame



Type O1 Beehive Grate
 Approx. 135 sq. in. open area
 4" height above frame

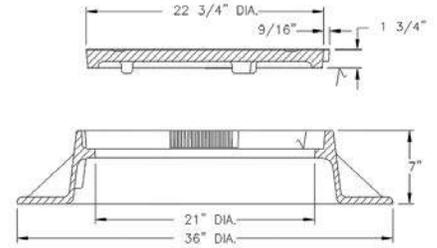


Type O2 Beehive Grate
 7" height above frame

1076 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Locking covers
 Unit provided with non-rock ratchet feature
 Stackable frames

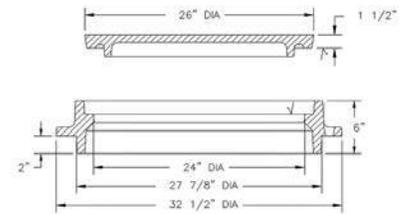
Options
 Gasket seal covers
 4" height frame available — 1077



1080 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1040 covers and grates

Options
 Solid or vented covers
 Special lettered covers
 Adjusting risers
 Gasket seal cover
 Watertite assembly
 Grates



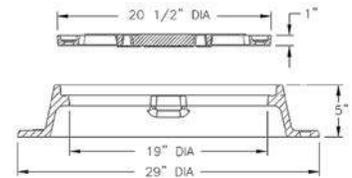
1085 FRAME & COVER

Heavy duty
 2 bolt assembly supplied as standard
 Stackable frames

Options
 Solid or vented covers
 Custom logo covers
 Special lettered covers
 Grates



City of New York Parks & Recreation shown.



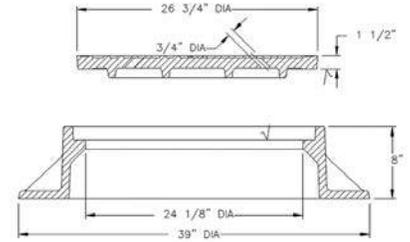
Type M Flat Grate
 Heavy duty
 Approx. 72 sq. in
 open area

Vented Cover

1090 FRAME & COVER

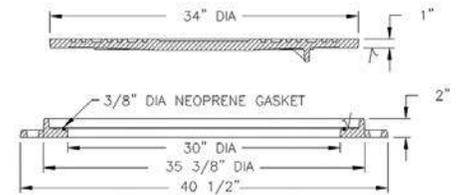
Heavy duty
Machined bearing surfaces
Vented cover

Options
Special lettered covers



1106 FRAME & COVER

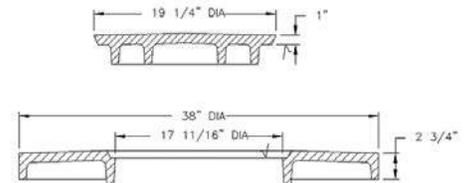
Heavy duty
Machined bearing surfaces



1110 FRAME & COVER

Heavy duty
Gate well frame & cover
Machined bearing surfaces

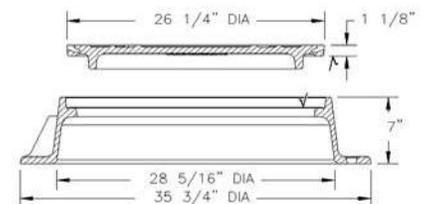
Options
Special lettered covers



V-1115-3 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frames

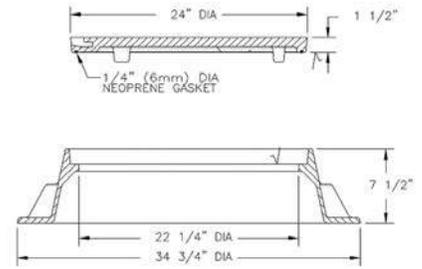
Options
Special lettered covers
Custom logo covers
Grates
Hinged unit
Adjusting risers



1117 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Unit provided with non-rock ratchet feature

Options
 Gasket seal covers
 Adjusting risers
 Grates



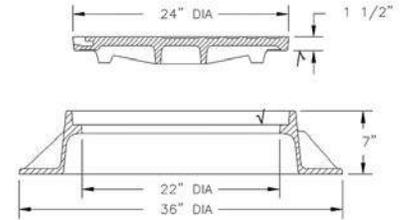
1118 — 1120 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Solid, vented or custom logo covers
 Special lettered covers
 Watertite assembly
 Adjusting risers
 Gasket seal covers
 Grates
 TF Frame 2800 — see page 124
 Stackable frames



1120 Illustrated



Type M Flat Grate
 Approx. 125 sq. in.
 open area



Type M2 ADA Grate
 Approx. 84 sq. in.
 open area

Available Frames for 1118 — 1120 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
1118	34	4
2860**	34 TF	4
1311	32	4
1119	34	7
1120Z1	36	7
1117*	34 3/4	7 1/2
2030	31 1/2	Adjustable

Note: All dimensions are in inches.

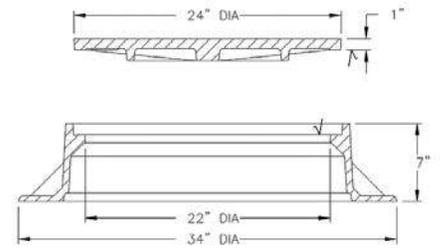
*Locking feature

**Top Flange Frame

1122 FRAME & COVER

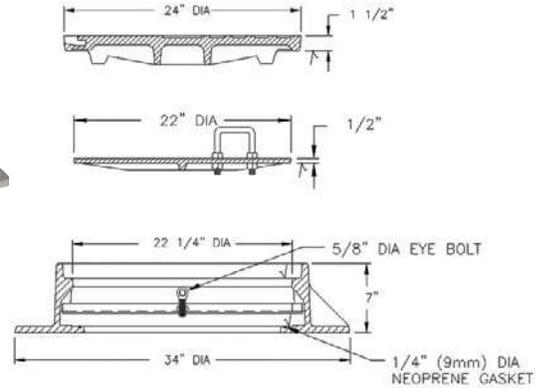
Heavy duty
Machined bearing surfaces

- Options
Solid or vented covers
Special lettered covers
Gasket seal covers



1123 FRAME & COVER

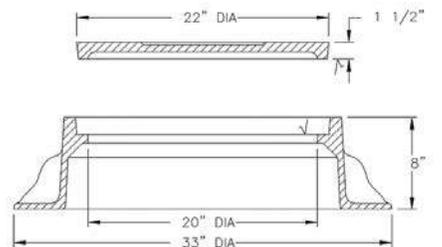
Heavy duty
Machined bearing surfaces
Frost proof
Accepts 1120 covers



1125 FRAME & COVER

Heavy duty
Machined bearing surfaces
Also accepts 1130 cover and grates

- Options
Special lettered covers



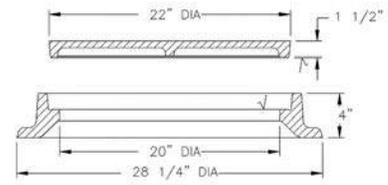
1130 FRAME & COVER

Heavy duty
Machined bearing surfaces
For 24" sewer pipe bell

- Options
- Special lettered covers
- Grates
- Gasket seal covers
- Medium duty covers
- Extra heavy duty ductile iron cover



Type A solid cover illustrated



Type M Grate
Approx. 182 sq. in. open area



Type M1 Flat Grate
Medium duty
Approx. 115 sq. in. open area



Type M3 Radial Grate
Heavy duty
Approx. 170 sq. in. open area



Type N Oval Grate
Approx. 135 sq. in. open area
2 1/2" height above frame



Type O1 Beehive Grate
Approx. 135 sq. in. open area
4" height above frame



Type O2 Beehive Grate
Approx. 135 sq. in. open area
7" height above frame

Available Frames for 1130 Covers and Grates

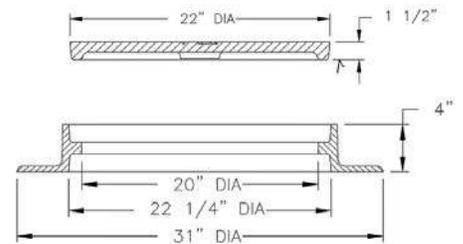
Catalog Number	Base Flange Diameter	Frame Height
1490	28	4
1130	28 1/4	4
1135	31	4
2935*	28 TF	4
1140	28 1/4	6
1125	33	8

Note: All dimensions are in inches.
*Reversible

1135 FRAME & COVER

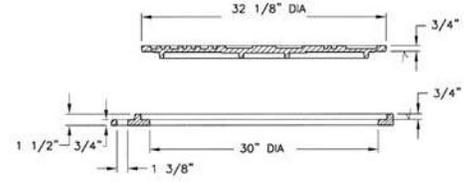
Heavy duty
For 24" sewer pipe bell
Reversible frame
Accepts 1130 covers and grates

- Options
- Special lettered covers
- Grates
- Gasket seal covers
- Medium duty covers



1136 FRAME & COVER

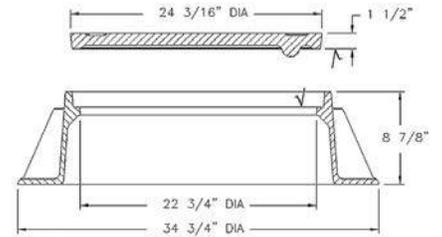
Light duty (Non-traffic)
Machined bearing surfaces



1143 FRAME & COVER

Heavy duty
Machined bearing surfaces

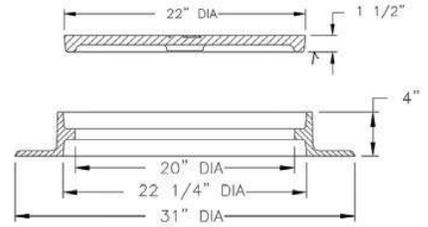
Options
Special lettered covers



1150 FRAME & COVER

Medium duty
For 12" sewer pipe bell

Options
Adjusting risers
Grates



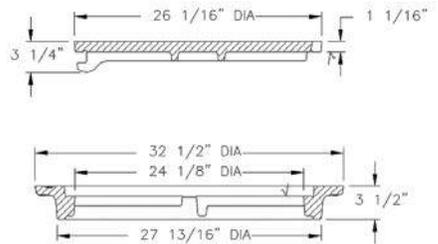
Type M Flat Grate
Approx. 40 sq. in.
open area



Type N Oval Grate
Approx. 50 sq. in.
open area
2" height above frame

1154 FRAME & COVER

Heavy duty
Machined bearing surfaces
"Turn and Lock" feature is standard
Options
7" height base flange frame



1154 Frame Heights

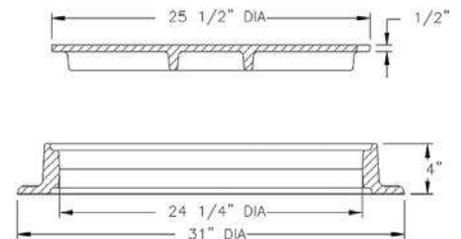
Frame Type	Frame Height
1154Z1 TF	3 1/2
1154Z2 BF	7

Note: All dimensions are in inches.

1155 FRAME & COVER

Light duty (Non-traffic)

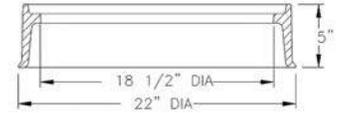
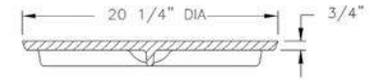
Options
Special lettered covers
"DUMP NO WASTE!" lettering



1160 FRAME & COVER

Medium duty
For 18" sewer pipe bell

Options
Grates



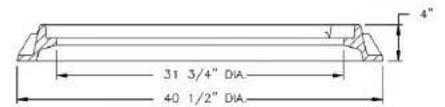
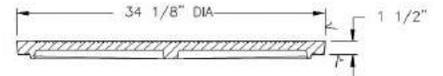
Type M Flat Grate
Approx. 75 sq. in.
open area



Type N Oval Grate
Approx. 105 sq. in.
open area
2 1/2" height above frame

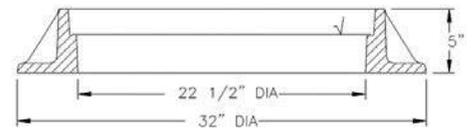
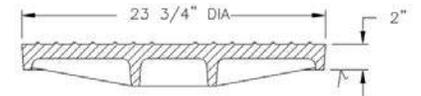
1161 FRAME & COVER

Heavy duty
Machined bearing surfaces
Options
Special lettered covers
Custom logo covers
Gasket seal covers
Non-stacking frame available



V-1168 FRAME & COVER

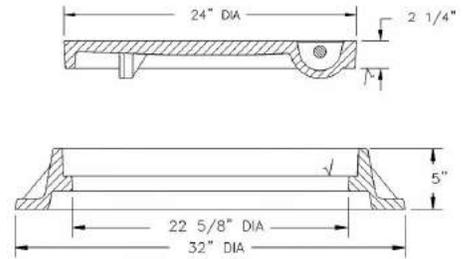
Heavy duty
Options
Custom logo covers
Special lettered covers



1177 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Custom logo covers
- Special lettered covers
- Adjusting risers
- Grates



Flat Grate
Approx. 190 sq. in.
open area



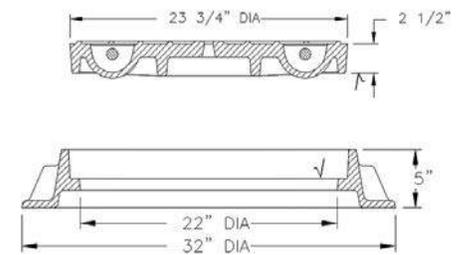
Custom Logo Covers



1202 FRAME & COVER

Heavy duty
Machined bearing surfaces
Specify Type cover or grate

- Options
- Custom logo covers
- Special lettered covers
- Grates
- Adjusting risers
- "DUMP NO WASTE!" lettering



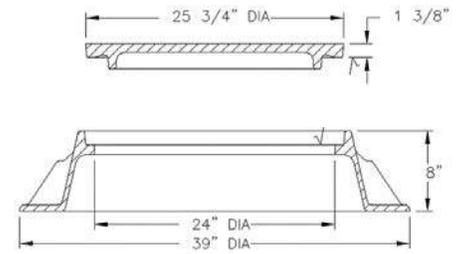
Flat Radial Grate
Approx. 117 sq. in.
open area



Custom Logo Cover

1203 FRAME & COVER

- Heavy duty
- Machined bearing surfaces
- Options
- Solid or vented covers
- Special lettered covers
- Grate with "DUMP NO WASTE!" lettering
- Custom logo covers
- Gasket seal covers
- Cam lock covers
- Watertite assembly
- Adjusting risers
- ADA grate
- Square flange frame available — 1203Z3



1040M3 ADA Grate
Heavy duty
Approx. 130 sq. in.
open area

Available Frames For 1203 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
1203Z1	39	4
1405	34	6
1203Z2	39	8
1207	36	8
1204	43	10

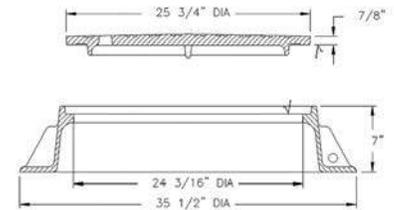
Note: All dimensions are in inches.

1205 FRAME & COVER

- Heavy duty
- Machined bearing surfaces
- Options
- Solid or vented covers
- Custom logo covers
- Grates
- Gasket seal covers
- Adjusting risers
- Hinged unit



Type A solid cover illustrated



Type M Flat Grate
Approx. 200 sq. in.
open area
"DUMP NO WASTE!"
lettering



Type M2 Circular Vane Grate
Approx. 403 sq. in.
open area



Type O2 Beehive Grate
Approx. 185 sq. in.
open area



Type O3 9" Tall Beehive Grate
Approx. 163 sq. in.
open area

Available Frames for 1205 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
1205Z1	35 1/2	4
1205	35 1/2	7
1936	35 1/2	9

Note: All dimensions are in inches.

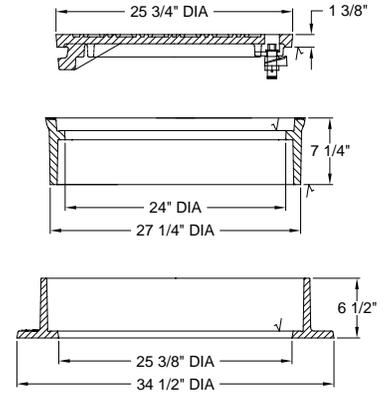
1208 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Adjustable frame
 Accepts 1203 covers

Options
 Special lettered covers
 Cam lock covers



1208 adjustable frame and 1203A2 cover with optional cam lock illustrated



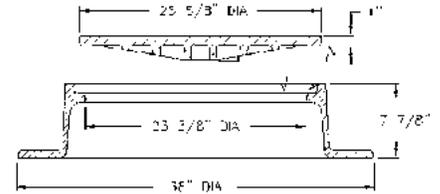
1210 FRAME & COVER

Heavy duty
 Vertical and horizontal machined surfaces

Options
 Solid or vented covers
 Special lettered covers
 Adjusting risers



Type A Solid PLD Cover



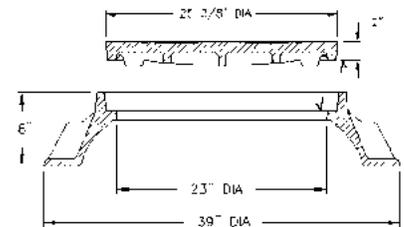
1212 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Stackable frame

Options
 Solid or vented covers
 Special lettered covers
 Custom logo covers
 Also accepts 1700 covers
 Gasket seal covers
 Cam lock covers
 Watertite assembly
 Adjusting risers
 Grate — 1700
 4" height frame — 1214Z



Type A1 Solid Cover
 "DUMP NO WASTE!"
 lettering and trout
 image



1220 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces

Options

- Solid or vented covers
- Special lettered covers
- Adjusting risers
- Gasket seal covers
- 4" height frame



Type BVH Perforated
PLD Cover

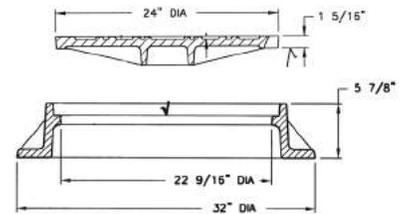


1224 FRAME & COVER

Heavy duty

Options

- Special lettered covers
- Watertite assembly
- Gasket seal covers

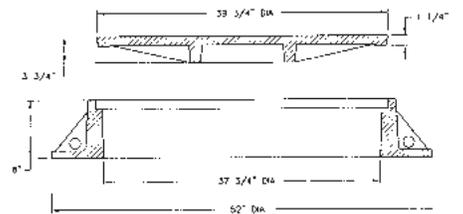


1225 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

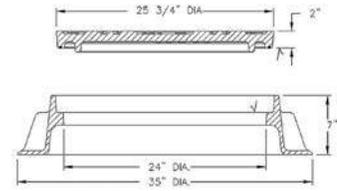
- Special lettered covers
- Watertite assembly
- Hinged unit



1227 FRAME & COVER

Heavy duty
Machined bearing surfaces

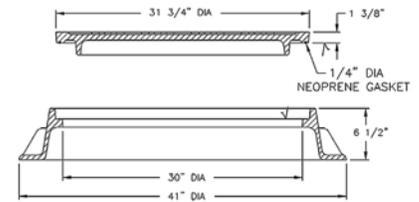
Options
Special lettered covers
Gasket seal cover



1230 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1810 series covers

Options
Special lettered covers
Gasket seal covers
Watertite assembly
Grate — V3600-4
Slab style frame — V-1700-4
Reversible frame — V-1600-4
Adjusting risers
Hinged unit



Available Frames for 1230 Covers and Grates

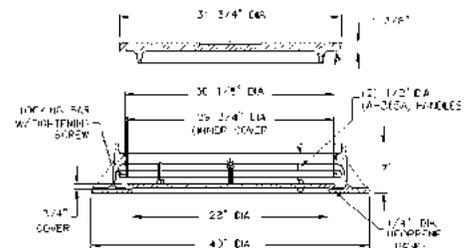
Catalog Number	Frame Height
1820	5 5/8
1232	6 1/2
1233	7
1234	8
1825	10

Note: All dimensions are in inches.

1233 FRAME & COVER

Heavy duty
Machined bearing surfaces
Frost proof
Accepts 1230 covers

Options
Special lettered covers

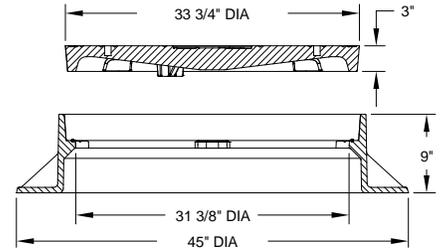


1240 AIRPORT MANHOLE FRAME & COVER

Extra heavy duty
 Proof load 245,000 lbs.
 Machined bearing surfaces
 Bolted assembly

Options
 Solid or vented covers
 Special lettered covers

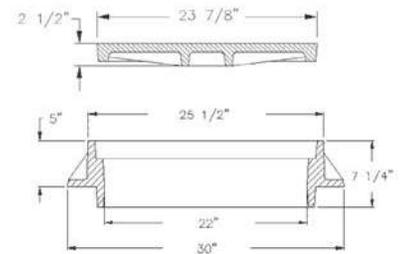
MATERIAL SPECIFICATIONS
 Frame - Gray Iron ASTM A48, Class 35B
 Cover - Ductile Iron ASTM A536



V-1243 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Solid and vented covers
 Custom logo covers
 Special lettered covers
 Adjusting risers
 Grate — V-3317

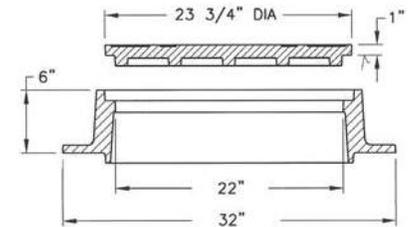


Custom Logo Cover

1251 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Custom logo covers
 Special lettered covers
 Adjusting risers
 Grates



Flat Grate
 Approx. 172 sq. in.
 open area

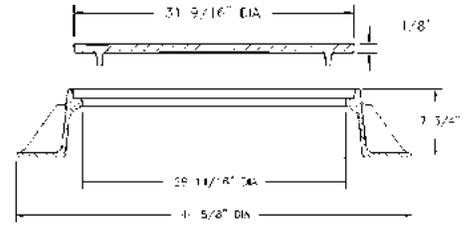


Type A Solid Cover

1266 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces
Perforated cover is standard

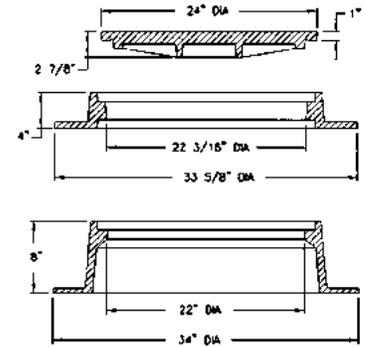
Options
Grates
Special locking device



1267 FRAME & COVER

Heavy duty
Machined bearing surfaces
Specify 4" or 7" height frame
4" frame is reversible

Options
Special lettered covers
Adjusting risers
Grates
Gasket seal covers
Watertite assembly
Consider 1122Z 7" frame as an alternative

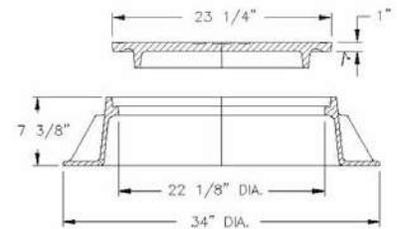


Flat Radial Grate
Approx. 122 sq. in.
open area

V-1301 FRAME & COVER

Heavy duty
Machined bearing surfaces

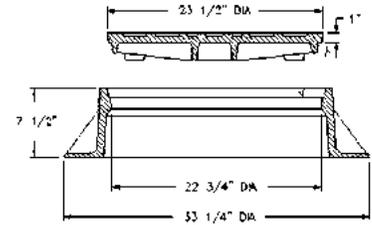
Options
Solid and vented covers
Custom logo covers
Special lettered covers
Grate — V-3501



V-1304 FRAME & COVER

Heavy duty
Machined bearing surfaces

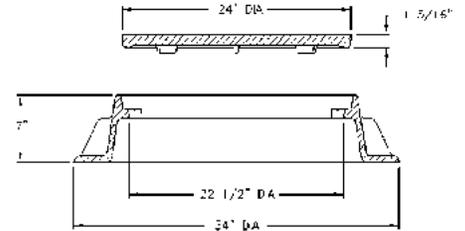
Options
Special lettered covers



1310 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

Options
Special lettered covers
Watertite assembly
Gasket seal covers
Bolted assembly
2", 2 1/2", and 3" adjusting risers — 1310H
4" height frame — 1311
Grate — Type M and M2

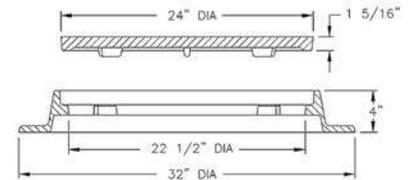


Type M Grate
Approx. 182 sq. in.
open area

1311 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

Options
Special lettered covers
Watertite assembly
Gasket seal covers
Bolted assembly
Adjusting riser — 1224
7" height frame — 1310
Grate — 1120M

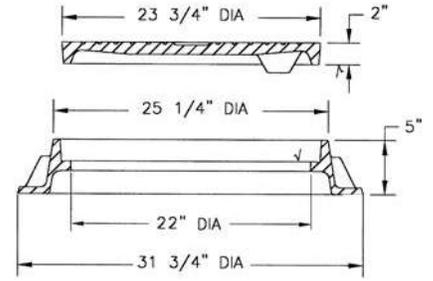


Type M Flat Grate
Approx. 125 sq. in.
open area

V-1317 FRAME & COVER

Heavy duty
Machined bearing surfaces

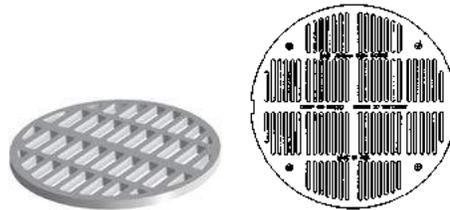
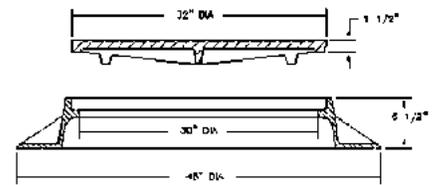
- Options
Solid and vented covers
Special lettered covers
Custom logo covers
Watertite assembly
Adjusting risers
Grates — V-3317 & 1710



1320 FRAME & COVER

Heavy duty
Machined bearing surfaces
Also accepts 1480 covers and grates

- Options
Solid, vented and custom logo covers
Special lettered covers
Watertite assembly
Gasket seal covers
ADA Grate
Hinged unit
Type E ductile outer cover with 1040
26" diameter "inner" cover



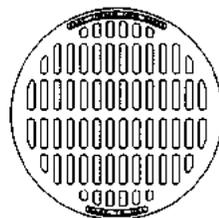
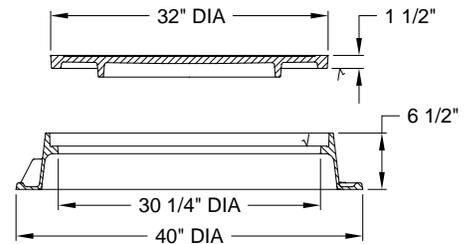
Type M Flat Grate
Approx. 360 sq. in.
open area

Type M1 ADA Grate
Approx. 262 sq. in.
open area

1322 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1320, 1322, 1324, 1480, V-1419,
V-1420, V-1432 & V-1816 covers

- Options
Special lettered covers
Watertite assembly
Gasket seal covers
Grates
ADA Grate — 1480
Type E ductile outer cover with
1040 — 26" diameter "inner" cover

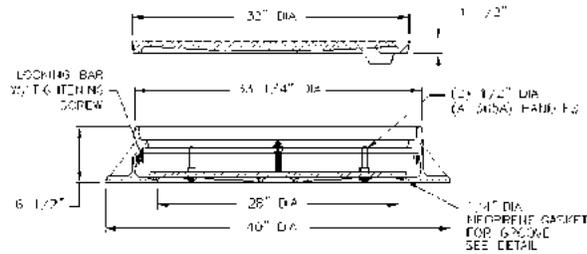


Type M Grate
Approx. 240 sq. in.
open area

1323 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Frost proof
 Accepts 1320, 1322 &
 1480 covers

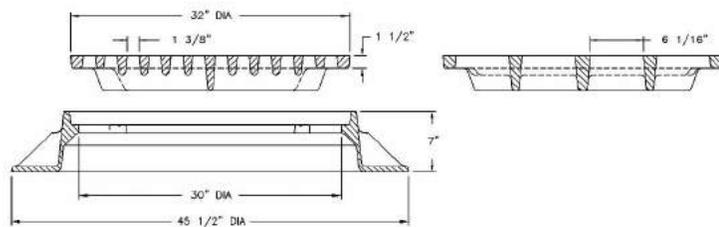
Options
 Special lettered covers
 Custom logo covers
 Pick bars



1324 AIRPORT MANHOLE FRAME & GRATE

Extra heavy duty
 Proof load 200,000 lb.
 Approximate 270 sq. in. open area
 Bolted assembly
 "DUMP NO WASTE!" lettering

Options
 Solid or vented covers
 Special lettered covers
 Gasket seal covers
 Adjusting risers



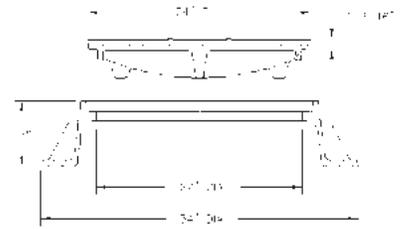
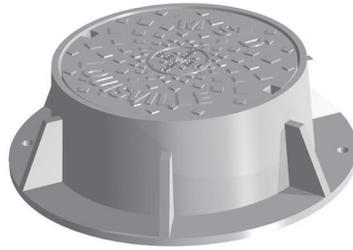
MATERIAL SPECIFICATIONS

Frame — Gray Iron ASTM A48 Class 35B
 Grate — Ductile Iron ASTM A536

1325 FRAME & COVER

Heavy duty
Machined bearing surfaces

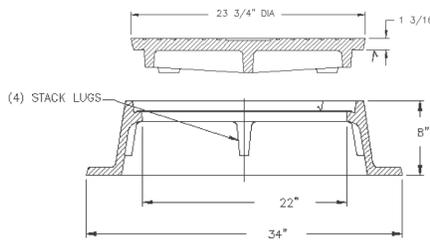
Options
Special lettered covers
Watertite assembly



V-1326 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

Options
Solid and vented covers
Custom logo covers
Special lettered covers
Adjusting risers
Grates
Watertite — V-2326



Available Frames for V-1326 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
V-1136	30	2 1/2
V-1326-4	32	4
V-1327	32	6
V-1326-3	34	6
V-1327-1	36	6
V-1326	34	8
V-1326-2	34	8

Note: All dimensions are in inches.



1120 Type M2 ADA Grate
Approx. 84 sq. in. open area



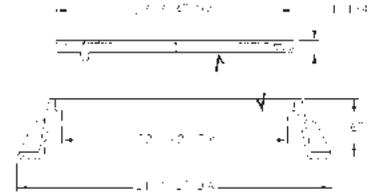
1248 Type M2 Grate
Approx. 192 sq. in. open area

1337 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Special lettered covers
- 7" height frame — 1771
- 2 1/2" height frame — V-1136
- Top flange frame — 2855
- Gasket seal covers
- Watertite assembly
- Grate — V-3337

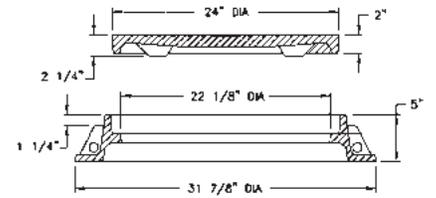


1342 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Special lettered covers
- Custom logo covers
- Solid or vented covers
- Grates
- Watertite assembly
- Adjusting risers
- Pick slots



V-3342 Flat Grate
Approx. 145 sq. in open area

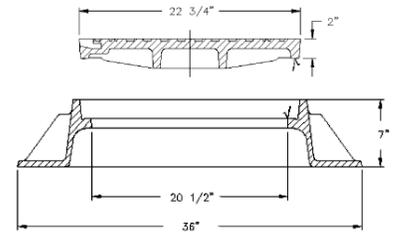
Custom Logo Covers



V-1344 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

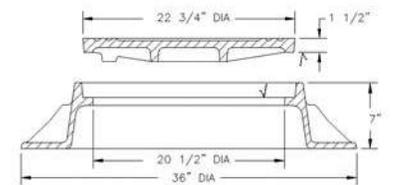
Options
Custom logo covers
Special lettered covers
Adjusting risers
Grate — V-3344



V-1345 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

Options
Custom logo covers
Special lettered covers
Adjusting risers



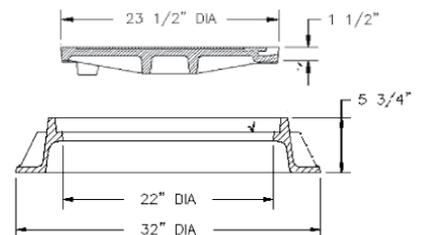
1348 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

Options
Custom logo covers
Special lettered covers
Gasket seal covers
Watertite assembly
Adjusting risers
Grate — V-3418-1
ADA Grate — V-3418-3



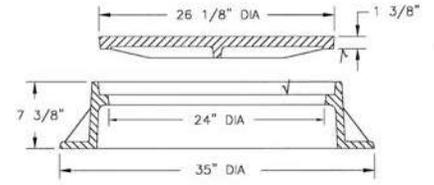
Radial Grate
Approx. 162 sq. in.
open area



V-1355 FRAME & COVER

Heavy duty
Machined bearing surfaces

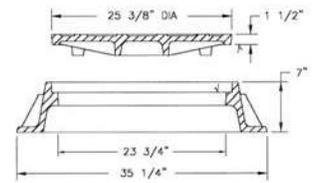
- Options
Solid and vented covers
Special lettered covers
Custom logo covers
Hinged unit



V-1357 FRAME & COVER

Heavy duty
Machined bearing surfaces

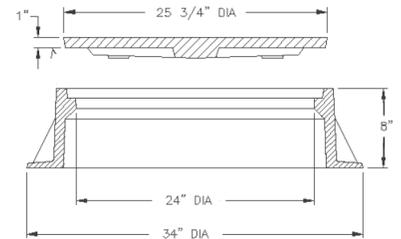
- Options
Special lettered covers
Custom logo covers
Adjusting risers
Reversible frame — V-1600-3 & 2932Z
Grate — V-3600-3 ductile iron,
approximate 180 sq. in. open area



V-1358 FRAME & COVER

Heavy duty
Machined bearing surfaces

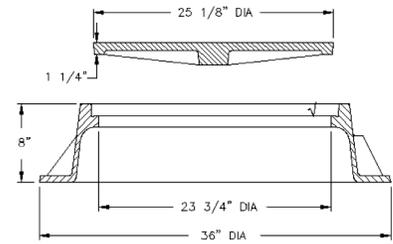
- Options
Solid and vented covers
Special lettered covers
Adjusting risers



V-1360 FRAME & COVER

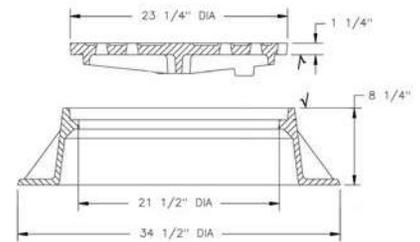
Heavy duty
Machined bearing surfaces

Options
Solid and vented covers
Special lettered covers
Adjusting risers

**V-1383 FRAME & COVER**

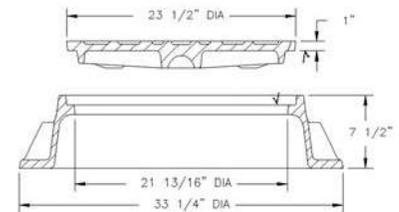
Heavy duty
Machined bearing surfaces

Options
Solid and vented covers
Custom logo covers
Special lettered covers
Gasket seal cover
4" height frame — V-1383-1

**V-1384 FRAME & COVER**

Heavy duty
Machined bearing surfaces
Stackable frames

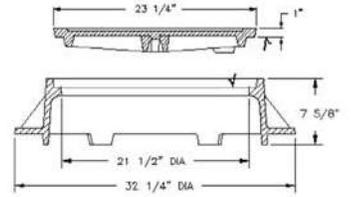
Options
Solid and vented covers
Special lettered covers
Custom logo covers
Gasket seal cover
Ductile iron cover
4" height reversible frame — V-1384-4
6" height frame — V-1284-3
Watertite assembly — V-2384
Adjusting risers
Grate — V-3384
Cam lock assembly
Security bolt assembly
"DUMP NO WASTE!" lettering



V-1403 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Centered lugs
 Uses V-1501 cover

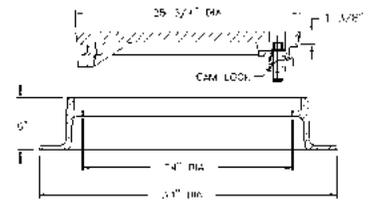
Options
 Solid and vented covers
 Special lettered covers
 Custom logo covers
 Adjusting risers
 4 1/8" height frame — V-1406
 Grate — V-3501, approximate
 157 sq. in. open area



1405 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Cam lock cover

Options
 Special lettered covers
 Grate — 1203M
 ADA grate — 1040M3

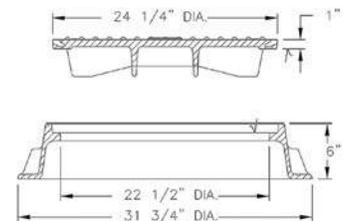


1040M3 ADA Grate
 Heavy duty
 Approx. 130 sq. in.
 open area

V-1407-1 FRAME & COVER

Heavy duty
 Machined bearing surfaces

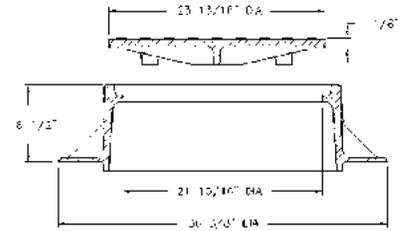
Options
 Solid and vented covers
 Special lettered covers
 Custom logo covers
 Adjusting risers
 Accepts V-1375 cover
 Grate — V-3324



1410 FRAME & COVER

Heavy duty
Machined bearing surfaces
Lock lug cover

Options
Grates

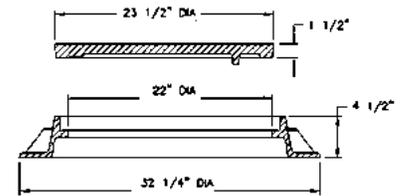


Type M Flat Grate
Approx. 170 sq. in.
open area

V-1418-2 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

Options
Custom logo covers
Special lettered covers
Adjusting risers
Gasket seal covers
Hinged unit
Drainage grates



V-3418-1 Grate
Approx. 169 sq. in.
open area

Available Frames for V-1418-2 Covers and Grates

Catalog Number	Base Flange Diameter	Frame Height
V-1814	30	TF
V-1418-3	30	2 1/2
V-1600-2	28 1/2	4
V-1410-2	32 1/4	4 1/2
1348	32	5 3/4

Note: All dimensions are in inches.

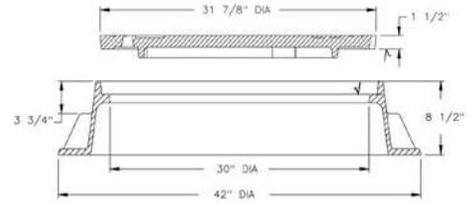
Custom Logo Covers



V-1419 — V-1420 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame

- Options
- Hinged unit
 - Gasket seal covers
 - Custom logo covers
 - Special lettered covers
 - Drainage grates
 - ADA drainage grates
 - Light duty drainage grates
 - Beehive grates



Type M1 ADA Grate
Approx. 262 sq. in. open area

Available Frames for V-1419 — V-1420 Covers and Grates

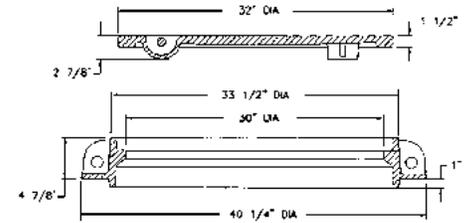
Catalog Number	Base Flange Diameter	Frame Height
V-1816	40 3/4	TF
2810	38	TF
1480	38	4
V-1420	40 3/4	4 1/2
V-1432*	40 1/4	4 7/8
1322	40	6 1/2
1320	46	6 1/2
V-1419	42	8 1/2

Note: All dimensions are in inches.
*Frame features mud ring

V-1432 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Custom logo covers
 - Special lettered covers
 - Watertite assembly
 - Adjusting risers
 - Grates
 - Pick slots



V-3419 Grate
Approx. 346 sq. in. open area



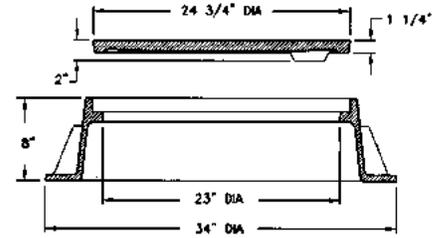
Custom Logo Covers



1433 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Solid or vented covers
 - Special lettered covers
 - Custom logo covers
 - Watertite assembly
 - Gasket seal covers
 - Grates



1433Z2 Illustrated



Type M Grate
Approx. 100 sq. in.
open area

Available Frames for 1433 Covers and Grates

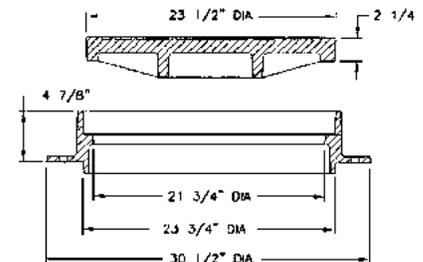
Catalog Number	Base Flange Diameter	Frame Height
1433Z3	34	4
1433Z2	34	8
1433Z1	37 1/4	9

Note: All dimensions are in inches.

V-1438 FRAME & COVER

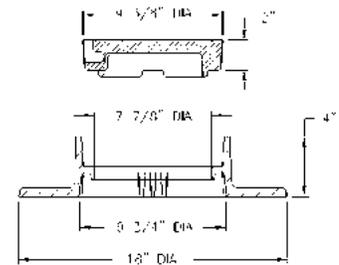
Heavy duty
Machined bearing surfaces

- Options
- Custom logo covers
 - Special lettered covers
 - Watertite — 2438



1445 METER BOX FRAME & COVER

Heavy duty



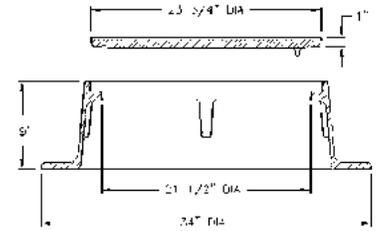
1450 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Z1 stackable frame and platen cover shown

- Options
- Solid or vented covers
 - Custom logo covers
 - Special lettered covers
 - Watertite assembly
 - Adjusting risers
 - Gasket seal covers
 - Lock lug cover
 - Ductile iron grate



1450Z1 Frame Illustrated



Type M Flat Grate
 Approx. 110 sq. in.
 open area

Type B 20 Hole Cover

Available Frames for 1450 Covers and Grates

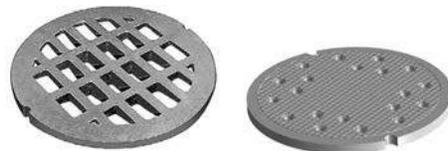
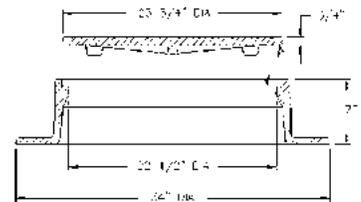
Catalog Number	Base Flange Diameter	Frame Height
2925 TF	23 3/4	4 TF
1690	31 1/4	4 5/8
1665Z1	37 7/8	7
1450Z	38	9
1450Z1	34	9
2020*	37 1/2	9
2035*	36	11

Note: All dimensions are in inches.
 *Frame has mud ring

1460 FRAME & COVER

Light duty (Non-traffic)
 Machined bearing surfaces

- Options
- Solid or vented covers
 - Special lettered covers
 - Gasket seal covers
 - Grates



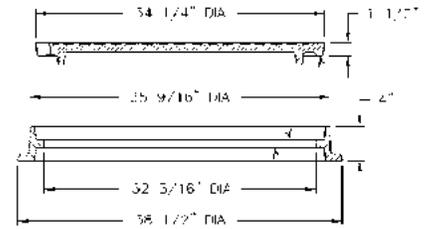
Type M Flat Grate
 Approx. 140 sq. in.
 open area

Type B 20 Vented Cover

1475 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

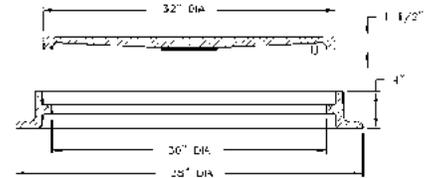
Options
Square bottom flange frame available



1480 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

Options:
Custom logo covers
Special lettered covers
Light duty cover or grate
Watertite assembly
Gasket seal covers
Grates
Hinged unit
1320 Grate — heavy duty
TYPE E ductile outer cover with 1040 26\"/>



Type M1 ADA Grate
Approx. 262 sq. in.
open area



Type M Flat Grate
Light duty
Approx. 275 sq. in.
open area



Custom Logo Cover

Available Frames for 1475 Covers and Grates

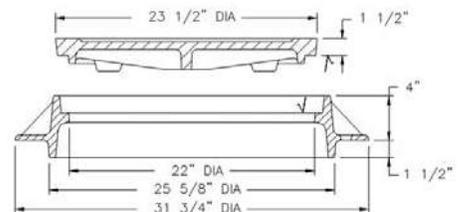
Catalog Number	Base Flange Diameter	Frame Height
1480*	38	4
V-1420	4 3/4	4 1/2
V-1432	40 1/4	4 7/8
1322	40	6 1/2
1320	46	6 1/2
1324	45 1/2	7
V-1419	42	8 1/2
V-1816**	40 3/4	4 1/2 TF
2810**	38	4 TF

Note: All dimensions are in inches.
*Reversible frame
**Top flange only

V-1480 FRAME & COVER

Heavy duty
Machined bearing surfaces

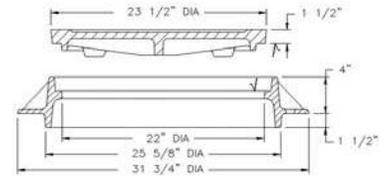
Options
Solid and vented covers
Custom logo covers
Special lettered covers
Grate — V-3418



V-1481 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses V-1480 cover

Options
Solid and vented covers
Custom logo covers
Special lettered covers
Grate — V-3418

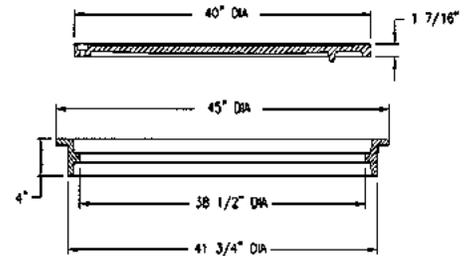


Section view illustrating mud ring

1484 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

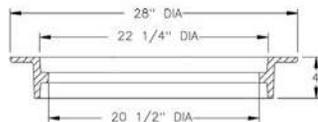
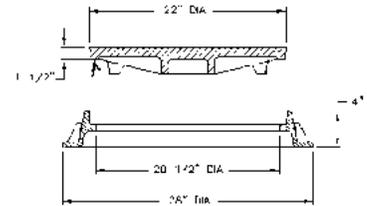
Options
Special lettered covers
Logo cover
Watertite assembly



1490 FRAME & COVER

Medium & heavy duty
Fits 24\"/>

Options
Watertite assembly
Gasket seal covers
1490Z2 reversible watertite frame
Adjusting risers



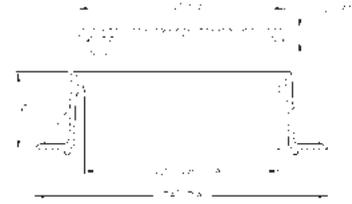
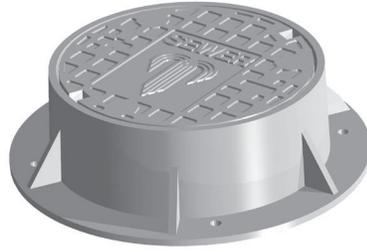
1490Z2 Reversible Frame

1500 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Lock lug cover
- Gasket seal covers
- 4 1/2" height frame available



V-1501 FRAME & COVER

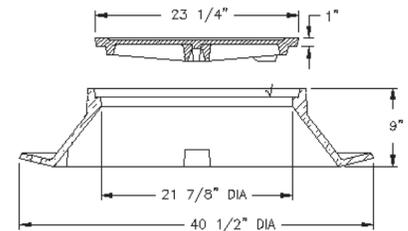
Heavy duty
Machined bearing surfaces

Options

- Custom logo covers
- Special lettered covers
- 4 7/8" height frame — V-1105
- 5" height reversible frame — 1622
- 9" height frame with mud ring — 2015
- Adjusting risers
- Grate — V-3501



New Orleans standard

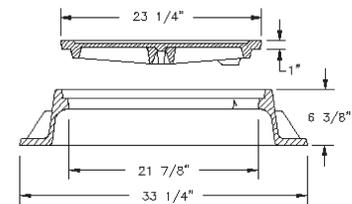


V-1503 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses V-1501 cover

Options

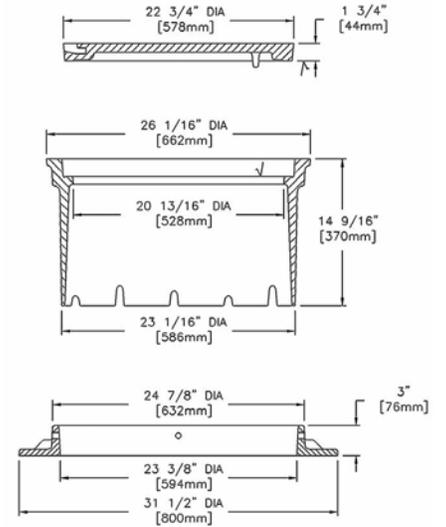
- Custom logo covers
- Special lettered covers
- Adjusting risers
- 4 7/8" height frame — V-1105
- 5" height reversible frame — 1622
- Grate — V-3501



1510 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Adjustable manhole
 Accepts 1020 covers and grates

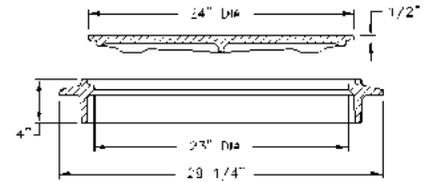
Options
 Custom logo covers
 Special lettered covers
 Watertite assembly
 Adjusting risers
 Gasket seal



1515 FRAME & COVER

Light duty
 Machined bearing surfaces

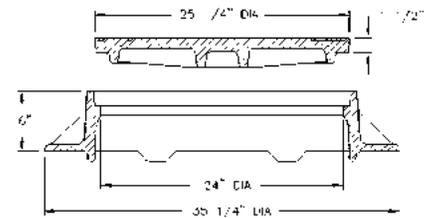
Options
 Solid or vented covers
 Custom logo covers
 Special lettered covers
 "DUMP NO WASTE!" lettering
 and fish image



1520 FRAME & COVER

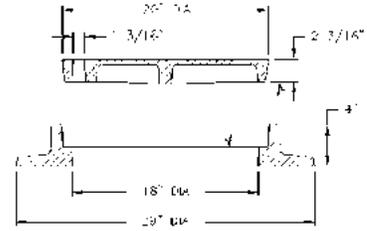
Heavy duty
 Machined bearing surfaces

Options
 Special lettered covers
 Adjusting risers



1525 FRAME & COVER

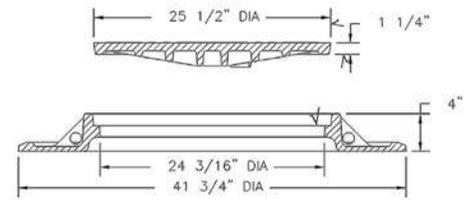
Heavy duty
Machined bearing surfaces
Vented cover
"Water valve" lettering



1530 FRAME & COVER

Heavy duty
Machined bearing surfaces

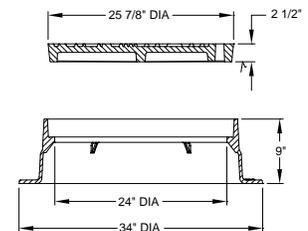
Options
Special lettered covers
Solid or vented covers



1543 — 1545 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Solid or vented covers
Special lettered covers
Cam lock cover — 1545
Also accepts 1544 and 1970 covers



Illustrating 1545Z3 frame and 1545 cover with optional cam locks



Section view showing cam locks

1543 — 1545 Frame Sizes

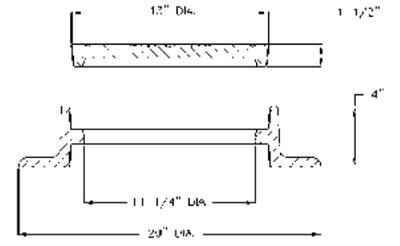
Catalog Number	Clear Opening	Flange Diameter	Frame Height
1543Z1	24	34	4
1545Z2*	24	34	6
1545Z3	24	34	9

Note: All dimensions are in inches.
*Reversible frame

1562 FRAME & COVER

Heavy duty
Reversible frame

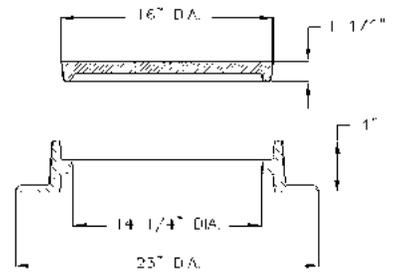
Options
Special lettered covers



1563 FRAME & COVER

Heavy duty
Reversible frame

Options
Special lettered covers



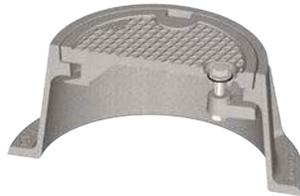
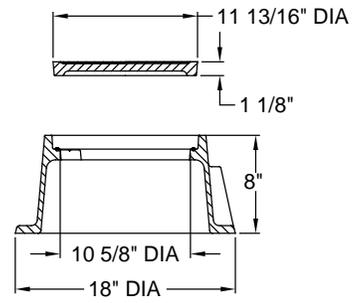
1564 MONUMENT BOX

Heavy duty

- Options
- Special lettered covers
- Watertite assembly
- Lock lug cover
- Cam lock covers



1564 with optional lock lug cover illustrated

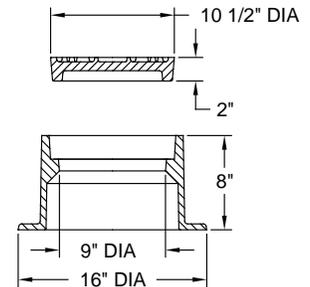


Cross section view showing lock lug

1565 MONUMENT BOX

Heavy duty

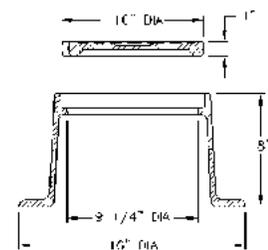
- Options
- 1 or 2 bolt assembly



1566 MONUMENT BOX

Heavy duty

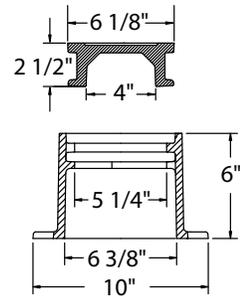
- Options
- Bolted assembly



1567 MONUMENT BOX

Heavy duty

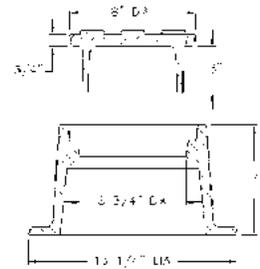
- Options
- Special lettered covers
- Lock lug cover



1570 MONUMENT BOX

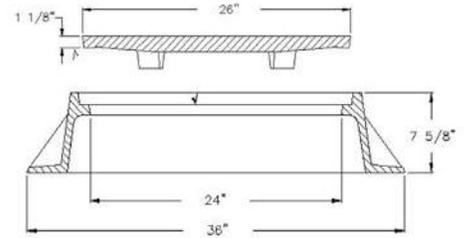
Heavy duty
Accepts 2965 covers

- Options
- Special lettered covers
- Bolted assembly



V-1570 FRAME & COVER

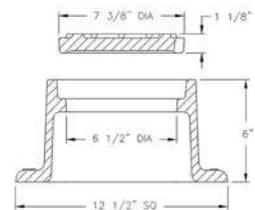
Heavy duty
Machined bearing surfaces



1571 MONUMENT BOX

Heavy duty

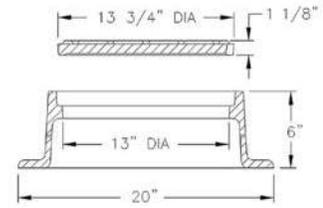
- Options
- Special lettered covers



1572 MONUMENT BOX

Heavy duty

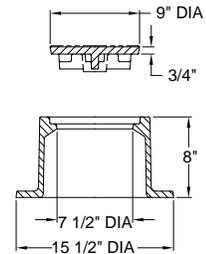
Options
Special lettered covers



1574 MONUMENT BOX

Heavy duty

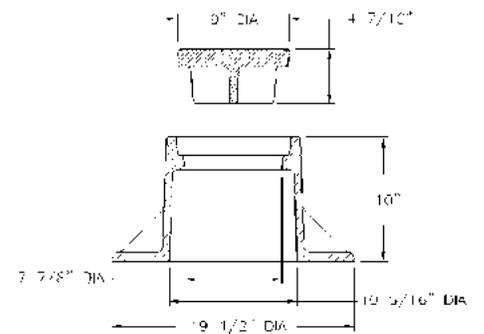
Options
Special lettered covers
Bolted assembly



1575 MONUMENT BOX

Heavy duty

Options
Bolted assembly



1576 MONUMENT BOX

Heavy duty

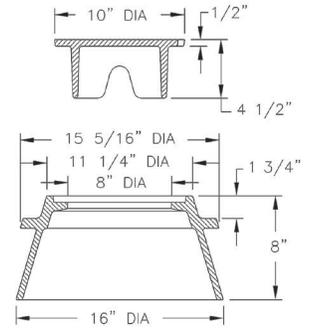
Options

Special lettered covers

Bolted assembly

Covers with 2" and 4" skirt depth

Adjusting risers



1577 MONUMENT BOX

Heavy duty

Reversible frame

For slab construction see 2885

Accepts 2975 covers

Options

2885 — 1 or 2 bolt assembly

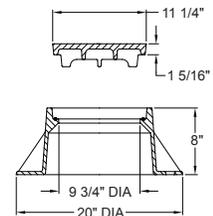


1578 MONUMENT BOX

Heavy duty

Options

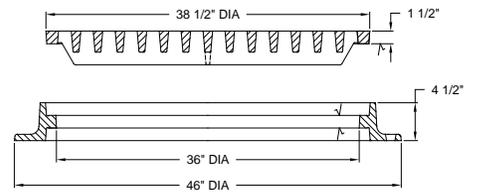
Watertite assembly



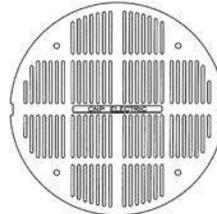
1581 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Reversible frame —
 2815 for top flange
 Accepts 1580 and 1581
 covers and grates

Options
 Watertite assembly
 Light duty cover
 Heavy duty ductile iron cover
 Extra heavy duty ductile iron grate
 Lift/Drop handles



Type M Flat Grate
 Approx. 375 sq. in.
 open area



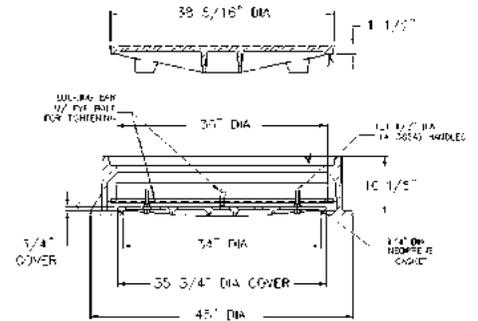
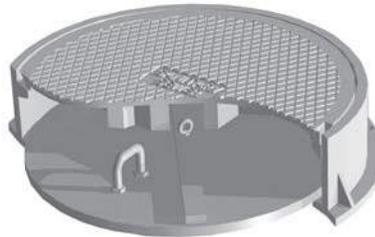
Type M2 ADA Grate
 Approx. 304 sq. in.
 open area



**Type E Outer Cover with
 1040 Inner Cover**

1583 FRAME & COVER

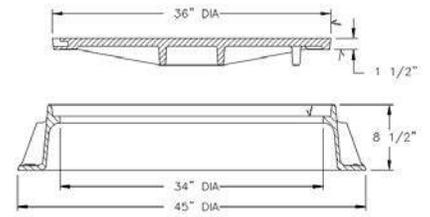
Heavy duty
 Machined bearing surfaces
 Frost proof assembly
 Accepts 1580 covers



1585 FRAME & COVER

Heavy duty
Vertical and horizontal machined bearing surfaces
Stackable frame

Options
Solid or vented covers
Special lettered covers
4 1/2" height frame — 1586
Grates

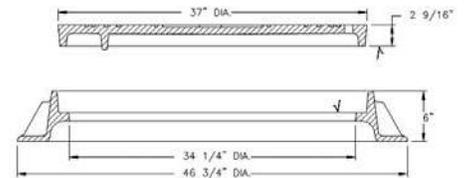


Type M Flat Grate
Approx. 400 sq. in.
open area

1588 FRAME & COVER

Heavy duty
Machined bearing surfaces

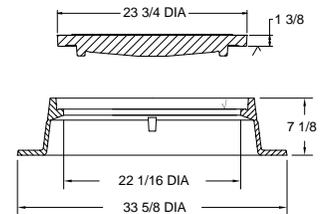
Options
Special lettered covers
Solid or vented covers



1590 FRAME & COVER

Heavy duty
Machined bearing surfaces

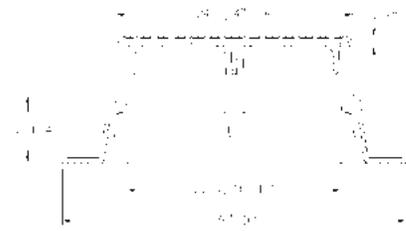
Options
Solid or vented covers
Gasket seal covers
Grates



Type M Flat Grate
Approx. 140 sq. in.
open area

1600 FRAME & COVER

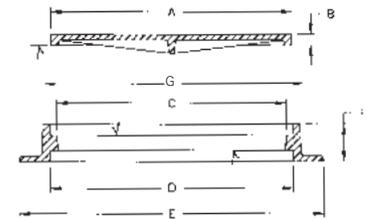
- Heavy duty
- Machined bearing surfaces
- Options
- Solid or vented covers
- Special lettered covers
- Watertite assembly
- Adjusting risers
- Grates
- 4" height reversible frame — 3020
- Bolted assemblies (V-2600, V-2800)



Type M Flat Grate
Approx. 175 sq. in.
open area

V-1600 FRAMES & COVERS

- Heavy duty
- Machined bearing surfaces
- Reversible frame
- Options
- Solid or vented covers
- Special lettered covers
- Custom logo covers
- Bolted assemblies
- Grates (see V-3600)
- Hinged unit available in select sizes



Illustrating V-1600-4

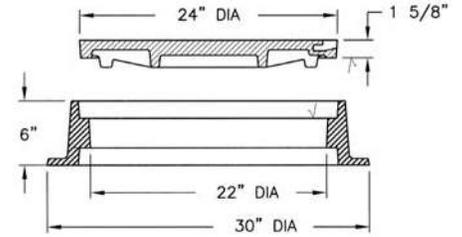
V-1600 Frames & Covers

Catalog Number	A Cover Dia.	B Cover Thk.	C Clear Opening	D Frame Opening	E Flange Dia.	F Height	G Drop In
V-1600-1	19 1/4	1 1/2	18 1/4	19 1/2	24	4	20 1/2
V-1600-2	23 1/2	1 1/2	22	23 3/4	28 1/2	4	24 3/4
V-1600-3	25 1/4	1 1/2	24	25 1/2	32 1/8	4	26 1/2
V-1600-4	31 3/4	1 3/8	30	32 1/8	38	4	33 1/8
V-1600-5	38	2	36	38 1/4	46	6	39 3/4
V-1600-6	50 1/4	2	48	50 1/2	56 1/2	6	52

Note: All dimensions are in inches.

1606 FRAME AND COVER

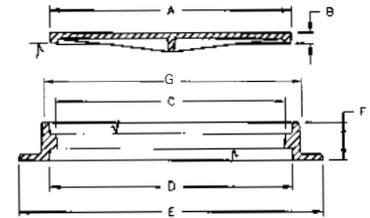
Heavy duty
 Reversible frame
 Machined bearing surfaces
 Uses 2750 cover



V-1610 FRAMES & COVERS

Heavy duty
 Machined bearing surfaces
 Reversible frame

Options
 Special lettered covers
 Logo covers
 Bolted assembly
 Grates (see V-3610)



Illustrating V-1610-4

V-1610 Frames & Covers

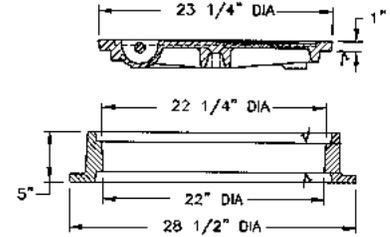
Catalog Number	Pipe Size	A Cover Dia.	B Cover Thk.	C Clear Opening	D Frame Opening	E Flange Dia.	F Frame Ht.	G Drop In
V-1610-1	12	10 1/4	1 1/2	8 1/2	10 1/2	14 1/2	4	11 1/2
V-1610-2	15	13 1/4	1 1/2	11 1/2	13 1/2	17 5/8	4	14 1/2
V-1610-3	18	16 1/4	1 1/2	14 3/8	16 1/2	20 1/2	4	17 1/2
V-1610-4	24	21 7/8	1 1/2	20 1/4	22 1/8	26 5/8	4	23 5/8
V-1610-5	30	27 7/8	1 1/2	26 3/8	28 1/4	32 1/2	4 1/8	29 5/8
V-1610-6	36	34	1 1/2	32	34 1/4	38 1/2	4	35 1/2
V-1610-7	42	39 5/8	1 1/2	38 1/4	39 7/8	44 1/2	4	41 7/8
V-1610-8	48	45 3/4	1 1/2	43 3/4	46	50 1/2	4	47 3/4

Note: All dimensions are in inches.

1622 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

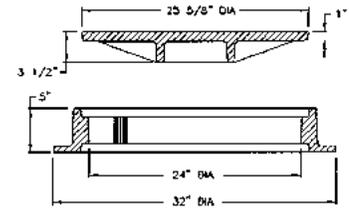
Options
Adjusting risers
Grate



1625 FRAME & COVER

Heavy duty
Reversible frame
Machined bearing surfaces

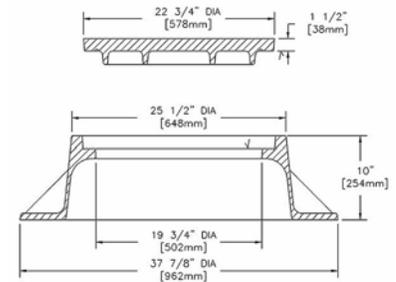
Options
Solid or vented covers
Special lettered covers
Bolted assembly



1641 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1640 covers and grates

Options
Gasket seal covers
Grates



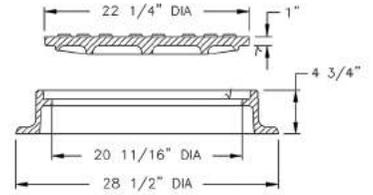
Type M Radial Flat Grate
Approx. 120 sq. in.
open area

1660 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1661 covers and grates

Options

- Watertite assembly
- Custom logo covers
- Special lettered covers
- Adjusting risers
- Gasket seal covers
- 9 3/4" height frame — 1661
- 20 5/8" clear opening



Type M Flat Grate
 Approx. 120 sq. in. open area

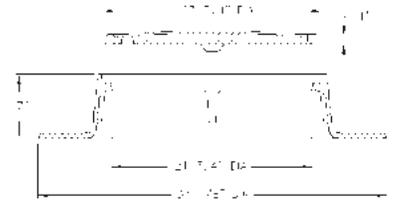
Type A2 Cover
 Closed pick holes

1665 FRAME & COVER

Heavy duty
 Vertical and horizontal machined surfaces

Options

- Solid or vented covers
- Custom logo covers
- Special lettered covers
- Grates
- Also accepts 1450 covers
- Watertite assembly
- Lock lug assembly
- Adjusting risers
- Top flange 4" frame — 2925



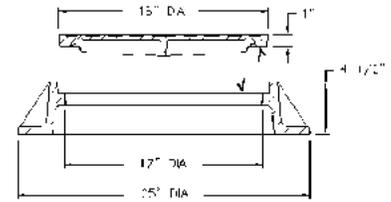
See 1450 for additional frame height.



Type M Flat Grate
 Approx. 175 sq. in. open area

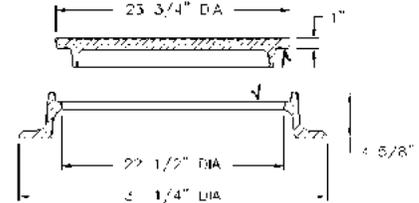
1680 FRAME & COVER

Light duty (Non-traffic)
Machined bearing surfaces



1690 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1450 covers and grates



Options

- Solid or vented covers
- Custom logo covers
- Special lettered covers

Adjusting risers

Lug lock covers

7" height frame – 1665 – 21 1/2" clear opening

9" height frame – 1450 – 21 1/2" clear opening

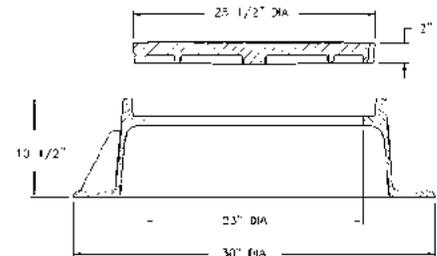
9" height frame – 2020 – 22" clear opening with mud ring



Type M Flat Grate
Approx. 110 sq. in. open area

1700 — 1703 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frame



Options

Solid or vented covers

Grates

Watertite assembly

Gasket seal covers

Adjusting risers

Accepts 1212 covers



Type M Flat Grate
Approx. 120 sq. in. open area

Available Frames for 1700 — 1703 Covers and Grates

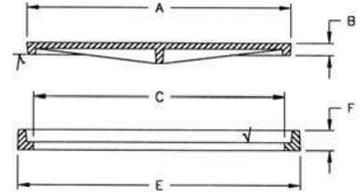
Catalog Number	Base Flange Diameter	Frame Height
1214	36	4
2770	31 3/4 TF	4 1/5
1703	38	5
1212	39	8

Note: All dimensions are in inches.

V-1700 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Uses V-1600 cover
 Uses V-3600 grates

Options
 Solid and vented covers
 Special lettered covers
 Custom logo covers



Illustrating V-1700-3

NOTE:
 Rings must be cast into concrete
 for heavy duty application.

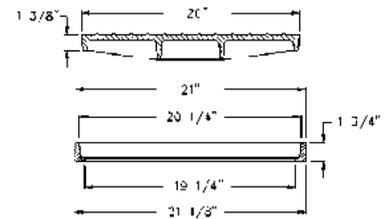
V-1700 Frame & Cover

Catalog Number	A Cover Diameter	B Cover Thickness	C Clear Opening	E Flange Diameter	F Frame Height
V-1700-1	19 1/4	18 1/8	1 1/2	21	2 1/2
V-1700-2	23 1/2	22	2 1/2	25 3/4	2 1/2
V-1700-3	25 1/4	24	1 1/2	27	2 1/2
V-1700-4	31 3/4	30	1 3/8	34 7/8	2 3/8
V-1700-5	38	36	2	40 1/2	3

Note: All dimensions are in inches.
 *4 piece bolted frame.

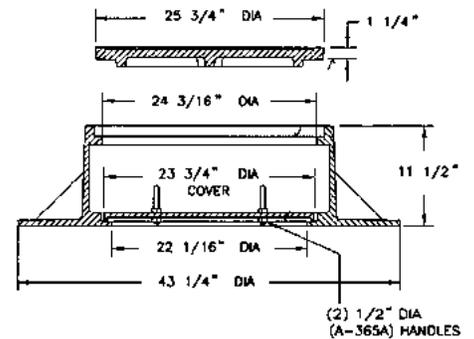
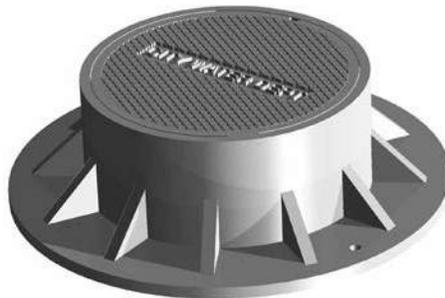
V-1701 FRAME & COVER

Light duty (Non-traffic)



1706 FRAME & COVER

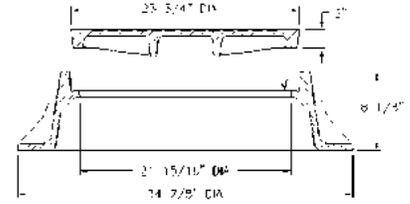
Heavy duty
 Machined bearing surfaces
 Frost proof assembly
 Accepts 1705 covers



1710 — 1715 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frames

- Options
Solid or vented covers
Grates
Gasket seal covers
Watertite assembly
Adjusting risers
5" height reversible frame — 2022
5" height frame — V-1317
9" height frame — 1715



Type O Beehive Grate
Approx. 140 sq. in.
open area
5 1/2" height above frame



Type M Flat Grate
Approx. 115 sq. in.
open area

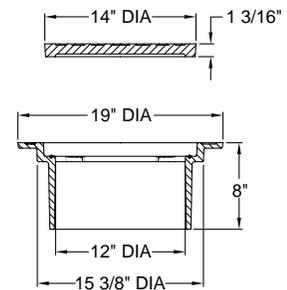
1716 AIRPORT CLEANOUT FRAME & COVER

Extra heavy duty
Proof load 200,000 lb.
Watertite assembly
Bolted assembly recommended

- Options
Recessed stainless steel hex bolts or special security bolts
Special lettered covers
3" height frame — 1716Z



1716Z1 8" height frame illustrated



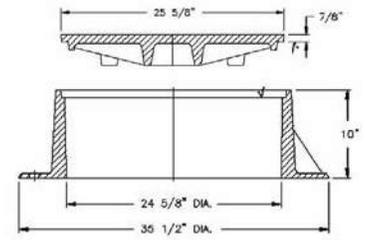
MATERIAL SPECIFICATIONS

Frame - Gray Iron ASTM A48, Class 35B
Cover - Ductile Iron ASTM A536

1730 FRAME & COVER

Heavy duty
Machined bearing surfaces

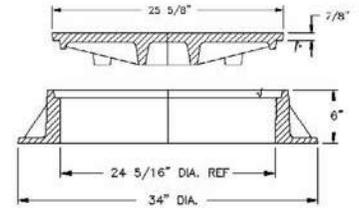
Options
Special lettered covers



1731 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses 1730 cover

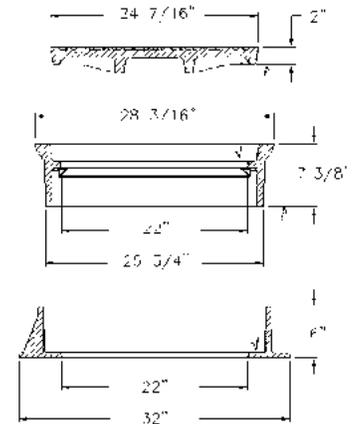
Options
Special lettered covers



1733 FRAME & COVER

Heavy duty
Machined bearing surfaces
Adjustable manhole, 3 piece assembly

Options
Special lettered covers



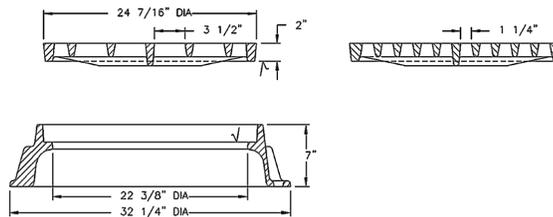
1734 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Stackable frames
 Uses 1733 covers and grates

Options
 Top flange frames
 Special lettered covers
 Grates

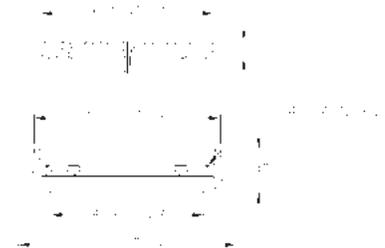


1734 frame with Type M Grate
 "DUMP NO WASTE!" lettering and fish image
 Approx. 166 sq. in. open area



1755 FRAME & COVER

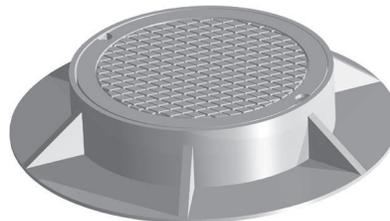
Heavy duty
 Reversible frame — 2905
 for top flange
 Unit assembled standard with
 4 1/2" SS bolts and 1/4" gasket
 Frame has cast bolting lugs
 Watertite assembly



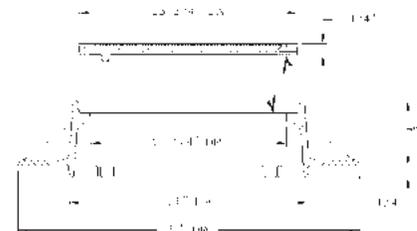
1771 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1770 covers and grates
 Accepts 1337 and 2855 covers

Options
 Special lettered covers
 Extra heavy duty cover
 Gasket seal cover
 Cam lock
 6" height frame — 1337



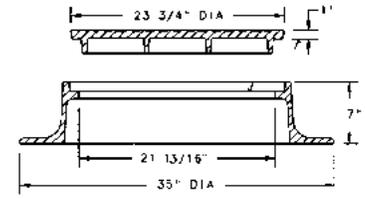
Type M Flat Grate
 Approx. 185 sq. in.
 open area



1775 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Special lettered covers
- Bolted assembly
- Adjusting risers
- Gasket seal covers



1802 — 1825 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces
Stackable frames
Frame supplied with 4 - 1" diameter base flange holes on 43 1/2" bolt circle
All units can be secured

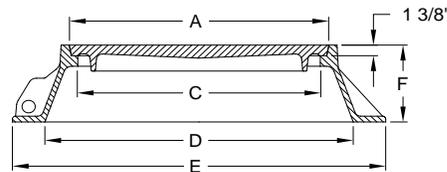
- Options
- Custom logo covers
- Type E 1810 outer cover
- Special lettered covers
- Gasket seal covers
- Two bolt assembly
- Two pent bolt assembly
- Cam lock assembly
- Pick bars, drop handles, closed pick holes
- Adjusting risers



Illustrated 1825Z 10" frame with 1810 Type A2 cover



1802Z1 5 5/8" frame with 1805 Type A7 cover



Illustrated 1805Z1VH 10" ductile iron frame with 1805 Type A7 ductile iron cover

1802—1825 Frame and Cover Assembly Options

Series Number	Reference	A Cover Diameter	C Clear Opening	D Frame Opening	E Flange Diameter	F Frame Height
1802	SB-27	28 15/16	27	34	46	5 5/8
1805	B-27	28 15/16	27	34	46	10
1820	SB-30	31 15/16	30	37	46	5 5/8
1825	B-30	31 15/16	30	38	46	10

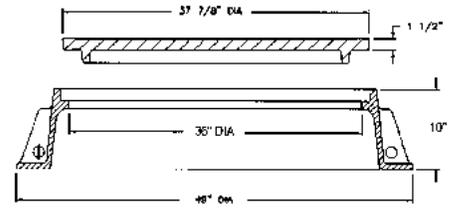
Note: all dimensions are in inches.

NOTE: Many of the covers in this series are manufactured with corporate names and their respective logos. These names and images are the protected property of our customers. EJ maintains custom covers for dozens of electrical, telecommunication, and other utility companies. Please contact your nearest EJ office for information regarding new or existing designs.

1812Z2 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Extra heavy duty ductile iron cover
 - Special lettered covers
 - Gasket seal covers
 - Bolted assembly
 - Ductile iron grates



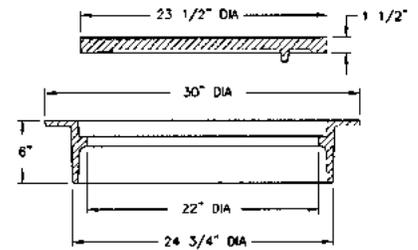
V-1814 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses V-1418 covers

- Options
- Adjusting risers
 - Grates
 - Special lettered covers



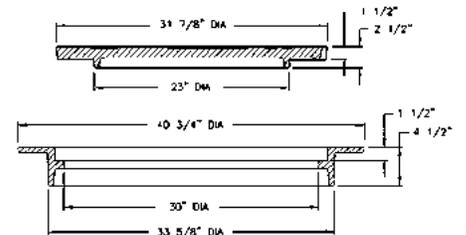
V-3418-1 Grate
Approx. 169 sq. in.
open area



V-1816 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses V-1420 covers

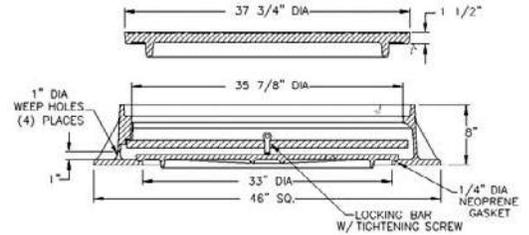
- Options
- Grates
 - Adjusting risers
 - Special lettered covers



1832 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Frost proof assembly
 Inner and outer covers

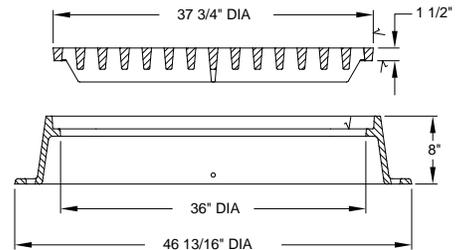
Options
 Special lettered covers
 Round flange frames



1833 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Special lettered covers
 Extra heavy duty ductile iron covers
 Ductile iron grates
 Round flange frames



1833M ductile iron grate with 8" transitional frame illustrated

1833 Frames

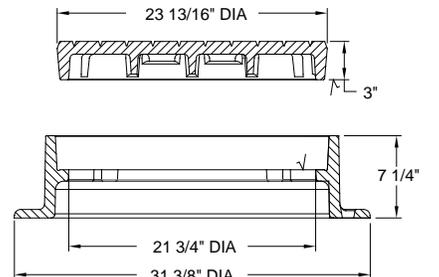
Catalog Number	Base Flange Diameter	Frame Height
1833Z3	52 TF	5
1833Z2	46 13/16 R	8
1833Z1	46 13/16 TF	8
1833Z	52 TF	10

Note: All dimensions are in inches.
 TF = Transitional flange frame
 R = Round flange frame

1835 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Stackable frame

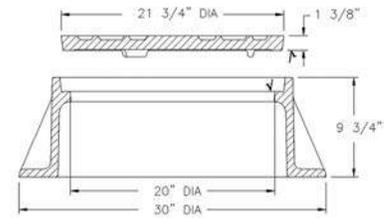
Options
 Solid or vented covers
 Special lettered covers
 Gasket seal covers
 Extra heavy duty ductile covers
 4" height frame — 1834



1837 FRAME & COVER

Heavy duty
Machined bearing surfaces

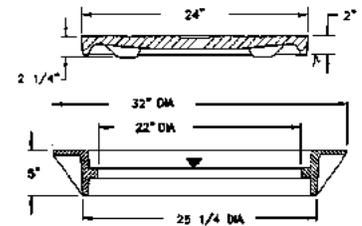
Options
Special lettered covers



1842 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses 1342 covers

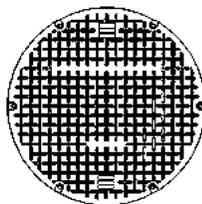
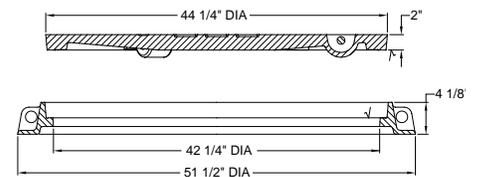
Options
Adjusting risers
Grates



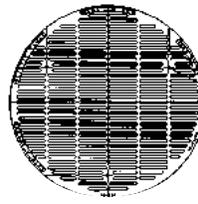
1843 — 1845 FRAME & COVER

Heavy duty
Machined bearing surfaces
Ductile iron covers

Options
Solid or vented covers
Special lettered covers
Bolted assembly
Watertite assembly
Ductile iron ADA grate
 1843M2 — light duty
 1843M1 — heavy duty
Airport rated covers
Lifting rings
Type E outer cover with 1120 24" diameter inner cover
Type E outer cover with 1810 32" diameter inner cover
8 1/2" height frames
Top flange frames



1843 APT Cover

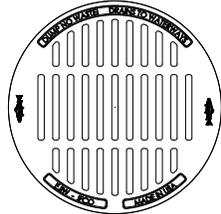
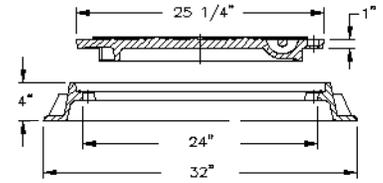


Type M1 ADA Grate
Approx. 639 sq. in. open area

1847 — 1849 FRAME & COVER

Heavy duty
Stackable frames

- Options
- Special lettered covers
- Custom logo covers
- Grates
- Bolted assembly
- Hinged unit
- Adjusting risers
- Reversible frame — 1849
- 6" height frames



Type M Grate
Approx 126 sq. in.
open area
"DUMP NO WASTE!"
lettering

1847 — 1849 Available Frames

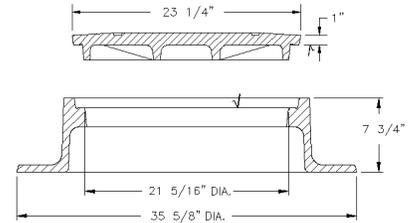
Catalog Number	Base Flange Diameter	Frame Height
1847	32	8
1848	32	4
1849*	34	4 TF

Note: All dimensions are in inches.
*Reversible frame

1850 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Solid or vented covers
- Adjusting risers
- Accepts 2015 covers
- Special lettered covers
- Custom logo covers
- "DUMP NO WASTE!"
lettering and fish image
- Reversible 5" frame — 1622

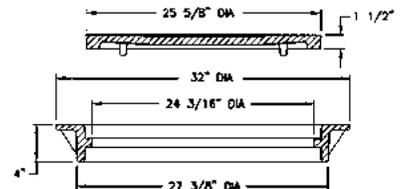


Type M Flat Grate
Approx. 105 sq. in.
open area

1854 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

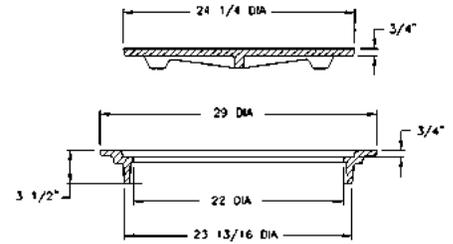
- Options
- Special lettered covers
- Bolted assembly



1855 FRAME & COVER

Light duty (Non-traffic)

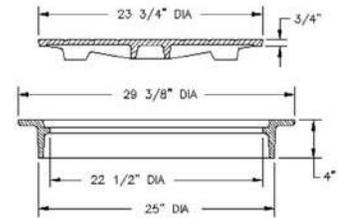
- Options
- Custom logo covers
- Special lettered covers
- ADA grates
- Bolted assembly
- "DUMP NO WASTE" lettering and fish image



V-1860 FRAME & COVER

Light duty (Non-traffic)

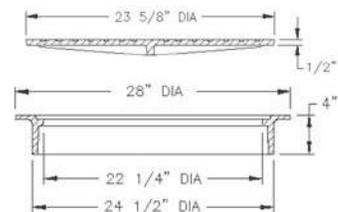
- Options
- "DUMP NO WASTE" lettering and fish image
- Solid and vented covers
- Special lettered covers
- Custom logo covers
- Grate — V-3860



Vented 3 Hole Cover
"DUMP NO WASTE!"
lettering and fish
image

V-1865 FRAME & COVER

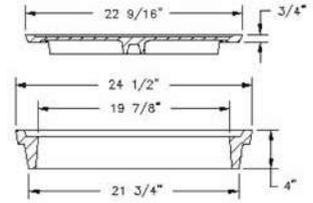
Light duty (Non-traffic)



V-1866 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Reversible frame

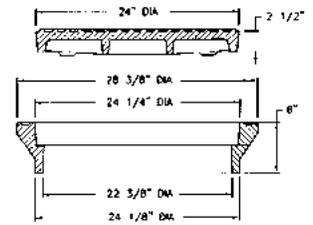
Options
 Solid and vented covers
 Custom logo covers
 Special lettered covers
 Grate — V-3866-1



V-1874 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Special lettered covers
 Solid or vented covers
 Grates

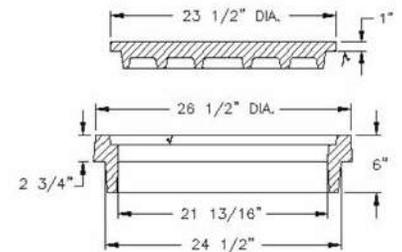


Storm Drain Cover

V-1883 FRAME & COVER

Heavy duty
 Machined bearing surfaces

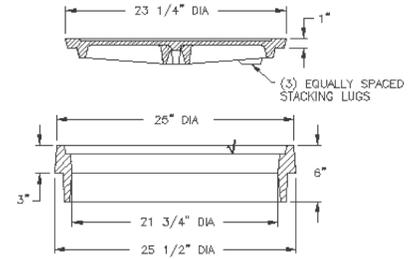
Options
 Special lettered covers
 Custom logo covers
 Adjusting riser — V-1984
 Grate — V-3883, approximate
 135 sq. in. open area



V-1886 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses V-1501 cover

Options
Special lettered covers
Custom logo covers
Adjusting risers
Grate — V-3501



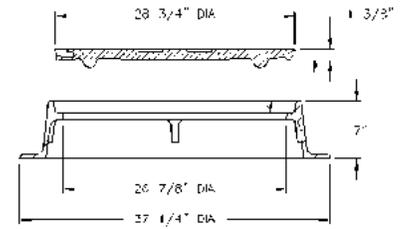
1890 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frames

Options
Solid or vented covers
Custom logo covers
Special lettered covers
Gasket seal covers
Watertite assembly
Grates
Bolted assembly
Adjusting risers
3" height frame — 1891
6" height top flange frame — V-1827
Hinged unit



1890Z1 Illustrated



1890 Frame Heights

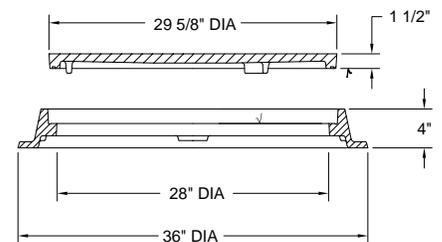
Catalog Number	Frame Height
1890Z	7
1890Z1	7
1891Z1	3

Note: All dimensions are in inches.

1892 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frames
PA DOT Type A

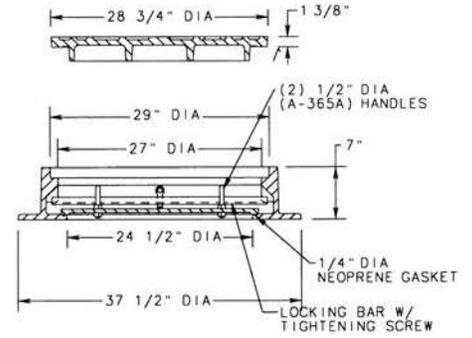
Options
Special lettered covers
Gasket seal covers
Adjusting risers
Square flange frames



1893 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Frost proof assembly
 Accepts 1890 covers

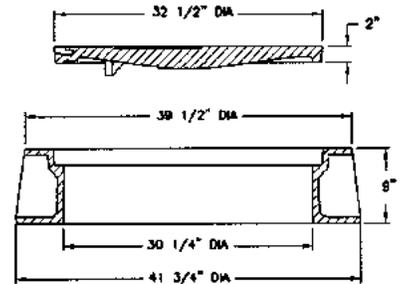
Options
 Gasket seal covers
 Locking



1895 AIRPORT MANHOLE FRAME & COVER

Airport Extra heavy duty
 Proof load 345,000 lb.
 Horizontal and vertical
 machined bearing surfaces
 Watertite assembly

Options
 Recessed stainless steel hex
 bolts or special security bolts
 Special lettered covers
 Gasket seal covers
 Solid and vented covers
 Drainage grate - 2780



MATERIAL SPECIFICATIONS

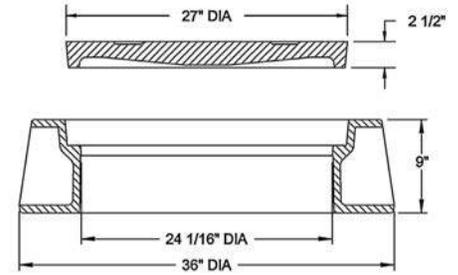
Frame - Gray Iron ASTM A48, Class 35B
 Cover - Ductile Iron ASTM A536
 Grate - Ductile Iron ASTM A536

**2880 Ductile Iron
 Type M Flat Grate**
 Approx. 375 sq. in.
 open area

1900 AIRPORT MANHOLE FRAME & COVER

Extra heavy duty
 Proof load 200,000 lb.
 Solid and vented cover options

- Options
- Watertite assembly
 - Recessed stainless steel hex bolts or special security bolts
 - Special lettered covers
 - Solid and vented covers
 - Drainage grate — 2870



MATERIAL SPECIFICATIONS
 Frame - Gray Iron ASTM A48, Class 35B
 Cover - Gray Iron ASTM A48 Class 35B
 Grate - Ductile Iron ASTM A536

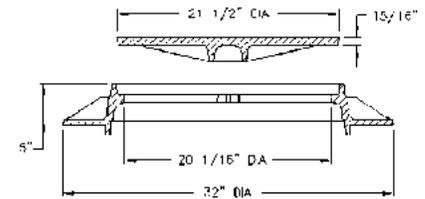


2870 Ductile Iron Type M Flat Grate
 Approx. 236 sq. in. open area

1915 FRAME & COVER

Heavy duty
 Machined bearing surfaces

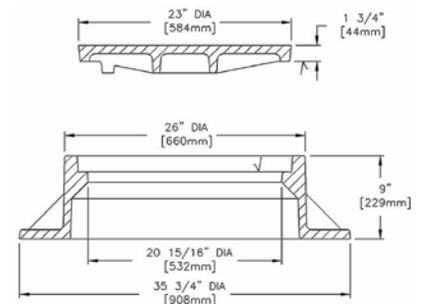
- Options
- Solid or vented covers
 - Special lettered covers
 - Watertite assembly
 - Adjusting risers



1920 FRAME & COVER

Heavy duty
 Machined bearing surfaces

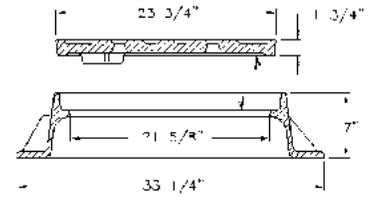
- Options
- Gasket seal covers



1925 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frames

Options
Solid or vented covers
Special lettered covers
3" height frame — 1925Z2
Adjusting risers

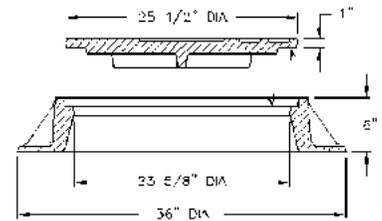


Type A1 Cover

1930 FRAME & COVER

Heavy duty
Machined bearing surfaces

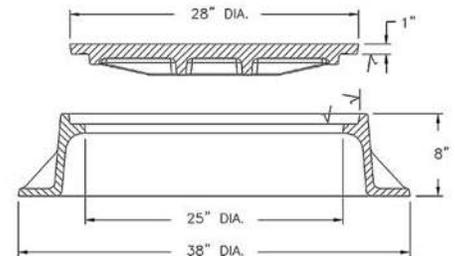
Options
Solid and vented covers
Special lettered covers
Accepts 1944 and 1975 covers and grates
Adjustable rings
3" height frame — 1975
8" height frame — 1944
9" height frame — 1975



1932 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces
Watertite assembly

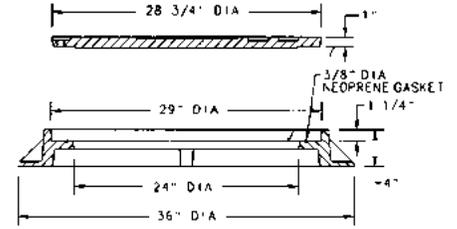
Options
Special lettered covers
Adjusting risers



1935 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Watertite assembly
 Unit is supplied with
 2 brass cam locks
 Gasket seal

Options
 Accepts 1940 covers
 Special lettered covers



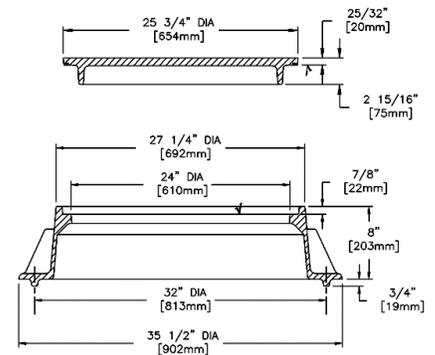
1936 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Special lettered covers

Options
 Accepts 1205 covers and grates
 Adjusting risers
 Stackable frames



Wichita standard



1936 Frame Sizes

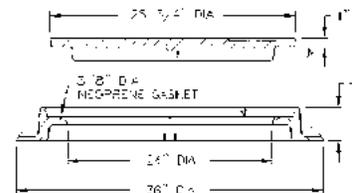
Catalog Number	Base Flange Diameter	Frame Height
1936Z1	35 1/2	8
1936Z2	51 1/2	8
1936Z4	35 1/4	4 1/4

Note: All dimensions are in inches.

1940 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Standard watertite unit
 supplied with 3/8" dia. gasket

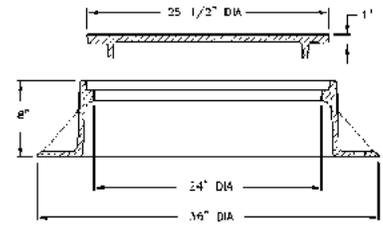
Options
 Special lettered covers
 Accepts 1935 covers



1944 FRAME & COVER

Heavy duty
Machined bearing surfaces

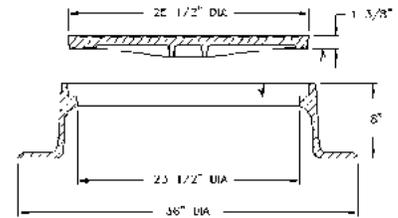
- Options
Solid or vented covers
Watertite assembly
Adjusting risers
Accepts 1930 covers



1950 FRAME & COVER

Heavy duty
Machined bearing surfaces

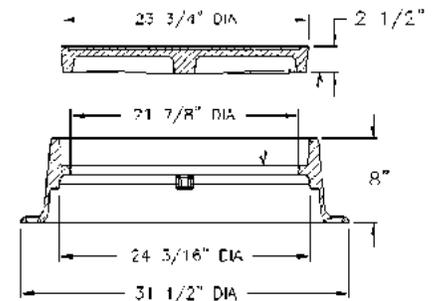
- Options
Solid or vented covers
Gasket seal covers
Watertite assembly



1960 FRAME & COVER

Heavy duty
Machined bearing surfaces

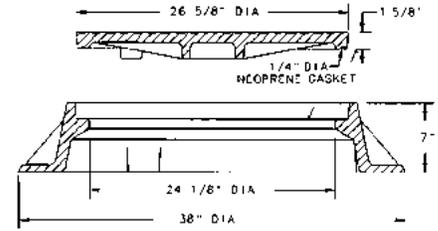
- Options
Gasket seal covers
Adjusting risers



1965 FRAME & COVER

Heavy duty
Machined bearing surfaces

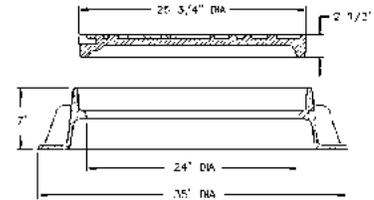
- Options
- Special lettered covers
 - Gasket seal covers
 - 3 1/2" height frame
 - 7" height frame
 - 9" height stackable frame
 - Adjusting risers including
INFRA-RISER® adjustable riser



1970 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1543, 1545, and 1548 covers

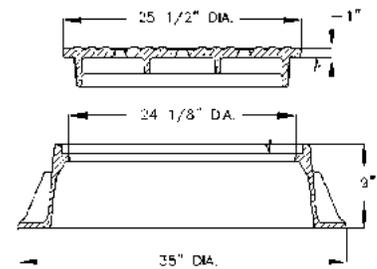
- Options
- Solid or vented covers
 - Special lettered covers
 - Gasket seal covers



1975 FRAME & COVER

Heavy duty
Machined bearing surfaces
Stackable frames

- Options
- Solid or vented covers
 - Custom logo covers
 - Accepts 1930 covers
 - 3" height frame — 1975Z1
 - Grates
 - Adjusting risers
 - Gasket seal covers

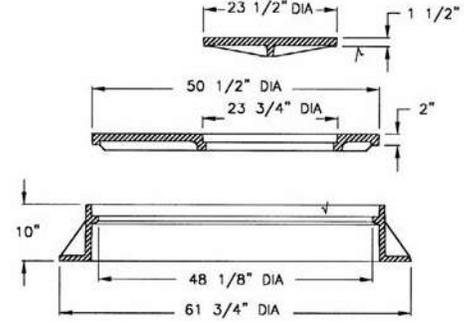


Type M Grate
Approx. 125 sq. in.
open area

1984 FRAME & COVER

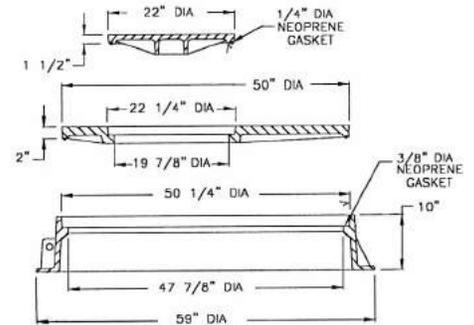
Heavy duty
 Machined bearing surfaces
 V-1418 inner cover
 REF. V-7048

Options
 Special lettered inner covers



1985 FRAME & COVER

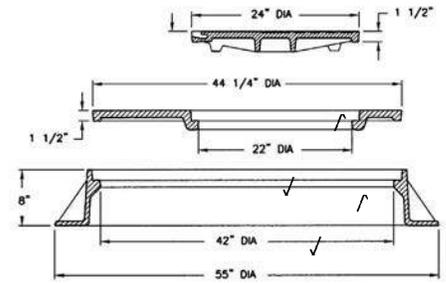
Heavy duty
 Machined bearing surfaces
 Gasket seal
 Assembly with inner cover



1986 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Type E outer cover with inner cover

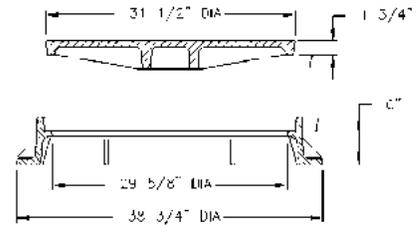
Options
 Solid or vented covers
 Special lettered covers
 Custom logo covers



2010 FRAME & COVER

Heavy duty
 Machined bearing surfaces

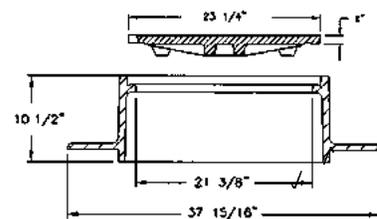
Options
 Solid or vented covers
 Special lettered covers
 Accepts 2011 covers
 Watertite assembly
 Gasket seal covers
 Adjusting risers



2015 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Solid or vented covers
 Special lettered covers
 Adjusting risers
 5" height reversible frame — 1622



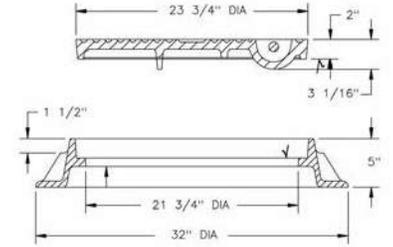
2023 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Custom logo covers
- Special lettered covers
- Drainage grates
- Stackable frames
- Adjusting risers
- Reversible frame — 2022



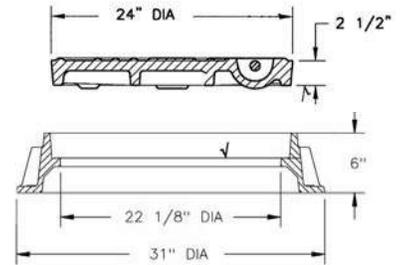
Type M Flat Grate
Approx. 115 sq. in.
open area



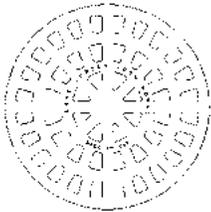
2024 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 2040 cover

- Options
- Custom logo covers
- Special lettered covers
- Drainage grates
- Adjusting risers
- Stackable frames
- “DUMP NO WASTE” lettering
and fish image



Custom Logo Covers



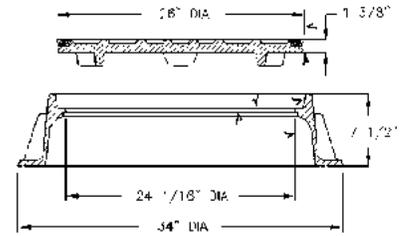
1202M Grate
Heavy duty
Approx. 117 sq. in.
open area



2027 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces

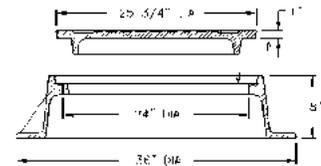
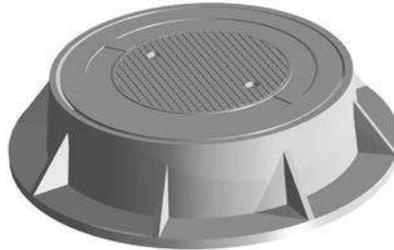
- Options
- Special lettered covers
 - Wiper gasket or O-ring gasket
 - Cam lock assembly
 - 4" reversible frames



2028 FRAME & COVER

Heavy duty
Machined bearing surfaces

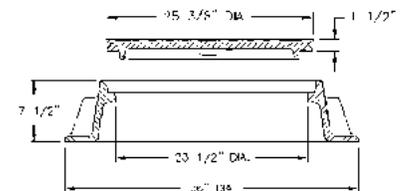
- Options
- Solid or vented covers
 - Watertite assembly
 - Special lettered covers
 - Pick bar(s)



2029 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces

- Options
- Wiper gasket
 - Special lettered covers

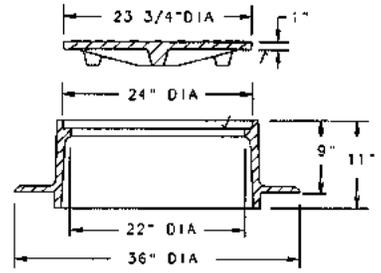


2035 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Accepts 1450 covers
- Special lettered covers
- Vented covers
- Custom logo covers
- Drainage grates
- Adjusting risers



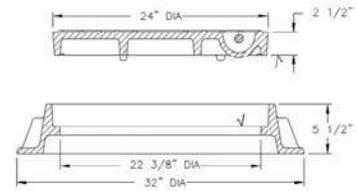
Type M Flat Grate
Approx. 110 sq. in.
open area

2040 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Custom logo covers
- Special lettered covers
- Drainage grates
- Adjusting risers
- Accepts 2024 covers



Custom Logo Covers

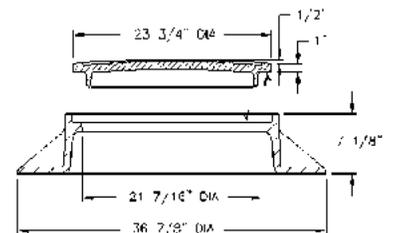


2045 FRAME & COVER

Heavy duty
Machined bearing surfaces
Domed cover
Cover has 6 - 1" diameter holes

Options

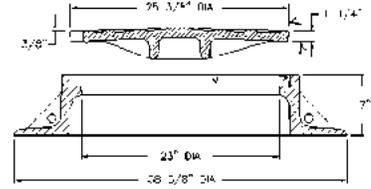
- Special lettered covers



2055 FRAME & COVER

Heavy duty
 Vertical and horizontal
 machined surfaces
 Domed cover
 Cover has 2 - 1" diameter holes

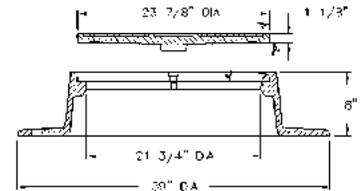
Options
 Adjusting risers



2060 FRAME & COVER

Heavy duty
 Vertical and horizontal
 machined surfaces
 Unit assembled with 3 - 5/8"
 SS bolts and 1/4" flat gasket
 Accepts 2065 covers
 Watertite assembly

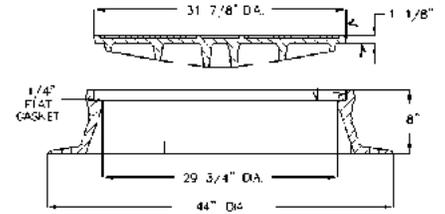
Options
 Special lettered covers
 Adjusting risers



2070 FRAME & COVER

Heavy duty
 Vertical and horizontal machined surfaces
 Unit assembled with 4 – 5/8" SS bolts and
 1/4" flat gasket
 Watertite assembly

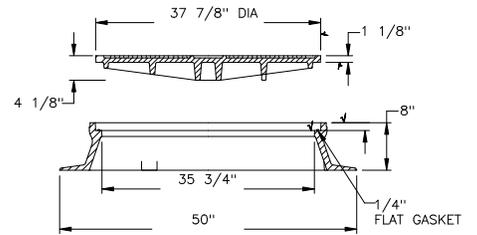
Options
 Special lettered covers



2075 FRAME & COVER

Heavy duty
 Vertical and horizontal machined surfaces
 Unit assembled with 5 – 5/8" SS bolts and
 1/4" flat gasket
 Watertite assembly

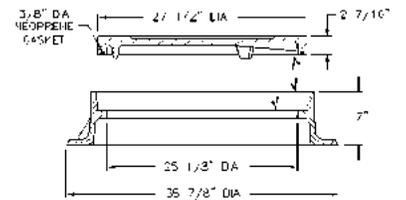
Options
 Special lettered covers



2080 FRAME & COVER

Heavy duty
 Machined bearing surfaces

Options
 Solid or vented covers
 Special lettered covers
 Gasket seal cover



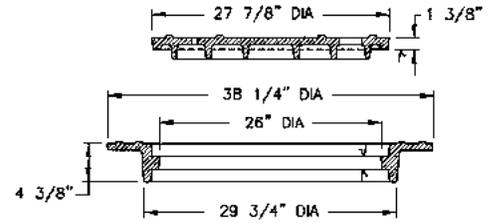
2100 FRAME & COVER

Heavy duty
Machined bearing surfaces
Specify Type cover or grate

- Options
- Custom logo covers
- Special lettered covers
- Reversible frame
- Watertite assembly
- Adjusting risers
- Grate



Oklahoma City



Type M Grate
Oklahoma City Storm
Approx. 205 sq. in. open area

Custom Logo and Special Lettered Covers



City Of Ardmore Logo



City Of Moore



City Of Norman



City Of Edmond



City Of Broken Arrow



City Of Lawton

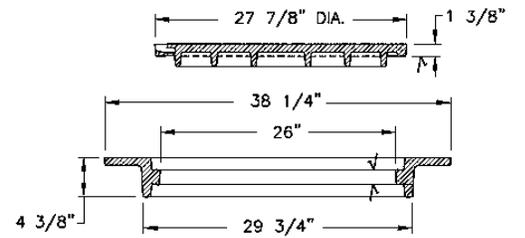
2101 FRAME & COVER

Heavy duty
Machined bearing surfaces
Specify Type cover or grate

- Options
- Special lettered covers
- Reversible frame
- Watertite assembly
- Adjusting risers
- Grate



City Of Tulsa



State Of Oklahoma

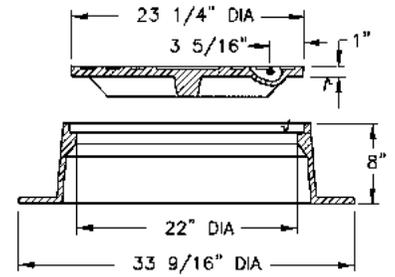


Type M Grate
Approx. 205 sq. in. open area

2132 FRAME & COVER

Heavy duty
Machined bearing surfaces

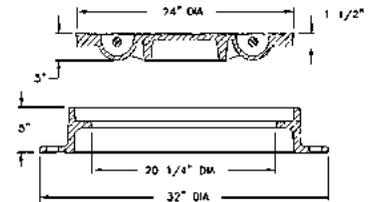
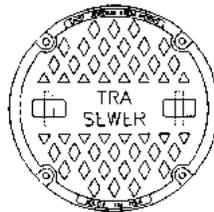
Options
Adjusting risers
4" reversible frame — 2132Z1
Grates



2134 WATERTITE FRAME & COVER

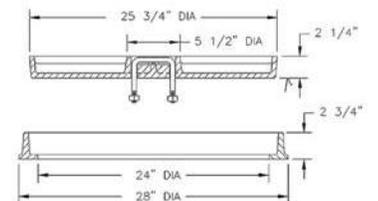
Heavy duty
Watertite assembly

Options
Special lettered covers



2222 — 2223 FRAME & COVER

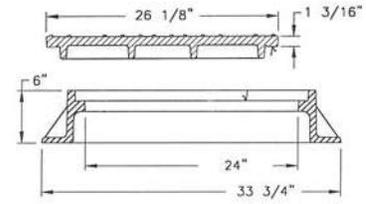
Light duty (Non-traffic)
Sidewalk frame and cover
Recessed for pavement infill
Drop handle in cover
2223 uses pick hole



2224 FRAME & COVER

Heavy duty
Machined bearing surfaces

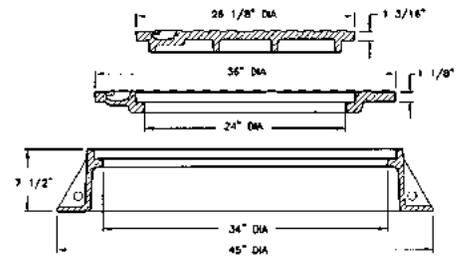
- Options
Special lettered covers
Custom logo covers
Watertite assembly
Hinged unit
Adjusting risers
2224Z1 — 4" height reversible frame



2228 FRAME & COVER

Heavy duty
Machined bearing surfaces
Type E outer cover with 2228 inner cover

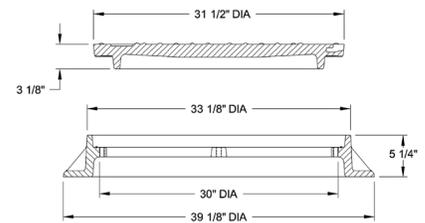
- Options
Special lettered covers
Composite inner cover — 26" diameter
Bolted assembly



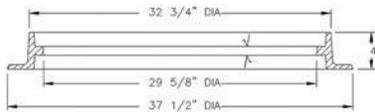
2230 — 2232 FRAME & COVER

Heavy duty
Machined bearing surfaces
2230Z1 frame is reversible

- Options
Extra heavy duty cover
Proof load tested 200,000 lb.
Recessed stainless steel hex bolts or special security bolts
Custom logo covers
Special lettered covers
Gasket seal covers
Hinged unit
5 1/4" height frame — 2230Z - base flange 39 1/8"
2230ZPT — watertite assembly
2232 is a stackable version of the 2230



2231 Illustrated



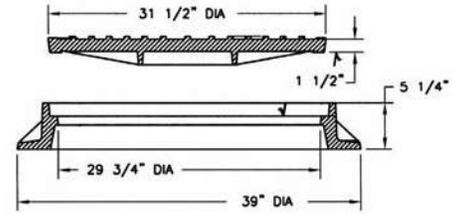
2230Z1 Reversible frame illustrated

MATERIAL SPECIFICATIONS

Frame - Gray Iron ASTM A48, Class 35B
Cover - Ductile Iron ASTM A536

2295 FRAME & COVER

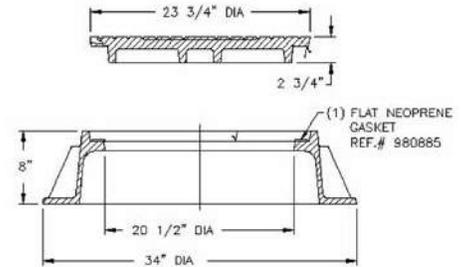
Heavy duty
Machined bearing surfaces



V-2326 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

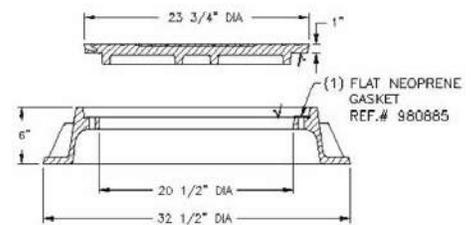
Options
Special lettered covers
Adjusting risers



V-2327 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

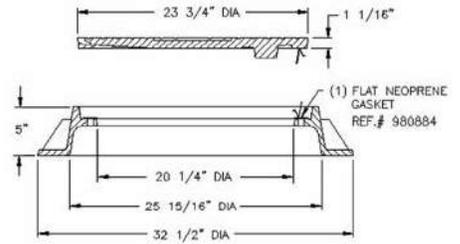
Options
Special lettered covers
Custom logo covers
Adjusting risers



V-2328 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

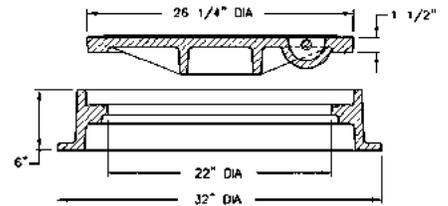
Options
Special lettered covers



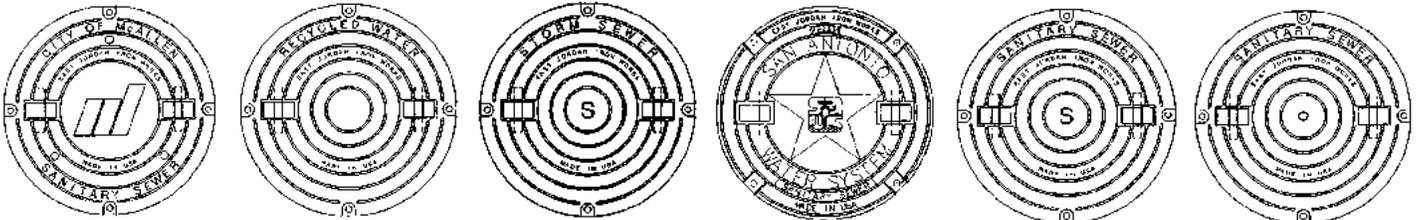
V-2339 FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

Options
Special lettered covers
Custom logo covers
Solid or vented covers



Custom Logo Covers

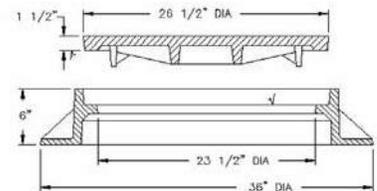


With center vent hole

V-2357 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

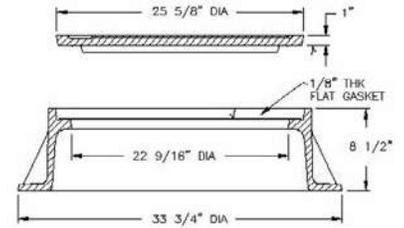
Options
Special lettered covers
Custom logo covers



V-2358 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

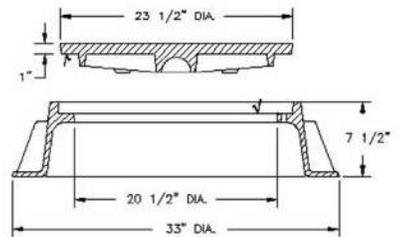
Options
Special lettered covers



V-2384 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

Options
Special lettered covers
Custom logo covers
4" and 6" height frames



V-2384 Frame Sizes

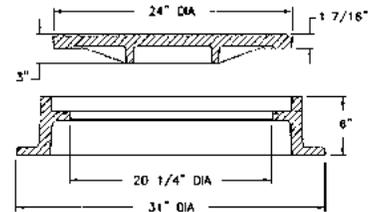
Catalog Number	Base Flange Diameter	Frame Height
V-2384-3	31	4
V-2384	33	7 1/2

Note: All dimensions are in inches.

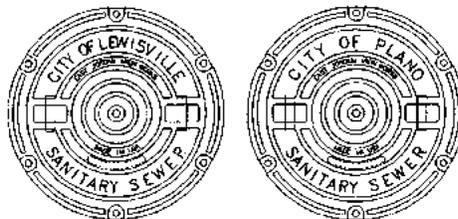
V-2386 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Special lettered covers



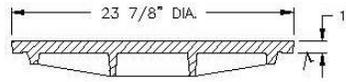
Custom Logo Covers



2405 COVER

Heavy duty

All 2405 covers can be used in the 2410, 2415, 2416, 2420, 2425, 2430 and 2455 units. Covers are interchangeable.



Options

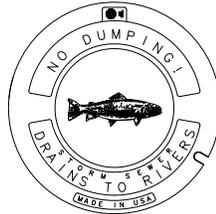
Special lettered covers

Custom logo covers

“DUMP NO WASTE!” lettering and fish image

Touch read cover available

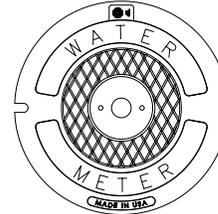
Non-bolted unit — V-1339



“DUMP NO WASTE!



Loveland



Touch Read

2405 Cover and Available Frames

Catalog Number	Product Number	Cover Diameter	Clear Opening	Frame Opening	Flange Diameter	Bottom Flange Diameter	Frame Height
2410	00241011	23 7/8	22 1/8	24 3/16	34 5/8	34 5/8	4 BF
2415	00241511	23 7/8	22 1/8	22 5/8	29 1/2	N/A	5 TF
2416	00241611	23 7/8	21 3/4	22 1/2	29 1/4	N/A	4 TF
2420	00242011	23 7/8	22 1/8	24 1/8	34 5/8	34 5/8	8 BF
2425	00242511	23 7/8	22	24 1/8	30	30	4 BF or TF
2430	00243011	23 7/8	22 1/8	24 1/8	34 5/8	34 5/8	6 BF
2455*	00245511	36	34	37	45	45	5 1/4 BF

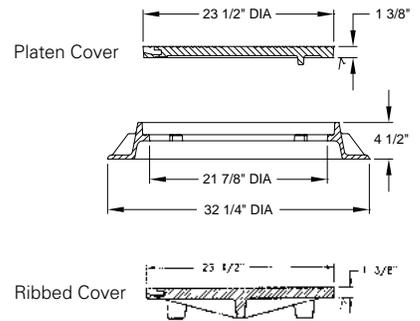
Note: All dimensions are in inches.

* Dimensions for 2455 frame shown. 2405 cover fits inside of 2455E outer cover.

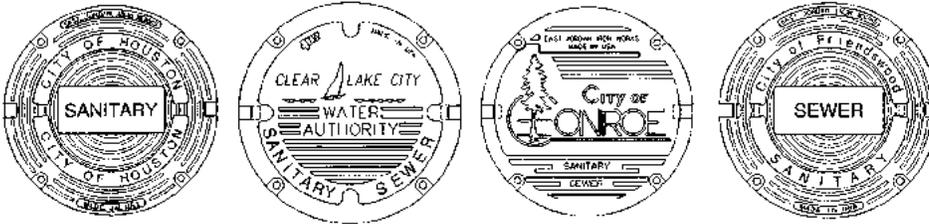
V-2418-2 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Special lettered covers
Logo covers



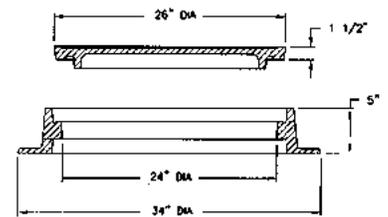
Custom Logo Covers



2450 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

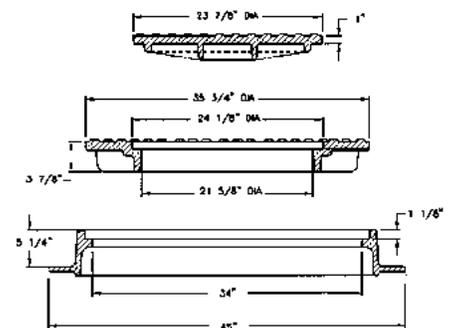
Options
Special lettered covers
Custom logo covers
Watertite assembly
Grates
Adjusting risers
Hinged unit
Gasket seal covers
Accepts 1040 covers



2455 FRAME & COVER

Heavy duty
Machined bearing surfaces
TYPE E outer cover with 2455 inner cover

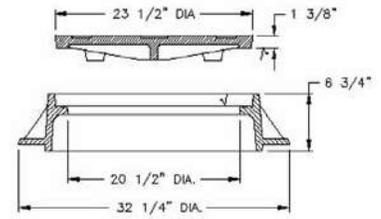
Options
Special lettered covers
Adjusting risers



V-2480 WATERTITE FRAME & COVER

Heavy duty
Machined bearing surfaces
Watertite assembly

Options
Special lettered covers
Custom logo covers
Adjusting risers



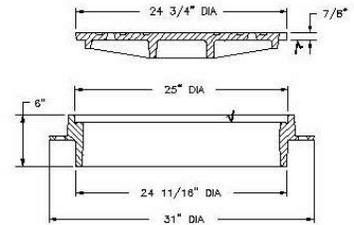
Custom Logo Cover



2600 FRAME & 2603 COVER

Heavy duty
Machined bearing surfaces
Uses 2603 covers and grates

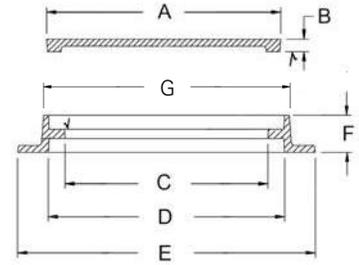
Options
Bolted assembly



V-2600/V-2610 FRAME & COVER

Heavy duty
Reversible frames
Watertite assembly

Options
Special lettered covers



V-2600/V-2610 Frame & Cover

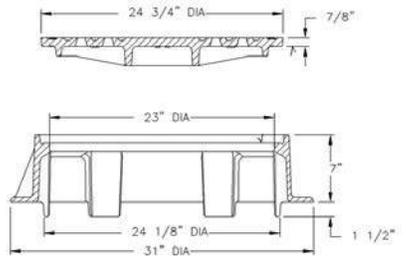
Bottom Flange	Top Flange	A Cover Dia.	B Cover Thk.	C Clear Opening	D Flange Opening	E Flange Dia	F Height	G Drop In
V-2600 Series								
V-2600-1	V-2800-1	19 1/4	1 1/2	18 1/4	19 1/2	21	4	24 3/4
V-2600-2	V-2800-2	23 1/2	1 3/8	21 3/4	23 3/4	28 1/2	4	24 3/4
V-2600-3	V-2800-3	25 1/4	1 3/8	21 7/8	25 1/2	32 1/8	4	26 1/2
V-2600-5	V-2800-5	38	1 7/8	34 3/8	38 1/4	46	6	40
V-2610 Series								
V-2610-1	V-2810-1	10 1/4	1 3/8	7 1/2	10 1/2	14 1/2	4	11 1/2
V-2610-2	V-2810-2	13 1/4	1 1/2	9 11/16	13 1/2	17 5/8	4	14 1/2
V-2610-4	V-2810-4	21 7/8	1 3/8	18 1/4	22 1/8	26 5/8	4	23 5/8
V-2610-5	V-2810-5	27 7/8	1 3/8	25 1/8	28 1/8	32 1/2	4	29 3/8
V-2610-6	V-2810-6	33 7/8	1 3/8	29 3/4	34 1/8	38 1/2	4	35 1/2
V-2610-7	V-2810-7	39 5/8	1 1/2	38 1/4	39 7/8	44 1/2	4	41 1/2
V-2610-8	V-2810-8	45 3/4	1 3/8	42 3/8	46	50 1/2	4	47 3/4

Note: All dimensions are in inches.

2603 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Special lettered covers
Custom logo covers
Bolted assembly



Type M Grate
Approx. 185 sq. in.
open area

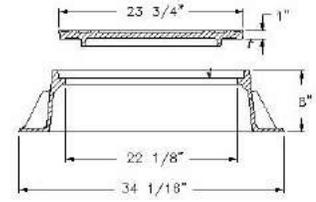


Side view to illustrate tabs

2609 FRAME & COVER

Heavy duty
Machined bearing surfaces

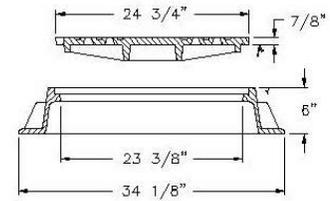
Options
Special lettered covers
Custom logo covers



2615 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses 2603 covers and grate

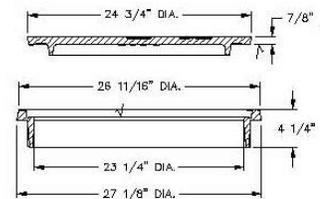
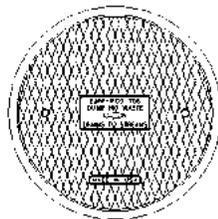
Options
Special lettered covers
Custom logo covers
Bolted assembly



2626 FRAME & COVER

Heavy duty
Machined bearing surfaces

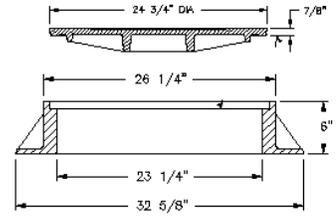
Options
Special lettered covers
"DUMP NO WASTE!" lettering and fish image
Bolted assembly



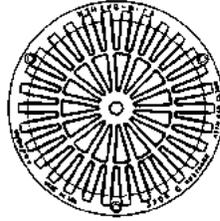
2640 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
Special lettered covers
Frames and grates available in gray or ductile iron
Catch pan available if required



Type P Concave Grate
Approx. 136 sq. in. open area

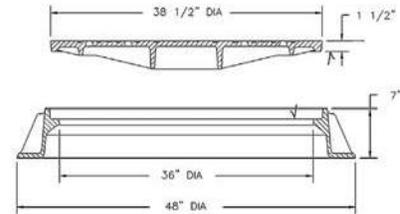


Type O Beehive Grate
Approx. 163 sq. in. open area
9" height above frame

2688 FRAME & COVER

Heavy duty
Machined bearing surfaces

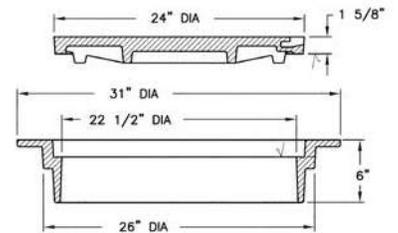
- Options
Watertite assembly
Special lettered covers
Z1 Reversible frame — 4"



2750 FRAME & COVER

Heavy duty

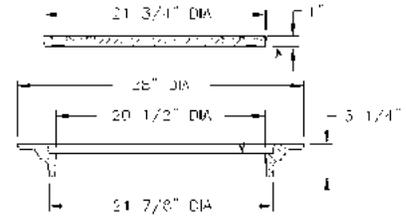
- Options
Special lettered covers



2755 FRAME & COVER

Heavy duty
Machined bearing surfaces

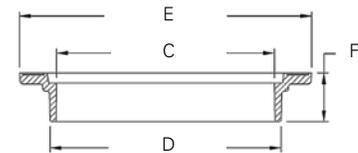
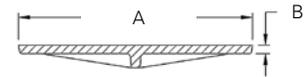
Options
Special lettered covers



2790 FRAME & COVER/GRATE SERIES

Light duty (Non-traffic)

Options
Solid covers
Special lettered covers
Grates



2790 Frame & Cover/Grate Series

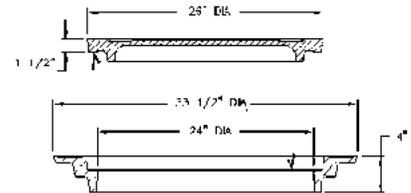
Catalog Number	A Cover Dia.	B Cover Thk.	C Clear Opening	D Flange Slv. OD	E Flange Dia	F Frame Height
2790-6	7 1/4	5/8	6	6 3/4	10 1/8	2 1/2
2790-8	9 3/4	9/16	8 7/16	9 3/8	14 1/4	2 1/4
2790-10	12	1/2	10 3/4	11 1/2	16	2 1/4
2790-12	14 3/8	1/2	13 7/6	14 3/16	18	3

Note: All dimensions are in inches.

2800 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1040 covers and grates

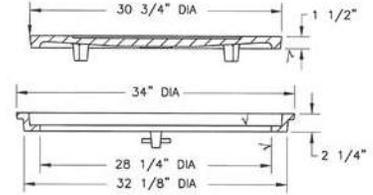
Options
Solid or vented covers
Special lettered covers
Custom logo covers
ADA grate
Watertite assembly
"DUMP NO WASTE!" lettering
Gasket seal covers



2805 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces
Bolted assembly

Options
Special lettered covers
Custom logo covers



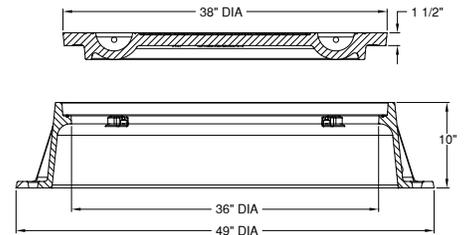
2812 AIRPORT MANHOLE FRAME & COVER

For slab construction
Extra heavy duty
Proof load 200,000 lb.
Machined bearing surfaces

Options
Recessed stainless steel hex bolts or special security bolts
Special lettered covers
Watertite assembly
Gasket seal covers
Drainage grate — 1580



Illustrating 1812Z2 frame with optional bolted watertite 2812 cover



MATERIAL SPECIFICATIONS

Frame - Gray Iron ASTM A48, Class 35B
Cover - Ductile Iron ASTM A536
Grate - Ductile Iron ASTM A536



1580 Ductile Iron Type M Flat Grate
Approx. 468 sq. in. open area



2812 4 1/2" top flange frame and cover

2812 Frame Sizes

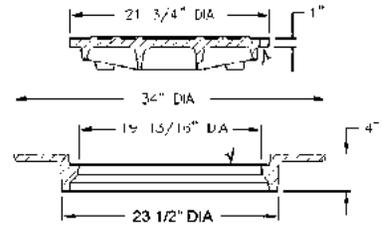
Catalog Number	Base Flange Diameter	Frame Height
2812	46 TF	4 1/2
2380Z	50	6
1812Z3	45 1/2	7
1812Z2	49	10
2381Z	50	10

Note: All dimensions are in inches.

2850 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1060 covers and grates

- Options
- Solid or vented
 - Custom logo covers
 - Special lettered covers
 - Watertite assembly
 - Gasket seal covers



Type M1 Flat Grate
 Medium duty
 Approx. 115 sq. in.
 open area



Type M2 Radial Grate
 Heavy duty
 Approx. 145 sq. in.
 open area



Type N Oval Grate
 Approx. 135 sq. in.
 open area
 2 1/2\"/>

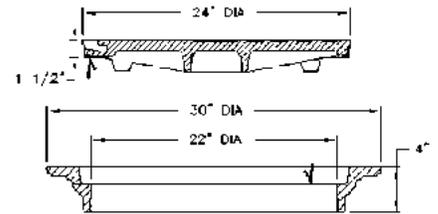


Type O1 Beehive Grate
 Approx. 135 sq. in.
 open area
 4\"/>

2860 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Accepts 1120 covers and grates

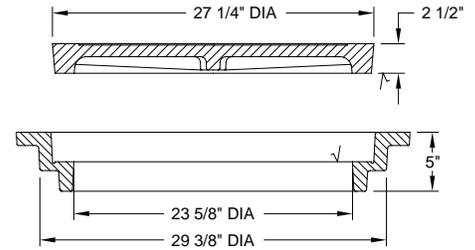
- Options
- Solid or vented covers
 - Special lettered covers
 - Custom logo covers
 - Gasket seal covers
 - Grates
 - Watertite assembly



2870 AIRPORT MANHOLE FRAME & COVER

For slab construction
 Extra heavy duty, see chart for load rating
 Machined bearing surfaces

- Options
- Recessed stainless steel hex bolts or special security bolts
 - Special lettered covers
 - Solid or vented covers
 - Drop handle
 - Drainage grate — 2870



MATERIAL SPECIFICATIONS
 Frame — Gray Iron ASTM A48, Class 35B



Type M Ductile Iron Flat Grate
 Approx. 236 sq. in. open area

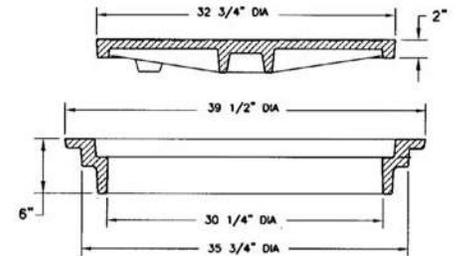
2870 Airport Manhole Frame & Cover

Catalog Number	Type	Material Specification	Proof Load
2870A	Cover	Gray Iron	110,000
2870ADI	Cover	Ductile Iron ASTM A536	200,000
2870M	Grate	Gray Iron ASTM A48 Class 35	140,000
2870MDI	Grate	Ductile Iron ASTM A536	200,000

2880 AIRPORT MANHOLE FRAME & COVER

For slab construction
 Extra heavy duty
 Proof load of 200,000 lb.
 Machined bearing surfaces

- Options
- Recessed stainless steel hex bolts or special security bolts
 - Gasket seal covers
 - Special lettered covers
 - Drainage grate - 2880



MATERIAL SPECIFICATIONS
 Frame - Gray Iron ASTM A48, Class 35B
 Cover - Ductile Iron ASTM A536
 Grate - Ductile Iron ASTM A536

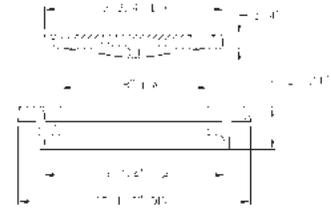


Type M Ductile Iron Flat Grate
 Approx. 238 sq. in. open area

2885 FRAME & COVER

Heavy duty
 Fits 8" sewer pipe bell
 Accepts 2975 covers
 Reversible frame, see 1577

Options
 1 or 2 bolt unit
 Specil lettered covers



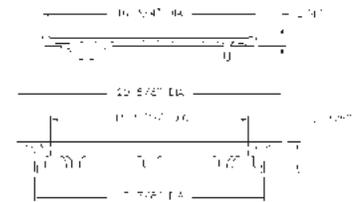
2890 FRAME & COVER

Light duty (Non-traffic)
 Fits 15" sewer pipe bell

Options
 Special lettered covers
 Watertite assembly
 Grate



Type M Flat Grate
 Approx. 75 sq. in.
 open area



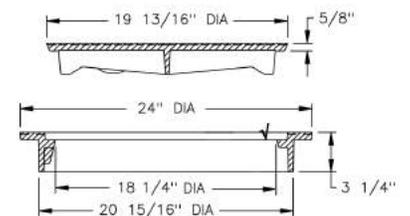
2900 FRAME & COVER

Light duty (Non-traffic)
 Fits 18" sewer pipe bell

Options
 Solid or vented covers
 Special lettered covers
 Watertite assembly
 Grates
 Gasket seal covers



Type M Flat Grate
 Approx. 130 sq. in.
 open area

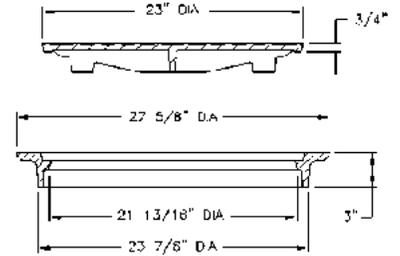


2910 FRAME & COVER

Light duty (Non-traffic)
Fits 21" sewer pipe bell

Options

- Solid or vented covers
- Special lettered covers
- Watertite assembly
- Grates
- 2910Z1 bottom flange frame available



Type M Flat Grate
Approx. 150 sq. in.
open area

2912 FRAME & COVER

Heavy duty
Reversible frame
Can be installed as a top
flange or bottom flange unit

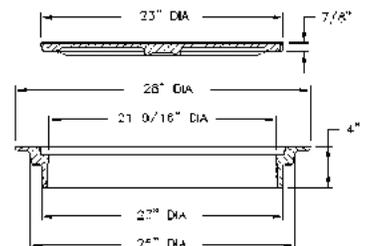


2915 FRAME & COVER

Light duty (Non-traffic)

Options

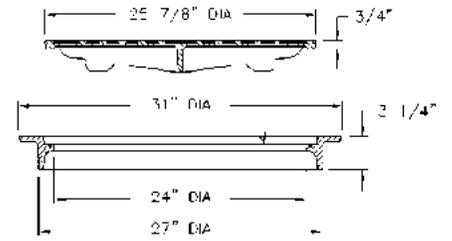
- Special lettered covers



2920 FRAME & COVER

Light duty (Non-traffic)
Fits 24" sewer pipe bell

- Options
- Solid or vented covers
- Watertite assembly
- Gasket seal covers
- Grates

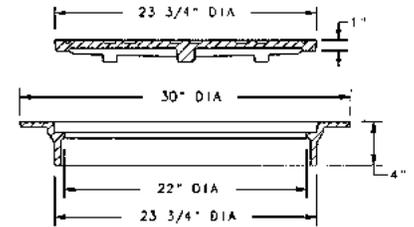


Type M Flat Grate
Approx. 215 sq. in.
open area

2925 FRAME & COVER

Medium duty

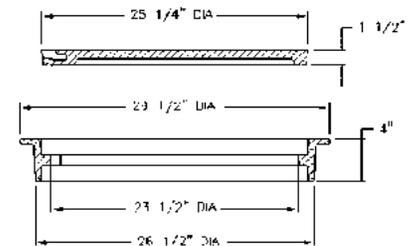
- Options
- Special lettered covers
- Lock lug covers
- Cross strap lock
- Also accepts 1450 and 1665 covers



2932 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

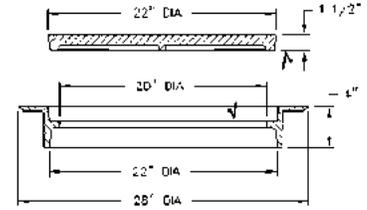
- Options
- Special lettered covers
- Watertite assembly
- Gasket seal covers
- Grates



2935 FRAME & COVER

Heavy duty
Machined bearing surfaces
Vented cover

Options
Special lettered covers
Custom logo covers
Accepts 1130 covers

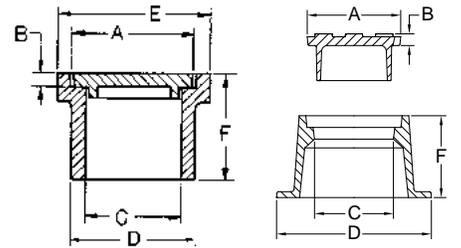


2960 — 2980 MONUMENT BOXES

Floor and monument boxes
Floor boxes are used in concrete floors to provide access to openings and valve controls. They can also be used as forms in concrete floors wherever a round opening is desired.
Sizes listed in order of clear openings



Illustrating bottom flange



Illustrating top flange

Illustrating bottom flange

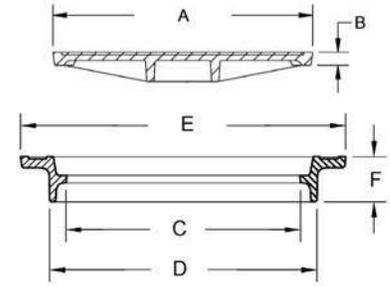
2960 — 2980 Monument Boxes

Catalog Number	A Cover Diameter	B Cover Thickness	C Clear Opening	D Drop In Dimension	E Top Flange	F Frame Height
2960	6 1/2	1 1/2	5	5 3/4	7 5/8	6 1/4
2965*	8	1	6 1/2	8	9 3/4	10
2966+	8	1	6 1/2	11 1/2	9 3/4	10
2967++	8	1	6 1/2	7 13/16	9 3/4	10
2970+++	8 1/4	3/4	7	7 3/4	9 1/2	6 1/4
2975+++	9 5/8	3/4	8 1/4	9	10 3/4	7 1/2
2980	11 3/8	5/8	10	-	13	7 1/2

Note: All dimensions are in inches.
* 2965 — Grate option, 1 1/2" and 2 1/2" Adjusting risers available with this unit
+ 2966 unit has 4 lugs at base of frame
++ 2967 unit is 2 piece split frame
+++ 2970 & 2975 can be bolted

2982 FRAME & COVER

Heavy duty and Light duty (Non-traffic)
Specify Type cover or grate



Type M Flat Grate
Approx. 101 sq. in.
open area

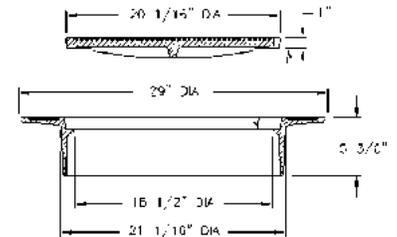
2982 Frame & Cover

Catalog Number	A Cover Dia.	B Cover Thk.	C Clear Opening	D Drop In Dimension	E Top Flange	F Frame Height
2982-18	17 1/4	1 1/4	15 1/2	18	21 3/4	3
2982-20	20	1	17 3/4	21 3/4	29	3 5/8
2982-24	28 3/4	2	22	25	30	4 3/4

Note: All dimensions are in inches.

2990 FRAME & COVER

Light duty (Non-traffic)
Machined bearing surfaces

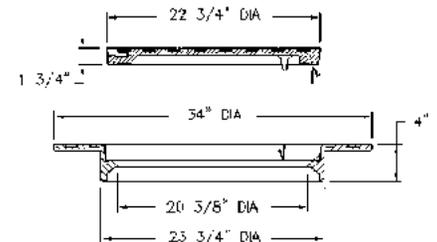


2995 FRAME & COVER

Heavy duty
Machined bearing surfaces
Accepts 1020 covers and grates



Type E "Outer" Cover with hole
for valve box cover



Options

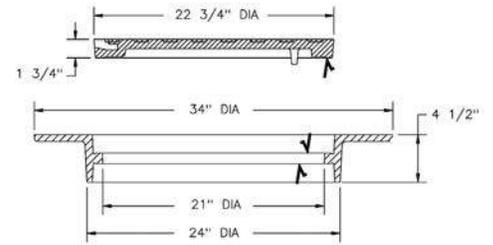
- Solid or vented covers
- Special lettered covers
- Watertite assembly
- Gasket seal covers
- Cross strap lock
- Grates

2996 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Reversible frame
 Accepts 1020 covers and grates

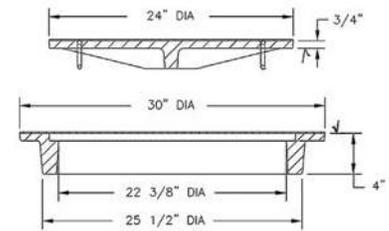
Options

- Solid or vented covers
- Special lettered covers
- Watertite assembly
- Gasket seal covers
- Cross strap lock
- Grates
- Type E "outer" cover with hole for valve box cover



3000 FRAME & COVER

Light duty (Non-traffic)
 Machined bearing surfaces
 Lift handles

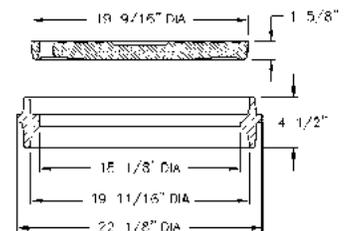


3005 FRAME & COVER

Heavy duty

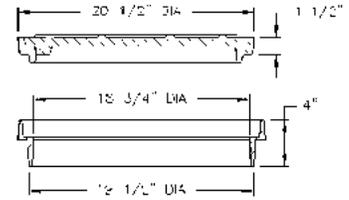
Options

- Vented covers
- Special lettered covers



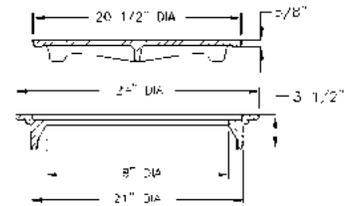
3010 FRAME & COVER

Heavy duty



3015 FRAME & COVER

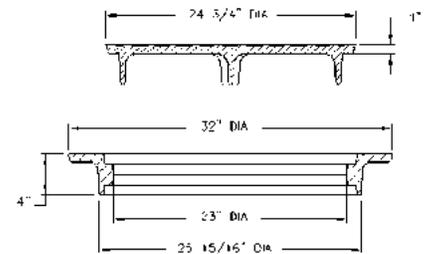
Light duty (Non-traffic)
Special lettered covers



3020 FRAME & COVER

Heavy duty
Reversible frame
Accepts 1600 covers and grates

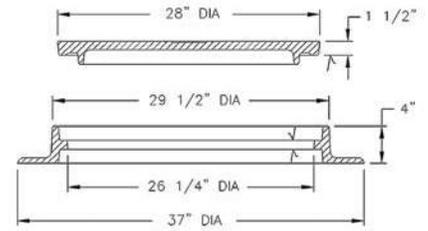
Options
Special lettered covers
Pick bar



3030 FRAME & COVER

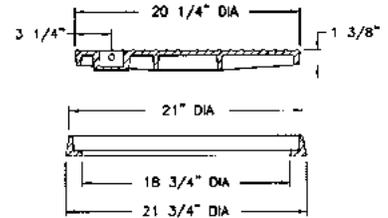
Heavy duty
 Machined bearing surfaces
 Reversible frame

Options
 Special lettered covers



3033 INLET FRAME & COVER

Light duty (Non-traffic)



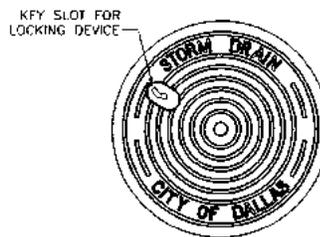
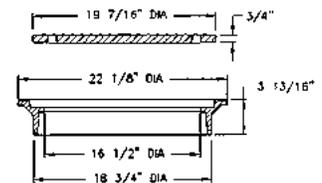
3034 INLET FRAME & COVER

Light duty (Non-traffic)

Options
 Special lettered covers
 "DUMP NO WASTE!" lettering
 and fish image
 Locking and non-locking cover



Non-locking cover



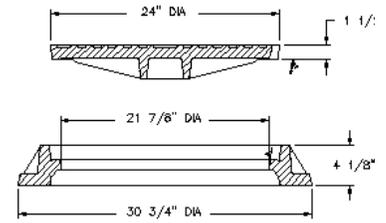
3034 with locking cover



3100 FRAME & COVER

Heavy duty
Machined bearing surfaces

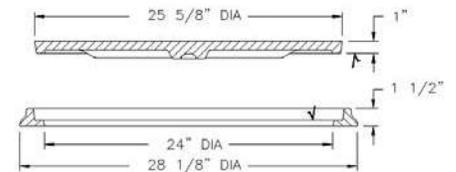
Options
Special lettered covers
Custom logo covers



3101 FRAME & COVER

Light duty (Non-traffic)
Machined bearing surfaces
Vented cover

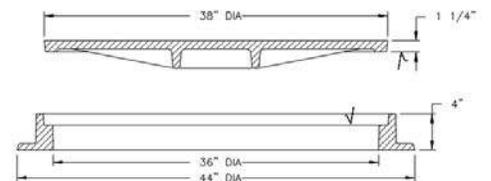
Options
Special lettered covers



3106 FRAME & COVER

Heavy duty
Machined bearing surfaces
Vented cover

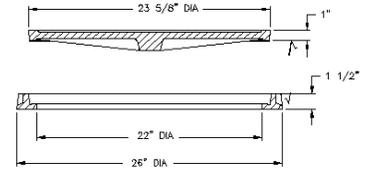
Options
Special lettered covers
4" and 6" height frames available
Accepts 3166 covers



3110 FRAME & COVER

Light duty (Non-traffic)
Machined bearing surfaces

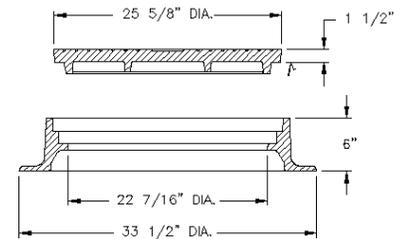
Options
Special lettered covers
Frame available with and without lugs



3115 FRAME & COVER

Heavy duty
Machined bearing surfaces

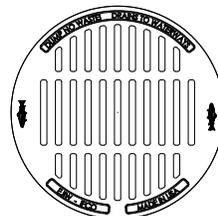
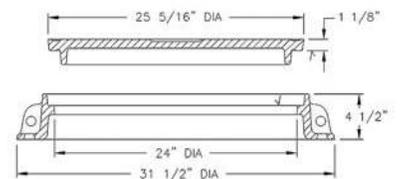
Options
Special lettered covers
Adjusting risers



3124 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Special lettered covers
Custom logo covers
Bolted assembly
Watertite assembly
Grate available — 1848
Hinged unit
"DUMP NO WASTE!" lettering
and fish image

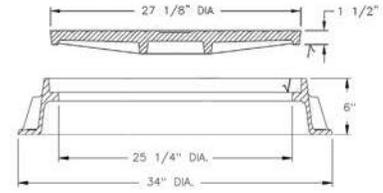


1848 Type M Grate
Approx 126 sq. in.
open area
"DUMP NO WASTE!"
lettering

3162 FRAME & COVER

Heavy duty
Machined bearing surfaces

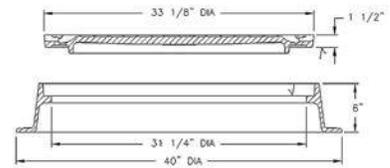
- Options
- Special lettered covers
- Platen covers
- Stackable frames
- Steel adjusting risers
- Watertite assembly



3163 FRAME & COVER

Heavy duty
Machined bearing surfaces

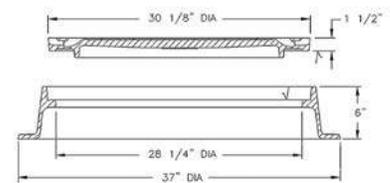
- Options
- Special lettered covers
- Platen covers
- Stackable frames
- Steel adjusting risers
- Watertite assembly



3164 FRAME & COVER

Heavy duty
Machined bearing surfaces

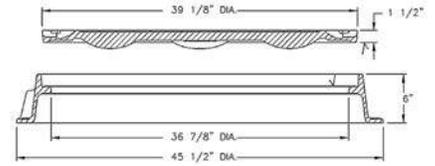
- Options
- Special lettered covers
- Platen covers
- Stackable frames
- Steel adjusting risers
- Watertite assembly
- Hinged unit



3165 FRAME & COVER

Heavy duty
Machined bearing surfaces

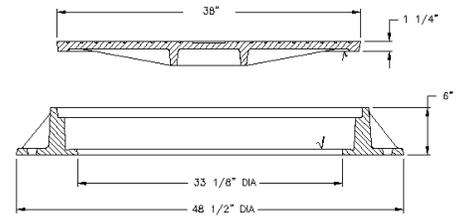
- Options
- Special lettered covers
- Platen covers
- Stackable frames
- Watertite assembly



3166 FRAME & COVER

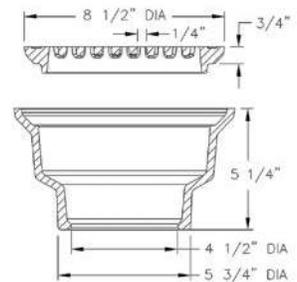
Heavy duty
Machined bearing surfaces

- Options
- Special lettered covers



3505 AREA DRAIN

Light duty



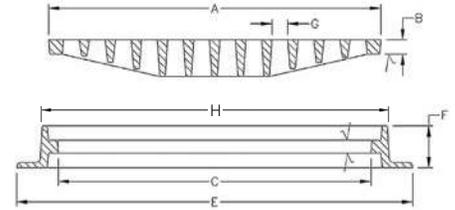
V-3600 FRAME & GRATE SERIES

Heavy duty
Machined bearing surfaces
Reversible unit
Specify top or bottom flange

Options
Solid or vented covers — V-1600
Special lettered covers
Custom logo covers
Bolted assemblies



Illustrating V-3600-4



V-3600 Frame & Grate Series

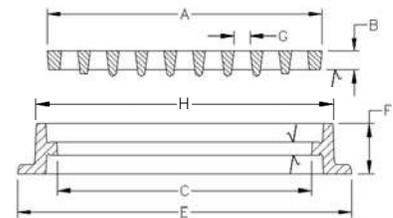
Catalog Number	B Cover Dia.	C Cover Thk.	D Clear Opening	E Flange	F Frame Height	G Slot Size	H Drop In	Open Area Sq. In.
V-3600-1	19 1/4	1 1/2	18 1/4	24	4	1 1/4	110	20 1/2
V-3600-2	23 1/2	1 1/2	21 3/4	28 1/2	4	1 1/8	196	24 3/4
V-3600-3	25 3/8	1 1/2	24	32 1/8	4	1 1/2	180	26 5/8
V-3600-4	31 7/8	1 3/8	30	38	4	1 1/2	350	33 1/8
V-3600-5	38	2	35 3/4	46	6	1 3/8	480	39 3/4
V-3600-6	50 1/4	2	48	56 1/2	6	1 1/2	760	52

Note: All dimensions are in inches.

V-3610 FRAME & GRATE SERIES

Heavy duty
Machined bearing surfaces
Reversible unit
Specify top or bottom flange

Options
Solid or vented covers — V-1610
Special lettered covers
Custom logo covers
Bolted assemblies



V-3610 Frame & Grate Series

Catalog Number	B Cover Dia.	C Cover Thk.	D Clear Opening	E Flange	F Frame Height	G Slot Size	H Drop In	Open Area Sq. In.
V-3610-1	10 1/4	1 1/2	8 1/2	14 1/2	4	1 1/16	33	11 1/2
V-3610-2	13 1/4	1 1/2	11 1/2	17 5/8	4	1	54	14 1/2
V-3610-3	16 1/4	1 1/2	14 3/8	20 1/2	4	1 1/2	73	17 1/2
V-3610-4	21 7/8	1 1/2	20 1/4	26 5/8	4	1 5/16	159	23 5/8
V-3610-5	27 7/8	1 1/2	26 3/8	32 1/2	4 1/8	1 5/16	243	29 5/8
V-3610-6	33 7/8	1 1/2	32 1/4	38 1/2	4	1 9/16	350	35 1/2
V-3610-7	39 5/8	1 1/2	38 1/4	44 1/2	4	1 3/8	516	41 1/8
V-3610-8	45 3/4	1 1/2	43 3/4	50 1/2	4	1 5/16	665	47 3/4

Note: All dimensions are in inches.

3612 FRAME & COVER

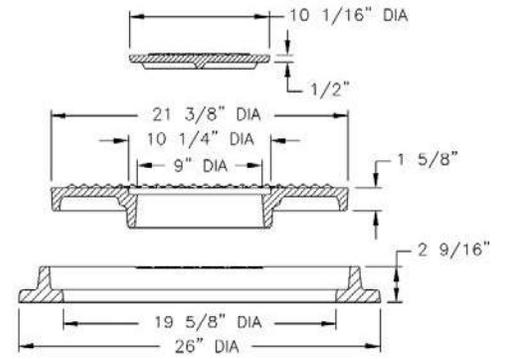
Light duty (Non-traffic)

Options

Special lettered covers

Custom logo covers

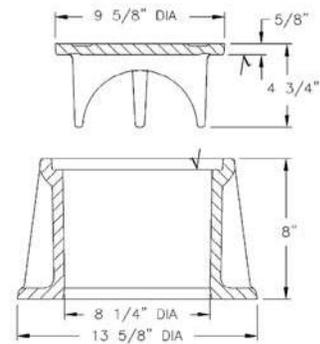
Type E outer cover and Type A inner cover



3614 FRAME & COVER

Heavy duty

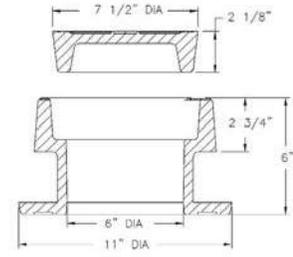
Machined bearing surfaces



3633 FRAME & COVER

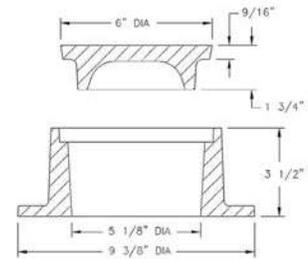
Heavy duty

Options
Special lettered covers



3638 MONUMENT BOX & COVER

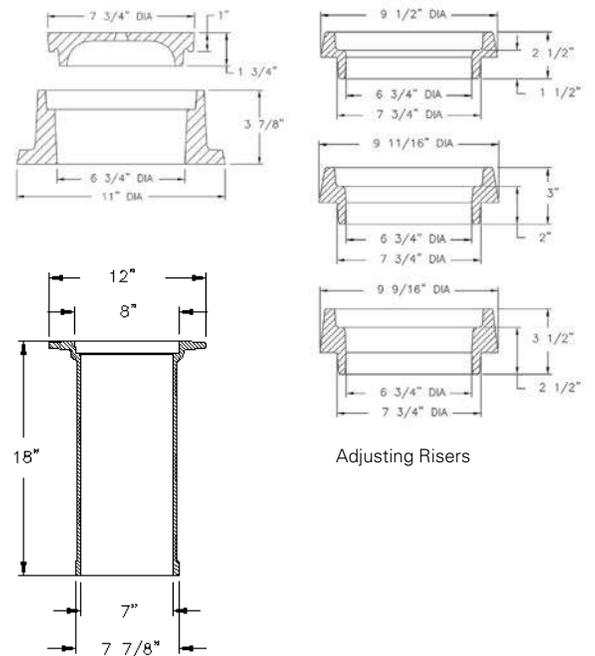
Heavy duty



3639 MONUMENT BOX & COVER

Heavy duty
3 7/8" ht. frame
18" height frame — 363912

Options
Special lettered covers
Adjusting risers



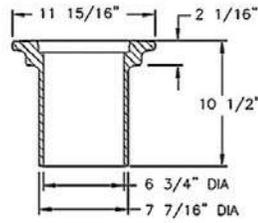
18" height frame 363912

3648 CLEANOUT

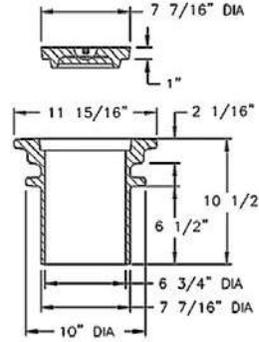
Heavy duty

Options

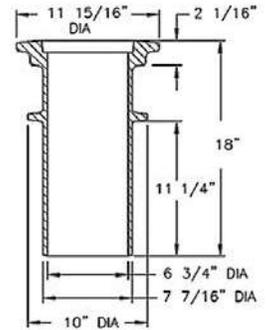
Special lettered covers



Z frame



Z1 frame



Z2 frame

3650 FRAME & COVER

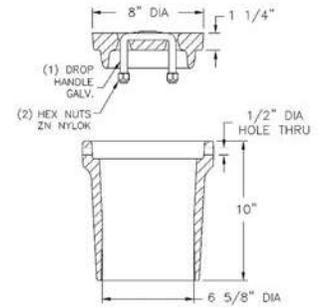
Heavy duty

Drop handle in cover

Options

Special lettered covers

Frame flange available-00365018



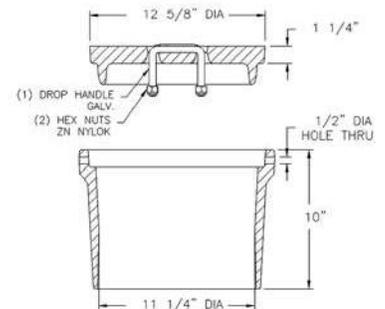
3651 FRAME & COVER

Heavy duty

Options

Special lettered covers-

Frame flange available-00365118



3661 LAMPHOLE FRAME & COVER

Heavy duty

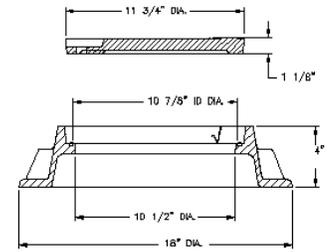
Options

Grates — ADA M2

Approximate 33 sq. in. open area

Bolted assembly

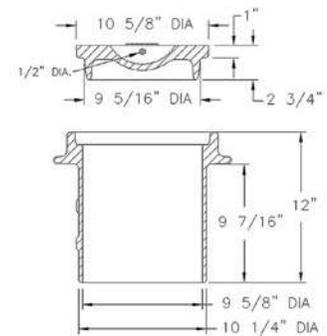
Watertite assembly



3663 FRAME & COVER

Heavy duty

Special lettered covers

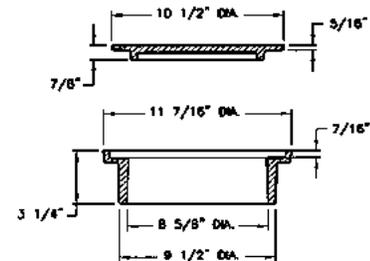


3670 METER BOX

Light duty (Non-traffic)

Options

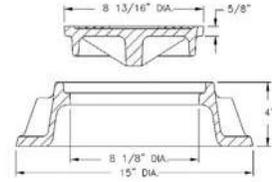
Ductile iron grates



3675 CLEANOUT

Heavy duty

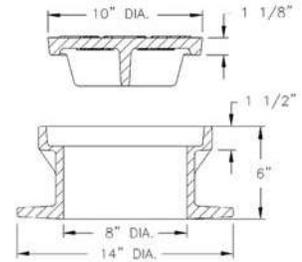
- Options
- Special lettered covers
- Watertite assembly
- Grates
- Adjusting risers
- Bolting



3680 FRAME & COVER

Heavy duty
Machined bearing surfaces

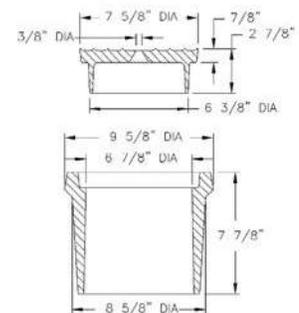
- Options
- Special lettered covers



3690 FRAME & COVER

Heavy duty

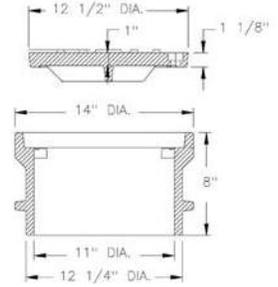
- Options
- Solid or vented covers



3698 FRAME & COVER

Heavy duty

- Options
- Bolted assembly
- Special lettered cover



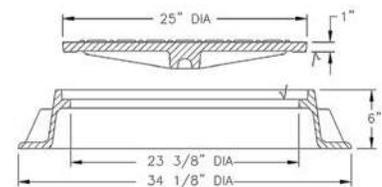
3700 — 3715 FRAME & COVER

Heavy duty
Machined bearing surfaces

- Options
- Custom logo
- Special lettered covers
- Stackable frames
- Ductile iron covers
- Flat and beehive grates
- ADA grate
- Gasket seal covers
- Special locking covers
- Bolted, watertite assemblies
- Adjusting risers



3715 Illustrated



Type M Flat Grate
Ductile iron
Approx. 152 sq. in. open area



Type O Beehive Grate
Gray iron
Approx. 163 sq. in. open area
9" height above frame



3700M2 ADA Grate

3700 — 3715 Frame & Cover

Catalog Number	Base Flange Diameter	Frame Height
3710	33 5/8	4
3711*	29 3/4-33 5/8	4 TF
3700	34 1/8	6
3715	34 1/8	6
3717	33 3/4	6
3705	33	6 1/8



3706 Tacoma Lettered Cover

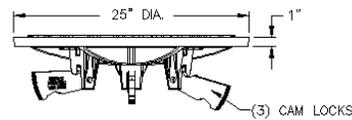


370763 Kent Logo Cover



3705 Bremerton Logo Cover

Note: All dimensions are in inches.
*Bolted top flange option



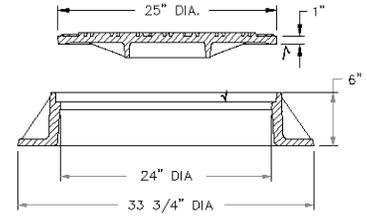
3704C Lock Cover

3717 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Custom logo covers
- Special lettered covers
- Also uses 3700, 3705 and 3706 covers
- Grate — 3700 series
- Bolted assembly
- Watertite assembly

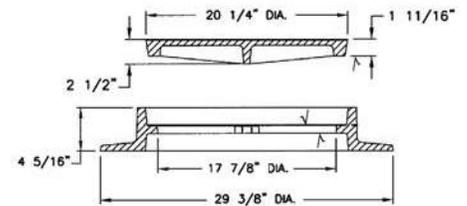


3718 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame

Options

- Special lettered covers
- Watertite assembly
- Adjusting risers
- Grates



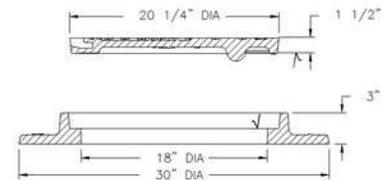
Type M1 Grate
Approx. 107 sq. in.
open area

3719 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options

- Special lettered covers
- Solid or vented covers
- Ductile iron covers
- Grates



Type M Grate
Approx. 121 sq. in.
open area

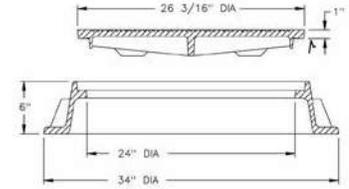


Type C Touch Reader Cover

3725 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Ductile iron covers
 Accepts 3726 cover

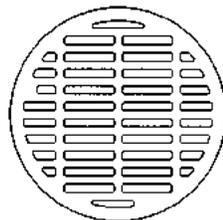
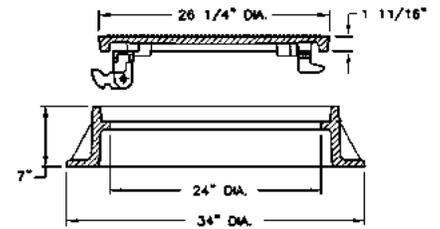
Options
 Special lettered covers
 Gate — 3726M
 Bolted assembly (locking)
 Watertite assembly



3730 FRAME & COVER

Heavy duty
 Vertical and horizontal
 machined bearing surfaces
 Ductile iron cover
 Cam lock

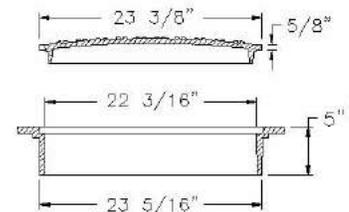
Options
 Special lettered covers
 Ductile iron grates
 13\"/>



Type M1 Grate
 Approx. 107 sq. in.
 open area

3731 SIDEWALK FRAME & COVER

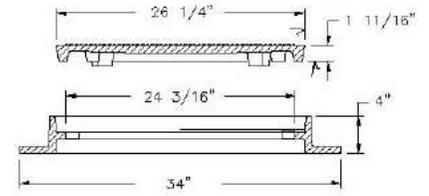
Light duty (Non-traffic)



3735 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Reversible frame
 Uses 3730 cover

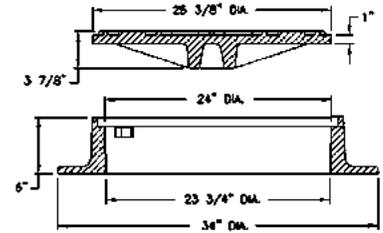
Options
 Special lettered covers
 Watertite assembly
 Ductile iron grates



3736 FRAME & COVER

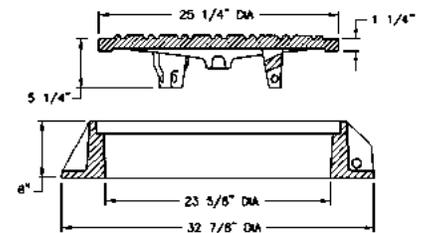
Heavy duty
 Machined bearing surfaces

Options
 Watertite assembly



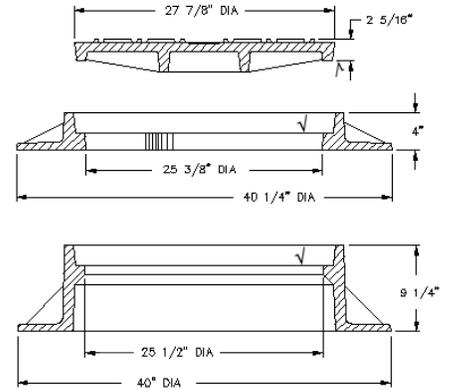
3740 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Ductile iron covers
 Cam lock



3761 FRAME & COVER

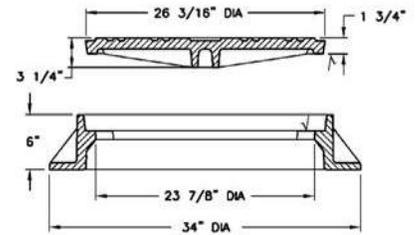
Heavy duty
Machined bearing surfaces
4" and 9" height frames



3767 FRAME & COVER

Heavy duty
Machined bearing surfaces
Ductile iron covers

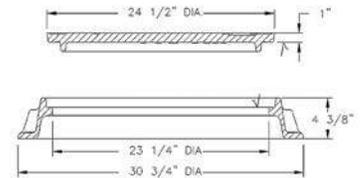
Options
Special lettered covers
Watertite assembly
Adjusting risers



3770 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Ductile iron grates

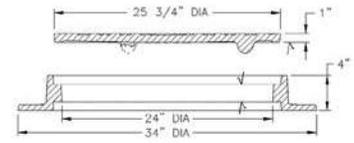


Type M Grate
Approx. 153 sq. in.
open area

3771 FRAME & COVER

Heavy duty
 Machined bearing surfaces
 Reversible frame
 Accepts 3772 cover

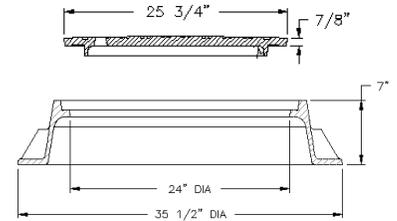
Options
 Custom logo covers
 Special lettered covers
 Solid and vented covers
 Gasketed frames
 Grates
 Ductile iron grates



3772 FRAME & COVER

Heavy duty
 Machined bearing surfaces

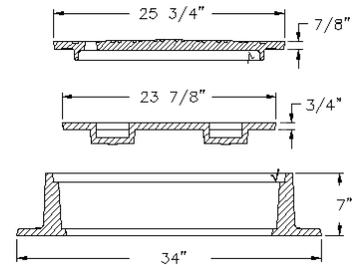
Options
 Special lettered covers
 Bolted assembly
 Grates
 4" reversible frame — 3771



3773 FROST PROOF FRAME & COVER

Heavy duty
 Machined bearing surfaces

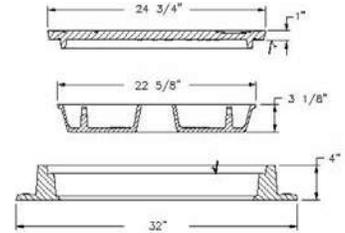
Options
 Inner cover — 3773 used
 makes unit frost proof



3777 FRAME & COVER

Heavy duty
Machined bearing surfaces

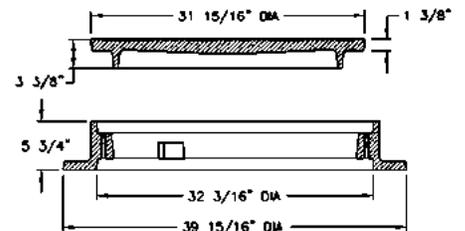
Options
Special lettered covers
Custom logo covers
Frame pan



3790 FRAME & COVER

Heavy duty
Machined bearing surfaces
Reversible frame
Uses 1810 cover

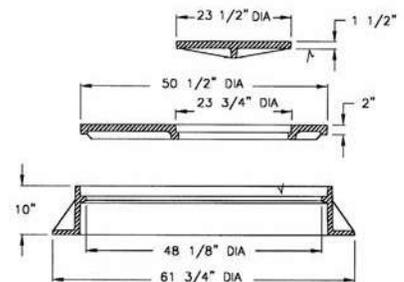
Options
Special lettered covers
Watertite assembly
Gasket seal covers
Two bolt and four bolt assembly (locking)



V-7048 FRAME & COVER

Heavy duty
Machined bearing surfaces
V-1418 inner cover

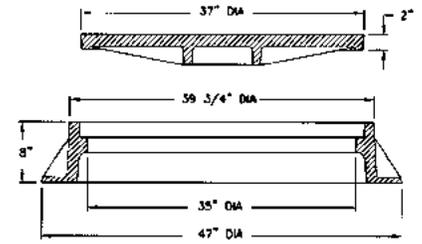
Options
Special lettered inner covers
Custom logo inner covers
Watertite



V-7068 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Special lettered covers



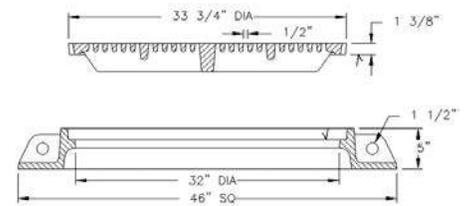
V-7069 FRAME & GRATE

Heavy duty
Machined bearing surfaces
Ductile iron cover

Options
Ductile iron ADA grate approx. 1523 sq. in. open area
Adjusting risers



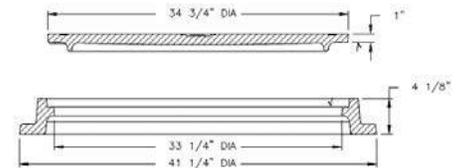
Illustrating ADA grate



V-7070-1 FRAME & COVER

Heavy duty
Machined bearing surfaces

Options
Special lettered covers



Drainage Grates, Frames, and Curb Inlets



V-4066 CURB & GUTTER INLET

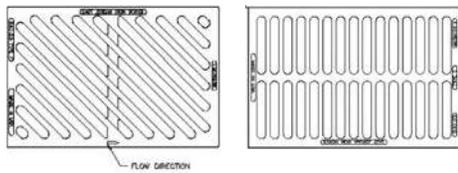
Heavy duty
 With V-4066-1 grate
 Curb back ht. adjusts from 7 1/2" to 11 3/4"

Options

"DUMP NO WASTE!" lettering and fish image on hood
 V-4066-2 grate is concave, approximate 436 sq. in. open area
 1" shorter frame with continuous bearing support for grate — V-4066-10

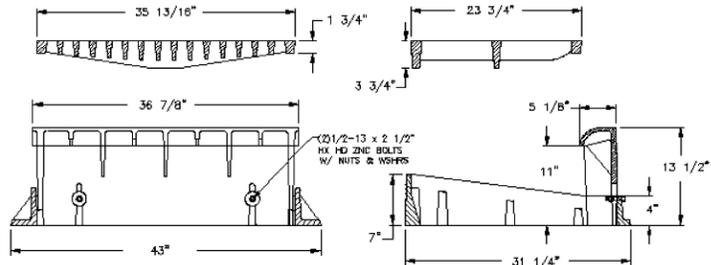


Illustrating V-4066-1



V-4066-3 & V-4066-4 Grate
 Approx. 369 sq. in. open area

V-4066-1 Grate
 Approx. 464 sq. in. open area

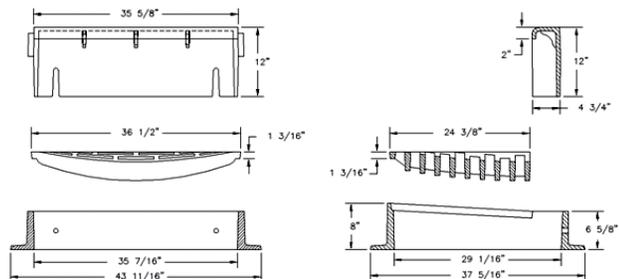
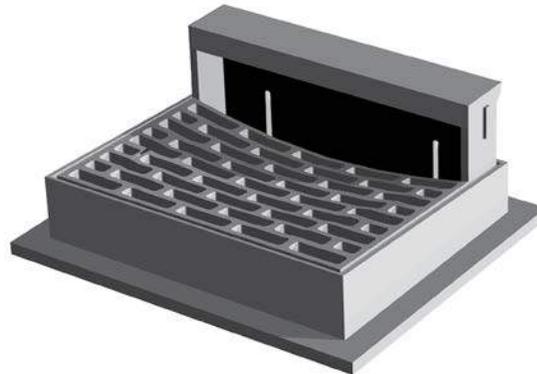


V-4069-1 CURB & GUTTER INLET

Heavy duty
 Approximate 382 sq. in. open area

Options

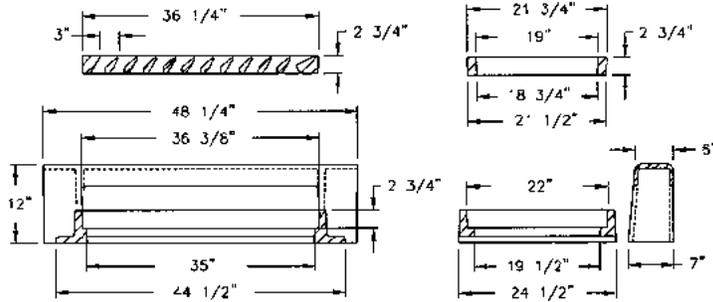
"DUMP NO WASTE!" lettering and fish image



V-4074 CURB & GUTTER INLET

Heavy duty
 Uses V-4070 hood
 Approximate 359 sq. in. open area

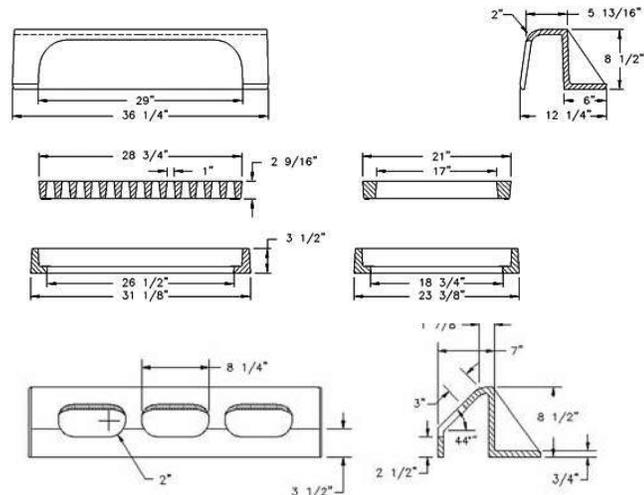
Options
 "DUMP NO WASTE!" lettering and
 fish image



V-4075 CURB & GUTTER INLET

Heavy duty
 Uses V-4275 frame and grate
 Approximate 220 sq. in. open area

Options
 "DUMP NO WASTE!" lettering and
 fish image

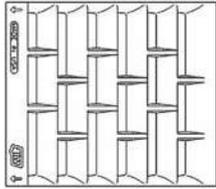


With V-4075-1 Mountable Back

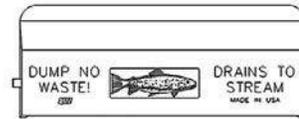
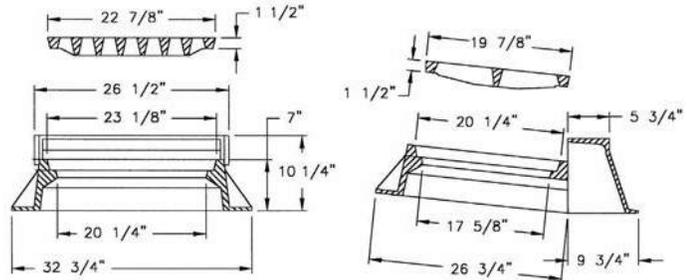
V-4091 CURB & GUTTER INLET

Heavy duty
 With V-4091-2 grate
 Approximate 142 sq. in. open area

Options
 "DUMP NO WASTE!" lettering
 and fish image on hood
 Double and triple units available



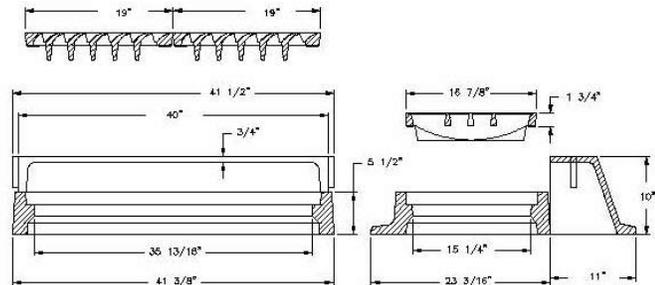
V-4091 Vane Grate



V-4092 CURB & GUTTER INLET

Heavy duty
 2 grates required
 Approximate 196 sq. in. open area

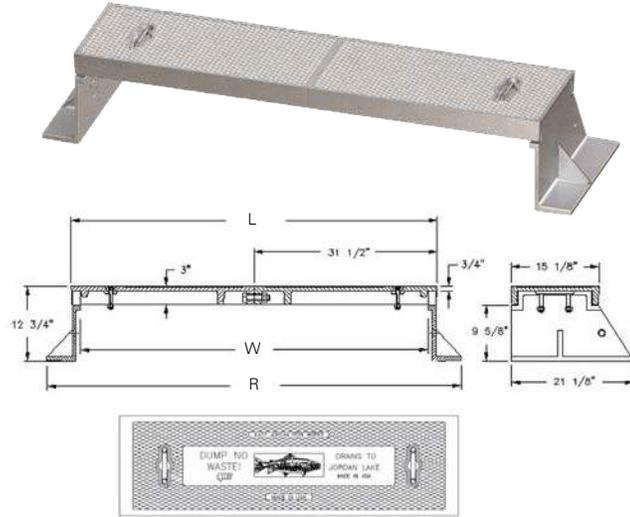
Options
 "DUMP NO WASTE!" lettering
 and fish image on hood
 Full flange option see V-4250



V-4096 CURB & GUTTER INLET

Light duty (Non-traffic)
Behind the curb use

Options
Special lettering
"DUMP NO WASTE!" lettering and fish image on hood



V-4096 Curb & Gutter Inlet Sizes

Catalog Number	R	W	L
V-4096-1	60	48	51
V-4086-2	72	60	63

Note: All dimensions are in inches.

V-4230 GUTTER INLET FRAME & BAR GRATE

Heavy duty
Machined bearing surfaces

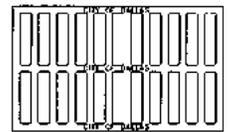
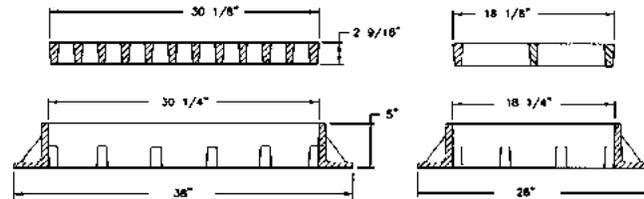
Options
Special lettering
Vane grate
Ductile iron
Bolted assembly
"DUMP NO WASTE!" lettering and fish image

NOTE: Support all frame joints with steel I-beams supplied by other.

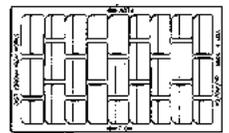


Illustrating V-4232 Frames & V-4230-1 Grates
Approx. 470 sq. in open area

Illustrating V-4230 Frame & V-4230-1 Grate
Approx. 235 sq. in open area

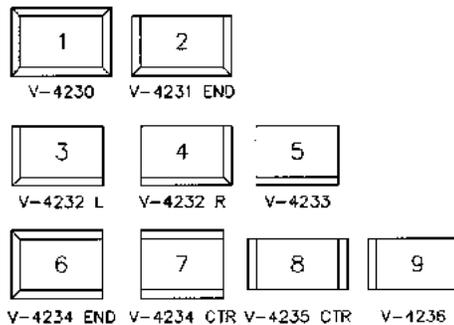


V-4230-1 Grate
With special lettering

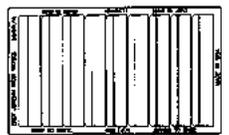
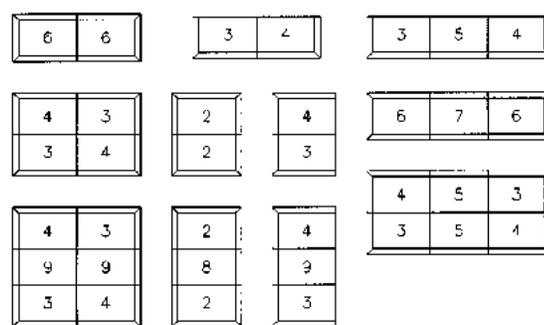


V-4230-2 Vane Grate
Approx. 195 sq. in. open area

Frame Styles



Frame Combination

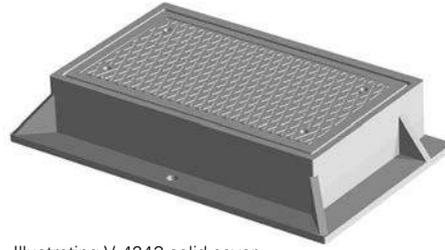


7600M Hydrodynamic Vane Grate
Approx. 220 sq. in. open area
"DUMP NO WASTE DRAINS TO RIVER"

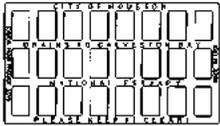
V-4241 CURB & GUTTER FRAME & COVER

Heavy duty
3 flange frame

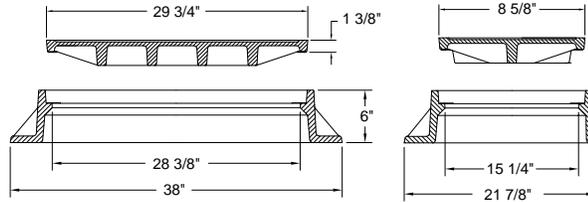
Options
Special lettered grates and covers



Illustrating V-4243 solid cover



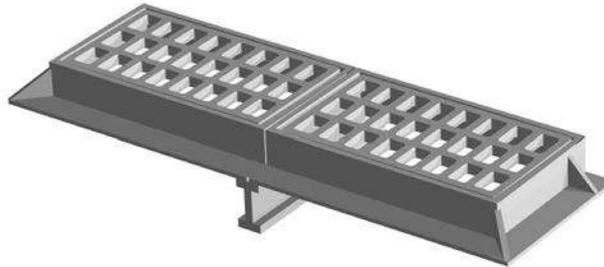
V-4243-1 Grate
Approx. 240 sq. in
open area



V-4243 CURB & GUTTER FRAME & GRATES

Heavy duty
Approximate 480 sq. in open area with
2 grates

Options
Custom logo covers
Special lettered grates
Special lettered covers
Accepts V-4854 cover
1 piece frame — V-4243Z2
(two grates required)



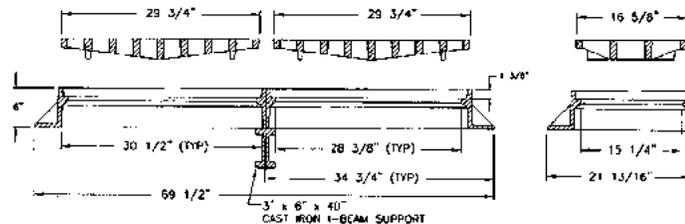
Illustrating V-4243Z1 left and right hand frames with I-beam and two grates



V-4243-3 Cover

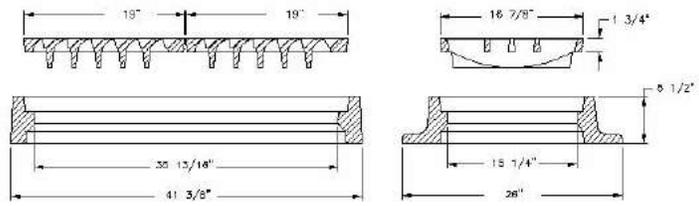


V-4243-1 Grate
Approx. 240 sq. in
open area



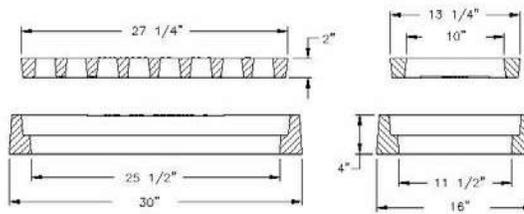
V-4250 GUTTER INLET

Heavy duty
 Accepts two V-4092 grates
 Approximate 196 sq. in. open area



V-4274 GUTTER INLET

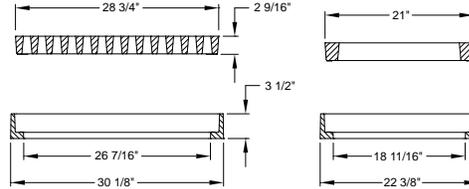
Heavy duty
 Approximate 77 sq. in. open area



V-4275 GUTTER INLET

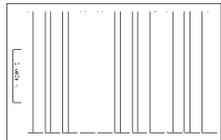
Heavy duty
Approximate 220 sq. in. open area

Options
For curb inlet see V-4075

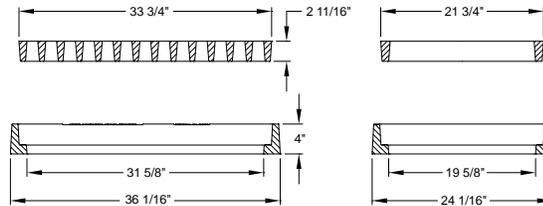


V-4280 GUTTER INLET

Heavy duty
With V-4280-1 grate
Approximate 361 sq. in. open area

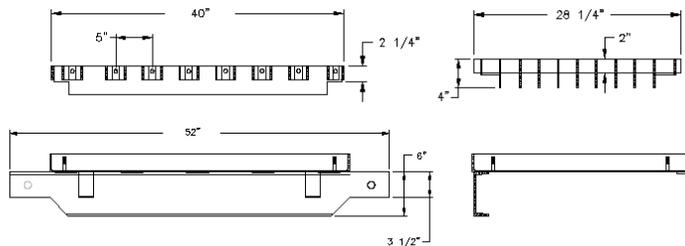


V-4280-2 Vane Grate
Approx. 255 sq. in. open area



V-4290 GUTTER INLET

Heavy duty
Uses V-4863 grate
Approximate 705 sq. in. open area
Frame and grate fabricated from
ASTM A36 steel
Units are hot-dip galvanized

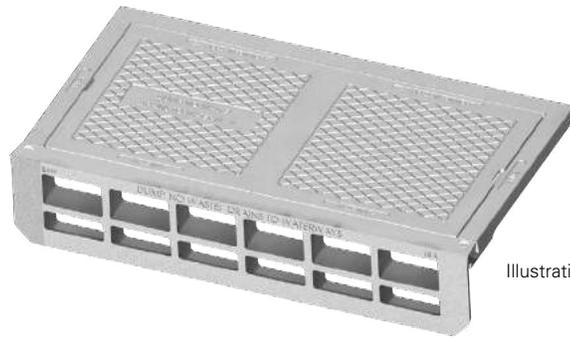


V-4300 CURB INLET SERIES

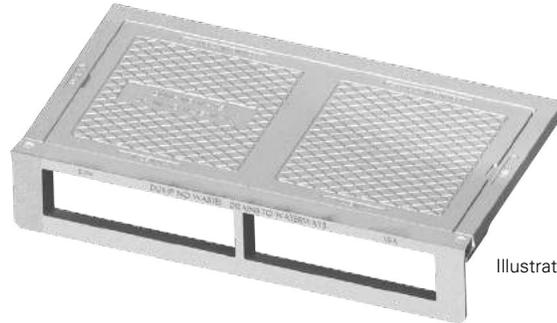
Light duty (Non-traffic)
 Designed for behind the curb access

Options

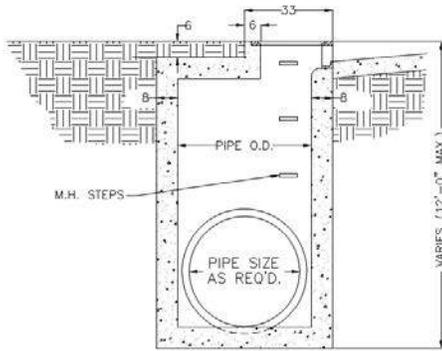
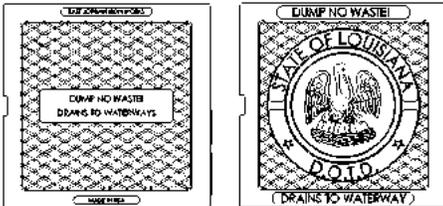
- Custom logo covers
- Special lettered covers
- “DUMP NO WASTE!” lettering and fish image covers and front grate



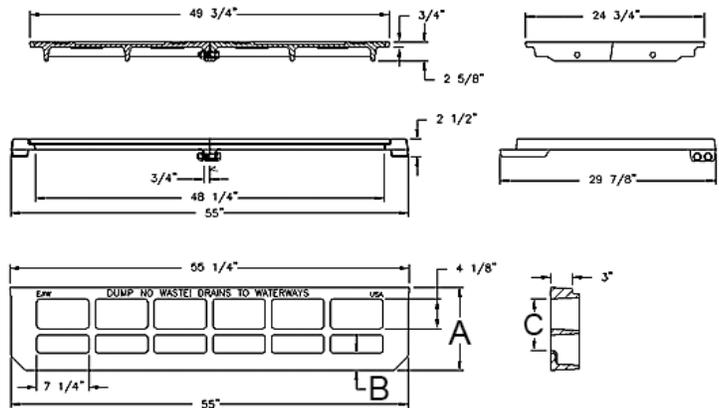
Illustrating V-4311-2



Illustrating V-4302



SECTION VIEW



V-4300 Curb Inlet Series

Catalog Number	A Front Height	B Inlet Height	C Front Opening
V-4301	8 1/2	2 1/2	4 1/2
V-4302	10 1/2	2 1/2	6 5/8
V-4304	11 1/2	2 1/8	7 7/8
V-4305*	11 1/2	2 1/8	7 7/8
V-4306	12 1/2	2 1/2	8 1/2
V-4308	14 1/2	2 1/2	10 1/2
V-4309	11 1/2	2 1/2	6
V-4311	11 1/2	2 5/8	7 3/8
V-4312	17 1/2	2 5/8	13 3/8
V-4313	20 1/2	2 5/8	16 3/8

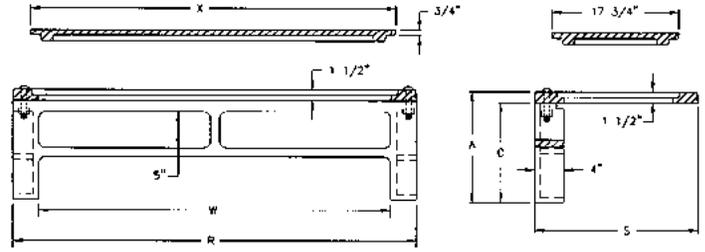
Note: All dimensions are in inches.
 *Face of front grate has a 20' radius

V-4340 CURB INLET SERIES

Light duty (Non-traffic)



Illustrating V-4341



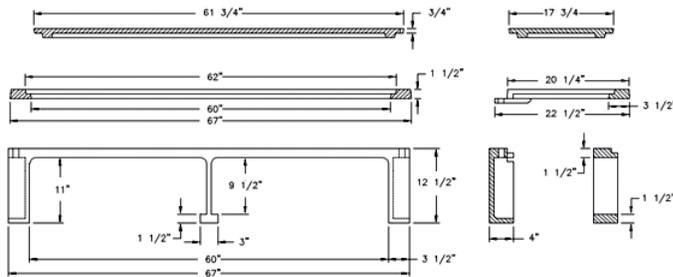
V-4340 Curb Inlet Series

Catalog Number	A Front Height	C Front Opening	R Frame Width	S Frame Depth	W Frame Clear Opening	X Cover Width	Y Cover Depth
V-4341	12	10 1/2	43	23 1/4	36	35 3/4	17 1/2
V-4342	13 1/2	12	55	22 1/2	48	49 3/4	17 3/4
V-4949	13 1/2	12	67	22 1/2	60	61 3/4	17 3/4

Note: All dimensions are in inches.

V-4343-2 CURB INLET

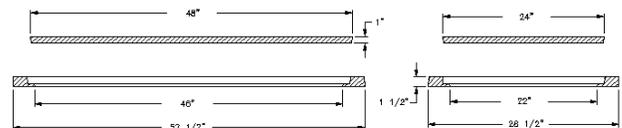
Light duty (Non-traffic)
Special lettered cover
"DUMP NO WASTE!" lettering



V-4350 CURB INLET

Light Duty (Non-traffic)

Options
Special lettered covers

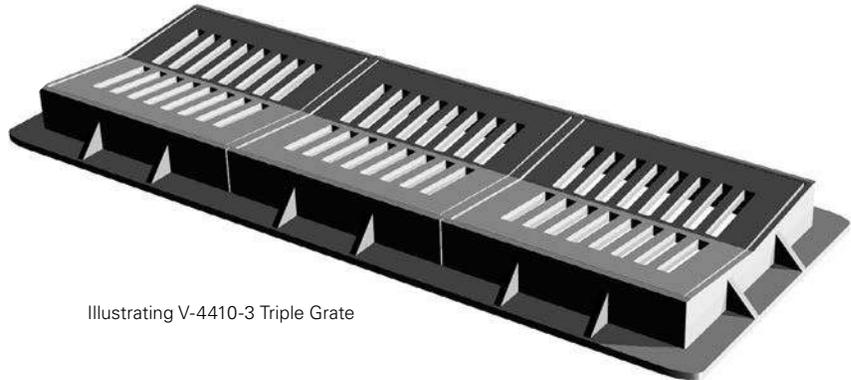


V-4410 GUTTER INLET SERIES

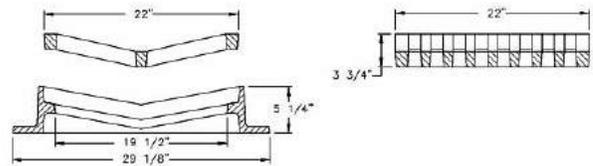
Heavy duty



Illustrating V-4410-1 Single Grate



Illustrating V-4410-3 Triple Grate



V-4410 Gutter Inlet Series

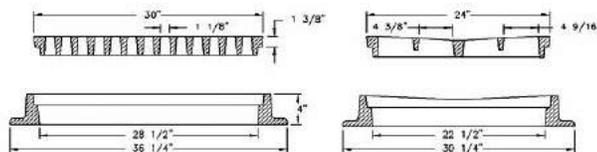
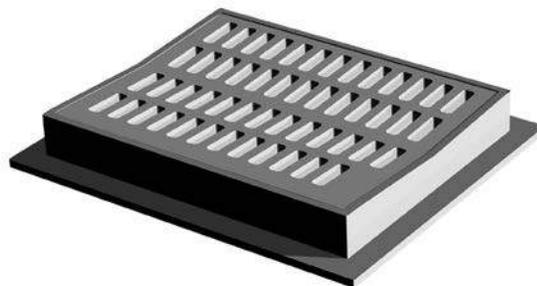
Catalog Number	Number of Grates	E Flange Width	Sq. In. Open
V-4410-1	1	29 1/4	178
V-4410-2	2	52 3/4	352
V-4410-3	3	78 3/8	528

Note: All dimensions are in inches.

V-4430 GUTTER INLET

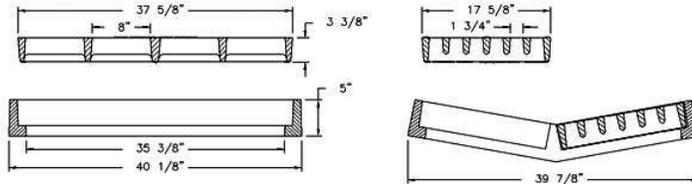
Heavy duty

Approximate 265 sq. in. open area



V-4449 GUTTER INLET

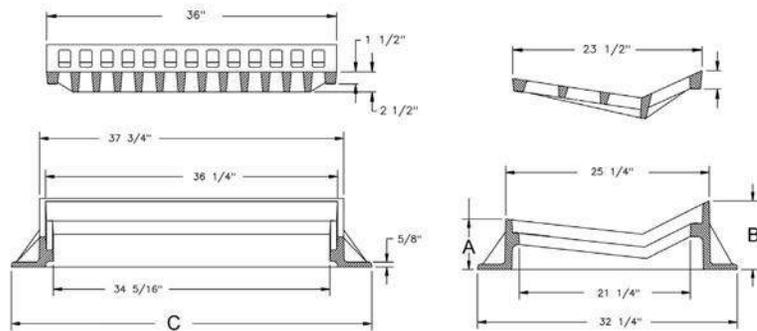
Heavy duty
 Requires two grates
 Approximate 751 sq. in. open area



V-4510 — V-4516 GUTTER INLET

Heavy duty
 Approximate 310 sq. in. open area

Options
 "DUMP NO WASTE!" lettering and
 fish image
 Double frame design — V-4516



V-4510 — V-4516 Gutter Inlet

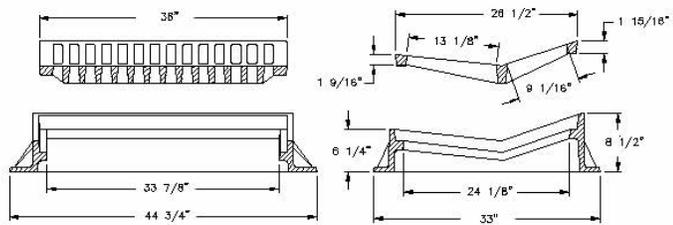
Catalog Number	A	B	C	Sq. In. Open
V-4510	6 1/4	8 1/2	44 3/4	310
V-4511	6 1/4	7 1/2	44 3/4	310
V-4516	6 1/4	7 1/2	82	620

Note: All dimensions are in inches.

V-4520 GUTTER INLET

Heavy duty
Approximate 458 sq. in. open area

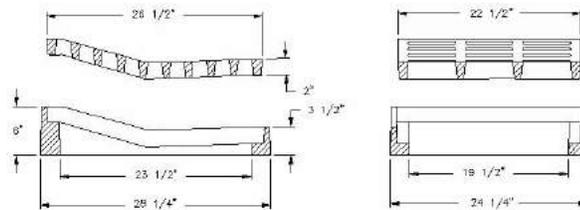
Option
Bike Grate — V-4520-1



V-4530 GUTTER INLET

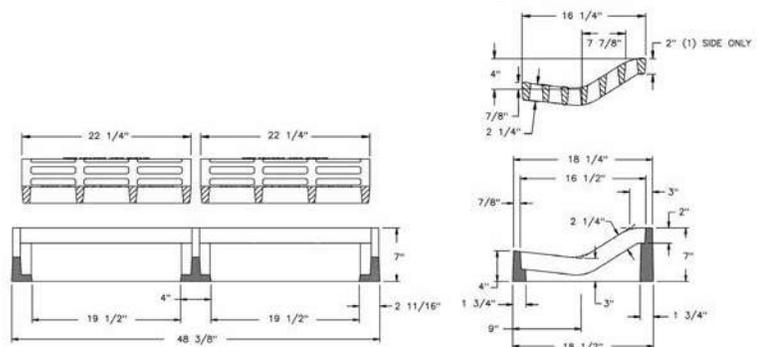
Heavy duty
Approximate 272 sq. in. open area

Double unit available — V-4530-2
Approximate 544 sq. in. open area



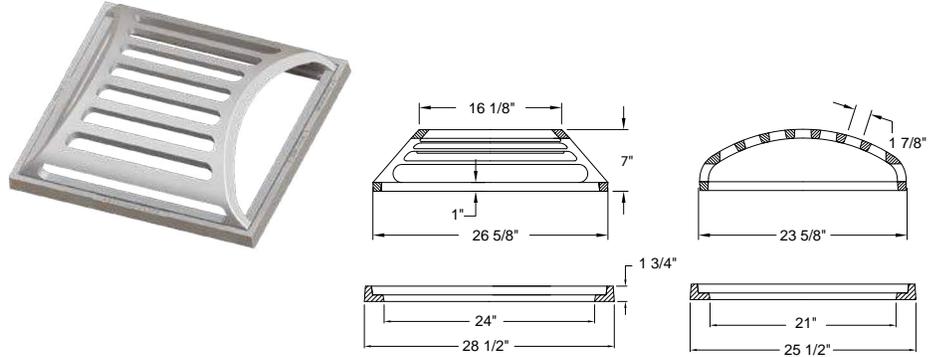
V-4540 GUTTER INLET

Heavy duty
Two grates required
Approximate 300 sq. in. open area



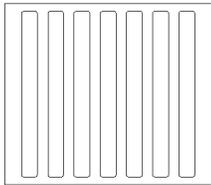
V-4810 DITCH INLET

Heavy duty
Approximate 430 sq. in. open area

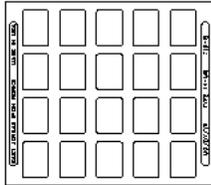


V-4821 GUTTER INLET

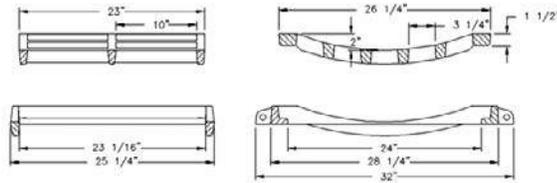
Light duty (Non-traffic)
With V-4821-1 grate
Approximate 330 sq. in. open area



V-4821-2 Grate
Approx. 294 sq. in.
open area

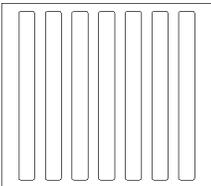


V-4821-4 Grate
Approx. 290 sq. in.
open area

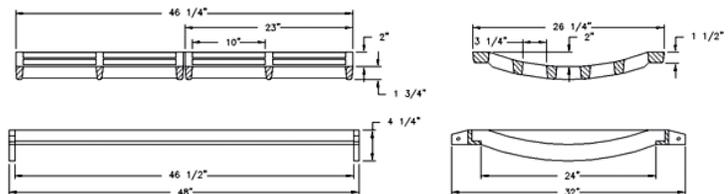


V-4822 DITCH INLET

Light duty (Non-traffic)
Uses two V-4821-1 grates
Approximate 660 sq. in. open area

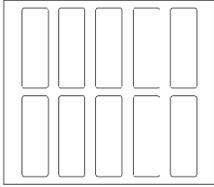


V-4821-2 Grate
Approx. 588 sq. in.
open area

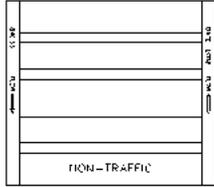


V-4823 DITCH INLET

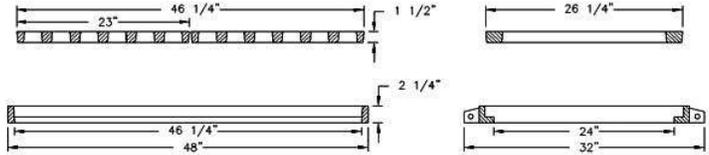
Light duty (Non-traffic)
 Uses two V-4823 grates
 Approximate 604 sq. in. open area



V-4823-1 Grate
 Approx. 650 sq. in.
 open area

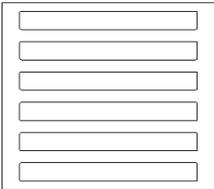


V-4823-3 Vane Grate
 Approx. 650 sq. in.
 open area

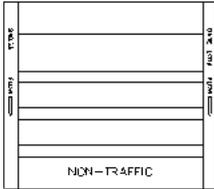


V-4824 DITCH INLET

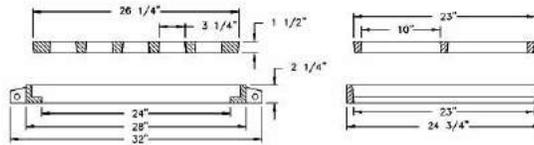
Light duty (Non-traffic)
 Uses V-4823-1 grate
 Approximate 302 sq. in. open area



V-4823-2 Grate
 Approx. 325 sq. in.
 open area



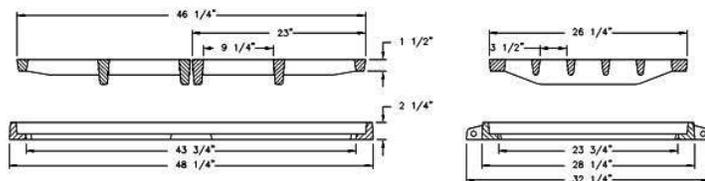
V-4823-3 Vane Grate
 Approx. 325 sq. in.
 open area



V-4825 MEDIAN INLET

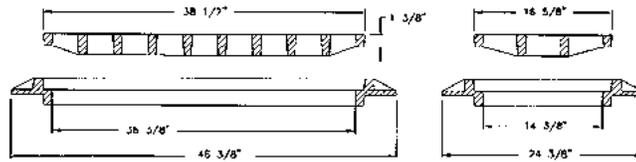
Heavy duty
 Double assembly shown
 Approximate 488 sq. in. open area

Options
 Single and triple assemblies
 Bolted assemblies



V-4855 FRAME & GRATE

Heavy duty
 Approximate 332 sq. in. open area
 V-4855-1 grate not suitable
 for pedestrian traffic



V-4860 INLET FRAME & GRATE SERIES

Steel frame
 Steel grate

Options

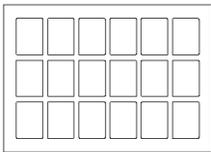
Heavy duty cast iron grate — V-4861
 Light duty (Non-traffic) steel grate — V-4862
 Steel adjusting frames



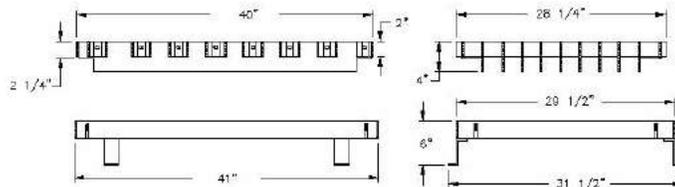
V-4860 Inlet Frame & Grate Series

Catalog Number	Material	Open Area	Load Rating
V-4861	Gray Iron	640	Heavy
V-4862	Steel	890	Light
V-4863	Steel	890	Heavy

Note: All dimensions are in inches.

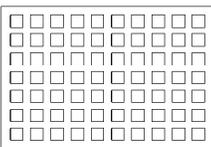


V-4861 Grate

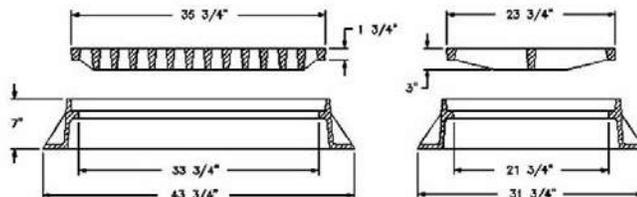


V-4867 INLET FRAME & GRATE

Heavy duty
 Uses V-4067-1 grate
 Approximate 383 sq. in. open area

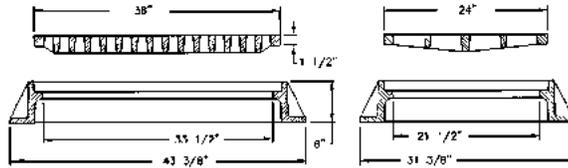
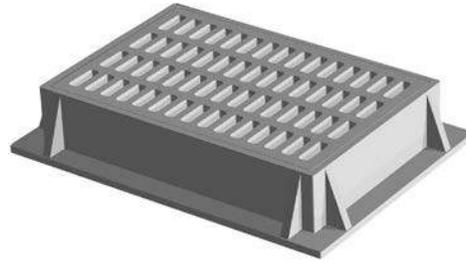


V-4067-3 Grate
 Approx. 368 sq. in.
 open area



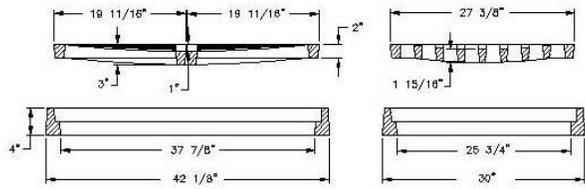
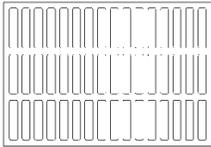
V-4868-2 FRAME & GRATE

Heavy duty
 Approximately 337 sq. in. open area



V-4870 INLET FRAME & GRATE

Light duty (Non-traffic)
 Uses two grates
 Approximate 528 sq. in. open area
 V-4870 concave grate light duty
 (Non-traffic) 264 sq. in. open area

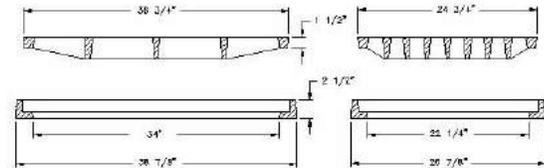
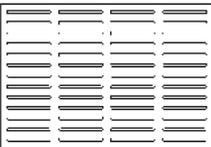


V-4870-1 Grate
 Approx. 528 sq. in.
 open area

V-4873 INLET FRAME & GRATE

Heavy duty
 Approximate 485 sq. in. open area

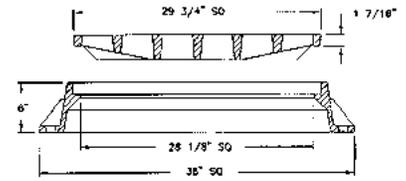
Options
 V-4873-1 ADA grate
 V-4870 concave grate light duty
 (Non-traffic) 264 sq. in. open area



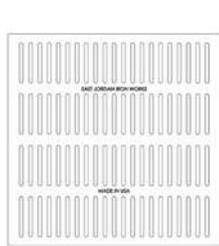
V-4873-1 ADA Grate
 Approx. 195 sq. in.
 open area

V-4880 FRAME & GRATE SERIES

Heavy duty



Illustrating V-4880-1 Grate



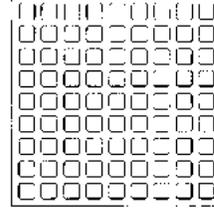
V-4880 ADA Grate
Heavy duty



V-4880-2 Grate
Heavy duty
Expressway use only



V-4880-3 Grate
Heavy duty



V-4880-4 Grate
Heavy duty

V-4880 Grates

Catalog Number	Open Area	Slot Dimension
V-4880-1	489 sq.	3 5/8 sq
V-4880-2	624 sq.	3 x 27 3/4
V-4880-3	444 sq.	1 5/8 x 6 3/11
V-4880-4	387 sq.	2 sq
V-4880-6	540 sq.	3 11/16 x 8 1/2

Note: All dimensions are in inches.

5000 CATCH BASIN INLET

Heavy duty

With Type M1 flat grate

approximate 160 sq. in. open area

“DUMP NO WASTE!” lettering and fish image

Options

2" Adjusting riser

Bolting

Restricted flow grates

Solid cover

ADA grate

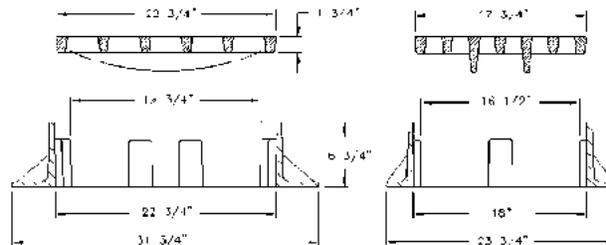
3 flange frame

Round base flange frame — 5080

Round base flange frame for hinged grate — 5000Z4



Illustrating 5000Z rectangular flange frame with Type M1 grate



Type A Solid Cover



Type M2 Sinusoidal Grate

Medium duty
Approx. 160 sq. in. open area
“DUMP NO WASTE!” Lettering and Fish Image



Type M3 Flat Restricted Grate

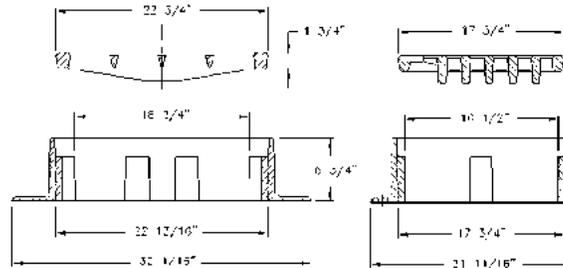
Available with 2, 4, 6, or 10 openings.
Approx. 5 sq. in. per opening.
6 hole grate with “DUMP NO WASTE!” Lettering and Fish Image



Illustrating 5000Z4 round base flange frame with Type M4 bolted and hinged grate

5020 CATCH BASIN INLET

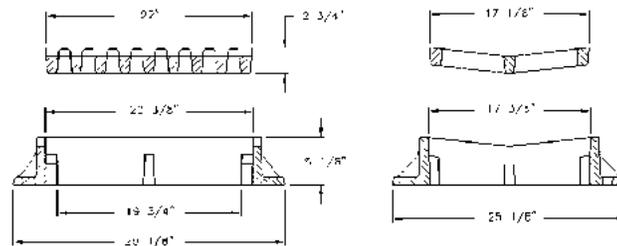
Heavy duty
 Accepts 5000 grates and covers
 With Type M1 flat grate –
 Approximate 160 sq. in. open area



5030 CATCH BASIN INLET

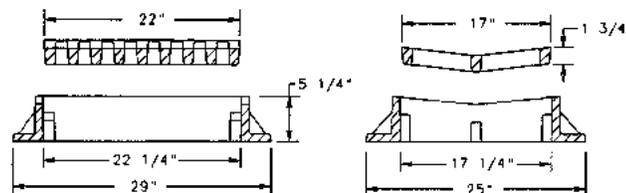
Light duty (Non-traffic)
 Concave Inlet with 1 1/4" opening
 Approximate 140 sq. in. open area

Options
 Ductile grate — 5031



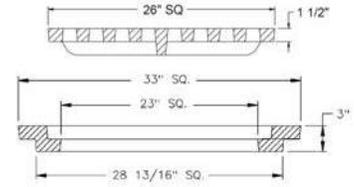
5031 CATCH BASIN INLET

Medium duty
 Concave grate
 Ductile iron frame & grate
 Approximate 140 sq. in. open area



5050 CATCH BASIN INLET

Light duty (Non-traffic)
Approximate 245 sq. in. open area

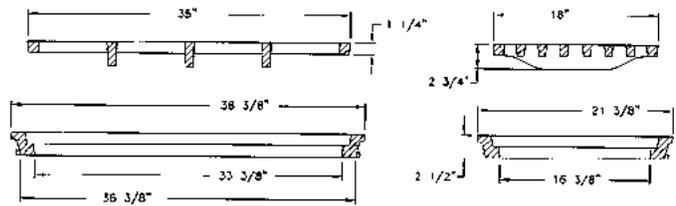


5055 FRAME & GRATE

Heavy duty
Approximate 282 sq. in. open area



V-5055-1 Grate
Approx. 280 sq. in.
open area



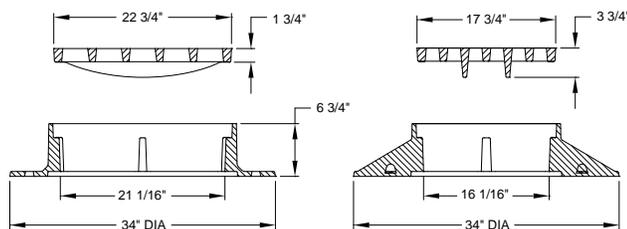
5080 CATCH BASIN INLET

Heavy duty
Round base inlet
Accepts 5000 grates and covers
With Type M1 flat grate
Approximate 160 sq. in. open area

Options
4" height stackable frame



Illustrating 5080 frame with 5000 Type M1 grate



5085 CATCH BASIN INLET

Heavy duty
 ADA grate
 Approximate 84 sq. in. open area

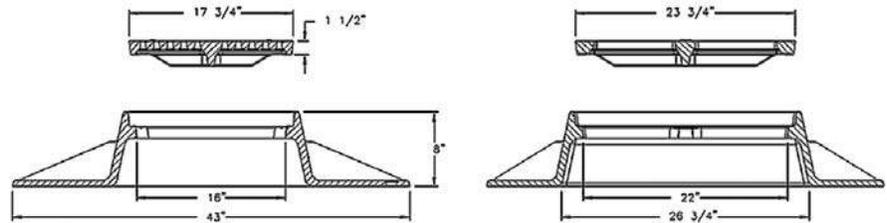
Options
 Bolted assembly
 Ductile iron



Illustrating Type M2 bolted ADA grate



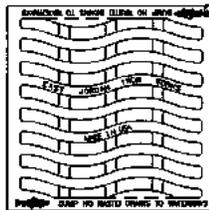
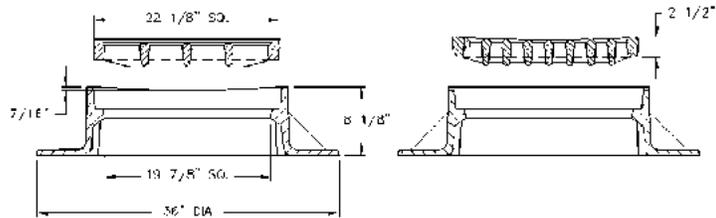
Type M1 Bolted Grate
 Medium duty
 Approx. 143 sq. in. open area



5100 CATCH BASIN INLET

Heavy duty
 Concave inlet with 5105 Type M1 grate
 Approximate 175 sq. in. open area
 Accepts 5105 grates

Options
 4" height stackable frames
 ADA grate — 5105M3



Type M1 5105 Grate
 "DUMP NO WASTE!"
 Lettering and fish image



Type M2 5105 Sinusoidal Grate
 Approx. 210 sq. in. open area
 Does not have cross bars, for expressway use only.

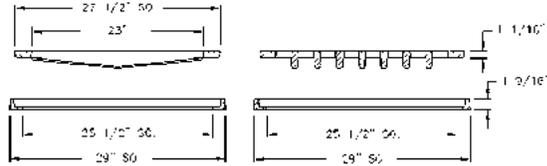


Type M3 5105 ADA Grate
 "DUMP NO WASTE!"
 Lettering and fish image

5110 CATCH BASIN INLET

Light duty flat grate (Non-traffic)
 Type M1 grate —
 "DUMP NO WASTE!" lettering
 Approximate 360 sq. in. open area

- Options
 Adjusting risers
 Heavy duty grates
 Medium duty grates



Type M2 Flat Grate
 Medium duty
 Approx. 340 sq. in. open area
 "DUMP NO WASTE!" lettering



Type M3 Sinusoidal Grate
 Heavy duty
 Approx. 300 sq. in. open area
 "DUMP NO WASTE!" lettering



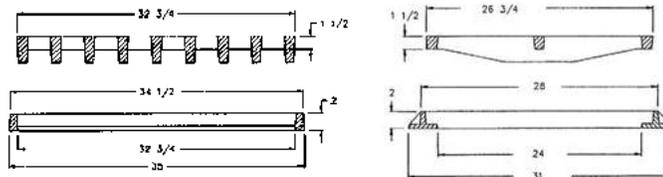
Type M4 Flat Grate
 Medium duty
 Approx. 295 sq. in. open area
 "DUMP NO WASTE!" lettering



Type M5 ADA Grate
 Heavy duty
 Approx. 150 sq. in. open area

5114 FRAME & GRATE

Medium duty
 Approximate 482 sq. in. open area



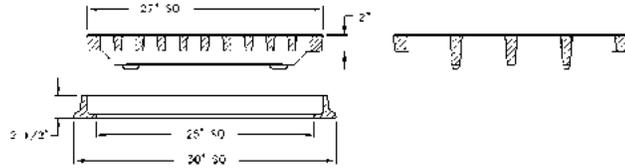
5115 CATCH BASIN INLET

Heavy duty
 With Type M2 –
 "DUMP NO WASTE!" lettering
 and fish image
 Approximate 300 sq. in. open area
 5116 frame accepts 5115 grates

Options
 Ductile iron grate — Type M3



Type M1 Flat Grate
 Medium duty
 Approx. 390 sq. in.
 open area
 2 1/2" x 7 1/2" grate
 openings



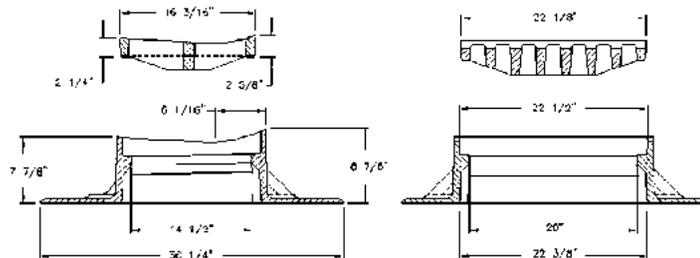
5116 frame & cover



5115 frame

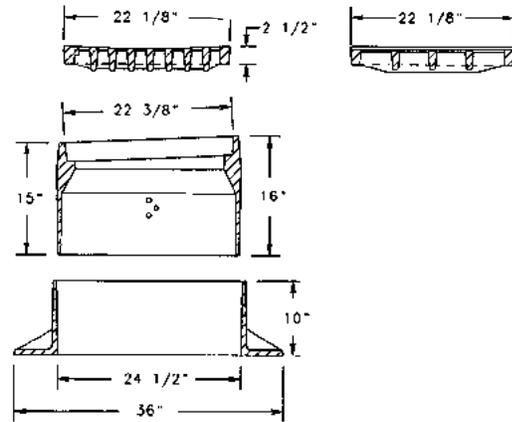
5120 CATCH BASIN INLET

Heavy duty
 Catch basin inlet for roll Type curb
 Approximate 148 sq. in. open area



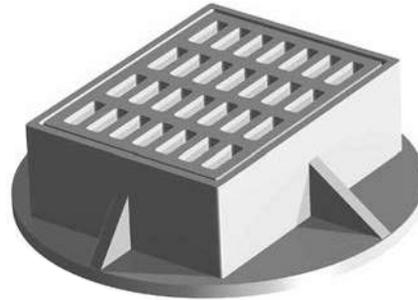
5125 CATCH BASIN INLET

Heavy duty
 Adjustable assembly
 Front adjusts from 16 1/2" to 18 1/2"
 Back adjusts from 17 1/2" to 19 1/2"
 Accepts 1795 base flange
 Accepts 5105 grates
 Approximate 175 sq. in. open area

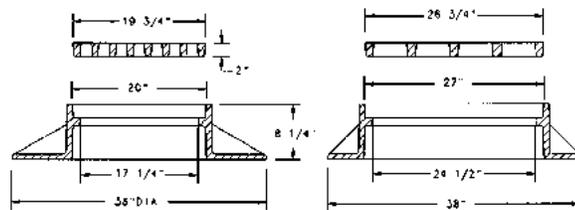


5130 CATCH BASIN INLET

Heavy duty
 With Type M2 flat grate
 "DUMP NO WASTE!" lettering
 Approximate 215 sq. in. open area

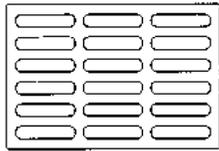


Type M3 Flat Grate
 Approx. 240 sq. in.
 open area

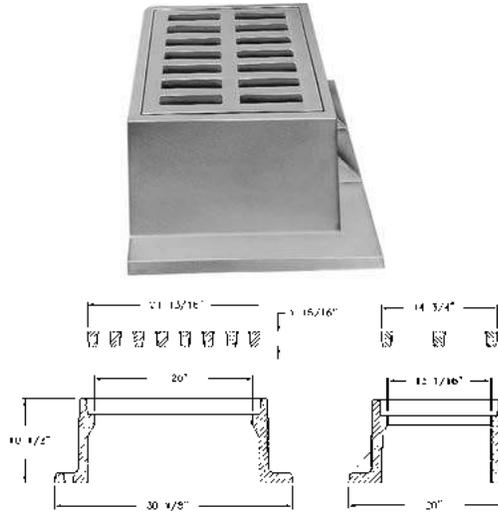


5150 CATCH BASIN INLET

Heavy duty
 With 5800 Type M1 flat grate
 Approximate 112 sq. in. open area



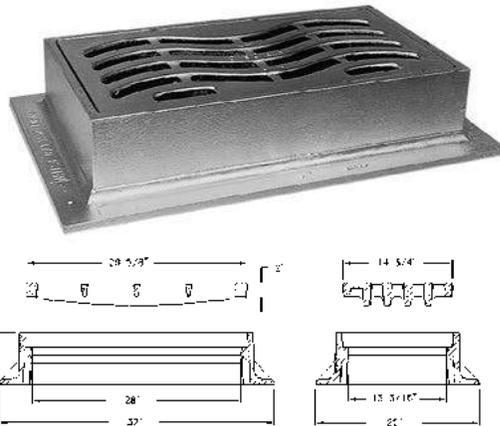
Type M2 Flat Grate
 Approx. 130 sq. in.
 open area



5190 — 5192 CATCH BASIN INLET

Heavy duty
 Approximate 155 sq. in. open area

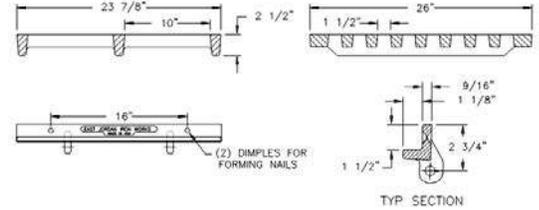
- Options
 5191 — Drop end flange
 5192 — Drop front flange



5216 CATCH BASIN INLET

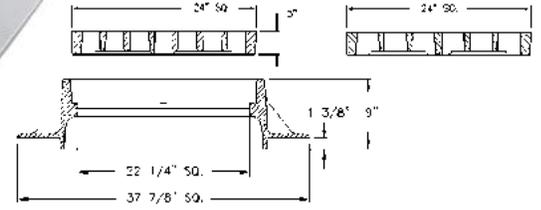
Heavy duty
 Ductile iron
 "DUMP NO WASTE!" lettering
 and fish image

Options
 M1 grate approximate 323 sq. in. open area
 M2 grate approximate 238 sq. in. open area



5230 CATCH BASIN INLET

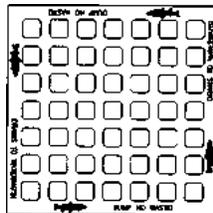
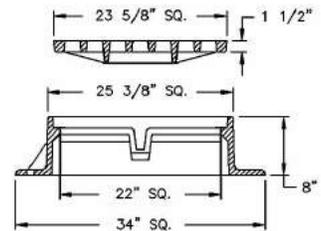
Heavy duty
 Approximate 300 sq. in. open area



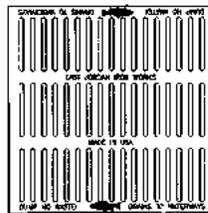
5235 CATCH BASIN INLET

Heavy duty
 Accepts 5250 grate
 Approximate 220 sq. in. open area
 Ductile iron safety bar

Options
 6" height frame — 5250
 4" height frame — V-5622
 ADA grate — V-5622-80
 Solid cover — V-6622



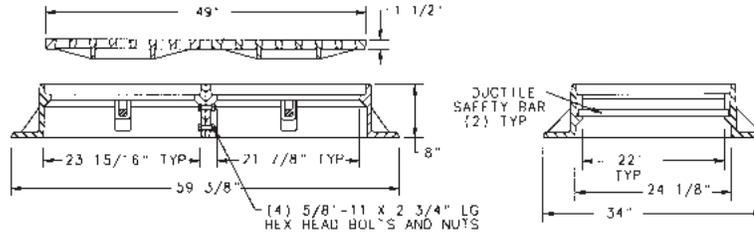
5250 Type M Grate
 "DUMP NO WASTE!"
 lettering and fish
 image



V-5622-80 ADA Grate
 Approx. 156 sq. in.
 open area
 "DUMP NO WASTE!"
 lettering and fish
 image

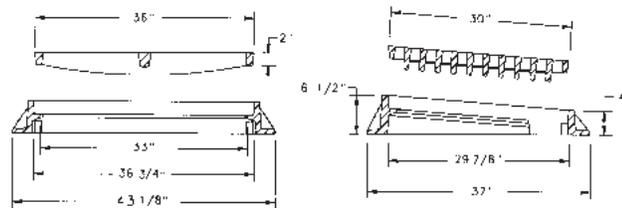
5236 CATCH BASIN INLET

Heavy duty
 Accepts 5250 grate
 Approximate 440 sq. in. open area
 Bolted frame



5240 CATCH BASIN INLET

Heavy duty
 "DUMP NO WASTE!" lettering and fish image
 Approximate 510 sq. in. open area



5245 CATCH BASIN INLET

Heavy duty
 "DUMP NO WASTE!" lettering and fish image
 Approximate 210 sq. in. open area



Options
 Accepts 7030 grates

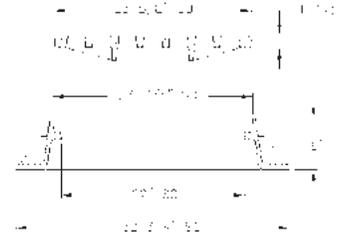


5250 CATCH BASIN INLET

Heavy duty
 "DUMP NO WASTE!" lettering and fish image
 Approximate 220 sq. in. open area
 Stackable frame

Options

- 8" height frame — 5235
- 4" height frame — V-5622
- ADA grate — V-5622-80
- Solid cover — V-6622

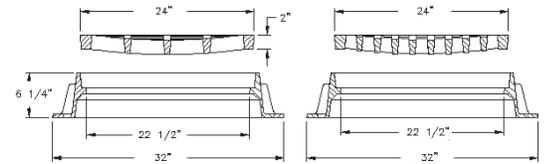


V-5324-1 FRAME & GRATE

Heavy duty
 Approximate 243 sq. in. open area

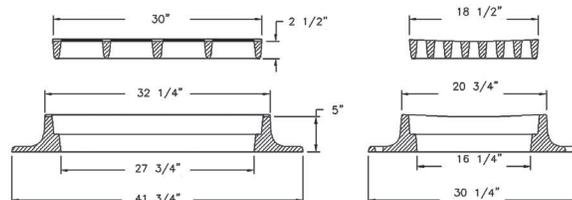
Options

- Accepts 5424 ADA grate
- Accepts 5344 vane grate
- 2 1/2" height frame — 5424



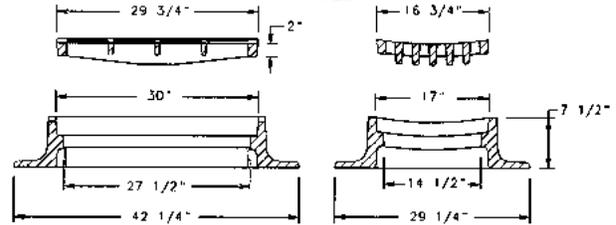
5334 CATCH BASIN INLET

Heavy duty
 "DUMP NO WASTE!" lettering and fish image
 Approximate 210 sq. in. open area, per grate



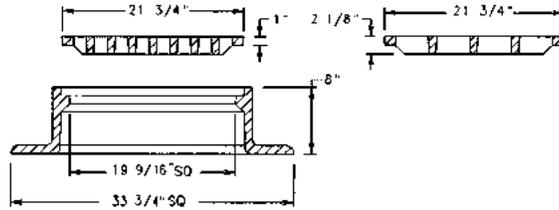
5335 CATCH BASIN INLET

Heavy duty
 Concave Inlet
 "DUMP NO WASTE!" lettering and
 fish image
 Approximate 200 sq. in. open area



5340 CATCH BASIN INLET

Heavy duty
 Approximate 185 sq. in.
 open area

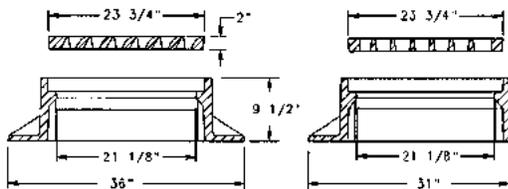


5342 CATCH BASIN INLET

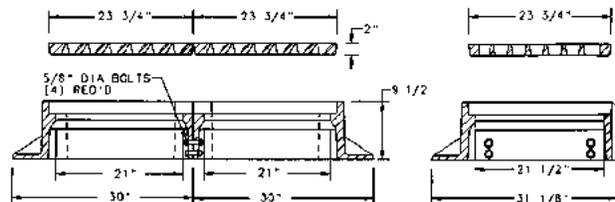
Heavy duty
 Accepts 5344 grate
 Approximate 175 sq. in. open area
 5344 — Double with open back
 approximate 350 sq. in. open area



Options
 6" height reversible frame — 5370



5342 illustrated



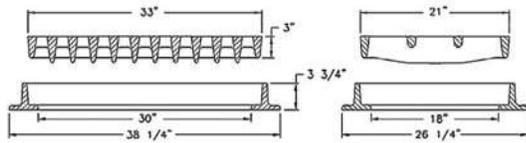
5344 — Double with open back illustrated

5352 CATCH BASIN INLET

Heavy duty
 Approximate 262 sq. in. open area

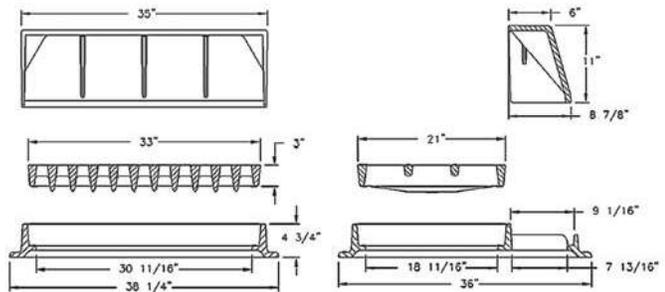
Options

- Special lettered grates
- “DUMP NO WASTE!” lettering and fish logo
- Uses 5353 hood and frame
- Uses 7080 hood and frame



5353 CATCH BASIN INLET

Heavy duty
 Uses 5352M grate
 Approximate 262 sq. in. open area
 With Type T back “DUMP NO WASTE!”
 lettering and fish image



5355 CATCH BASIN INLET

Heavy duty

With Type M1 heavy duty grate

Approximate 540 sq. in. open area

Steel frame and grate available in all sizes

All available with 3 or 4 flanges

Options

Adjusting risers

Beehive grate

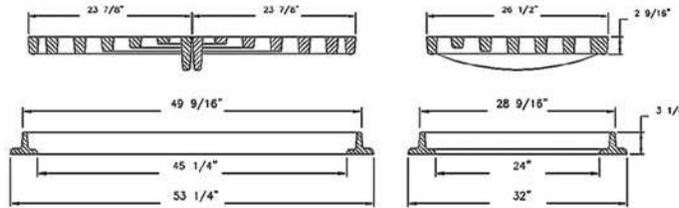
Bolted assembly

Special lettering

T1 4' hood



5355Z frame with Type M4 grates illustrated



Type M3 Grate
Approx. 208 sq. in. open area
2 grates required



Type M4 Grate
Approx. 270 sq. in. open area
2 grates required



Type M5 Vane Grate
Approx. 205 sq. in. open area
2 grates required



Type M6 ADA Grate
Approx. 140 sq. in. open area
2 grates required



Type M7 Ductile Grate
Approx. 326 sq. in. open area
2 grates required



Type M1
Approx. 465 sq. in. open area
Single grate



Type M8 Grate
Approx. 639 sq. in. open area
Single grate with "DUMP NO WASTE!" lettering and fish image



Type M9 Grate
Approx. 686 sq. in. open area
Single grate with "DUMP NO WASTE!" lettering and fish image



Type O beehive grate (Non-traffic)
Approx. 341 sq. in. open area
Single grate

Available frames for 5355 covers and grates

Catalog Number	Frame Height
5355	3 1/4
5356	8
5357	10 1/8

Note: All dimensions are in inches
*Steel frame available.

5356 CATCH BASIN INLET

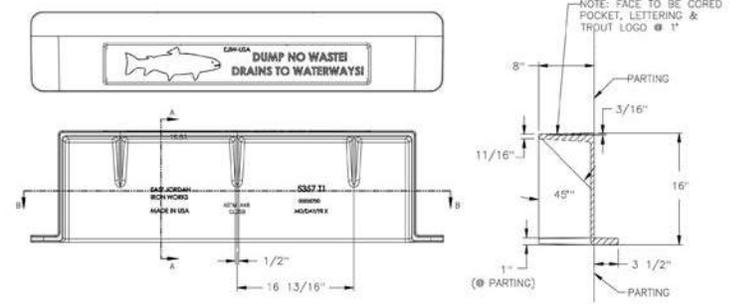
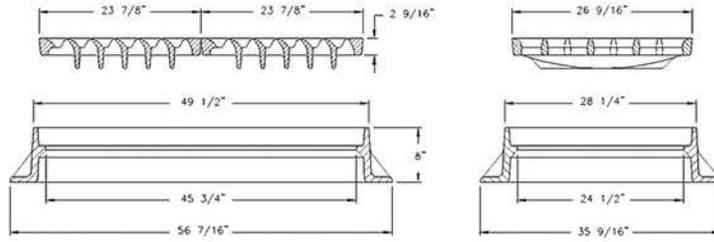
Heavy duty
 Accepts 5355 grates
 With Type M5 vane grate
 Approximate 514 sq. in. of open area

Options

Available with 3 or 4 flange frames
 Bolted assembly
 Adjusting risers
 Steel frames
 Steel grates
 5357 T1 4' hood — with "DUMP NO WASTE" lettering and fish image



4 flange frame
 Illustrated



Optional T1 Hood

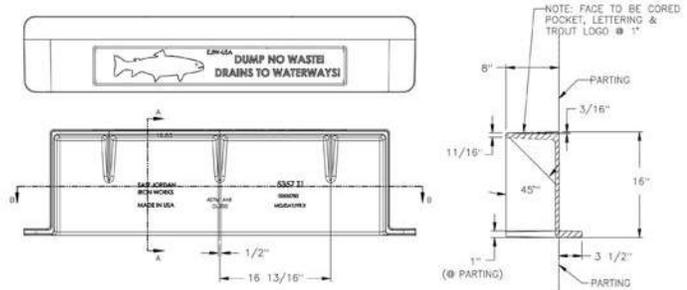
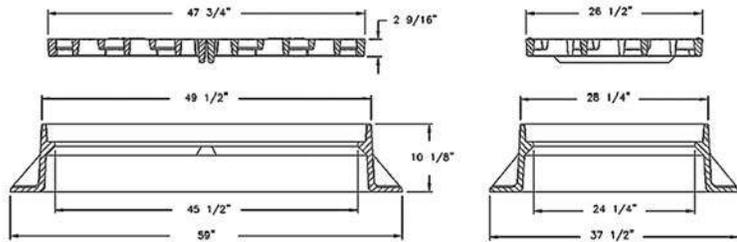
5357 CATCH BASIN INLET

Heavy duty
 Accepts 5355 grates
 With Type M7 diagonal grate
 Approximate 652 sq. in. open area

Options
 Available with 3 or 4 flange frames
 Bolted assembly
 Adjusting risers
 Steel grates
 T1 4' hood



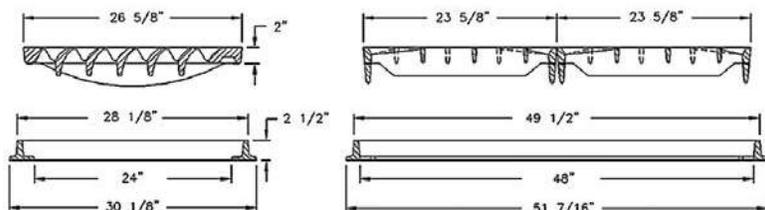
Illustrating 3 flange frame with M7 diagonal grate



Optional T1 Hood

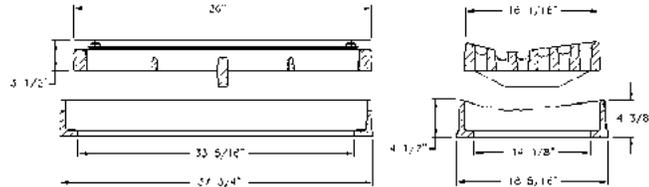
5358 CATCH BASIN INLET

Heavy duty
 Approximate 245 sq. in. open area
 Bolted assembly
 Single grate frame — 5358Z1
 Double grate frame — 5358Z2



5360 CATCH BASIN INLET

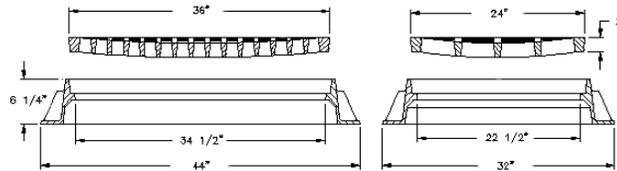
Heavy duty
 Approximate 190 sq. in. open area
 Bolted assembly



V-5360-1 FRAME & GRATE

Heavy duty
 Approximate 405 sq. in. open area

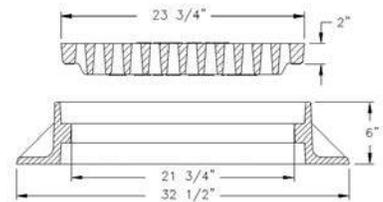
Options
 Accepts 7510 grates; sinusoidal, vane, diagonal and flat



5370 CATCH BASIN INLET

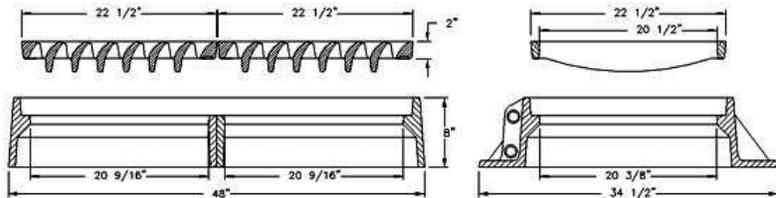
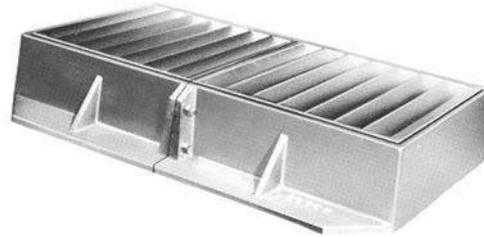
Heavy duty
 Reversible frame
 Approximate 215 sq. in. open area

Options
 Vane grate — 5344



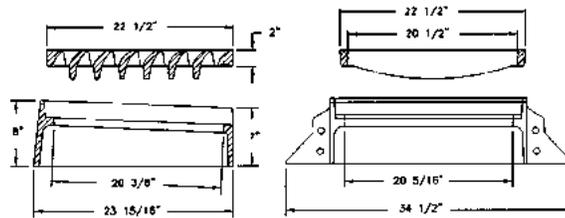
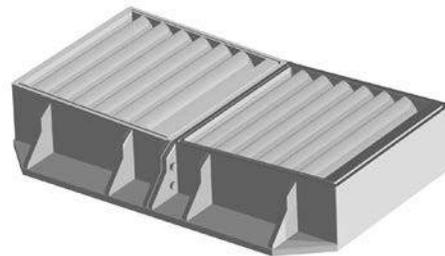
5375 CATCH BASIN INLET

Heavy duty
 Multiple inlet
 Accepts 5380 grate
 Approximate 500 sq. in. open area
 Frame is two pieces bolted together



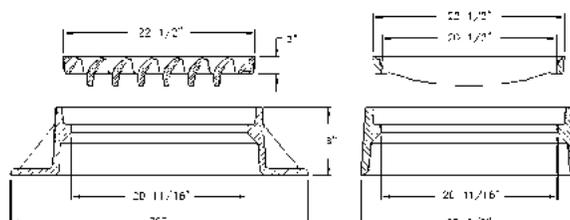
5376 CATCH BASIN INLET

Heavy duty
 Double inlet
 Accepts 5380 grates
 Approximate 500 sq. in. open area
 Frame is two pieces bolted together
 Available 1 piece frame — 5376Z1



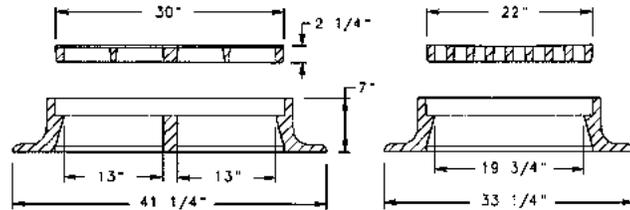
5380 CATCH BASIN INLET

Heavy duty
 Grate is ductile iron
 Approximate 250 sq. in. open area



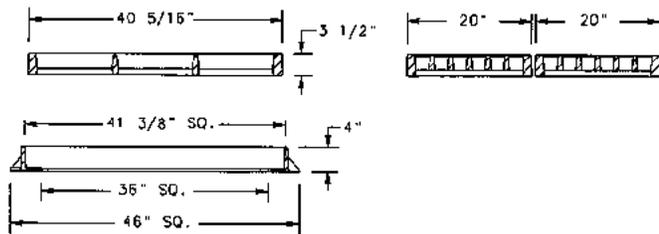
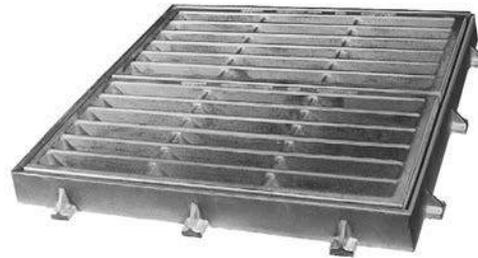
5385 CATCH BASIN INLET

Heavy duty
 Approximate 280 sq. in. open area



5390 CATCH BASIN INLET

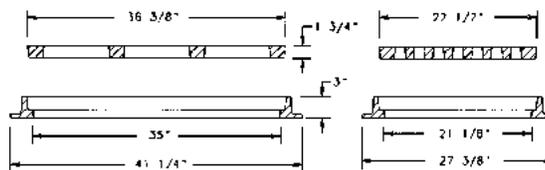
Heavy duty
 Approximate 890 sq. in. open area
 1 piece frame with 2 grates



5395 CATCH BASIN INLET

Heavy duty
 With Type M1 grate
 Approximate 260 sq. in. open area

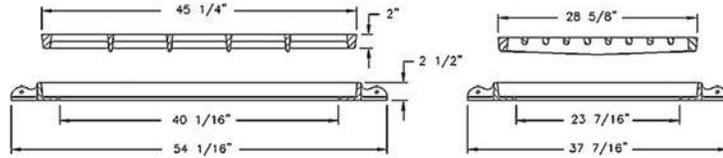
Options
 Adjusting risers



5400 CATCH BASIN INLET

Heavy duty
 Ductile iron grate
 Approximate 750 sq. in. open area

Options
 Double unit available — 5405



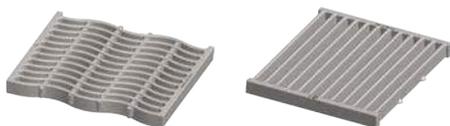
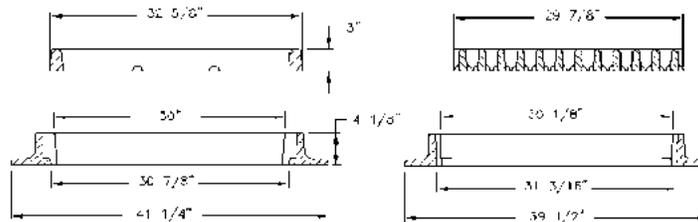
5416 CATCH BASIN INLET

Heavy duty
 Machined bearing surfaces
 Ductile iron
 With Type M3 vane grate
 approximate 365 sq. in. open area
 5417 Double Inlet
 with Type M2 Grate
 approximate 1040 sq. in. open area
 5418 Double Inlet without rear flange
 with Type M2 Grate
 approximate 1040 sq. in. open area

Options
 Special lettering



Illustrating 5416 frame with Type M3 vane grate

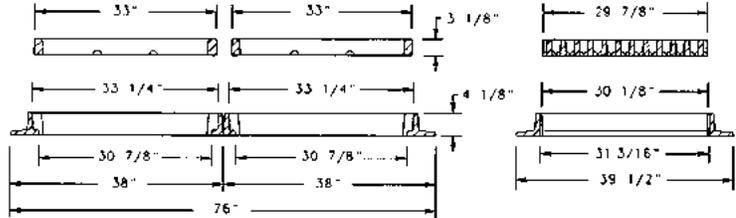
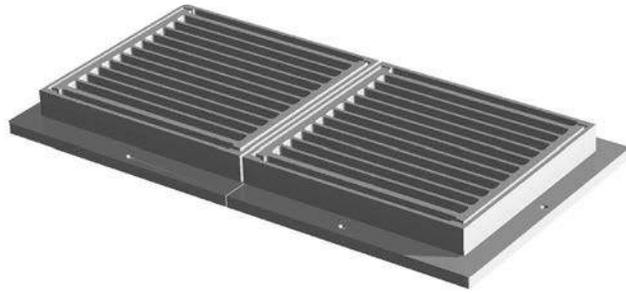


Type M1 Sinusoidal Grate
 Approx. 490 sq. in.
 open area

Type M2 Flat Grate
 Approx. 520 sq. in.
 open area

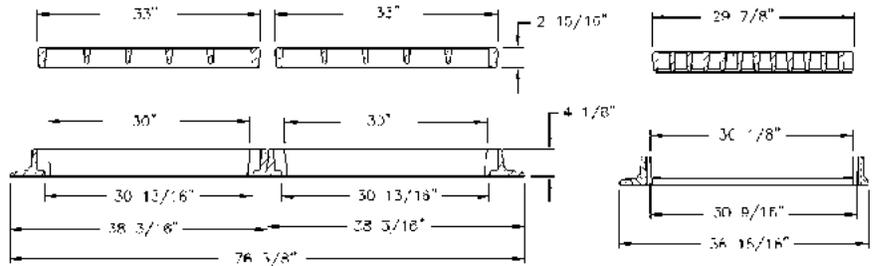
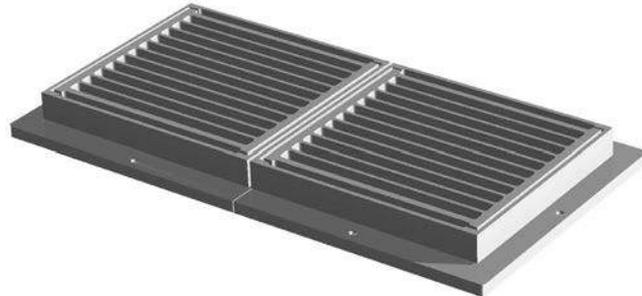
5417 CATCH BASIN INLET

Heavy duty
 Double inlet 5416
 With Type M2 grate
 Approximate 1040 sq. in. open area
 Uses 5416 grates



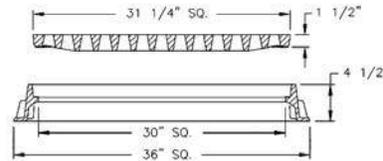
5418 CATCH BASIN INLET

Heavy duty
 With Type M2 grate
 Double inlet - without rear flange
 Approximate 1040 sq. in. open area
 Uses 5416 grates



5419 CATCH BASIN INLET

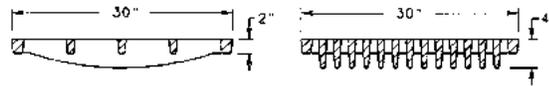
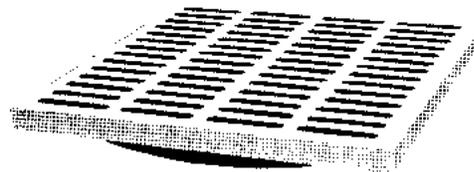
Heavy duty
 "DUMP NO WASTE!" lettering
 and fish image
 Approximate 329 sq. in. open area



5420 CATCH BASIN INLET GRATE

Heavy duty
 Approximate 335 sq. in. open area
 Steel frame available

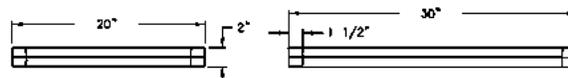
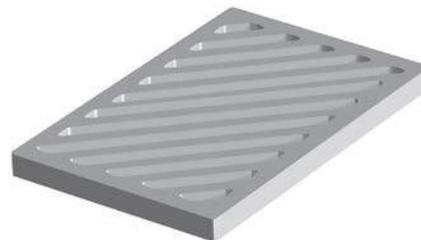
EJ recommends the use of steel or iron frames providing support to entire bearing surface



5421 CATCH BASIN INLET GRATE

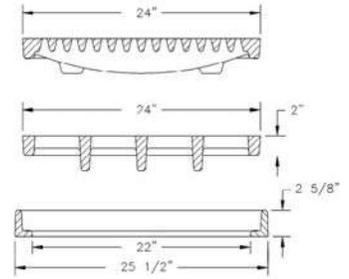
Heavy duty
 Approximate 270 sq. in. open area
 Steel frame available

EJ recommends the use of steel or iron frames providing support to entire bearing surface



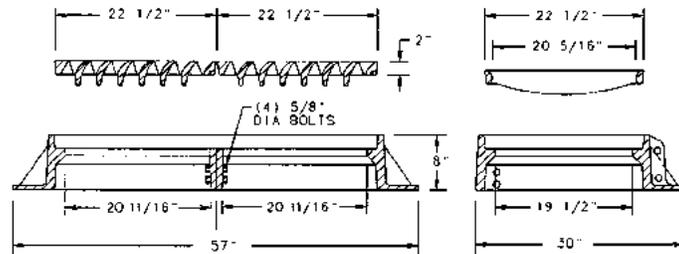
5424 CATCH BASIN INLET

Heavy duty
 Approximate 122 sq. in. open area
 ADA approved



5425 CATCH BASIN INLET

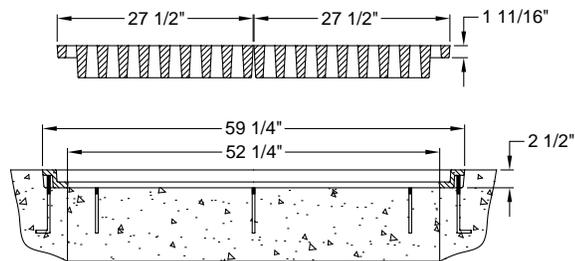
Heavy duty, double inlet
 Approximate 440 sq. in. open area
 Bolted assembly: frame is 2 pieces,
 bolted together
 Grate available in gray and ductile iron



5440 FRAME AND GRATES

Airport extra heavy duty
 Approximate 590 sq. in. open area
 Top Flange

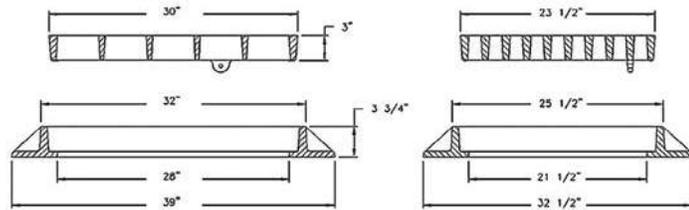
Options
 Bolting
 Anchor Bolts



5450 CATCH BASIN INLET

Heavy duty

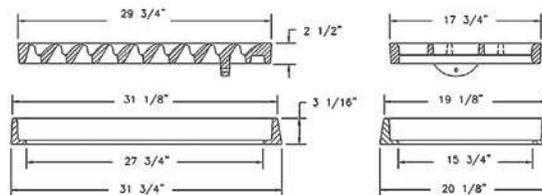
Approximate 335 sq. in. open area per grate



5460 CATCH BASIN INLET

Heavy duty

Approximate 220 sq. in. open area



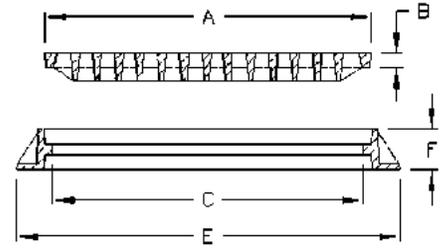
V-5600 REVERSIBLE FRAMES & GRATES

Heavy duty
 Reversible unit
 Special lettered grates

Options
 ADA compliant grates
 Extra heavy duty grates
 Vane grates



V-5630 assembly



V-5600 Reversible Frame and Grate Options

Frame Series Number	Grate Series Number	Cover Series Number	A Grate Size	B Grate Thickness	C Clear Opening	E Flange Dimension	F Frame Height	Open Area Sq. In.
Square								
V-5613	V-5713	V-6713	13 3/8	1 9/16	11 5/8	19 1/8	4	55
V-5620	V-5720	V-6720	19 3/4	1 1/2	18	25 1/2	4	175
	V-5720-80†		19 3/4	1 1/2	18	25 1/2	4	105
	V-5720**		19 3/4	1 1/2	18	25 1/2	4	175
V-5622	V-5622 (DI)•	V-6622	23 11/16	1 1/2	22	29 1/4	4	274
	V-5622**		23 11/16	1 1/2	22	29 1/4	4	266
	V-5622-2†		23 7/8	1 1/2	22	29 1/4	4	200
	V-5622-80‡		23 11/16	1 1/2	22	29 1/4	4	156
	V-5622-5		23 3/4	1 1/2	22	29 1/4	4	269
V-5622-1					22	32	5	
V-5624	V-5624	V-6624 8208	25 3/4	1 1/2	24	31 3/8	4	295
	V-5624-80‡		25 3/4	1 1/2	24	31 3/8	4	194
	V-5624**		25 3/4	1 1/2	24	31 3/8	4	295
V-5626-1	V-5726 (DI)•	V-6726	25 3/4	2	24	32	5	318
	V-5726**		25 3/4	2	24	32	5	321
	V-5726-80‡		25 3/4	2	24	32	5	194
V-5626-2					24	32	6	
V-5630	V-5630	V-6630	31 3/4	1 1/2	30 1/8	37 1/2	4	474
	V-5630**		31 3/4	1 1/2	30 1/8	37 1/2	4	474
	V5630-80‡		31 7/8	1 1/2	30 1/8	37 1/2	4	283
V-5630 (DI)					30 1/8	37 1/2	4	
V-5632	V-5732 (DI)•	V-6732	31 7/8	2	30	38 1/8	5	507
	V-5732**		31 7/8	2	30	38 1/8	5	478
	V-5732-80‡		31 7/8	2	30	38 1/8	5	283
V-5636	V-5636 (DI)•	V-6636	37 1/2	1 1/2	36	43 1/4	4	655
	V-5636**		37 1/2	1 1/2	36	43 1/4	4	651
	V-5636‡		37 1/2	1 1/2	36	43 1/4	4	356
V-5636 (DI)					36	43 1/4	4	
V-5642 (2P)	V-5742 (2P)	V-6642 (2P)	43 7/8	2	41 3/4	50 1/8	5	868
	V-5742 (2P)**		43 7/8	2	41 3/4	50 1/8	5	868
V-5648 (2P)	V-5648 (2P)	V-6648 (2P)	50 5/8	1 5/8	48 5/8	58 5/8	4 3/8	1360
	V-5648 (2P)**		50 5/8	1 5/8	48 5/8	58 5/8	4 3/8	1400

Note: all dimensions are in inches.

** Ductile Iron Extra Heavy Duty Grate † Vane Grate ‡ ADA Compliant Grate (2P) 2 Piece (2 frames/2 covers/2 grates) (DI) Ductile Iron

• Improved grate design. See page 202 for details.

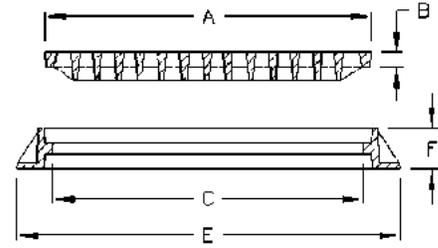
V-5600 REVERSIBLE FRAMES & GRATES (CONTINUED)

Heavy duty
Reversible unit
Special lettered grates

Options
ADA compliant grates
Extra heavy duty grates
Vane grates



V-5630 assembly



V-5600 Reversible Frame and Grate Options

Frame Series Number	Grate Series Number	Cover Series Number	A Grate Size	B Grate Thickness	C Clear Opening	E Flange Dimension	F Frame Height	Open Area Sq. In.
V-5660	V-5660 (DI)•	V-6660	23 3/4 x 35 3/4	1 1/2	21 15/16 x 34	29 1/2 x 41 1/2	4	408
	V-5660-80‡		23 3/4 x 35 3/4	1 1/2	21 15/16 x 34	29 1/2 x 41 1/2	4	260
V-5662	V-5662	No cover	25 5/8 x 31 3/4	1 1/2	24 3/16 x 30 1/8	31 3/8 x 37 3/8	4	390
	V-5662-1 (DI)		25 1/2 x 31 9/16	1 1/2	24 3/16 x 30 1/8	31 3/8 x 37 3/8	4	426
V-5662-2	V-5662-1 (2P)(DI)	No cover	31 9/16 x 51 1/4	1 1/2	30 1/8 x 49 7/8	37 1/2 x 57 1/8	4	852
V-5665	V-5665	V-6665	25 3/4 x 37 3/4	1 1/2	24 1/8 x 36 1/8	31 1/2 x 43 1/2	4	463
V-5667	V-5667 (2P)	V-6667 (2P)	25 3/4 x 49 3/4	1 1/2	24 x 48	31 1/2 x 55 1/2	4	598
	V-5667 (2P)**		25 3/4 x 49 3/4	1 1/2	24 x 48	31 1/2 x 55 1/2	4	598
V-5667 (DI)					24 x 48	31 1/2 x 55 1/2	4	
V-5668	V-5668	V-6668	31 3/4 x 37 3/4	2	29 7/8 x 36	38 1/4 x 44 1/4	5	562
	V-5668**		31 3/4 x 37 3/4	2	29 7/8 x 36	38 1/4 x 44 1/4	5	562
V-5668 (DI)					29 7/8 x 36	38 1/4 x 44 1/4	5	
V-5669	V-5669 (2P)	No cover	31 3/4 x 49 3/4	1 1/2	30 1/8 x 48 1/8	37 1/2 x 55 1/2	4	724
	V-5669 (2P)**		31 3/4 x 49 3/4	1 1/2	30 1/8 x 48 1/8	37 1/2 x 55 1/2	4	724
V-5670 (2P)	V-5670 (2P)	V-6670 (2P)	37 3/4 x 49 3/4	1 1/2	38 x 48	43 1/2 x 55 5/8	4	708
	V-5670 (2P)**		37 3/4 x 49 3/4	1 1/2	38 x 48	43 1/2 x 55 5/8	4	708

Note: all dimensions are in inches.

** Ductile Iron Extra Heavy Duty Grate

† Vane Grate

‡ ADA Compliant Grate

(2P) 2 Piece (2 frames/2 covers/2 grates)

(DI) Ductile Iron

• Improved grate design. See below for details.

Improved grate designs

Now in ductile iron, the design allows for an increase in open area and improved ergonomics.



Illustrating V-5636 ductile iron grate

Catalog Number	Part Number
V-5622	45622050
V-5636	45636030
V-5660	45660050
V-5726	45726030
V-5732	45732050
V-5736	45736030

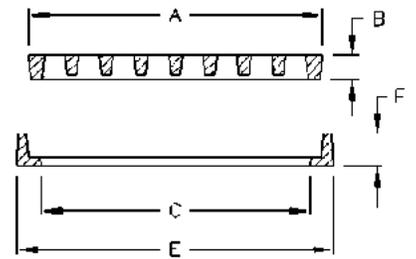
V-5700 FRAME & GRATE SERIES

Heavy duty
 ADA compliant grates available
 Special lettered grates

Options
 ADA compliant grates
 Extra heavy duty grates
 Vane grates



V-5724 assembly



V-5700 Reversible Frame and Grate Options

Frame Series Number	Grate Series Number	Cover Series Number	A Grate Size	B Grate Thk.	C Clear Opening	E Frame Size	F Frame Height	Open Area Sq. In.
Square								
V-5708	V-5708	No Cover	9 3/8	1	7 3/4	11	1 1/2	33
V-5712	V-5712	V-6712	12	7/8	10 1/2	13 7/16	1 1/4	66
	V-5712†		12	7/8	10 1/2	13 7/16	1 1/4	43
V-5713	V-5713	V-6713	13 3/8	1 9/16	11 5/8	15 3/8	2 1/8	55
V-5714	V-5714	V-6714	14 1/2	1	13 1/4	16	1 9/16	76
No Frame	V-5715†	No cover	14 3/4	1 3/16				58
V-5716	V-5716	No cover	15 7/8	1 1/8	14 1/4	17 1/2	1 3/4	90
V-5718	V-5718	V-6718	18	1 1/2	16 3/8	19 1/2	2	152
V-5720	V-5720	V-6720	19 3/4	1 1/2	18 1/4	21 1/4	2	175
	V-5720**		19 3/4	1 1/2	18 1/4	21 1/4	2	175
	V-5720-80†		19 3/4	1 1/2	18 1/4	21 1/4	2	105
V-5724	V-5724-1	V-6724	24	1 7/8	22 1/4	25 7/8	2 5/8	268
	V-5724-2		24	1 7/8	22 1/4	25 7/8	2 5/8	212
	V-5724-4 (DI)		24	1 7/8	22 1/4	25 7/8	2 5/8	336
	V-5724-80†		24	1 7/8	22 1/4	25 7/8	2 5/8	164
V-5724-1 (w/flange)				22 1/8	30	2 5/8		
V-5726-1	V-5726 (DI)•	V-6726	25 3/4	2	24 1/4	27 7/8	2 3/4	318
	V-5726**		25 3/4	2	24 1/4	27 7/8	2 3/4	321
	V-5726-80†		25 3/4	2	24 1/4	27 7/8	2 3/4	194
V-5626-1 (DI)				24 1/4	27 7/8	2 3/4		
V-5728	V-5728	No cover	28	2	25 7/8	30 1/8	2 3/4	370
V-5732	V-5732 (DI)•	V-6732	31 7/8	2	30 1/4	33 3/4	2 3/4	507
	V-5732**		31 7/8	2	30 1/4	33 3/4	2 3/4	478
	V-5732-80†		31 7/8	2	30 1/4	33 3/4	2 3/4	283
V-5736	V-5736 (DI)•	V-6736	38 1/4	2	36 1/2	40 3/8	2 3/4	673
	V-5736**		38 1/4	2	36 1/2	40 3/8	2 3/4	625
	V-5736-80†		38 1/4	2	36 1/2	40 3/8	2 3/4	356
V-5736 (DI)				36 1/2	40 3/8	2 3/4		
V-5742	V-5742 (2P)	V-6642 (2P)	43 7/8	2	42 1/8	45 7/8	2 3/4	868
	V-5742 (2P)**		43 7/8	2	42 1/8	45 7/8	2 3/4	868
V-5748 (non-traffic) (steel angle frame)	V-5648 (2P)	V-6648	50 5/8	1 5/8	48	51 1/2	1 3/4	1360
	V-5648 (2P)**		50 5/8	1 5/8	48	51 1/2	1 3/4	1400

Note: all dimensions are in inches.

† Vane Grate

** Ductile Iron Extra Heavy Duty Grate

• Improved grate design. See page 204 for details.

† ADA Compliant Grate

(2P) 2 Piece (2 frames/2 covers/2 grates)

(DG) Diagonal Grate

(CG) Concave Grate

(DI) Ductile Iron

(S) Sinusoidal Grate

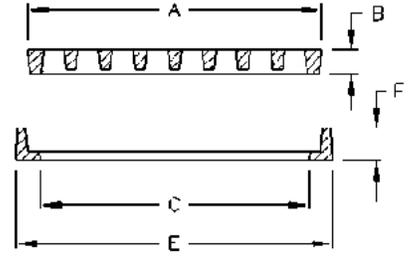
V-5700 FRAME & GRATE SERIES (CONTINUED)

Heavy duty
 ADA compliant grates available
 Special lettered grates

Options
 ADA compliant grates
 Extra heavy duty grates
 Vane grates



V-5724 assembly



V-5700 Reversible Frame and Grate Options

Frame Series Number	Grate Series Number	Cover Series Number	A Grate Size	B Grate Thk.	C Clear Opening	E Frame Size	F Frame Height	Open Area Sq. In.
Rectangular								
V-5751	V-5751	V-6751	13 7/8 x 25 7/8	1	12 x 24	15 5/16 x 27 3/8	1 1/2	158
V-5752	V-5752	No cover	18 x 23 3/4	1 3/8	16 1/4 x 22	19 3/8 x 25 1/8	2	188
V-5754	V-5754-1	No cover	17 7/8 x 35 7/8	2	15 5/8 x 33 5/8	20 1/4 x 38 1/4	2 3/4	245
V-5760 (w/ flange)	V-5760	No cover	24 x 36	2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	413
	V-5760**		24 x 36	2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	413
	7510 M3†		23 7/8 x 35 3/4	2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	446
	7510 M4		23 7/8 x 35 3/4	2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	324
	7510 M1 (DG)		23 5/8 x 35 5/8	2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	410
	7510 M2 (S)		23 3/4 x 35 3/4	2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	340
V-5763	V-5763	No cover	25 7/8 x 31 7/8	1 3/4	24 5/8 x 30 3/8	27 7/8 x 33 7/8	2 3/8	402
V-5766	V-5666	V-6666	25 7/8 x 37 7/8	2	24 3/8 x 36 3/8	28 x 40	3	397
V-5770	V-5670 (2P)	V-6670 (2P)	37 3/4 x 49 3/4	1 1/2	36 x 48	39 3/4 x 51 3/4	2 1/4	708
	V-5670 (2P)**		37 3/4 x 49 3/4	1 1/2	36 x 48	39 3/4 x 51 3/4	2 1/4	708

Note: all dimensions are in inches.

† Vane Grate

** Ductile Iron Extra Heavy Duty Grate

‡ ADA Compliant Grate
 (2P) 2 Piece (2 frames/2 covers/2 grates)

(DG) Diagonal Grate
 (CG) Concave Grate

(DI) Ductile Iron
 (S) Sinusoidal Grate

Improved grate designs

Now in ductile iron, the design allows for an increase in open area and improved ergonomics.

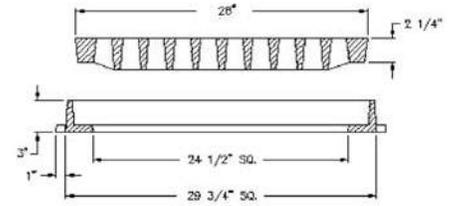


Illustrating V-5726 ductile iron grate

Catalog Number	Part Number
V-5622	45622050
V-5636	45636030
V-5660	45660050
V-5726	45726030
V-5732	45732050
V-5736	45736030

V-5775 FRAME & GRATE

Heavy duty
Approximate 326 sq. in. open area



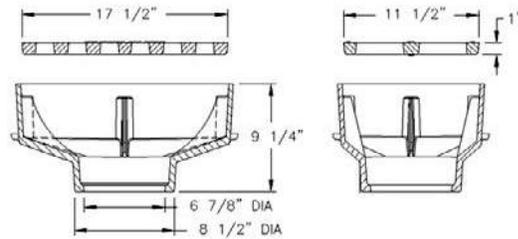
5810 CATCH BASIN INLET

Heavy duty
Approximate 52 sq. in. open area

Options
Ductile iron
Special lettered covers



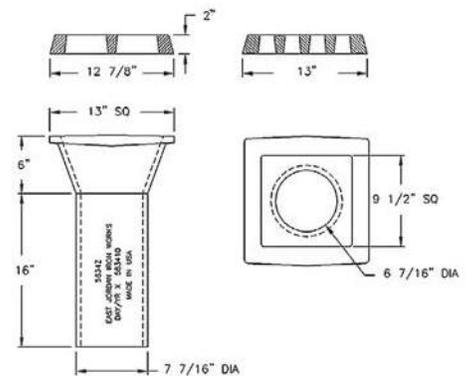
Section view of inlet



5834 ELEVATED & BRIDGE DRAIN INLET

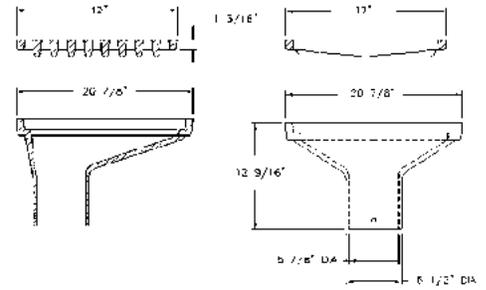
Heavy duty
Bridge drain
With 5826 grate
Approximate 48 sq. in. open area

Options
Available with 4 - 1/2" x 13" tapped holes
furnished 2" up from bottom



5840 ELEVATED & BRIDGE DRAIN INLET

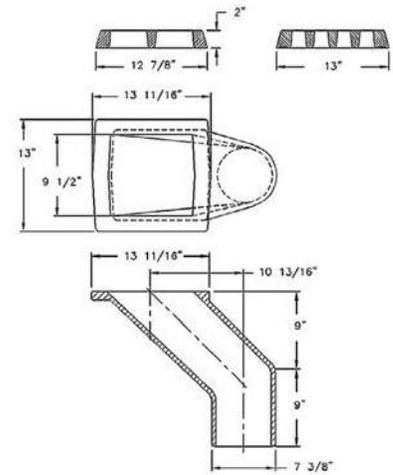
Heavy duty
 Approximate 154 sq. in. open area



5844 ELEVATED & BRIDGE DRAIN INLET

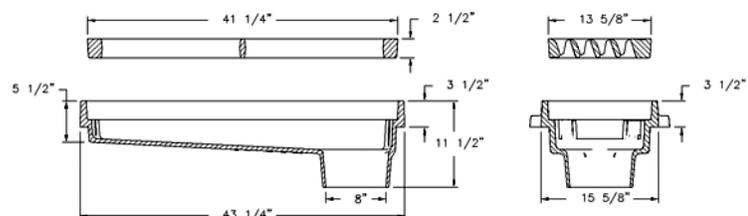
Heavy duty
 Bridge drain with 5826 grate
 Approximate 48 sq. in. open area

Options
 Available with 6 — 1/2" x 13" tapped holes
 furnished 2" up from bottom



5845 ELEVATED & BRIDGE DRAIN INLET

Heavy duty
 Approximate 306 sq. in. open area
 Bolted assembly



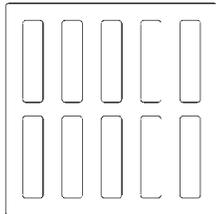
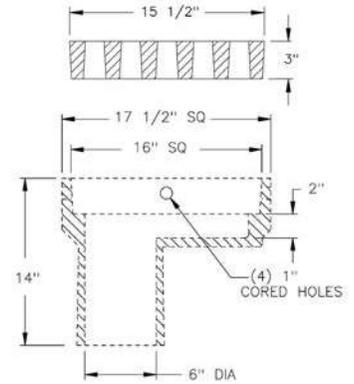
5890 ELEVATED & BRIDGE DRAIN INLET

Heavy duty

5890M grate has approximate 95 sq. in. open area

Options

5890M2 grate has approximate 75 sq. in. open area



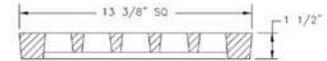
M2 Grate

V-5913-1 GRATE

Heavy duty

Approximate 52 sq. in. open area

EJ recommends the use of iron frames providing support to entire bearing surface

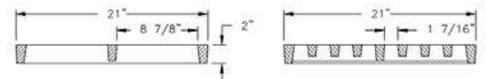


V-5921-2 GRATE

Light duty (Non-traffic)

Approximate 205 sq. in. open area

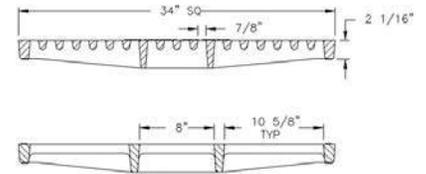
EJ recommends the use of iron frames providing support to entire bearing surface



V-5934-1 GRATE

Heavy duty
 Approximate 451 sq. in. open area
 34" square grate for precast

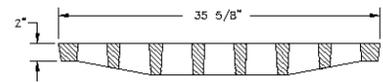
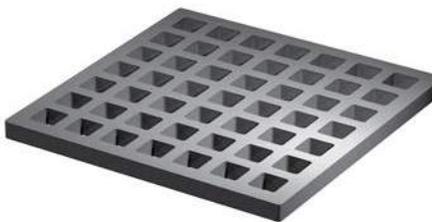
EJ recommends the use of steel or iron frames providing support to entire bearing surface



V-5935 GRATE

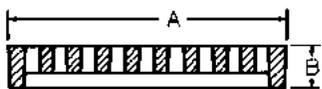
Heavy duty
 Approximate 517 sq. in. open area

EJ recommends the use of steel or iron frames providing support to entire bearing surface



6004 — 6027 SEWER PIPE GRATE & COVER

For concrete or clay sewer pipe bells



6004 — 6027 Sewer Pipe Grate & Cover

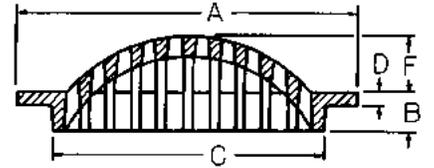
Catalog Number	Pipe Size*	A Diameter	B Height	Approx. Sq. In. Opening
6004	4	5 1/2	1 5/8	7
6006	6	8	2 1/8	17
6008	8	10 1/4	2 3/8	25
6010	10	12 1/2	2 1/2	43
6012	12	14 7/8	2 1/2	75
6015	15	18 1/4	2 1/4	95
6018	18	22	2 1/2	166
6021	21	25 3/8	3 1/4	237
6023M1	24	26 7/8	2 3/4	195
6023M2	24	27 1/2	3	235
6024M1	24	29	3 1/4	306
6024M2	24	29	3 1/4	272
6027	27	32 5/8	3 3/8	382

Note: All dimensions are in inches.

*These Types of pipe are manufactured under a variety of specifications and dimensions. Measure the size of your pipe and match with the corresponding dimensions.

6104 — 6124 DRAINAGE GRATES

Fits into concrete or clay sewer pipe bells & corrugated pipe
Frames available



6104 — 6124 Drainage Grates

Catalog Number	Pipe ID*	A Diameter	B Height	C Diameter	D Flange	F Profile Height	Approx. Sq. In. Opening
6104N	6	7 3/4	1 1/4	5 1/2	5/16	1	13
6106N	8	10	1 5/8	8	3/8	1 1/2	19
6108N	10	12 1/2	2	9 1/2	3/8	1 1/2	27
6110N	12	15 1/8	1 7/8	11 5/8	5/8	2	45
6112N	15	18 1/4	1/2	13 7/8	1/2	2	75
6112-O	15	18 1/4	1/2	13 11/16	1/2	6	68
6115N	18	20 1/4	1 1/2	17 1/4	5/8	2 1/2	120
6118N	21	25	2 1/2	20 1/2	1/2	3 3/8	160
6121N	24	25 3/4	2 3/4	23 1/2	3/4	3 3/4	155
6124N	30	34	2	27 1/2	5/8	2 3/4	214
6124-O	30	33 11/16	2 1/2	27 1/4	11/16	6	270

Note: All dimensions are in inches.

*These Types of pipe are manufactured under a variety of specifications and dimensions. Measure the size of your pipe and match with the corresponding dimensions.

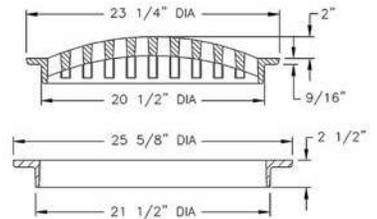
N = lowEr profile beehive (see "F" dimension)

O = higher profile beehive (see "F" dimension)

6140 DRAINAGE GRATE

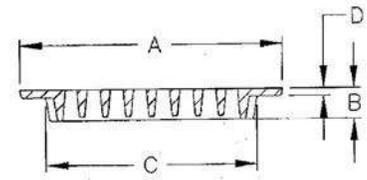
Heavy duty
Approximate 150 sq. in. open area

Options
Uses 6118 frame



6204 — 6224 DRAINAGE GRATES

Fits into corrugated plastic pipe
 Flat style grates
 Frames available — 6104-6124 series



6204 — 6224 Drainage Grates

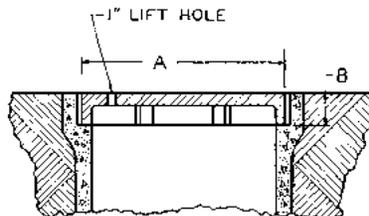
Catalog Number	*Pipe ID	A Diameter	B Height	C Diameter	D Flange	Approx. Sq. In. Opening Area	Duty Rating
6204	6	7	1 1/2	5 1/2	1/4	10	Light
6206	8	10 3/8	1 1/2	7 3/4	3/8	18	Heavy
6208	10	12 3/4	1 1/2	9 1/2	3/8	30	Heavy
6210 ADA	12	14 1/4	1 3/4	11 3/4	3/8	33	Heavy
6210M2	12	14 1/4	1 3/4	11 3/4	3/8	45	Heavy
6212 DNW	15	18	2 1/8	13 7/8	1/2	65	Medium
6215	18	22	2 3/8	17 1/4	1/2	72	Medium
6215M2	18	22	2 3/8	17 1/4	1/2	105	Medium
6128	21	25 1/2	2 7/8	20 3/8	5/8	132	Heavy
6221 DNW	24	29 7/8	3 3/16	23 1/2	11/16	192	Heavy
6224 DNW	30	34	2 1/8	27 1/2	1/2	286	Heavy

Note: All dimensions are in inches.

*These types of pipe are manufactured under a variety of specifications and dimensions. Measure the size of your pipe and match with the corresponding dimensions.

6304 — 6324 SEWER PIPE COVER

Medium duty
 For concrete or clay sewer pipe bells



6304 — 6324 Sewer Pipe Cover

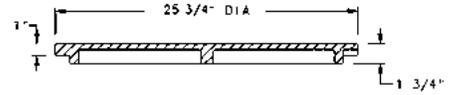
Catalog Number	Pipe Size	A Dia.	B Height
6304	4	5 1/2	1 1/2
6306	6	8	2
6308	8	10 1/4	2 1/4
6310	10	12 1/2	2 1/2
6315	15	18 1/4	2 5/8
6318	18	21 1/2	2 3/4
6324	24	29	3

Note: All dimensions are in inches.

*These Types of pipe are manufactured under a variety of specifications and dimensions. Measure the size of your pipe and match with the corresponding dimensions.

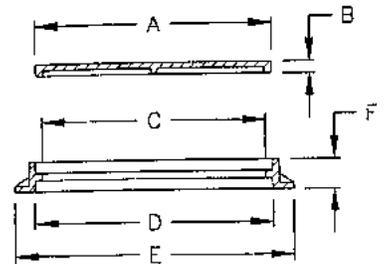
6340 SEWER PIPE COVER

Light duty (Non-traffic)



V-6400 WATERTITE ACCESS HATCH

Heavy duty
Watertite assembly
Bolted and gasketed
Reversible frame



V-6400 Watertite Access Hatch

Catalog Number	A Cover Size	B Cover Thk.	C Clear Opning	D Frame Inside	E Flange Size	F Frame Ht.
Square						
V-6436	37 3/4	1 3/8	34 1/4	37 13/16	43 1/4	4
V-6442	43 3/4	1 7/8	41	44	50 1/8	5
Rectangular						
V-6465	23 x 35	1 3/8	23 x 35	26 x 38	31 1/2 x 43 1/2	4
V-6468	31 7/8 x 37 3/4	1 7/8	29 x 35	32 1/8 x 38	38 1/4 x 44 1/4	5
V-6469	31 3/4 x 49 3/4	1 3/8	28 5/8 x 46 5/8	32 x 50	37 1/2 x 55 1/2	4

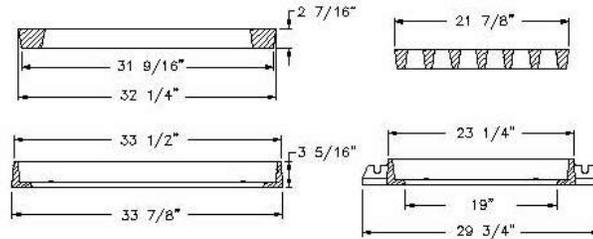
Note: All dimensions are in inches.

6407 INLET BOX

Heavy duty

Two frames and grates required per unit

Confirm frame and grate dimensions before installation

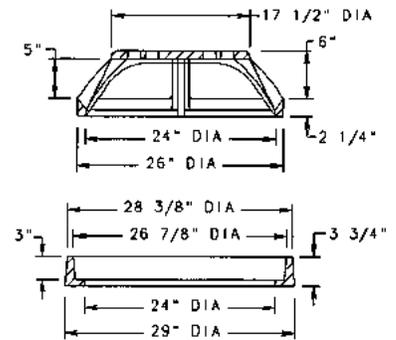
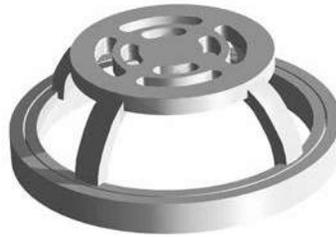


6487 BEEHIVE DITCH GRATE

Heavy duty

Approximate 430 sq. in. open area

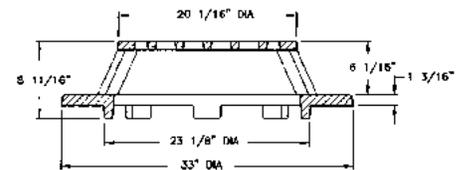
Grate is ductile iron



6488 BEEHIVE DITCH GRATE

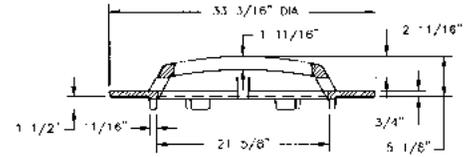
Heavy duty

Approximate 520 sq. in. open area



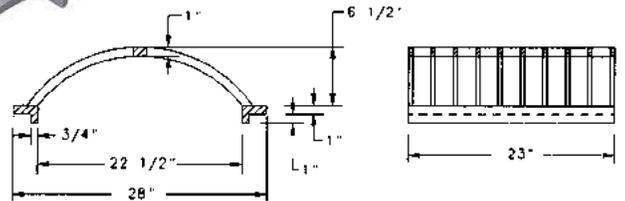
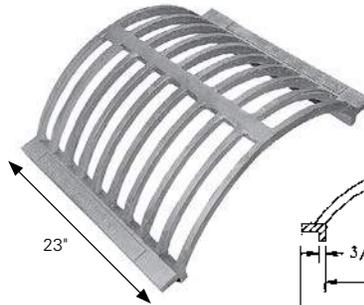
6489 BEEHIVE DITCH GRATE

Heavy duty
 Approximate 220 sq. in. open area
 "DUMP NO WASTE!" lettering



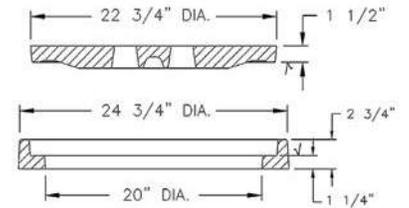
6490 BEEHIVE DITCH GRATE

Heavy duty
 Approximate 470 sq. in. open area
 23" long



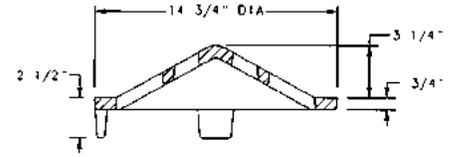
6492 DITCH GRATE

Heavy duty
 Approximate 124 sq. in. open area
 "DUMP NO WASTE!" lettering



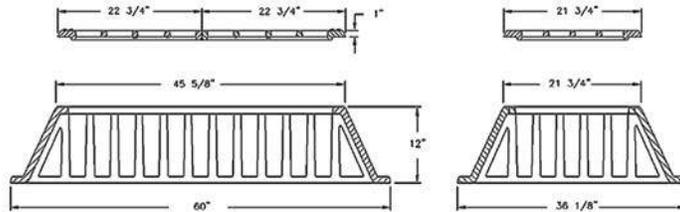
6495 BEEHIVE DITCH GRATE

Heavy duty
 Fits 12" bell & spigot pipe
 Approximate 60 sq. in. open area
 "DUMP NO WASTE!" lettering



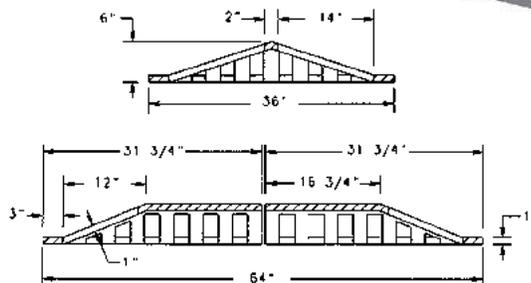
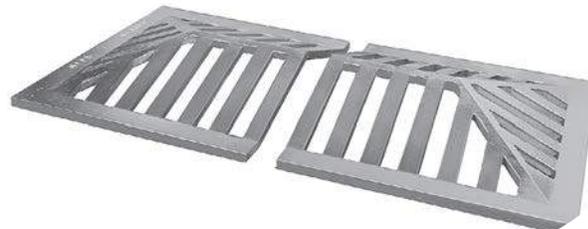
6496 BEEHIVE DITCH GRATE

Heavy duty
 Approximate 1386 sq. in. open area
 "DUMP NO WASTE!" lettering



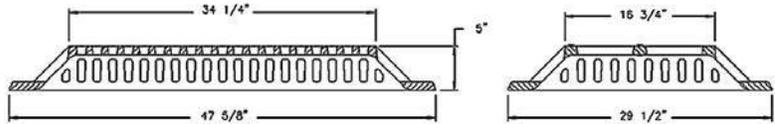
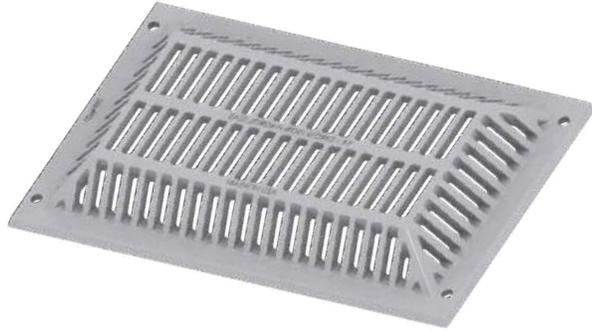
6498 BEEHIVE DITCH GRATE

Heavy duty
 Note: Grate is made in two pieces
 Approximate 680 sq. in. open area



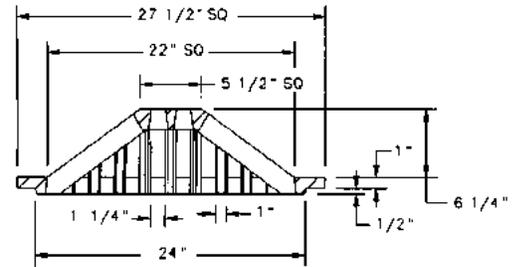
6499 BEEHIVE DITCH GRATE

Light duty (Non-traffic)
 Approximate 212 sq. in. open area



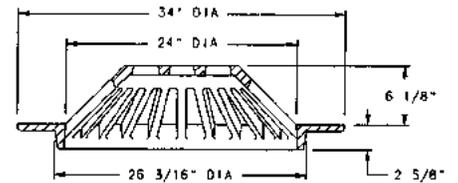
6500 BEEHIVE DITCH GRATE

Heavy duty
 Approximate 280 sq. in. open area
 "DUMP NO WASTE!" lettering



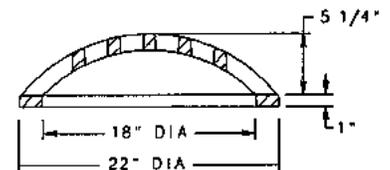
6508 BEEHIVE DITCH GRATE

Heavy duty
 Fits 24" sewer pipe bell
 Approximate 280 sq. in. open area
 "DUMP NO WASTE!" lettering



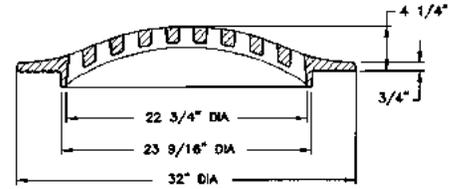
6509 BEEHIVE DITCH GRATE

Heavy duty
 Fits 18" sewer pipe bell
 Approximate 166 sq. in. open area
 "DUMP NO WASTE!" lettering



6517 DITCH GRATE

Heavy duty
Approximate 190 sq. in. open area



6527 DITCH GRATE

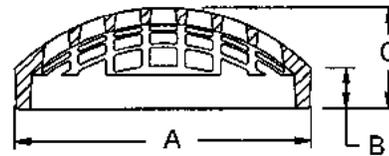
Heavy duty
Fits 24" sewer pipe bell
Approximate 160 sq. in. open area



Options
"DUMP NO WASTE!" lettering

6532 — 6536 BEEHIVE DITCH GRATES

Heavy duty
For sewer pipe bells



6532 — 6536 beehive Ditch Grates

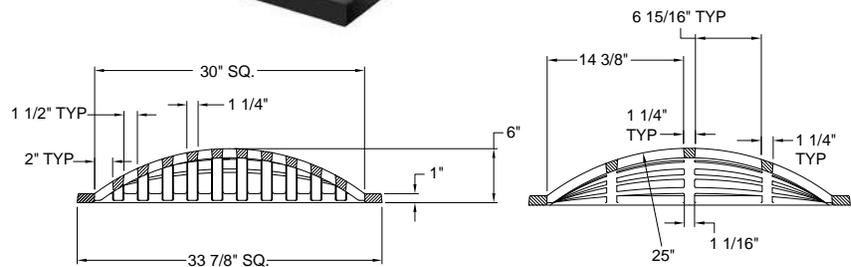
Catalog Number	Pipe Size	A Dia.	B Height	C Grate Ht.	Approx. Sq. In. Opening
6532	12	14 3/4	2 1/2	5 1/2	60
6533	15	18 1/4	2 1/2	6 1/4	100
6534	18	22	3	7 1/2	140
6536	24	29	3	9	245

Note: All dimensions are in inches.

6610 BEEHIVE DITCH GRATE

Heavy duty
Approximate 430 sq. in. open area

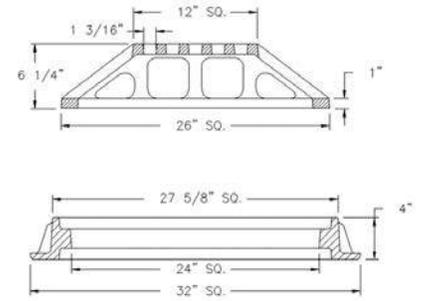
Options
"DUMP NO WASTE!"
lettering and fish image



6626 BEEHIVE DITCH GRATE

Heavy duty
 Machined bearing surfaces
 Approximate 292 sq. in. open area

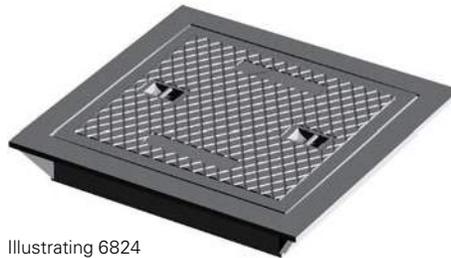
Options
 Reversible frame



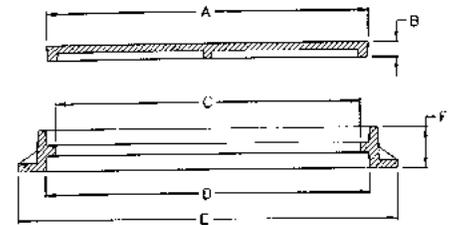
V-6600/V-6700 SQUARE AND RECTANGULAR FRAME & COVER SERIES

Heavy duty
 Reversible unit, specify top flange or bottom flange

Options
 See grates V-5600 & V-5700 series
 Additional covers available in V-5700 series
 For available watertite options, see table on page 324



Illustrating 6824



V-6600/V-6700 Rectangular Frame & Cover Series

Cover Number	Frame Number	Grate Number	A Cover Size Sq. In.	B Cover Thk.	C Clear Opening Sq. In.	D Frame Size Sq. In.	E Flange Size Sq. In.	F Frame Height
V-6660	V-5660	V-5660	23 3/4 x 35 3/4	1 1/2	22 x 34	24 x 36	29 1/2 x 41 1/2	4
		V-5660†	23 3/4 x 35 3/4	1 1/2	22 x 34	24 x 36	29 1/2 x 41 1/2	4
V-6665	V-5665	V-5665	25 3/4 x 37 3/4	1 1/2	24 1/8 x 36 1/8	26 x 38	31 1/2 x 43 1/2	4
V-6667 (2P)	V-5667	V-5667 (2P)	25 3/4 x 49 3/4	1 1/2	24 x 48	26 x 50	31 1/2 x 55 1/2	4
		V-5667 (2P)**	25 3/4 x 49 3/4	1 1/2	24 x 48	26 x 50	31 1/2 x 55 1/2	4
		V-5667 (DI)			24 x 48	26 x 50	31 1/2 x 55 1/2	4
V-6668	V-5668	V-5668	31 3/4 x 37 3/4	2	30 x 36	32 x 38	38 1/4 x 44 1/4	5
		V-5668**	31 3/4 x 37 3/4	2	30 x 36	32 x 38	38 1/4 x 44 1/4	5
		V-5668 (DI)			30 x 36	32 x 38	38 1/4 x 44 1/4	5
V-6670 (2P)	V-5670	V-5670 (2P)	37 3/4 x 49 3/4	1 1/2	36 x 48	38 x 50 1/4	46 1/4 x 55 1/2	4
		V-5670 (2P)**	37 3/4 x 49 3/4	1 1/2	36 x 48	38 x 50 1/4	46 1/4 x 55 1/2	4

† Vane Grate
 ** Ductile Iron Extra Heavy Duty Grate

‡ ADA Compliant Grate
 (2P) 2 Piece (2 frames/2 covers/2 grates)

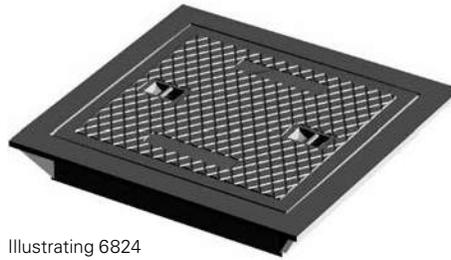
(DI) Ductile Iron
 § Special Operations

Note: all dimensions are in inches.

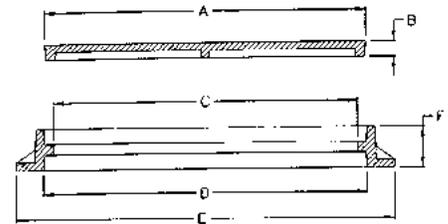
V-6600/V-6700 SQUARE AND RECTANGULAR FRAME & COVER SERIES (CONTINUED)

Heavy duty
Reversible unit, specify top flange or bottom flange

Options
See grates V-5600 & V-5700 series
Additional covers available in V-5700 series
For available watertite options, see table on page 324



Illustrating 6824



V-6600/V-6700 Square Frame & Cover Series

Cover Number	Frame Number	Grate Number	A Cover Size Sq. In.	B Cover Thk.	C Clear Opening Sq. In.	D Frame Size Sq. In.	E Flange Size Sq. In.	F Frame Height
Square								
V-6713	V-5613	V-5713	13 3/8	1 9/16	11 5/8	13 5/8	19 1/8	4
V-6720	V-5620	V-5720	19 3/4	1 1/2	18	20	25 1/2	4
	V-5720	V-5720-80†	19 3/4	1 1/2	18 1/4	20	21 1/4	2
V-6622	V-5622	V-5622	23 3/4	1 1/2	22	24	29 1/4	4
		V-5622**	23 3/4	1 1/2	22	24	29 1/4	4
		V-5622-2†	23 3/4	1 1/2	22	24	29 1/4	4
		V-5622-80‡	23 3/4	1 1/2	22	24	29 1/4	4
		V-5622-5§	23 3/4	1 1/2	22	24	29 1/4	4
	V-5622-1				22	26 1/4	32	5
V-6624	V-5624	V-5624	25 3/4	1 1/2	24	26	31 3/8	4
		V-5624-80‡	25 3/4	1 1/2	24	26	31 3/8	4
		V-5624**	25 3/4	1 1/2	24	26	31 3/8	4
V-6726	V-5626-1	V-5726	25 3/4	2	24	26	32	5
		V-5726**	25 3/4	2	24	26	32	5
	V-5626-2	V-5726-80‡	25 3/4	2	24	26	32	5
				24	26	32	6	
V-6630	V5630	V-5630	31 3/4	1 1/2	30 1/8	32	37 1/2	4
		V-5630**	31 3/4	1 1/2	30 1/8	32	37 1/2	4
		V-5630-80‡	31 7/8	1 1/2	30 1/8	32	37 1/2	4
V-6732	V5632	V-5732	31 7/8	2	30	32 1/8	38 1/8	5
		V-5732‡	31 7/8	2	30	32 1/8	38 1/8	5
		V-5732-80	31 7/8	2	30	32 1/8	38 1/8	5
V-6636	V-5636	V-5636	37 1/2	1 1/2	36	37 3/4	43 1/4	4
		V-5636**	37 1/2	1 1/2	36	37 3/4	43 1/4	4
		V-5636‡	37 1/2	1 1/2	36	37 3/4	43 1/4	4
	V-5636 (DI)			36	37 3/4	43 1/4	4	
V-6642 (2P)	V-5642 (2P)	V-5742 (2P)	43 7/8	2	42	44 1/4	49 3/4	5
		V-5742 (2P)**			42	44 1/4	49 3/4	5
V-6648 (2P)	V-5648 (2P)	V-5648 (2P)	50 5/8	1 5/8	48 5/8	51	58 3/4	4 3/8
		V-5648 (2P)**	50 5/8	1 5/8	48 5/8	51	58 3/4	4 3/8

† Vane Grate

** Ductile Iron Extra Heavy Duty Grate

‡ ADA Compliant Grate

(2P) 2 Piece (2 frames/2 covers/2 grates)

(DI) Ductile Iron

§ Special Operations

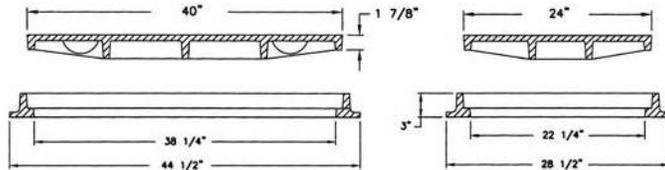
Note: all dimensions are in inches.

V-6780 FRAME & COVER

Heavy duty

Options

Special lettered covers



7000 CATCH BASIN CURB INLET

Heavy duty

With Type M1 grate and T1 back

Approximate 135 sq. in. open area

Curb back height adjusts from 3" to 9"

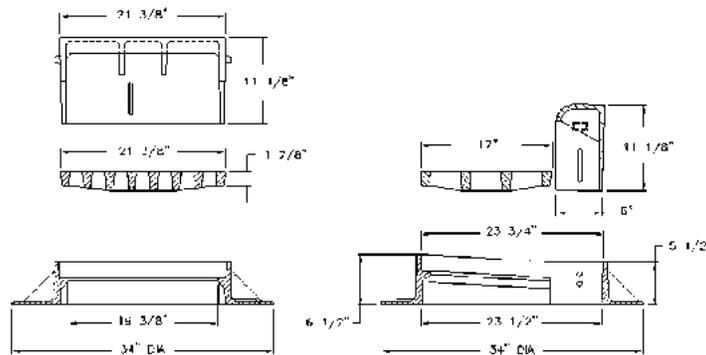
"DUMP NO WASTE!" lettering

and fish image on back



Options

Height adjustable



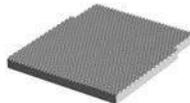
Type M2 Sinusoidal Grate

Approx. 150 sq. in. open area



Type M3 Flat Grate

Approx. 195 sq. in. open area
To be used without curb back



Type M4 Restricted Grate

Approx. 6 sq. in. open area per knockout



Type T2 Back

No Adjustment



Type T3 Strainer Back

2" Curb Radius Height
Adjusts 3" to 9"



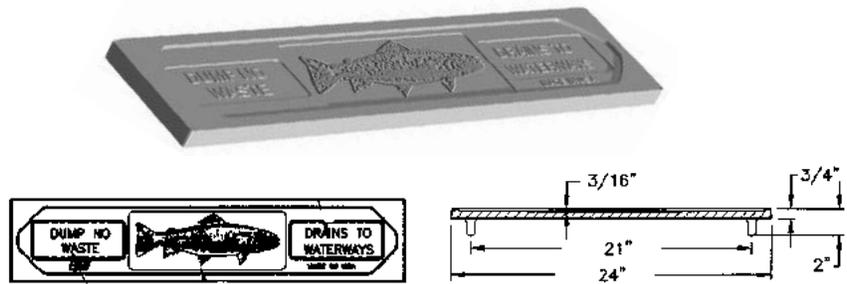
Type T4 Back

4" Curb Radius height
Adjusts 3 3/4" to 8 1/4"

7003 CURB PLATE

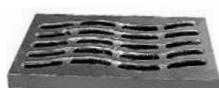
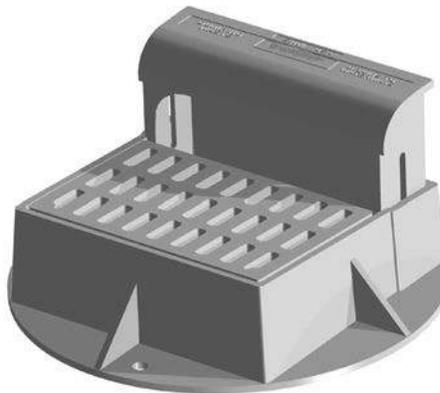
Used in sidewalk above a gutter inlet
 Embed into concrete during construction
 7001 — 5" width
 7003 — 3" width

Options
 Special lettering
 "DUMP NO WASTE!" lettering
 and fish image



7010 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate and T1 back
 Approximate 130 sq. in. open area
 Curb back ht. adjusts from 3 1/2" to 8"
 "DUMP NO WASTE!" lettering and
 fish image on back



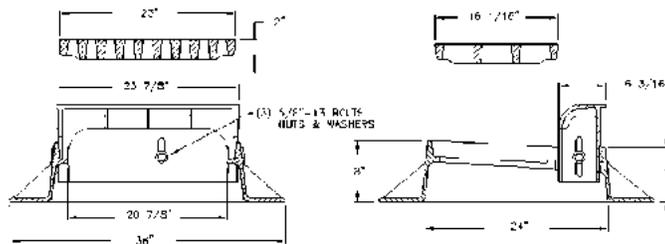
Type M3 Sinusoidal Grate
 Approx. 140 sq. in.
 open area



Type M4 Vane Grate
 Approx. 125 sq. in.
 open area



Type M5 Diagonal Bar Grate
 Approx. 160 sq. in.
 open area



Type T2 Back
 Height Adjusts 2" to
 3 1/2"



**Type T4 Curb Plate With
 Trout Image**

7020 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 Grate and T1 Back
 Approximate 195 sq. in. open area
 Curb back ht. adjusts from 5 1/2" to 8 1/2"
 "DUMP NO WASTE!" lettering and fish image on back

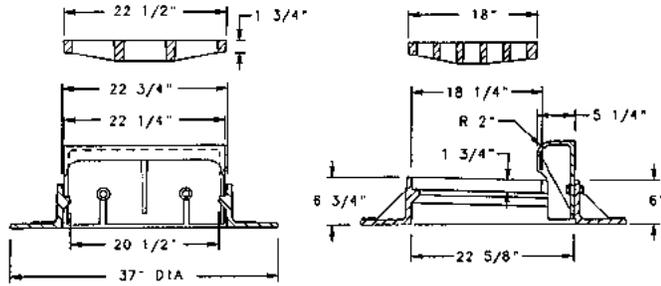


Type M2 Sinusoidal Grate

Approx. 140 sq. in. open area

Type M3 Sinusoidal Grate

Approx. 170 sq. in. open area.
 Grate has break-off section so curb back can be added when curb is installed



Type T2 Back

6" Curb radius
 Height adjusts 5 1/2" to 8"

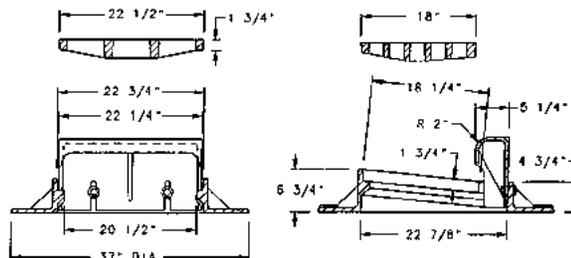


Type T4 Back

10" curb radius
 Height adjusts 3" to 7"

7022 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate and T1 back
 Approximate 195 sq. in. open area
 Curb back height adjusts from 5 1/2" to 8 1/2"
 Accepts 7020 grates and backs

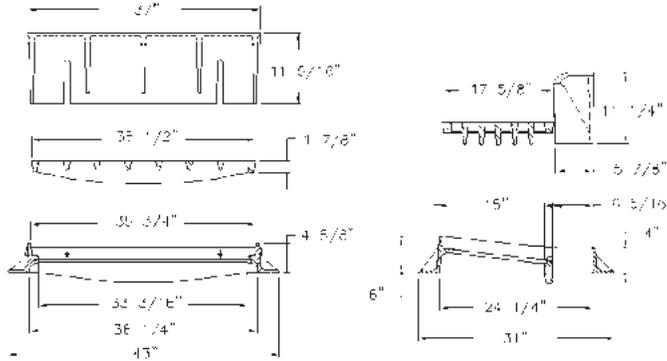


7030 CATCH BASIN CURB INLET

Heavy duty
 With Type M2 grate and T1 back
 260 sq. in. open area
 Curb back height adjusts from 3 1/4" to 9"
 "DUMP NO WASTE!" lettering and fish image
 Drive over curb inlet frame — 7030Z2



7030Z2 Drive Over Curb Inlet Frame



Type M3 Diagonal Bar Grate
 Approx. 315 sq. in. open area
 2 1/8" wide opening between bars



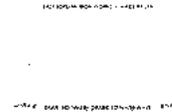
Type M4 Vane Grate
 Approx. 260 sq. in. open area



Type M5 Diagonal Bar Grate
 Approx. 225 sq. in. open area
 1 1/4" wide opening between bars



Type M6 Vane Grate
 Approx. 260 sq. in. open area



Type M10 ADA Grate
 Approx. 140 sq. in. open area
 "DUMP NO WASTE!" lettering and fish image



Type T2 Back
 12" curb radius,
 Height adjusts 4" to 9"



Type T3 Back
 12" concave curb radius
 No curb Adjustment



Type T4 Back
 3" curb Radius
 Height adjusts 6" to 11"
 "DUMP NO WASTE!" lettering and fish image



Type T5 Back
 No curb radius
 Height adjusts 4 1/2" to 8"



Type T6
 3" curb radius
 Height adjusts 6" to 10"
 "DUMP NO WASTE!" lettering and fish image



Type T7 Back
 Roll curb no curb adjustment

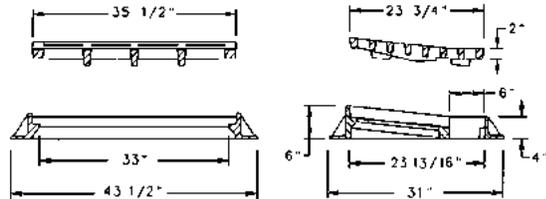
7031 — 7032 CATCH BASIN CURB INLET

Heavy duty
 Double and triple 7030 unit
 With Type M2 grate and T1 back
 "DUMP NO WASTE!" lettering and fish image
 Frames bolt together
 Accepts 7030 grates and backs



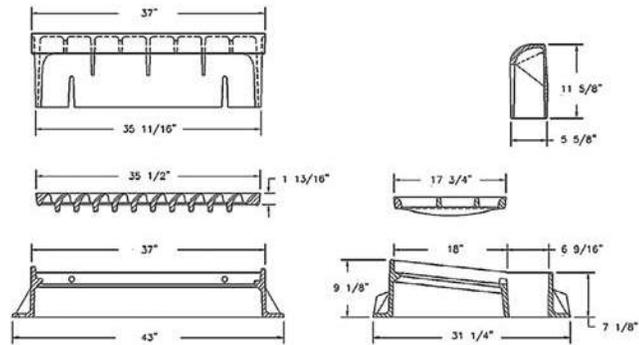
7034 CATCH BASIN CURB INLET

Heavy duty
 Approximate 380 sq. in. open area
 Special lettering
 "DUMP NO WASTE!" lettering and fish image
 End to end double unit available



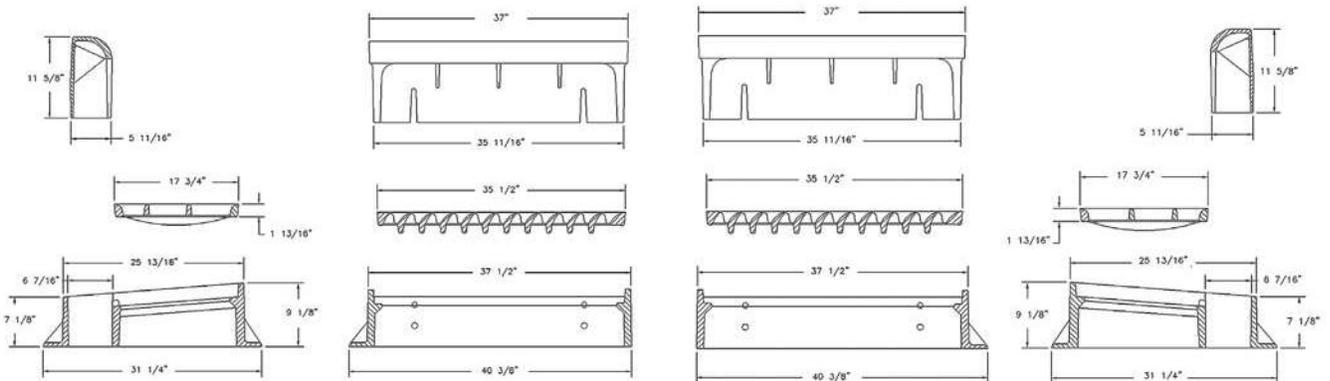
7035 CATCH BASIN CURB INLET

Heavy duty
 With Type M6 Grate and T6 Back.
 260 sq. in. open area
 Curb back height adjusts from 3 1/4" to 9"
 "DUMP NO WASTE!" lettering and fish image
 Accepts 7030 grates and backs
 Double unit available — 7036



7036 CATCH BASIN CURB INLET

Heavy duty
 Double 7035
 With 7030 Type M vane grate and T6 back
 520 sq. in. open area
 Curb back height adjusts from 6" to 10"
 Accepts 7030 grates and backs
 "DUMP NO WASTE!" lettering and fish image on all 7030 backs



7045 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate and 7050 T1 back.
 "DUMP NO WASTE!" lettering and fish image
 Approximate 160 sq. in. open area
 Curb back height adjusts from 4" to 10"

Options
 Special lettered grates
 Adjusting frames
 Accepts 7040 grates



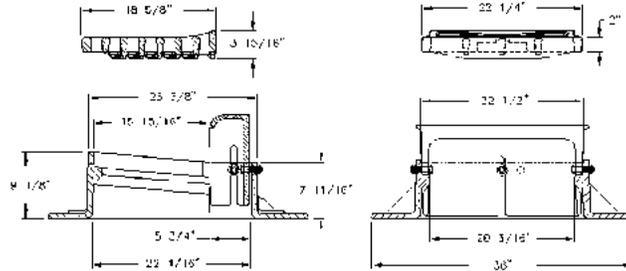
Type M2 Adjusting Grate

For increase of 1 1/2" in pavement grade
 Approx. 160 sq. in. open area



Type M3 Sinusoidal Grate

Expressway use only
 Approx. 180 sq. in. open area



Type M4 Vane Style Curb Inlet Grate

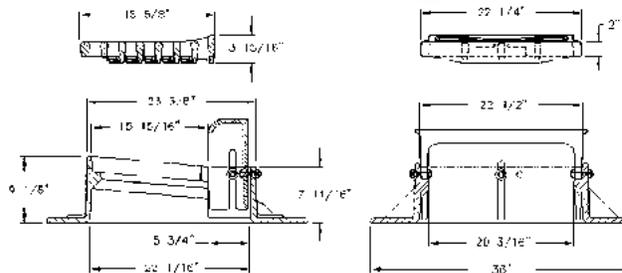
Approx. 233 sq. in. open area



7066 frame with 7045M4 vane style curb inlet grate

7050 CATCH BASIN CURB INLET

Heavy duty
 With front split frame
 With 7040 Type M1 grate and 7050 T1 back
 Approximate 160 sq. in. open area
 Curb back height adjusts from 5" to 9"
 "DUMP NO WASTE!" lettering and fish image on T1 back



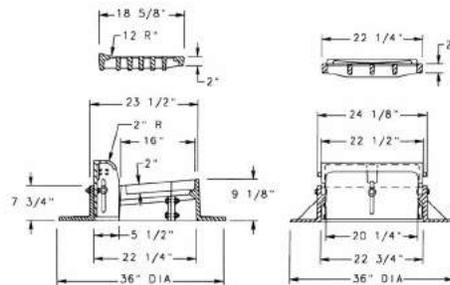
7055 CATCH BASIN CURB INLET

Heavy duty
 Front split frame
 With Type 7045 M1 grate and 7050 T1 back
 Approximate 160 sq. in. open area
 Curb adjustment from 5" to 9"
 "DUMP NO WASTE!" lettering and
 fish image on T1 back
 Accepts 7045 grates



Note:

The small section of this unit is to be pre-set before pavement is placed. The large section is set after the pavement form is removed and then bolted to the small section.



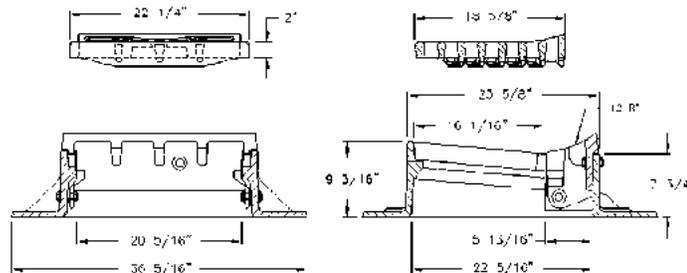
7056 CATCH BASIN CURB INLET

Heavy duty
 With back split frame
 With 7045 Type M1 grate and 7056 T1 back
 Approximate 160 sq. in. open area
 Accepts 7045 grates
 Curb back height adjusts from 5" to 9"



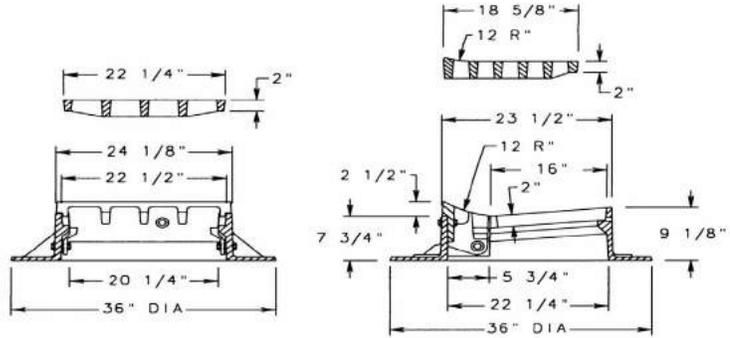
Note:

The large section of this unit is to be pre-set before pavement is placed. The small section is set after the pavement form is removed and then bolted to the large section.



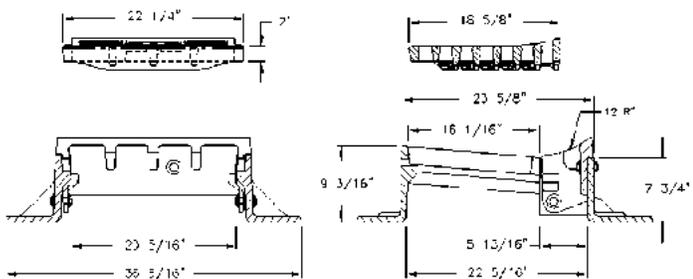
7060 CATCH BASIN CURB INLET

Heavy duty
 With Type 7040 M1 grate and 7060 T1 back
 Special lettered grate
 "DUMP NO WASTE!" lettering
 and fish image
 Approximate 195 sq. in. open area



7065 CATCH BASIN CURB INLET

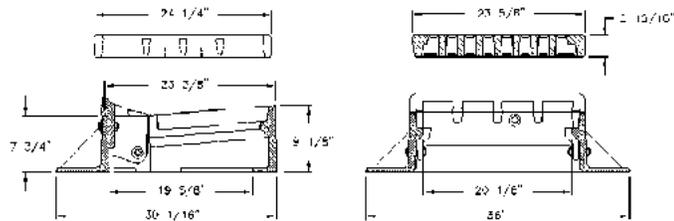
Heavy duty
 With 7045 Type M1 grate and 7060 T1 back
 Approximate 195 sq. in. open area
 Accepts 7045 grates
 Special lettered grate
 "DUMP NO WASTE!" lettering
 and fish image



7066 CATCH BASIN CURB INLET

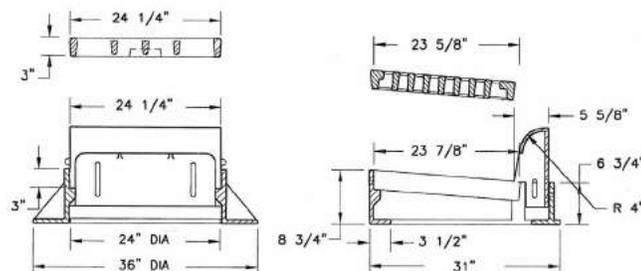
Heavy duty
 With 7045 Type M1 grate and 7060 T1 back
 Approximate 195 sq. in. open area
 Accepts 7045 grates
 Special lettered grate
 "DUMP NO WASTE!" lettering
 and fish image

Options
 Accepts 7050 backs



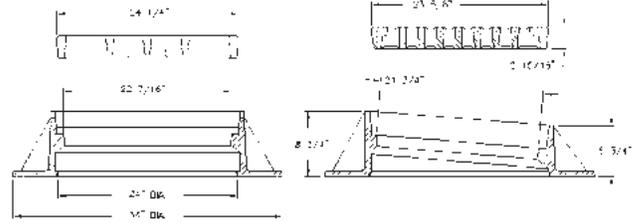
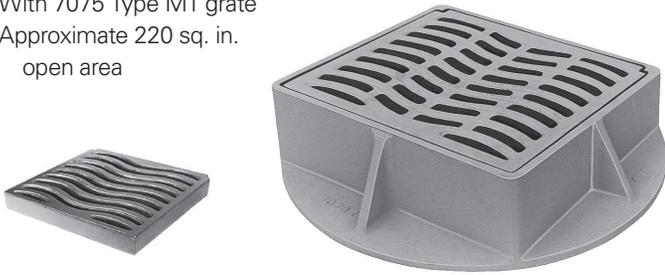
7075 CATCH BASIN CURB INLET

Heavy duty
 With Type 7075 M1 grate
 Approximate 240 sq. in. open area
 With 7070 frame & back
 Accepts 7076 grates



7076 CATCH BASIN CURB INLET

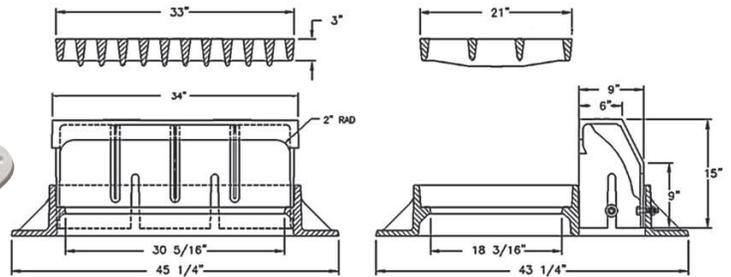
Heavy duty
 With 7075 Type M1 grate
 Approximate 220 sq. in.
 open area



7075 Type M2 Sinusoidal Grate
 Expressway use only
 Approx. 240 sq. in.
 open area

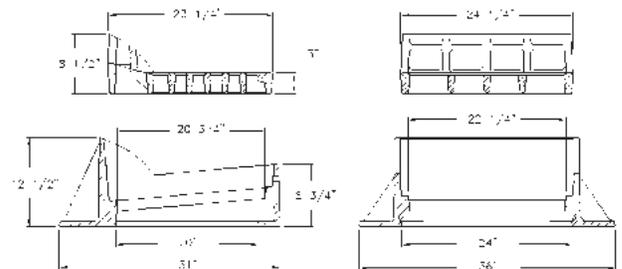
7080 CATCH BASIN CURB INLET

Heavy duty
 Uses 5352M grate
 Approximate 262 sq. in. open area
 "DUMP NO WASTE!" lettering



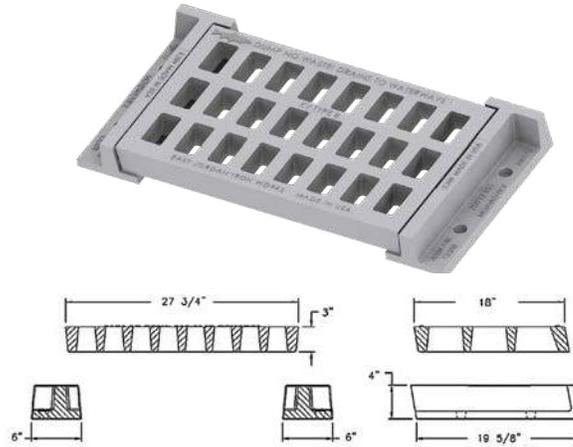
7085 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate
 Approximate 220 sq. in.
 open area



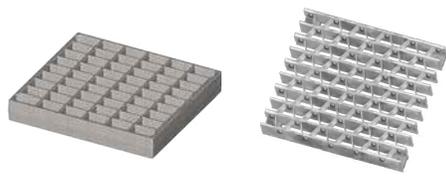
7091 CATCH BASIN INLET

Heavy duty
 3-piece unit
 Approximate 175 sq. in. open area
 "DUMP NO WASTE!" lettering and fish image



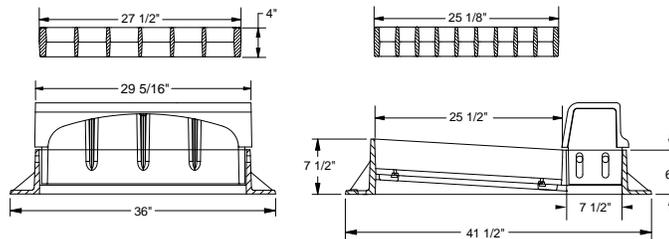
7140 CATCH BASIN CURB INLET

Heavy duty
 With M1 ductile iron grate and
 Type T1 unmountable back
 Curb back height adjusts 6" to 10"
 NY State DOT — Type F1, G1, CU1 & CM1

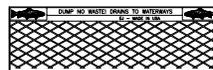


Type M1 Grate (G1)
 Approx. 412 sq. in.
 open area

Galvanized Steel Reticuline Grate (G1)



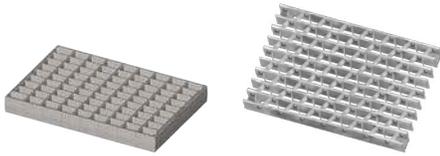
Type T1 Back
 Unmountable back (CU1)
 with "DUMP NO
 WASTE!" lettering and
 fish image



Type T2
 Mountable back (CM1)

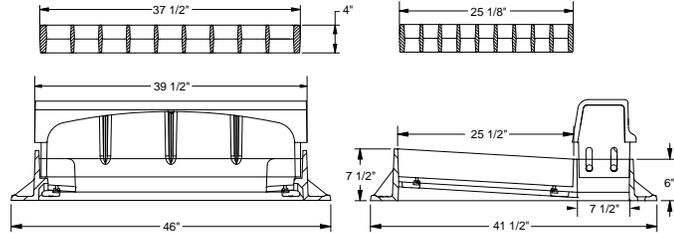
7150 CATCH BASIN CURB INLET

Heavy duty
 With M1 ductile iron grate and
 Type T1 unmountable back
 Curb back height adjusts 6" to 10"
 7150Z1 frame with 7 1/2" height front
 and 6" height back
 NY State DOT — Type F2, G2, CU2 & CM2

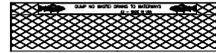


Type M1 Grate (G2)
 Approx. 558 sq. in.
 open area

**Galvanized Steel
 Reticuline Grate (G2)**



Type T1 Back
 Unmountable back (CU2)
 with "DUMP NO
 WASTE!" lettering and
 fish image



Type T2 Back
 Mountable back (CM2)

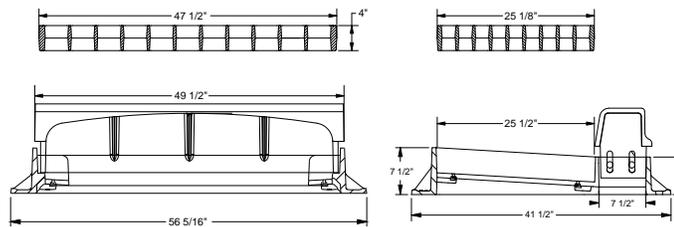
7155 CATCH BASIN CURB INLET

Heavy duty
 With M1 ductile iron grate and
 Type T1 unmountable back (CU3)
 Curb back height adjusts 6" to 10"
 NY State DOT — Type F3, G3, CU3 & CM3
 Parallel bar grate

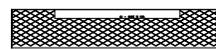


Type M1 Grate (G3)
 Approx. 724 sq. in.
 open area

**Galvanized Steel
 Reticuline Grate (G3)**



Type T1 Back
 Unmountable back (CU3)
 with "DUMP NO
 WASTE!" lettering and
 fish image

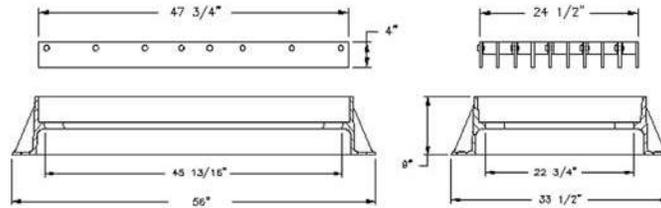


Type T2 Back
 Mountable back (CM3)

7156 INLET FRAME & GRATE

Heavy duty
 Uses 7158 galvanized reticuline steel grate

- Options
 Bolted assembly
 Iron grates
 Adjusting frames



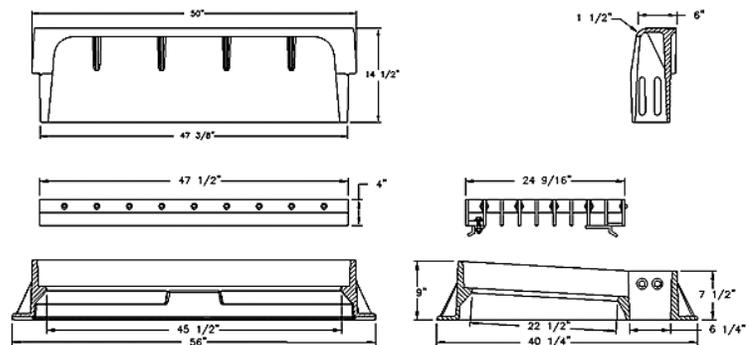
7158 CURB & GUTTER INLET

Heavy duty
 Uses galvanized reticuline steel grate

- Options
 Bolted assembly
 T1 low profile back
 "DUMP NO WASTE!" lettering
 Iron grate
 Adjusting frame



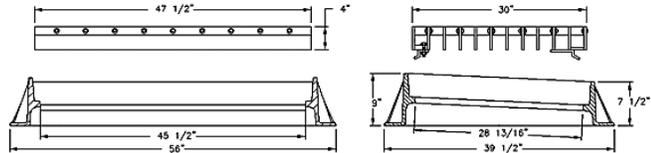
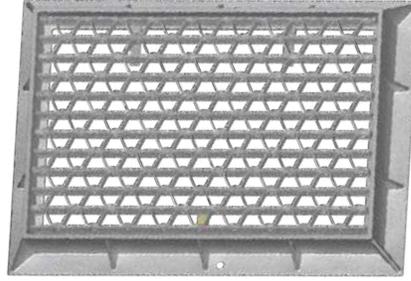
Illustrating 7158 with T1 back and steel reticuline grate



7159 INLET FRAME & GRATE

Heavy duty
 Uses galvanized reticuline steel grate

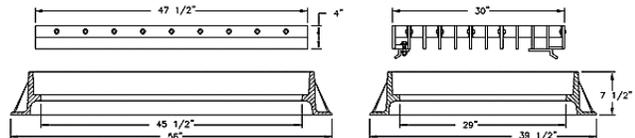
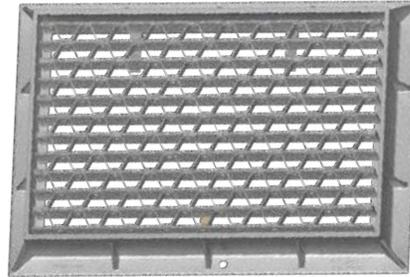
Options
 Bolted assembly
 Iron grates
 Adjusting risers available — 7160



7160 INLET FRAME & GRATE

Heavy duty
 Uses 7159 galvanized reticuline steel grate

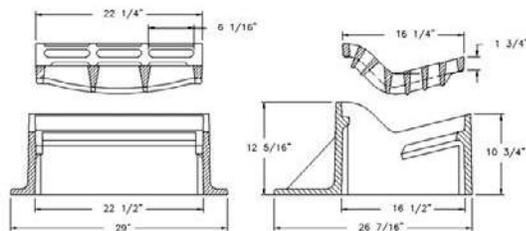
Options
 Bolted assembly
 Iron grates
 Adjusting risers available



7170 CATCH BASIN CURB INLET

Heavy duty
 M1 grate has approximate 185 sq. in.
 open area

Options
 M2 grate has approximate 140 sq. in.
 open area

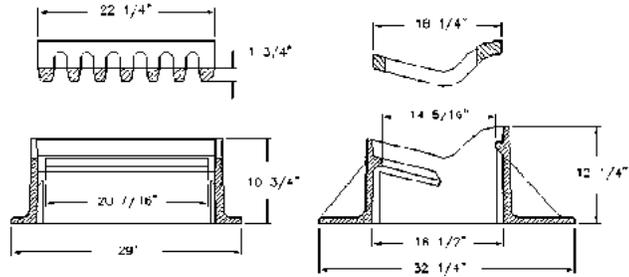


7171 CATCH BASIN CURB INLET

Heavy duty
 With 7170 Type M2 grate
 Approximate 140 sq. in. open area
 Available without front flange — 7170



Type M1 Grate
 Approx. 185 sq. in.
 open area

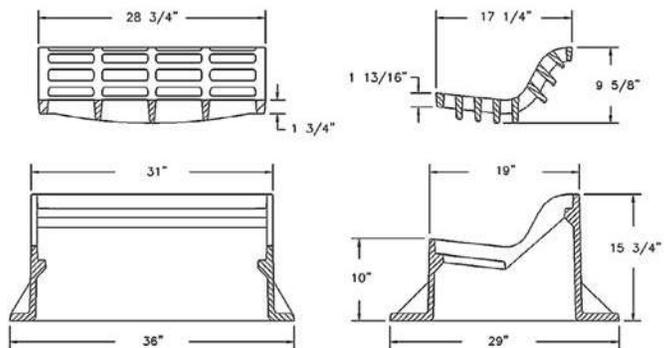


7180 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate
 Approximate 270 sq. in. open area

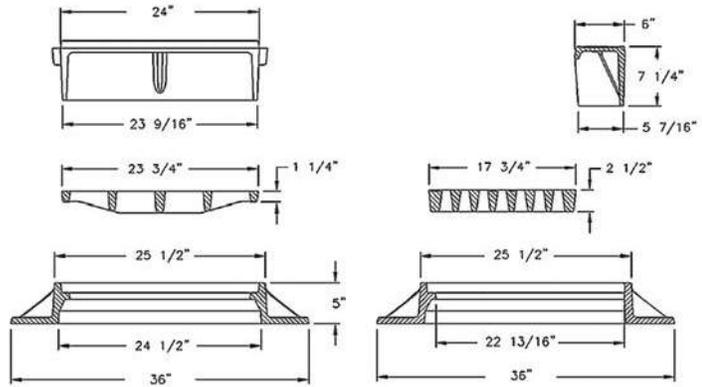


Type M2 Grate
 Approx. 215 sq. in.
 open area



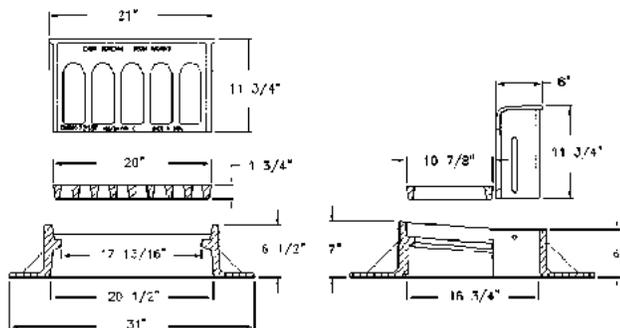
7191 CATCH BASIN INLET

Heavy duty
 Type M grate
 Approximate 123 sq. in. open area
 "DUMP NO WASTE!" lettering and
 fish image on grate and curb back



7205 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate
 Approximate 100 sq. in. open area



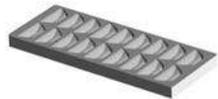
7210 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 Grate and T1 Back
 Approximate 130 sq. in. open area
 Curb back height adjusts from 4 1/2" to 9"
 "DUMP NO WASTE!" lettering and
 fish image on back
 Square flange frame available

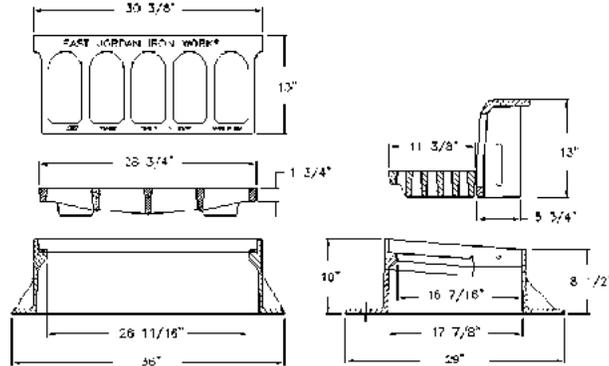


Type M2 Grate
 Approx. 135 sq. in.
 open area

Type M3 Grate
 Approx. 230 sq. in.
 open area
 To be used without
 curb back



Type M4 Vane Grate
 Approx. 85 sq. in.
 open area



7220 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 Grate and T1 Back
 Approximate 165 sq. in. open area
 Curb back height adjusts from 5 1/4" to 9"
 "DUMP NO WASTE!"
 lettering and fish image on back

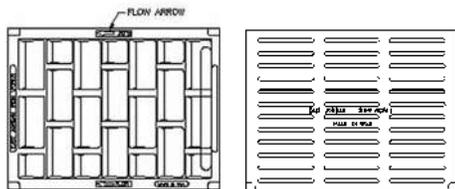


Options
 Type M5 ADA grate available



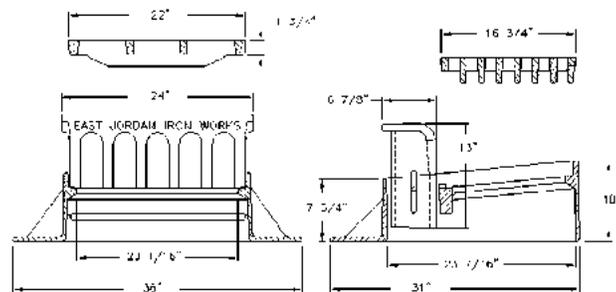
Type M2 Grate
 Approx. 145 sq. in.
 open area

Type M3 Sinusoidal Grate
 Approx. 145 sq. in.
 open area



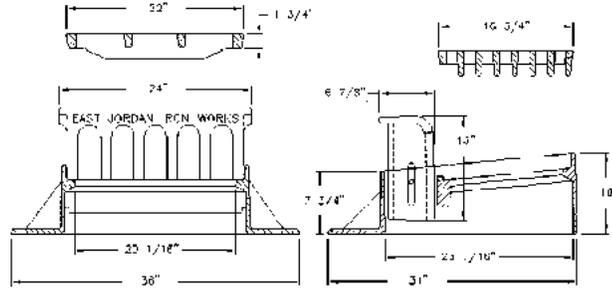
Type M4 Vane Grate
 Approx. 100 sq. in.
 open area

Type 5 ADA Grate
 Approx. 76 sq. in.
 open area



7221 CATCH BASIN CURB INLET

Heavy duty
 With 7220 Type M1 Grate and T1 Back
 Approximate 165 sq. in. open area
 Uses 7220 back and grates

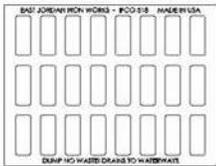


7222 ROUND BASE CURB & GUTTER INLET

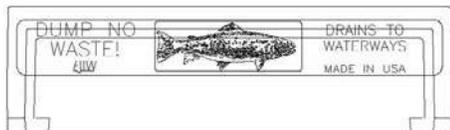
Heavy duty
 Uses 7220 back
 Specify grate style when ordering
 Grate & back have "DUMP NO WASTE!"
 lettering & fish image
 Shown with Type M1 vane grate
 Approximate 101 sq. in. open area



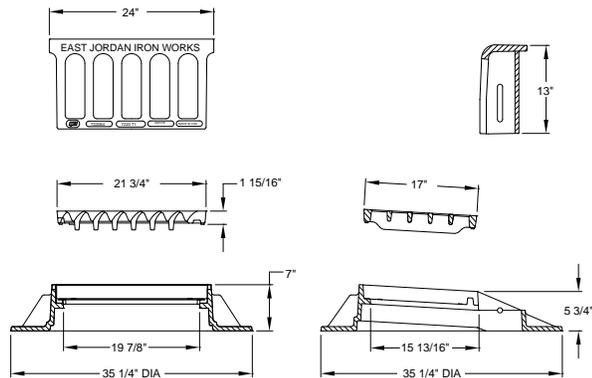
Options
 Diagonal style grates



Type M2 Grate
 Approx. 71 Sq. In. open area



Type T1 Adjustable Curb Inlet Hood
 With with "DUMP NO WASTE!" lettering and fish image

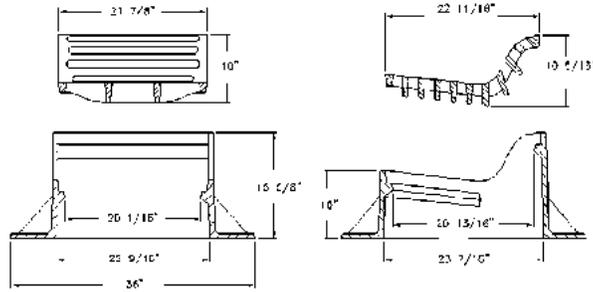


7235 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate
 Approximate 250 sq. in. open area

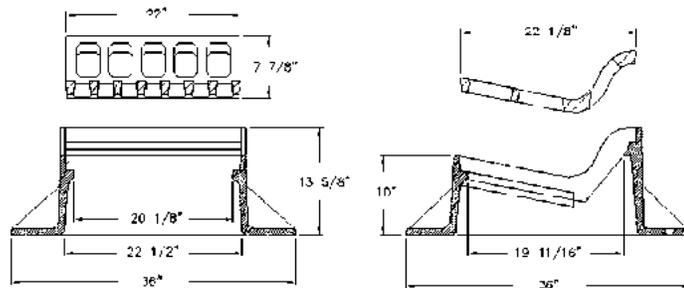


Type M2 Grate
 Approx. 250 sq. in.
 open area



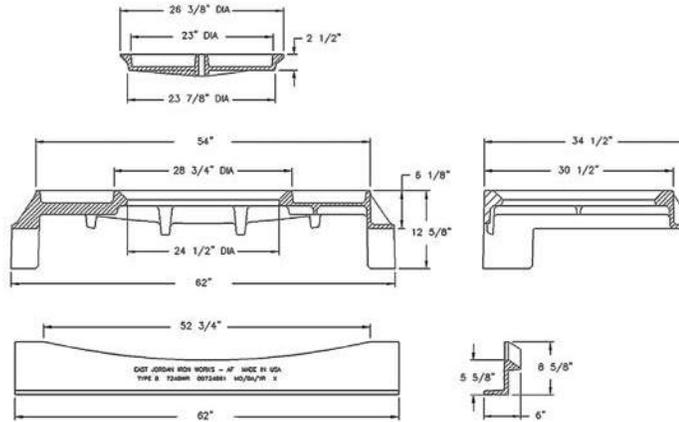
7236 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate
 Approximate 215 sq. in. open area



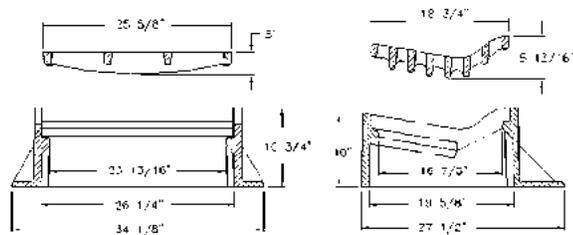
7248 CATCH BASIN INLET

Heavy duty
3 piece unit
Concrete filled



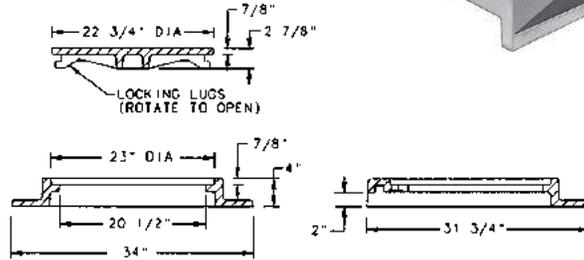
7250 CATCH BASIN CURB INLET

Heavy duty
Approximate 225 sq. in. open area



7260 CATCH BASIN CURB INLET

Heavy duty
Cover has locking lugs



7262 CURB OUTLET

Heavy duty
Storm water curb

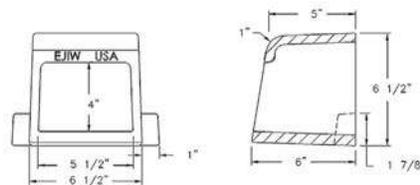
Options
4" outlet — 7262T1



7262T curb outlet illustrated

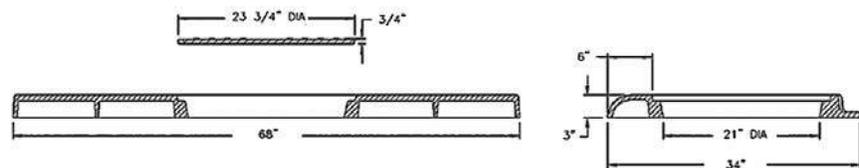


7262T1 with 4" outlet



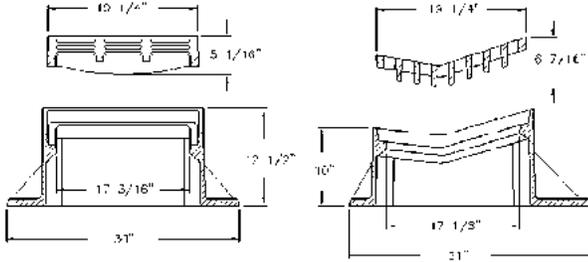
7266 CATCH BASIN CURB INLET

Heavy duty
Specify if cast iron
support beam required
Concrete filled
"DUMP NO WASTE!" lettering
and fish image



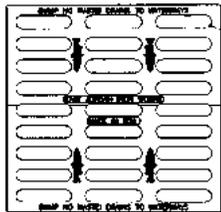
7281 CATCH BASIN CURB INLET

Heavy duty
 Uses 7280 grate
 Approximate 175 sq. in. open area
 Frame with front flange removed — 7280

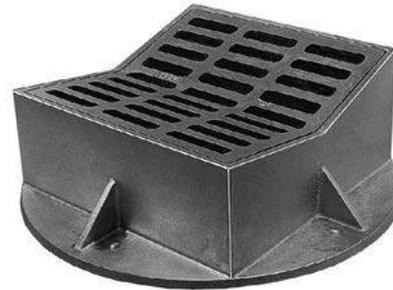
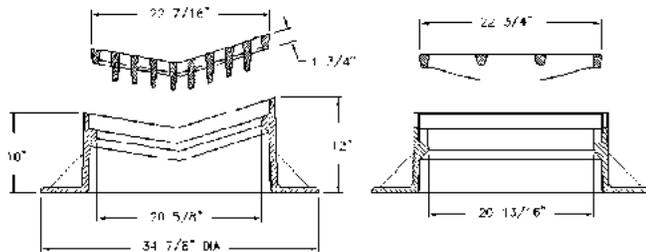


7300 CATCH BASIN CURB INLET

Heavy duty
 Approximate 220 sq. in. open area



7300 M Grate
 "DUMP NO WASTE!"
 lettering and fish
 image

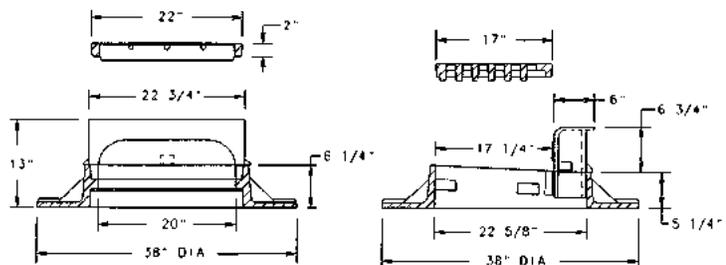


7310 CATCH BASIN CURB INLET

Heavy duty
 With Type M2 grate
 Approximate 140 sq. in. open area

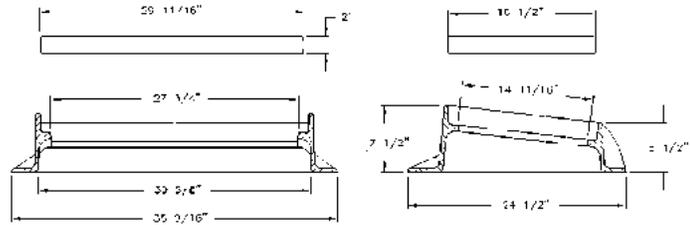
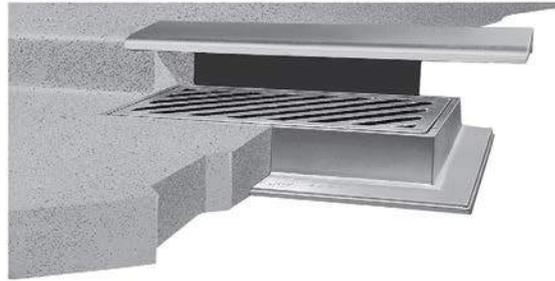


Type M1 Grate
 Approx. 170 sq. in.
 open area



7350 CATCH BASIN CURB INLET

Heavy duty
 With Type M2 diagonal bar grate
 Approximate 195 sq. in. open area
 Specify I-beam if required



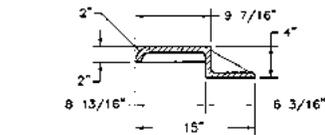
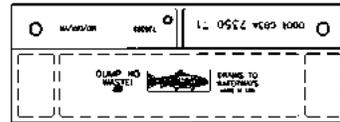
Type M3 Grate
 Approx. 212 sq. in. open area



Type M4 Grate
 Approx. 229 sq. in. open area.
 "DUMP NO WASTE!" lettering and fish image



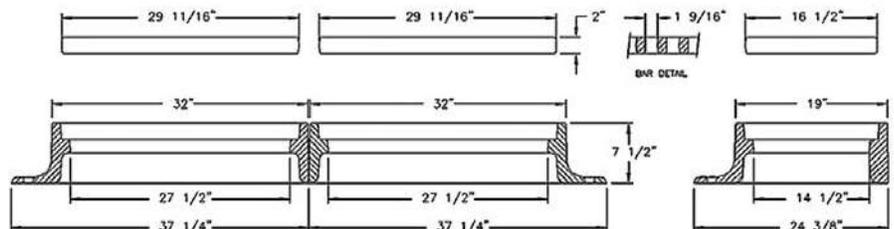
Type M5 ADA Grate
 Approx. 104 sq. in. open area
 "DUMP NO WASTE!" lettering and fish image



7350 T1 Back
 "DUMP NO WASTE!" lettering and fish image

7351 CATCH BASIN CURB INLET

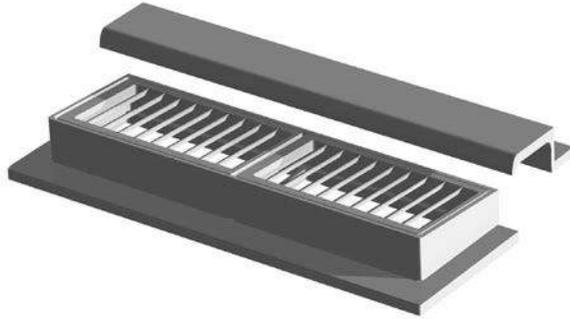
Heavy duty
 Double Inlet shown with 7350 Type2 diagonal grate
 Approximate 195 sq. in. open area
 Accepts 7350 grates and backs
 Specify I-beam if required
 Single frame available



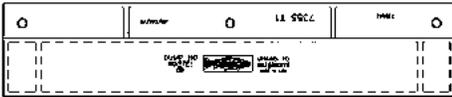
7355 CATCH BASIN CURB INLET

Heavy duty
 Multiple 7350 curb inlet with Type M3 grate
 Approximate 424 sq. in. open area
 Specify I-beam if required

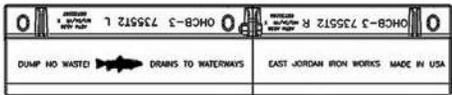
Options
 2 piece back available
 Grates — Uses 7350 grates



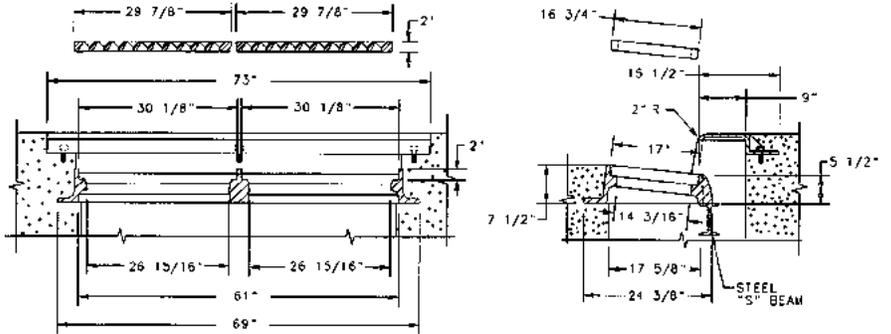
Type M2 Grate
 Approx. 195 sq. in.
 open area



7355 T1 Back
 "DUMP NO WASTE!" lettering and fish image

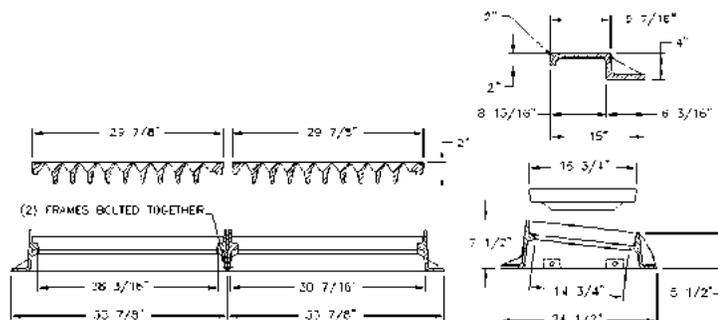
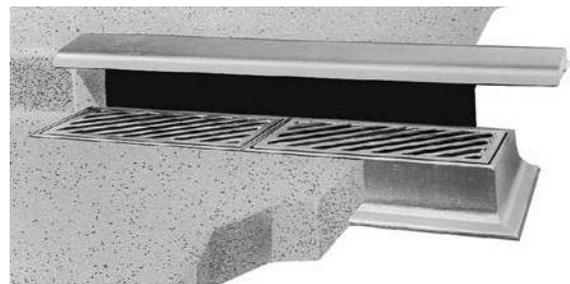


7355 T2 Back
 "DUMP NO WASTE!" lettering and fish image



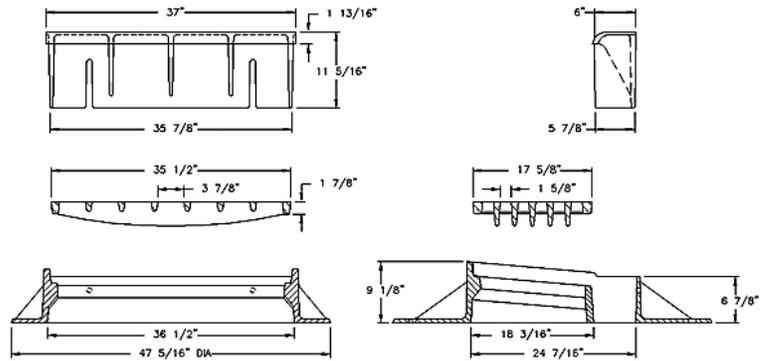
7358 CATCH BASIN CURB INLET

Heavy duty
 Multiple 7350 curb inlet with 7355 back
 Frame is 2 pieces, bolted together with
 Type M2 diagonal bar grate
 Accepts 7350 grates
 Approximate 390 sq. in. open area
 Back is 2 pieces, bolted together
 Specify I-beam if required



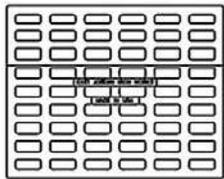
7360 CATCH BASIN CURB INLET

Heavy duty
 Approximate 250 sq. in. open area
 "DUMP NO WASTE!" lettering
 and fish image
 Accepts 7030 backs
 Curb back height adjusts from 4" to 9"

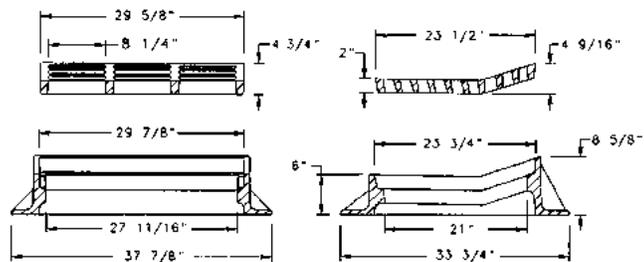


7370 — 7371 CATCH BASIN CURB INLET

Heavy duty
 With Type M grate
 Approximate 305 sq. in. open area
 Double unit available — 7371 uses
 two 7370M grates approximate
 610 sq. in. open area

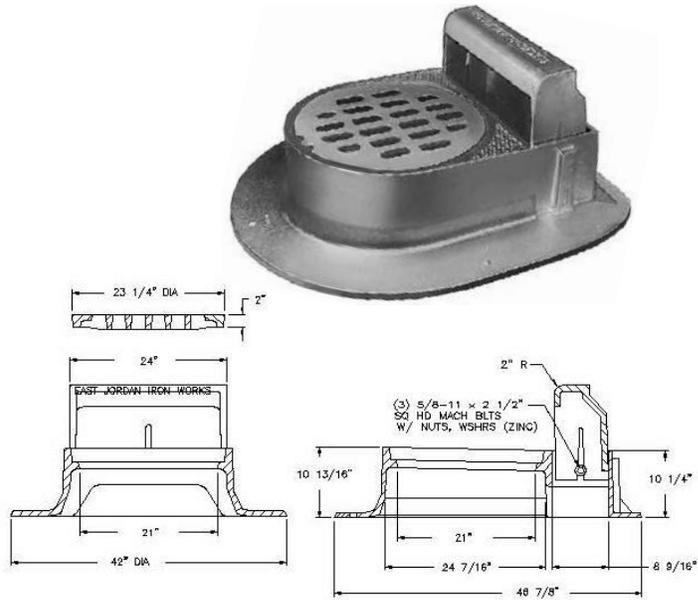


Type M1 Grate
 Approx. 280 sq. in.
 open area



7380 CATCH BASIN CURB INLET

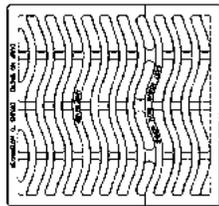
Heavy duty
 Approximate 160 sq. in. open area



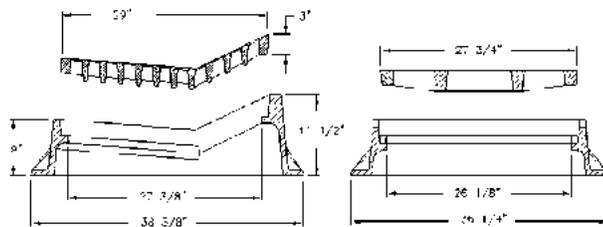
7390 CATCH BASIN CURB INLET

Heavy duty
 "DUMP NO WASTE!" with Type M2 grate
 Approximate 330 sq. in. open area

Options
 Round flange frame — 7395

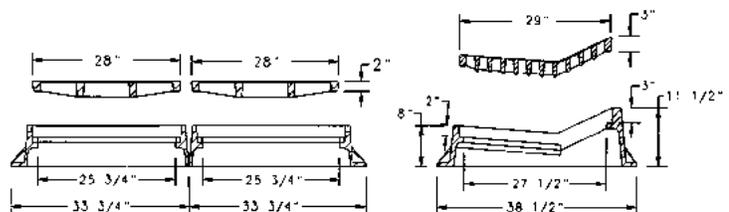


Type M3 "S" Grate
 Approx. 340 sq. in.
 open area
 "DUMP NO WASTE!"
 lettering



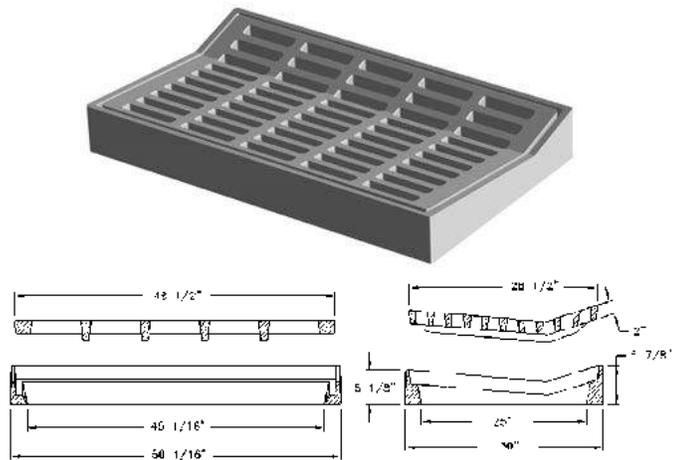
7391 CATCH BASIN CURB INLET

Heavy duty
 Multiple 7390 curb inlet
 "DUMP NO WASTE!" with Type M2 grate
 Approximate 660 sq. in. open area



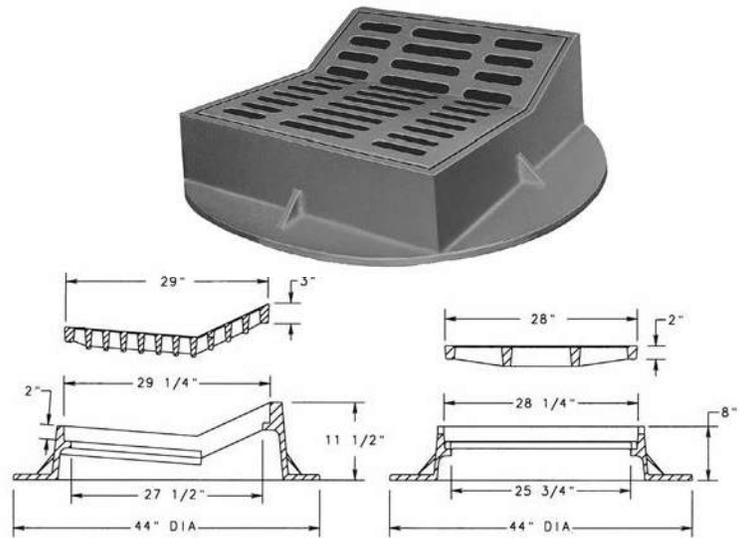
7392 CATCH BASIN CURB INLET

Heavy duty
 Approximate 700 sq. in. open area



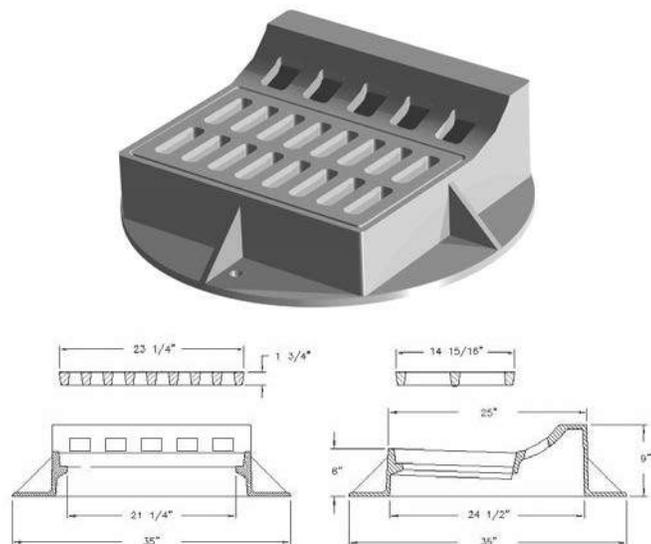
7395 CATCH BASIN CURB INLET

Heavy duty
 With 7390 Type M2 grate
 Approximate 360 sq. in. open area
 "DUMP NO WASTE!"
 lettering



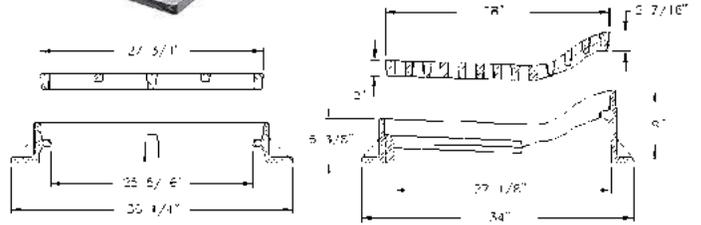
7420 CATCH BASIN CURB INLET

Heavy duty
 Approximate 175 sq. in. open area
 "DUMP NO WASTE!" lettering and fish image



7430 CATCH BASIN CURB INLET

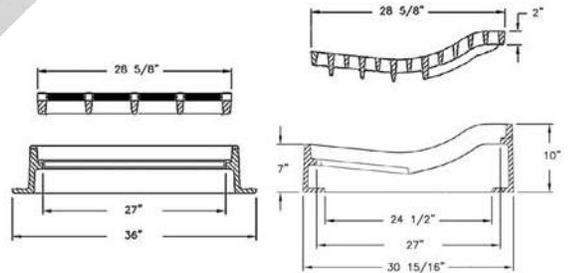
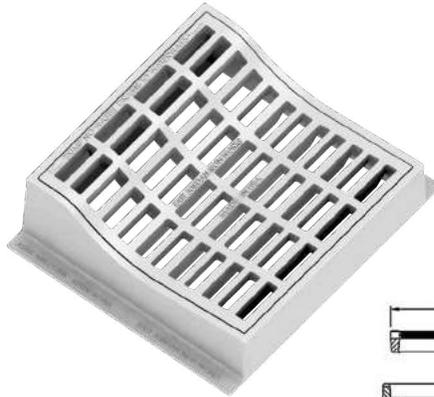
Heavy duty
Approximate 315 sq. in. open area



7432 CATCH BASIN CURB INLET

Heavy duty
Approximate 400 sq. in. open area
"DUMP NO WASTE!" lettering and fish image

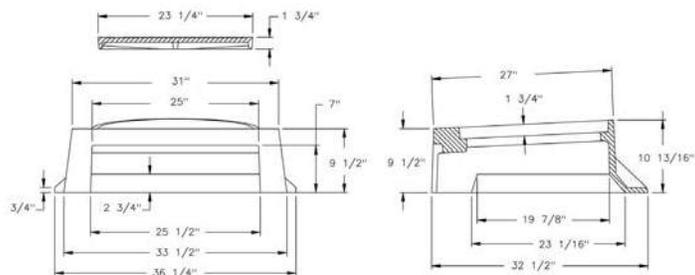
Options
Two sided flange — 7432Z1
Three sided flange — 7432Z



7460 CATCH BASIN CURB INLET

Heavy duty
Light duty cover
This unit can be installed in curb combination with 7411

Options
Special lettered covers



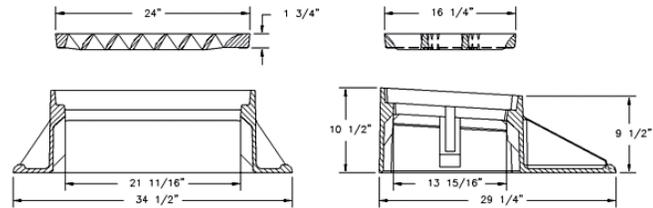
7464 CATCH BASIN CURB INLET

Heavy duty
 With 7463 Type M2 grate
 Approximate 130 sq. in. open area

Options
 Ductile iron safety bar



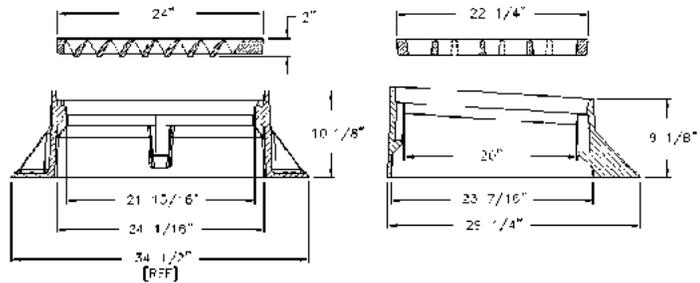
Illustrating safety bar



7467 CATCH BASIN CURB INLET

Heavy duty
 With 7466 Type M2 grate
 Approximate 225 sq. in. open area

Options
 Four flange frame — 7466
 Ductile iron safety bar



7485 CATCH BASIN CURB INLET

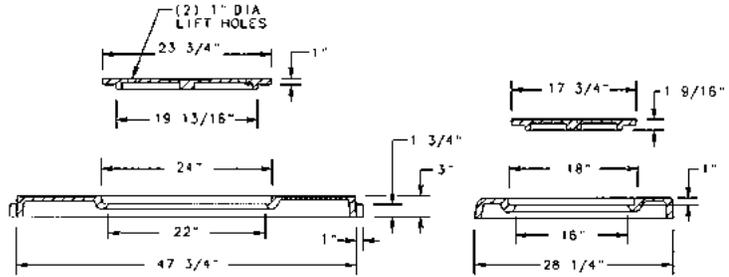
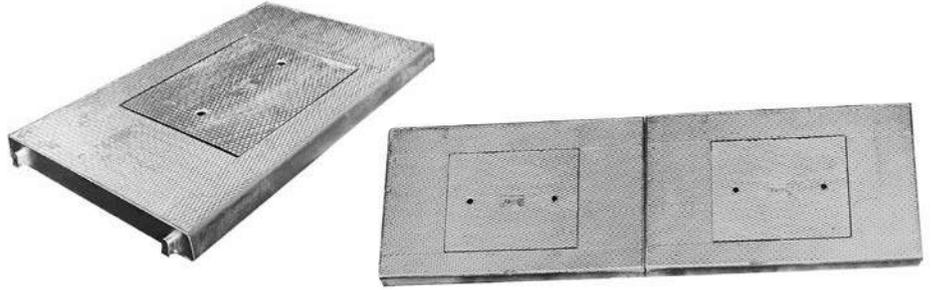
Heavy duty

Options

Solid curb edge

Frame — 7484

Double unit — 7486



7488 CATCH BASIN CURB INLET

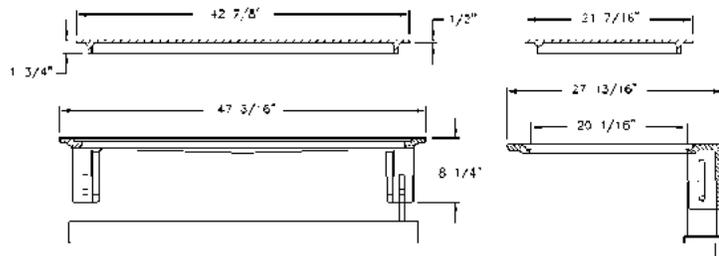
Light duty

3 piece catch basin

Options

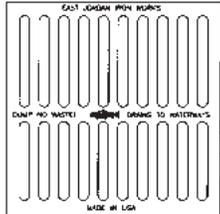
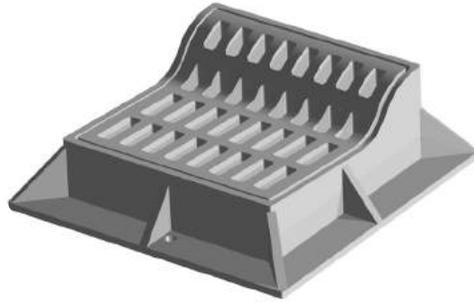
Special lettered covers

Custom logo covers

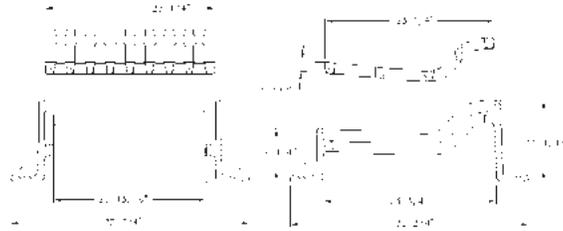


7490 CATCH BASIN CURB INLET

Heavy duty
 With Type M3 grate
 Approximate 230 sq. in. open area
 "DUMP NO WASTE!"
 lettering and fish image



Type M1 Grate
 Approx. 220 sq. in.
 open area
 "DUMP NO WASTE!"
 lettering and fish
 image

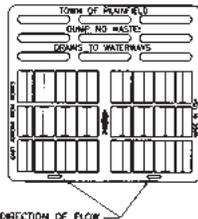
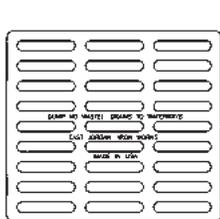


7495 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 right hand grate
 (M2 left hand)
 Approximate 250 sq. in. open area
 "DUMP NO WASTE!" lettering and fish image

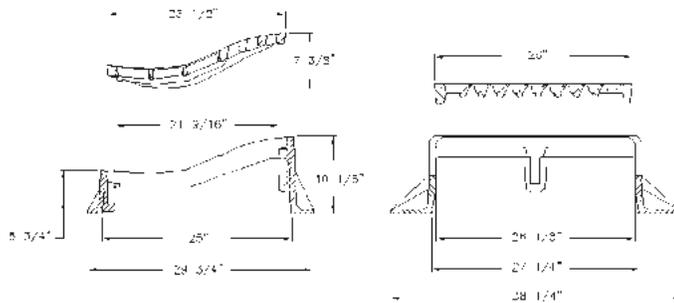


Options
 Safety bar — 5235
 Round flange frame



Type M3 Grate
 Approx. 227 sq. in.
 open area
 "DUMP NO WASTE!"
 lettering

Type M4 Bidirectional Grate
 Approx. 185 sq. in.
 open area
 "DUMP NO WASTE!"
 lettering and fish
 image



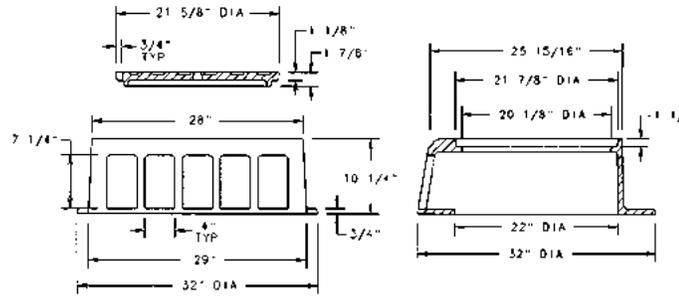
7500 CATCH BASIN CURB INLET

Heavy duty
 Approximate 145 sq. in. open area
 Accepts 1060 covers

Options
 Special lettered covers
 Custom logo covers

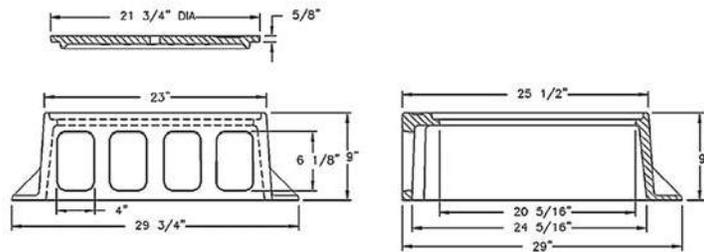


1060 Cover
 "DUMP NO WASTE!"
 lettering and fish
 image



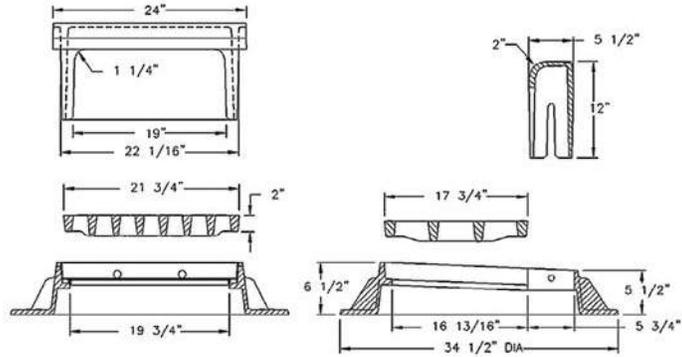
7501 CATCH BASIN CURB INLET

Light duty (Non-traffic)
 Bolted down assembly



7504 CATCH BASIN CURB INLET

Heavy duty
 Ductile iron
 Type M grate with 7504T Back
 "DUMP NO WASTE" lettering and fish image on back and grate
 M2 Vane grate with "DUMP NO WASTE" lettering and fish image

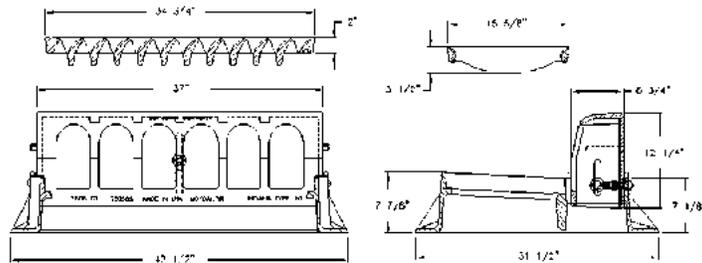


7505 CATCH BASIN CURB INLET

Heavy duty
 With Type M3 Vane Grate and T4 Back
 Approximate 400 sq. in. open area
 Curb back height adjusts from 5 1/4" to 8 3/4"
 "DUMP NO WASTE!" lettering and fish image on backs



Type M1 Flat Bar Grate
 Approx. 190 sq. in. open area
 Available in gray or ductile iron



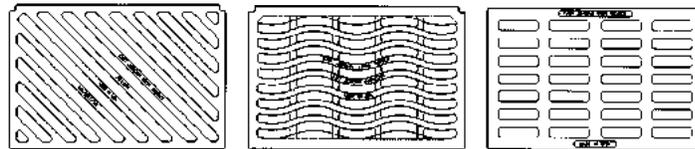
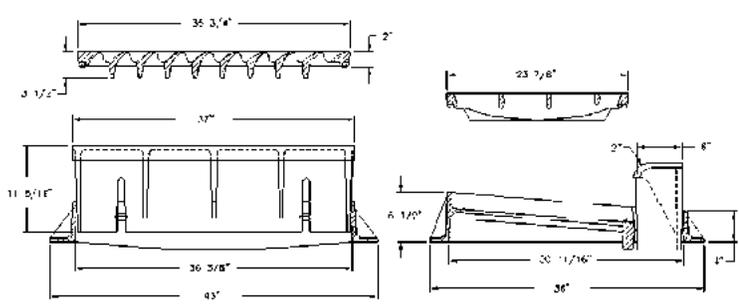
7510 CATCH BASIN CURB INLET

Heavy duty
 Accepts 7030 backs
 With Type M3 grate and 7030 T1 back
 Curb back height adjusts from 3 1/4" to 9"
 "DUMP NO WASTE!" lettering on backs



7510 Catch Basin Grates

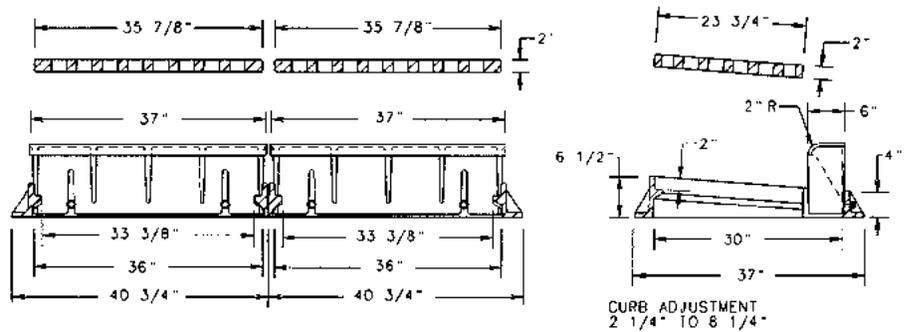
Grate Type	Sq In. Open Area
M1 Diagonal	410
M2 "S"	340
M3 Vane	446
M4 Fiat	324



Type M1 Grate Type M2 "S" Grate Type M4 Flat Grate

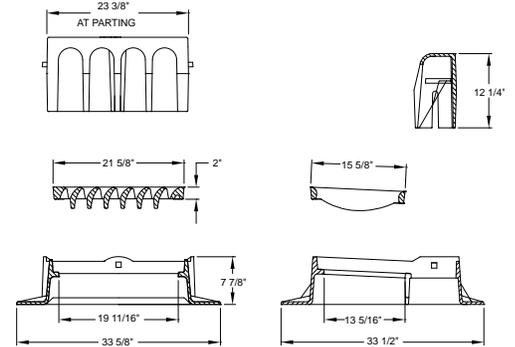
7511 CATCH BASIN CURB INLET

Heavy duty
 Multiple curb inlet
 Accepts 7030 backs
 Type M1 grate and 7030 T1 back
 Curb back height adjusts from 3 1/4" to 9"
 Center frame available
 "DUMP NO WASTE!" lettering on backs



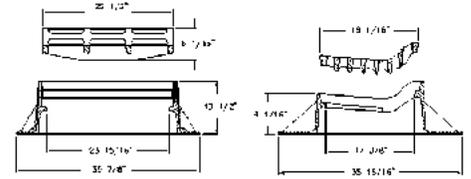
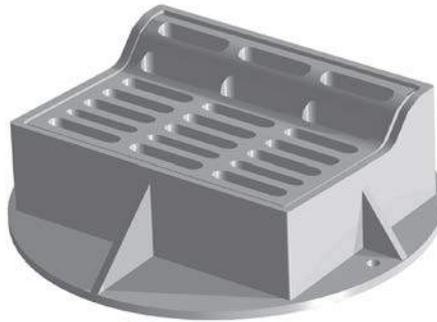
7520 CATCH BASIN CURB INLET

Heavy duty
 With Type M2 grate and T2 back
 Approximate 145 sq. in. open area
 Curb back height adjusts from 5 1/4" to 8 3/4"
 "DUMP NO WASTE!" lettering and fish
 image on back



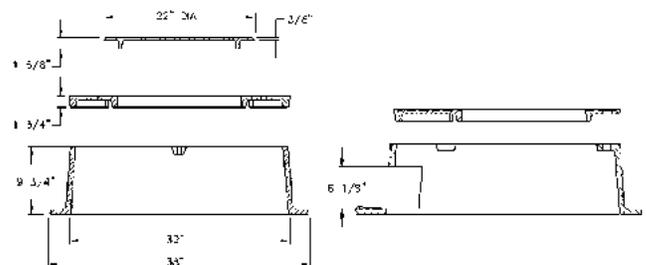
7525 CATCH BASIN CURB INLET

Heavy duty
 Approximate 220 sq. in. open area
 "DUMP NO WASTE!" lettering and
 fish image



7530 CATCH BASIN CURB INLET

Heavy duty
 With straight face curb
 "DUMP NO WASTE!" lettering on top cover



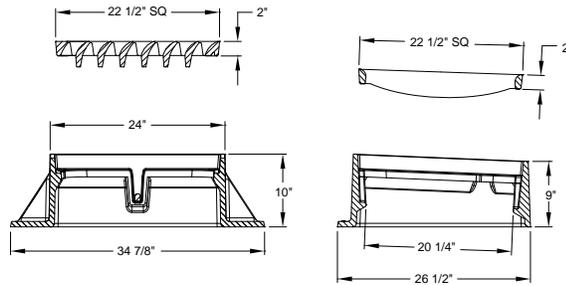
7535 CATCH BASIN CURB INLET

Heavy duty
 Approximate 220 sq. in. open area
 Designed for use along barrier wall
 Unit has ductile iron safety bar
 Double unit available — 7536
 Uses the 5425M2 Grate



Illustrating 7535Z1PT bolted curb inlet assembly with 5425M2 vane grate and safety bar

7536Z frames with 7535M grates and safety bar

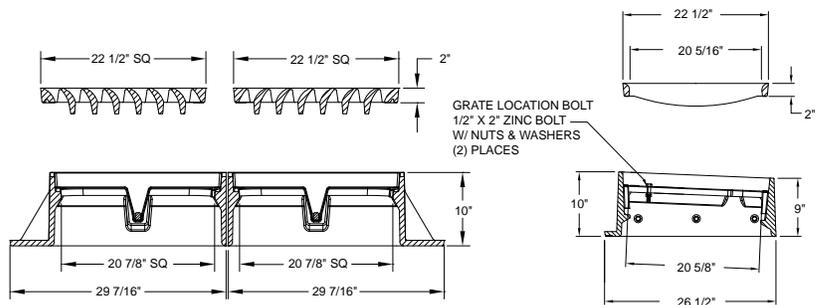


7536 CATCH BASIN CURB INLET

Heavy duty
 Multiple curb inlet
 Uses the 5425M2 grate
 Approximate 110 sq. in. open area



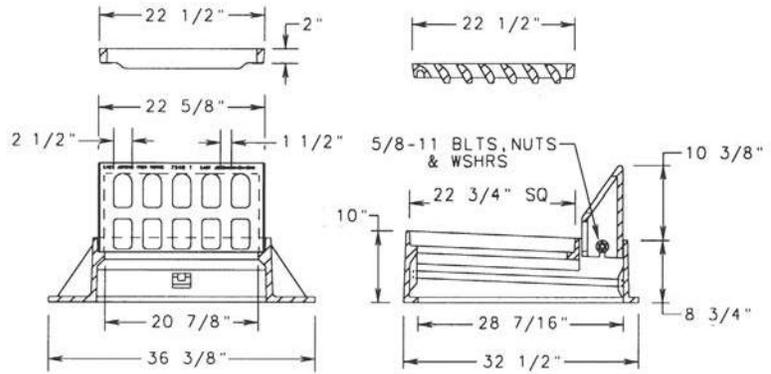
Illustrating safety bars in frame



7540 CATCH BASIN CURB INLET

Heavy duty
 Uses the 5425M2 grate
 Approximate 110 sq. in. open area

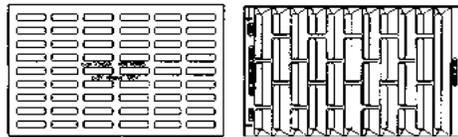
Options
 Bolted assembly



7555 CATCH BASIN CURB INLET

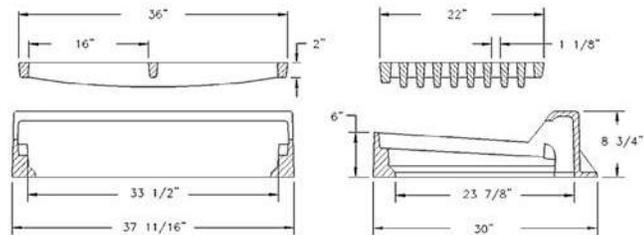
Heavy duty
 Type M1 grate
 Approximate 320 sq. in. open area

Options
 7560 frame with 6" height front
 and 11 3/4" height back



Type M2 Grate
 Approx. 290 sq. in.
 open area

Type M3 Vane Grate
 Approx. 330 sq. in.
 open area



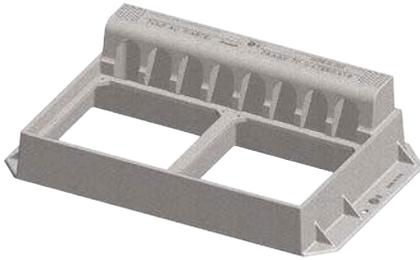
7565 CATCH BASIN CURB INLET

Heavy duty
 With Type 5425 M2 grate and T3 Back 2"
 curb radius
 Approximate 440 sq. in. open area

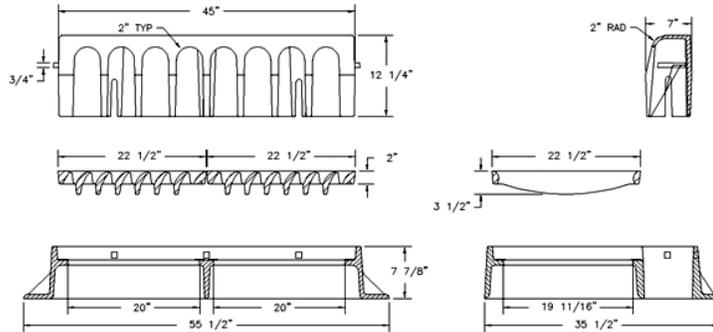
Options
 Type T1 back with "DUMP NO WASTE!"
 lettering and fish image
 Monolithic frame — 7565Z1



Illustrating 7565ZPT frame with 5425M2 bolted right hand vane grates and adjustable T3 back



7565Z1 monolithic 1 piece frame



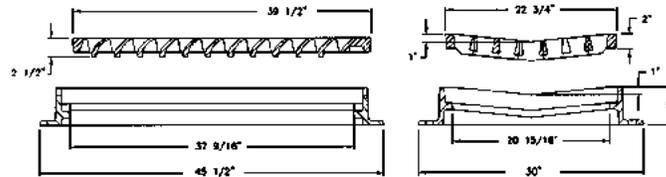
7568 CATCH BASIN CURB INLE

Heavy duty
Specify grate Type

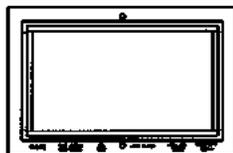
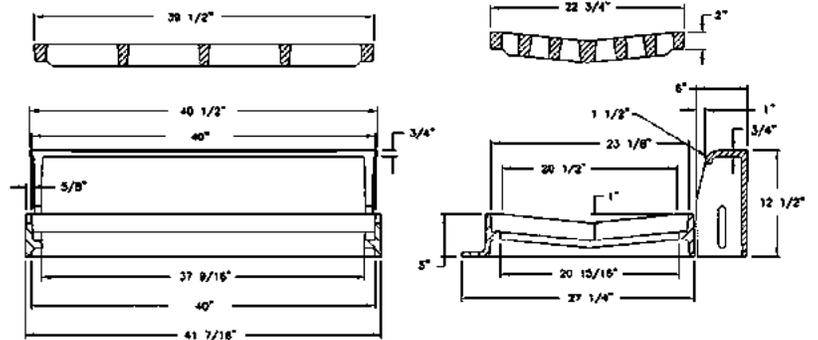
Options
Back for curb inlet
"DUMP NO WASTE!" lettering and
fish image
Multiple frame combinations



Heavy duty Standard frame, 7567M vane grate, approx. 340 sq. in open area



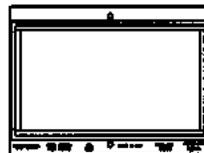
Heavy duty Center frame, 7567M2 grate,
7568 T1 back
Approx. 370 sq. in open area



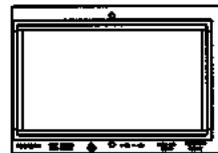
Standard Frame



CH/LH Frame



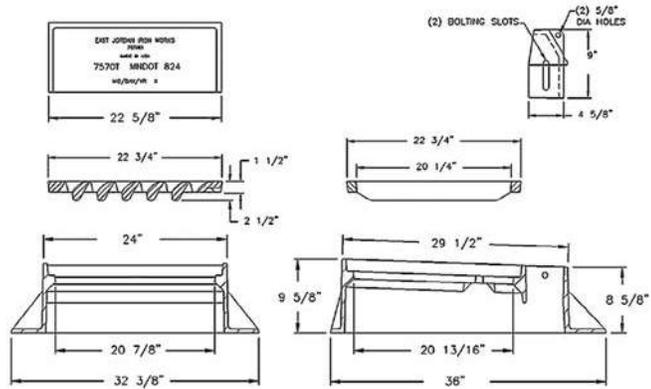
Center Frame



CH/RH Frame

7570 CATCH BASIN CURB INLET

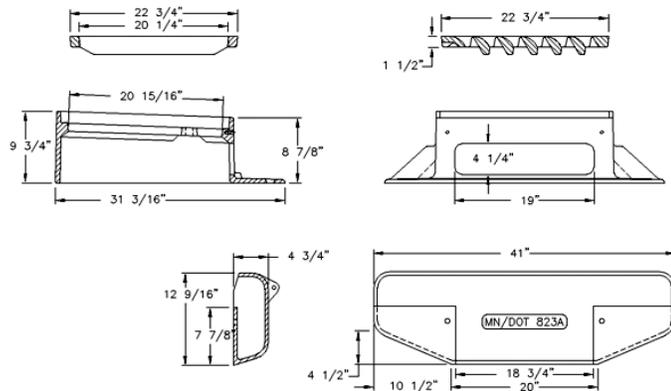
Heavy duty
 Type M1 grate
 Approximate 190 sq. in. open area



7571 CATCH BASIN CURB INLET

Heavy duty
 Approximate 190 sq. in. open area
 Uses 7570 grates

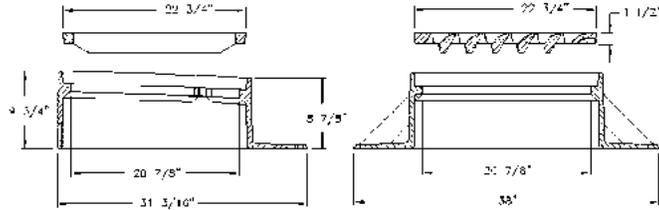
Options
 Frame with cut-off front flange
 Frame with 36" dia. full flange and cut flange



7582 CATCH BASIN INLET

Heavy duty
 With 7570 Type M1 grate
 Approximate 190 sq. in. open area
 Uses 7570 grates

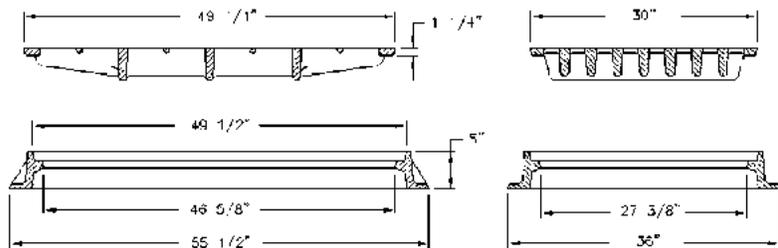
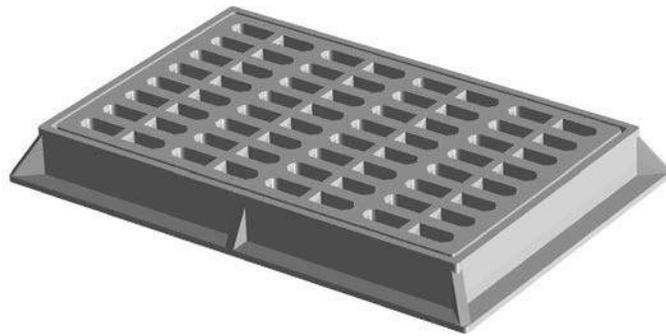
Options
 Frame with full flange
 Frame with 36" dia. full flange and cut flange



7585 CATCH BASIN INLET

Heavy duty
 With Type M grate
 Approximate 575 sq. in. open area

Options
 Extra heavy duty airport

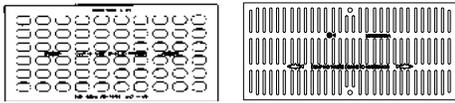


7590 CATCH BASIN INLET

Heavy duty
 Type M grate and T2 Type NS 8" height
 Approximate 415 sq. in. open area

Options

- 4", 6" 8" and 10" backs available
- "DUMP NO WASTE!" lettering and fish image
- Adjusting risers
- T10 mountable curb
- 7590M2 ADA grate
- Type M1 grate

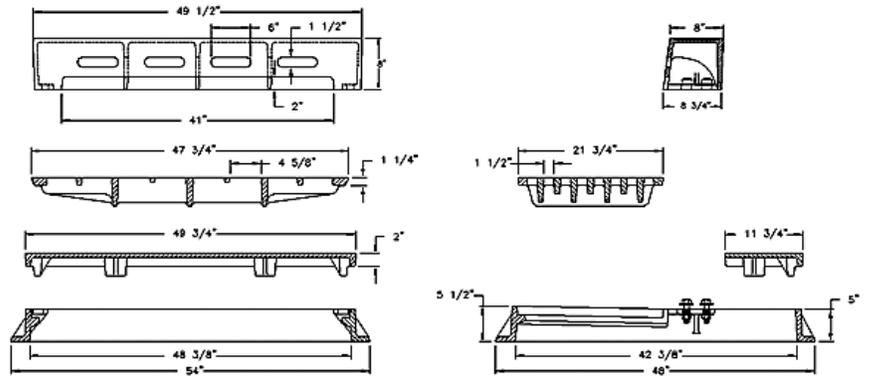


Type M1 Grate
 Approx. 338 sq. in. open area

Type M2 ADA Grate
 Heavy duty
 Approx. 244 sq. in. open area



T2 Back



7590 Catch Basin Inlet

Back Type	Back Height
T5	Curb Inlet
T6	4
T7, T11	6
T8, T12	8
T9	10

Note: All dimensions are in inches.

7591 CATCH BASIN INLET

Heavy duty
 7590 Type M grate and T8 back
 Approximate 415 sq. in. open area
 Uses 7590 grates and backs

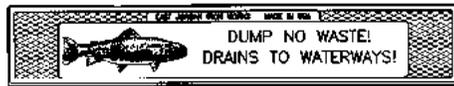
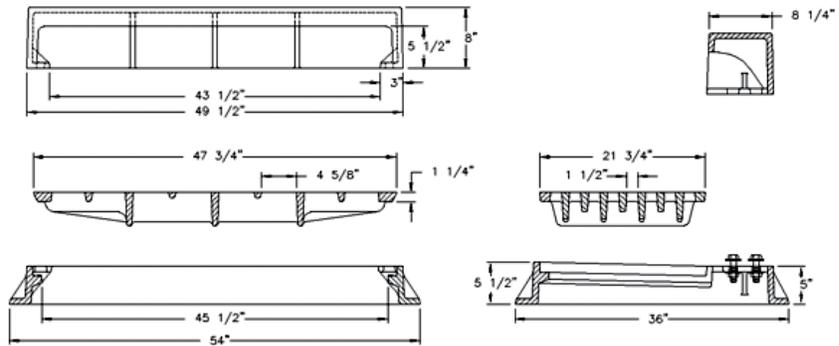
Options
 7590M2 ADA grate
 7590 Type M1 grate



7591 Catch Basin Inlet

Back Type	Back Height
T5	Curb Inlet
T6	4
T7, T11	6
T8, T12	8
T9	10

Note: All dimensions are in inches.

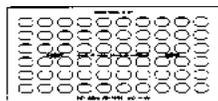


T8 Back

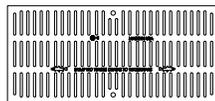
7592 CATCH BASIN INLET

Heavy duty
 With two 7590 Type M grate
 Approximate 830 sq. in. open area
 Uses 7590 grates

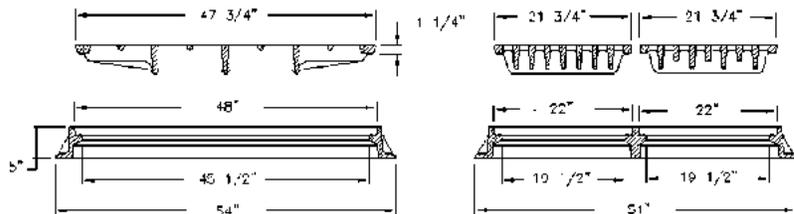
Options
 Adjusting risers
 7590 M2 ADA grate
 7590 Type M1 grate



Type M1 Grate
 Approx. 338 sq. in.
 open area



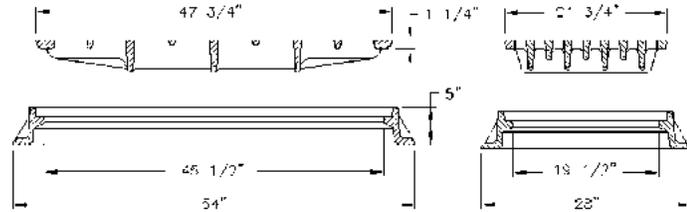
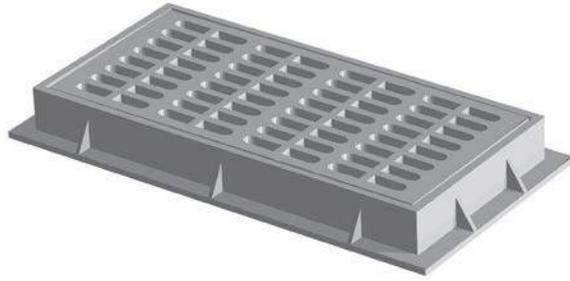
Type M2 ADA Grate
 Heavy duty
 Approx. 244 sq. in.
 open area



7593 CATCH BASIN INLET

Heavy duty
 With 7590 Type M grate
 Approximate 415 sq. in. open area
 Uses 7590 grates

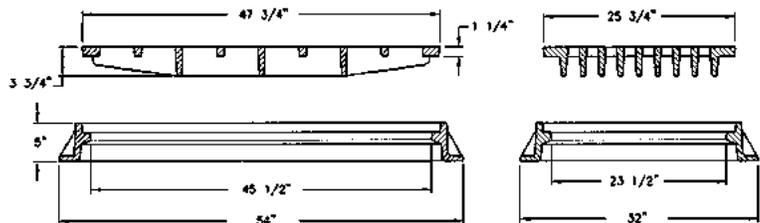
Options
 Adjusting risers
 7590 M2 ADA grate
 7590 Type M1 grate



7595 INLET FRAME & GRATE

Heavy duty
 Approximate 415 sq. in. open area

Options
 ADA grate
 9" height frame — 7595Z1
 "DUMP NO WASTE!" lettering
 Scupper frame with bolt holes



7595M2 ADA Grate
 Approx. 244 sq. in. open area

7596 CURB & GUTTER INLET

Heavy duty
 Approximate 415 sq. in. open area
 Uses 7595 grate

Options

- ADA grate
- 6" height back with "DUMP NO WASTE!" lettering and fish image — 7595T1
- 8" height back with "DUMP NO WASTE!" lettering and fish image — 7595T2

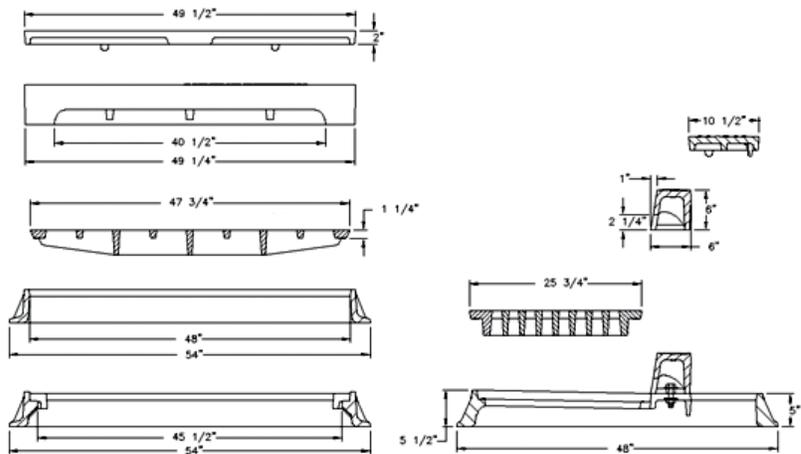


Illustrating 7596 with T1 back, 7595M1 grate and curb plate



7595M2 ADA Grate

Approx. 244 sq. in. open area



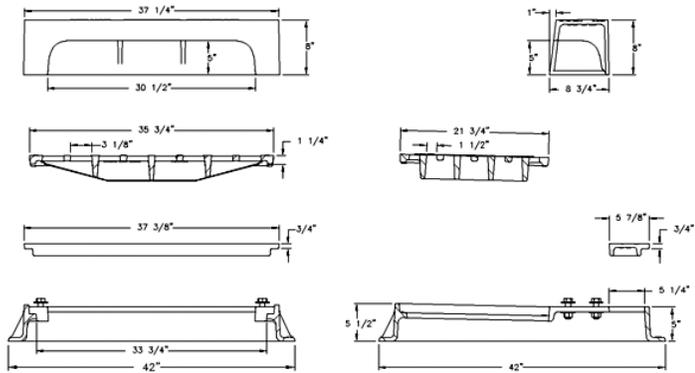
7597 CURB & GUTTER INLET

Heavy duty
 Approximate 283 sq. in. open area
 "DUMP NO WASTE!"
 lettering and fish image

Options
 6" height back — T2
 8" height back — T1



Illustrating 7597 with T1 back, M1 grate and curb plate



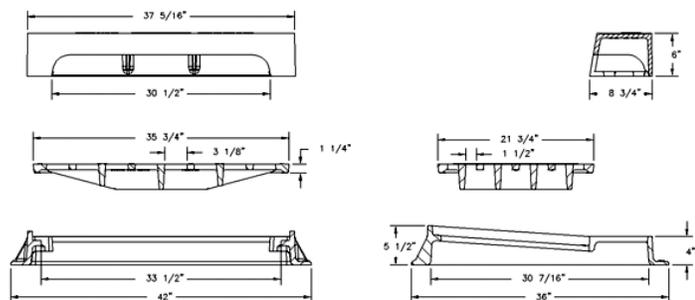
7598 CURB & GUTTER INLET

Heavy duty
 Uses 7597 grates
 Approximate 283 sq. in. open area
 "DUMP NO WASTE!"
 lettering and fish image

Options
 6" height back — T2
 8" height back — T1



Illustrating 7598Z1 frame, T2 back and 7597M1 grate



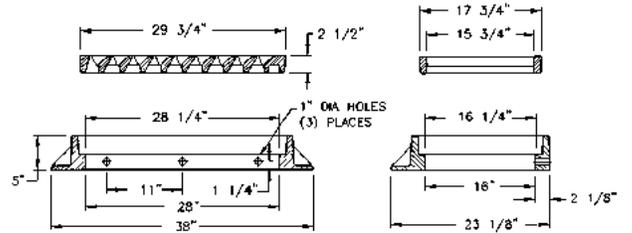
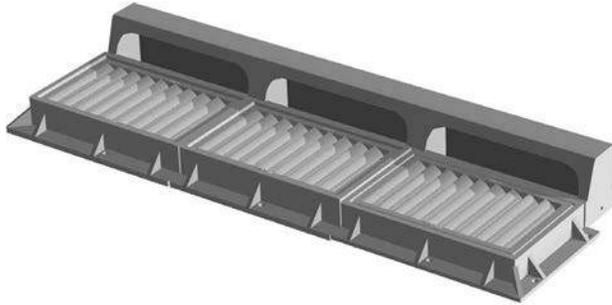
7600 CATCH BASIN SERIES, A-D

Options

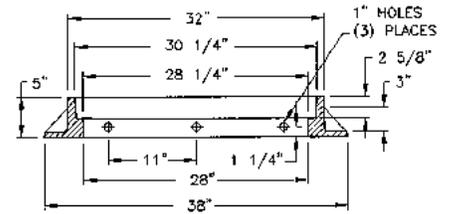
4", 6" mountable & 6", 8" barrier curbs



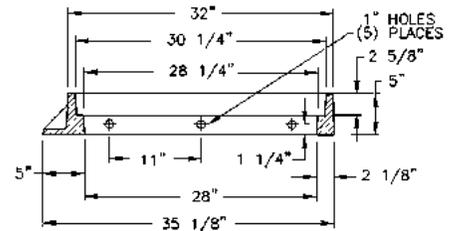
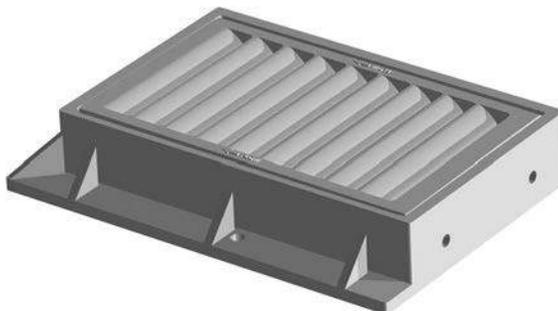
FRAME TYPES AVAILABLE



Oklahoma
Type A frame



Oklahoma
Type B left frame



7600 CATCH BASIN SERIES, A-D

Options

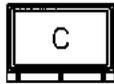
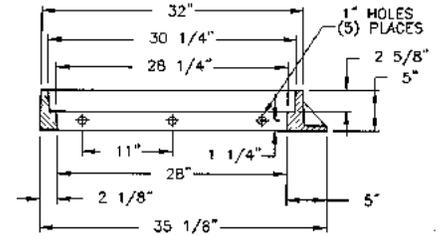
4", 6" mountable & 6", 8" barrier curbs



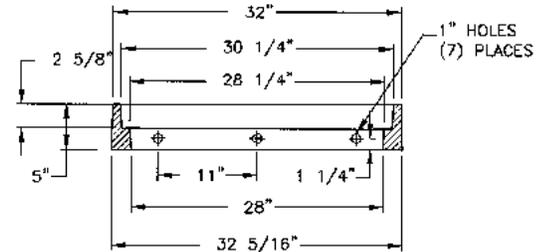
FRAME TYPES AVAILABLE



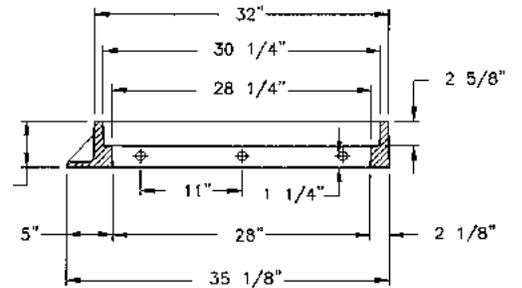
Oklahoma
Type B right frame



Oklahoma
Type C frame



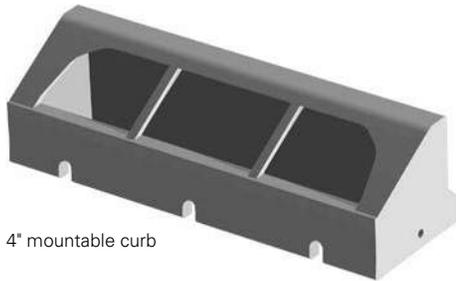
Oklahoma
Type D frame



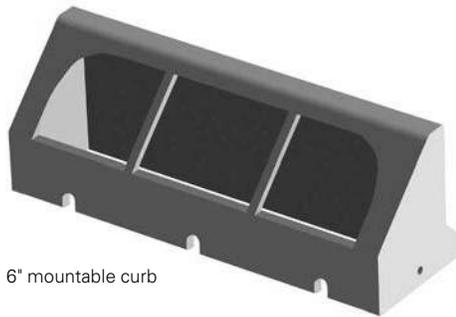
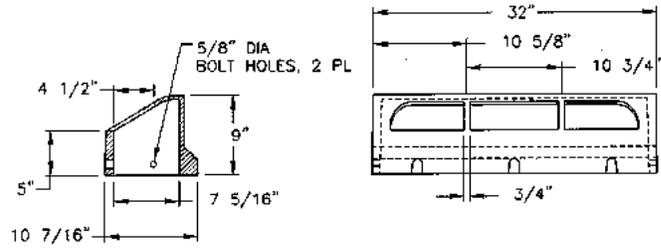
7600 CATCH BASIN SERIES, A-D

Options

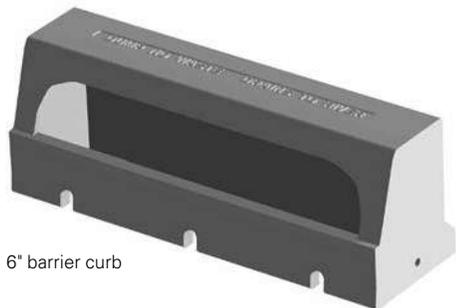
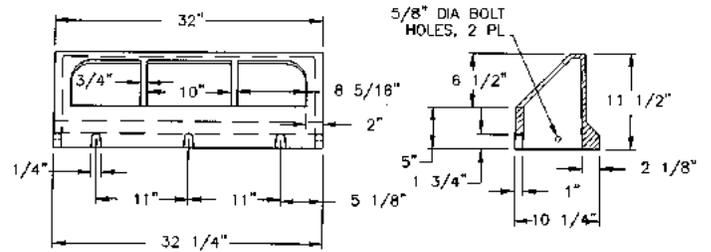
4", 6" mountable & 6", 8" barrier curbs



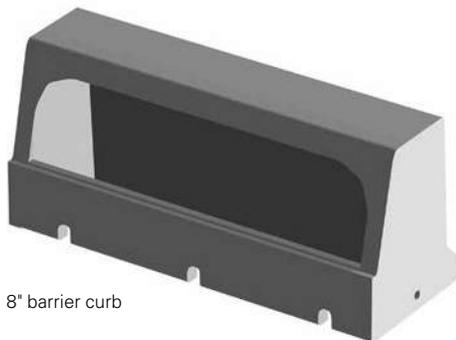
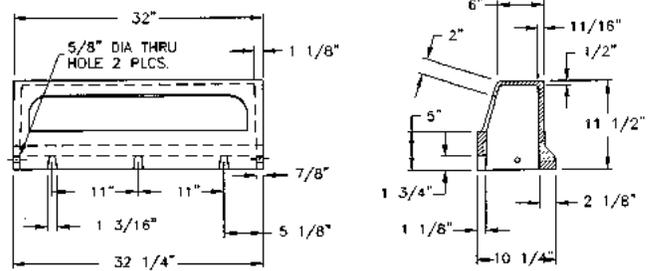
4" mountable curb



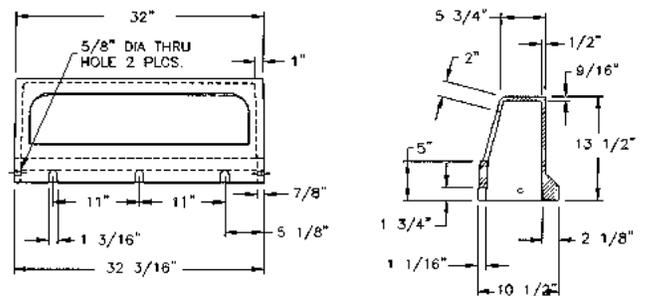
6" mountable curb



6" barrier curb



8" barrier curb

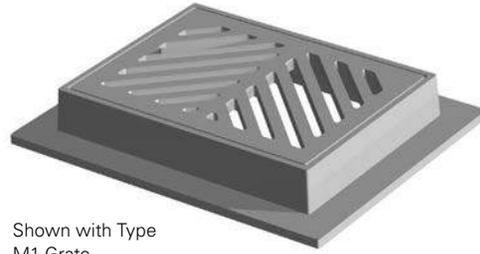


7700 CATCH BASIN INLET

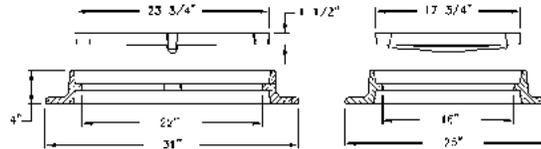
Heavy duty
Reversible frame, specify BF or TF

Options

- Solid cover
- Special lettering
- Ductile iron grates and covers
- Diagonal and center bolting
- Adjusting risers
- ADA grates

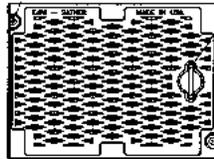


Shown with Type M1 Grate

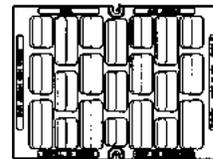


7700 Catch Basin Inlet

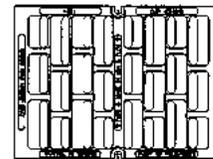
Grate Type	Open Area
M	128 sq. in.
M2 Vane	100 sq. in.
M3 Vane Bi-directional	100 sq. in.
M4 ADA	324 sq. in.
Solid Cover	N/A



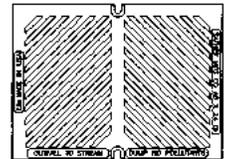
Type A Solid Cover



Type M2 Vane Grate



Type M3 Bi-directional Grate



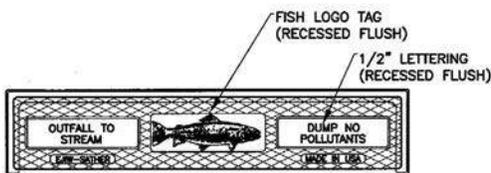
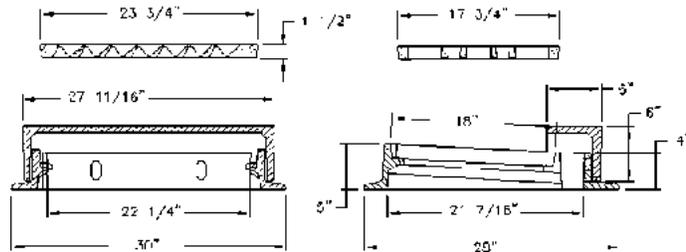
Type M4 ADA Grate

7701 CATCH BASIN CURB INLET

Heavy duty
Uses 7700 grates
Shown with Type M2 vane grate and
Type T2 6" back

Options

- T1 9" & T2 6" backs
- "OUTFALL TO STREAM DUMP NO POLLUTANTS" lettering with fish image
- Ductile iron grate and cover
- Diagonal and center bolting

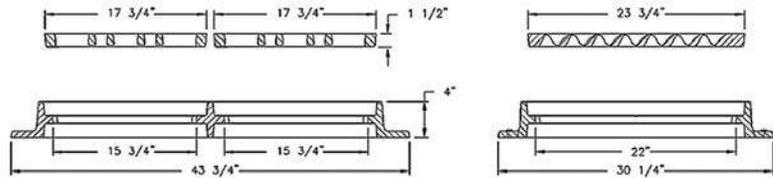


T2 Back

7705 CATCH BASIN INLET

Heavy duty
 Double unit
 Uses 7700 series grates
 Reversible frame

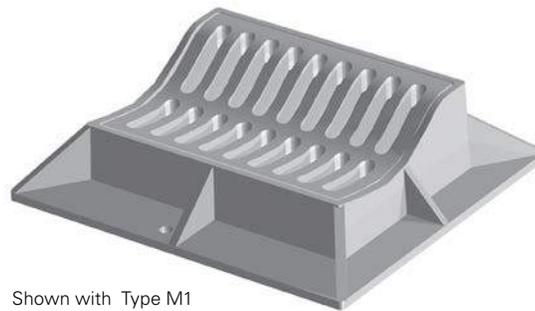
Options
 Special lettering



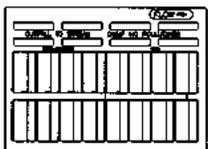
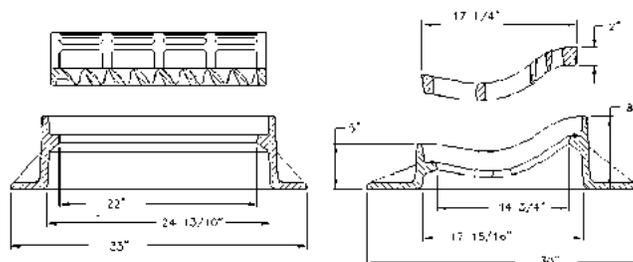
7711 ROLLED CURB FRAME & GRATE

Heavy duty
 With M1 grate
 Approximate 189 sq. in. open area

Options
 Special lettering
 LH or RH rolled vane grate
 "OUTFALL TO STREAM DUMP
 NO POLLUTANTS" lettering



Shown with Type M1 Grate



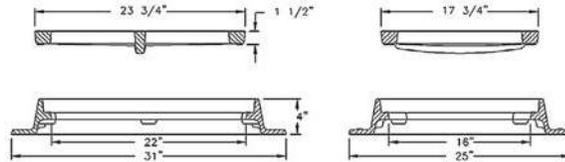
Type M3 Rolled Vane Grate

Right hand shown
 Approx. 165 sq. in.
 open area

7715 CATCH BASIN INLET

Heavy duty
Uses 7700 series grates

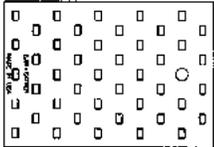
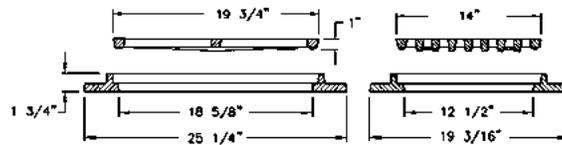
Options
Special lettering
Adjusting risers



7720 FRAME & GRATE

Light duty
Approximate 100 sq. in. open area

Options
Plain cover, drain lettering
Bolted assembly

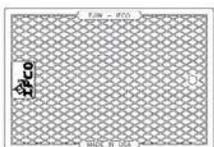
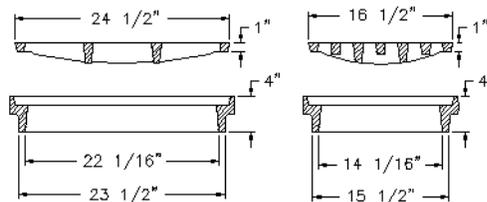


Plain Cover

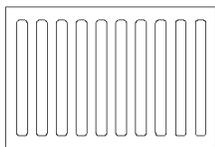
7737 CATCH BASIN

Heavy duty
Shown with Type M2 grate
Approximate 167 sq. in.
open area

Options
Solid covers
Vane grate



Solid cover

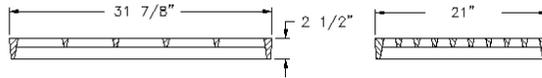


Type M1 Grate
Approx. 167 sq. in.
open area

7738 RECTANGULAR INLET GRATE

Heavy Duty
Grate only
Approximate 345 sq. in. open area

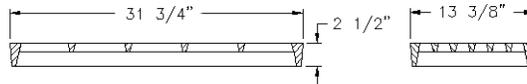
EJ recommends the use of iron frames
providing support to entire bearing surface



7739 RECTANGULAR INLET GRATE

Heavy duty
Grate only
Approximate 196 sq. in. open area

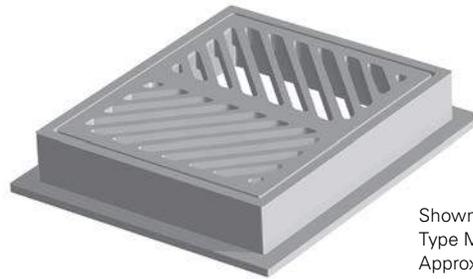
EJ recommends the use of iron frames
providing support to entire bearing surface



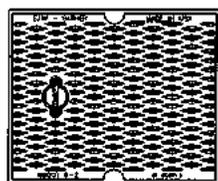
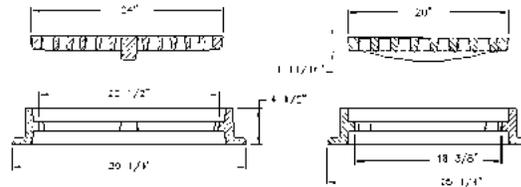
7750 FRAME & GRATE

Heavy duty
Ductile iron grates
Reversible frame

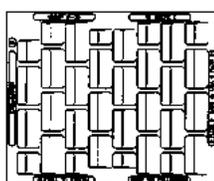
Options
Ductile iron cover
Drop handle
Diagonal and center bolting
Adjusting risers
ADA grate — V-7397



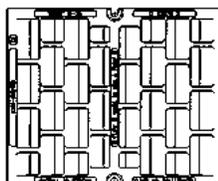
Shown with
Type M1 Grate
Approx. 185 sq. in. open area



Type A Solid Cover



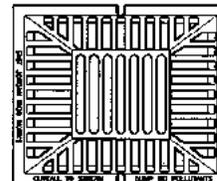
Type M2 Vane Grate
Approx. 216 sq. in.
open area



Type M3 Bi-directional Grate
Approx. 216 sq. in.
open area



Type M5 ADA Grate
Approx. 152 sq. in.
open area

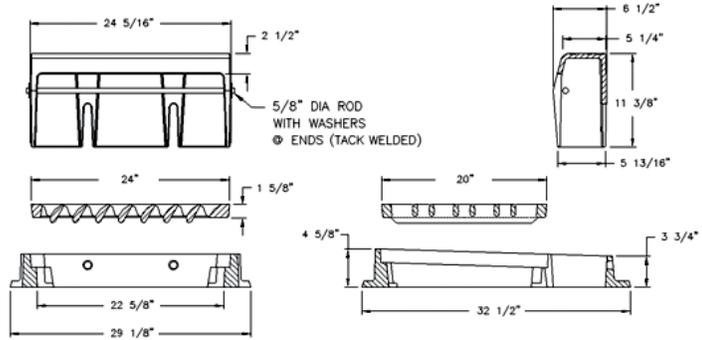


Type O Beehive Grate
Approx. 229 sq. in.
open area

7752 CURB & GUTTER INLET

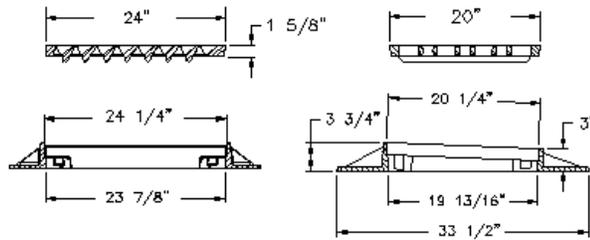
Heavy duty
 Shown with Type M grate
 Uses 7750 grates, ductile or gray iron

Options
 Grate guard



7753 ROUND BASE CATCH BASIN

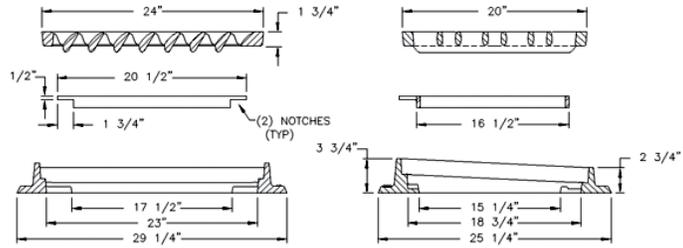
Heavy duty
 Uses 7750 grates, ductile or gray iron
 Shown with Type M1 grate



7756 CATCH BASIN FRAME

Heavy duty
 Uses EJ 7750 grates, ductile or gray Iron
 Shown with Type M1 grate

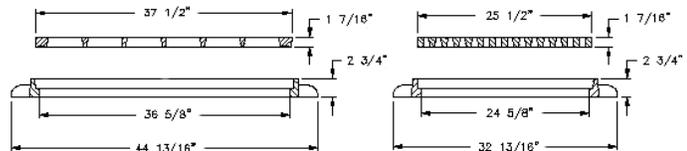
Options
 Grate guard



7761 CURB & GUTTER INLET

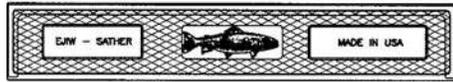
Heavy Duty
 Approximate 315 sq. in. open area

Options
 Gray or ductile iron grate
 "DUMP NO WASTE!" lettering

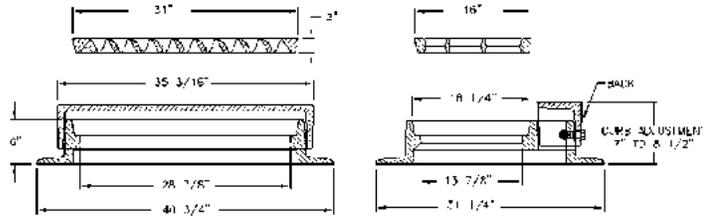


7765 CURB & GUTTER INLET

Heavy duty
 Ductile iron grate
 Fish image on 6" T1 back
 Approximate 163 sq. in. open area

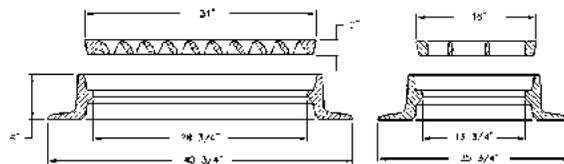


T1 Back



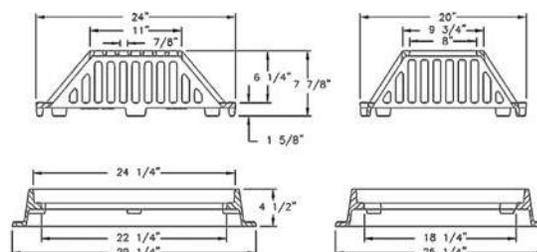
7766 CURB & GUTTER INLET

Heavy duty
 Ductile iron grate — 7765
 Approximate 163 sq. in. open area



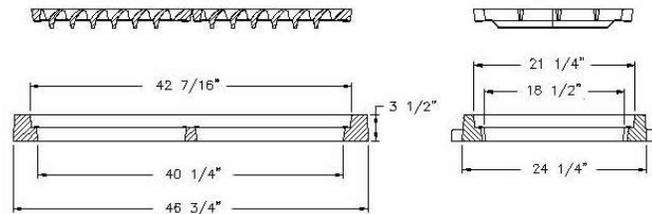
7770 CATCH BASIN

Heavy duty
 Machined bearing surfaces



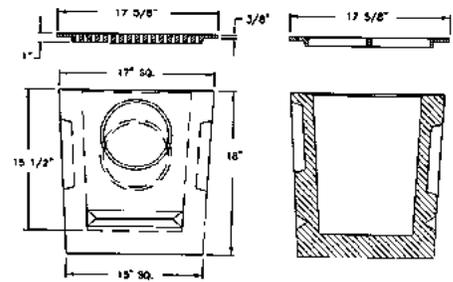
7775 CURB & GUTTER INLET

Heavy duty
 Bolted assembly
 Approximate 260 sq. in. open area



7780 CATCH BASIN

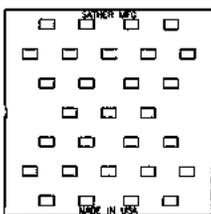
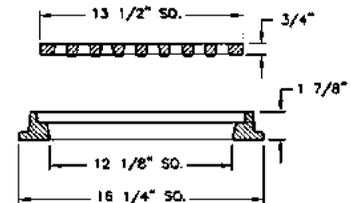
Light duty (Non-traffic)
 Approximate 163 sq. in. open area



7797 FRAME & GRATE

Light duty (Non-traffic)
 Approximate 70 sq. in. open area

Options
 Solid cover
 Bolted assembly



Solid Cover



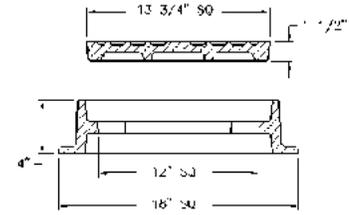
Miscellaneous Products



8001 JUNCTION BOX FRAME & COVER

Medium duty
Reversible frame

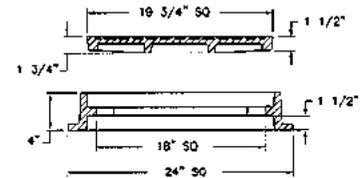
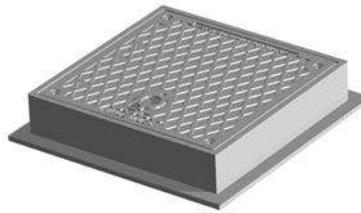
Options
Special lettered covers
Watertite assembly



8004 JUNCTION BOX FRAME & COVER

Heavy duty
Reversible frame
Watertite assembly
Lift ring
Pick bars

Options
Special lettered covers



8008 JUNCTION BOX FRAME & COVER

Heavy duty
Reversible frame
Watertite assembly
Lift ring
Pick bars

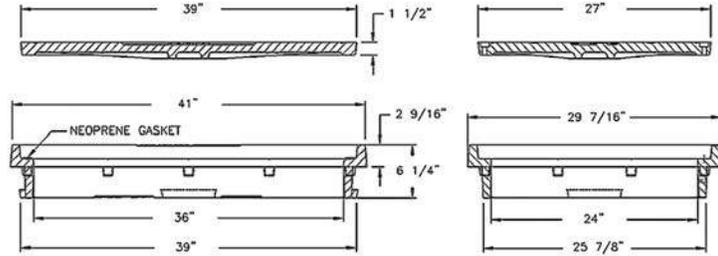
Options
Special lettered covers



8014 JUNCTION BOX FRAME & COVER

- Heavy duty
- Galvanized
- Pick hole
- Watertite assembly
- Ductile iron cover
- Bolting

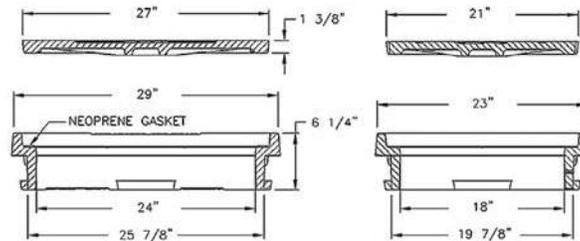
- Options
- Special lettered covers



8015 JUNCTION BOX FRAME & COVER

- Heavy duty
- Galvanized
- Watertite assembly
- Bolting

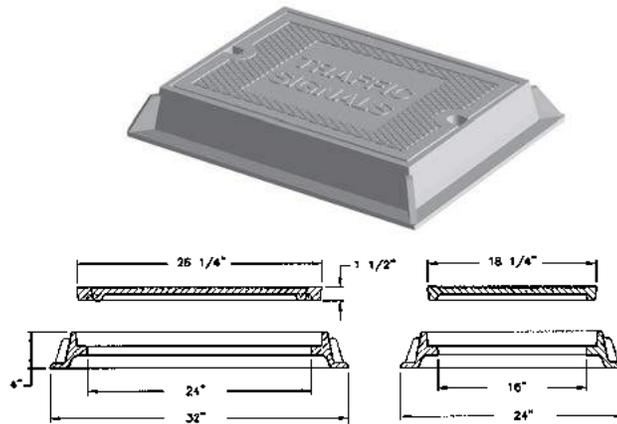
- Options
- Special lettered covers



8016 JUNCTION BOX FRAME & COVER

Heavy duty
Stackable frames

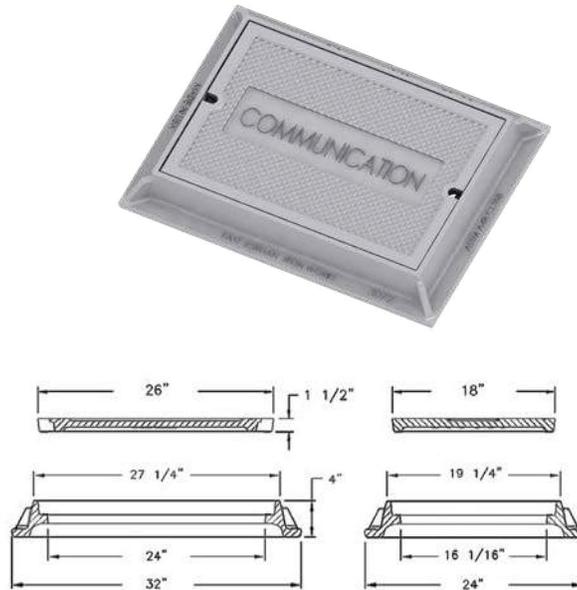
Options
Special lettered covers



8018 JUNCTION BOX FRAME & COVER

Heavy duty
Pick hole
Stackable frames

Options
Special lettered covers



8023 CATCH BASIN CURB INLET

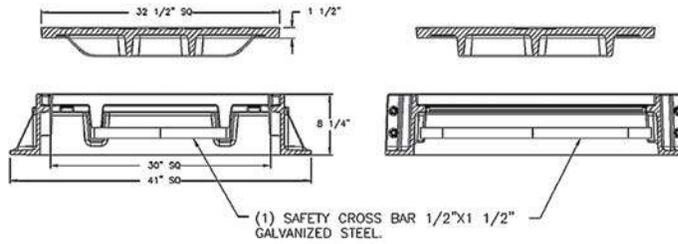
Heavy duty
Bolted down assembly

Options
Two or three cover unit
Continuous assemblies available



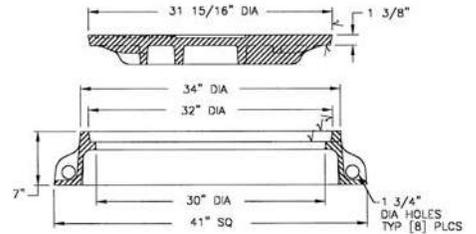
Top View

Bottom View



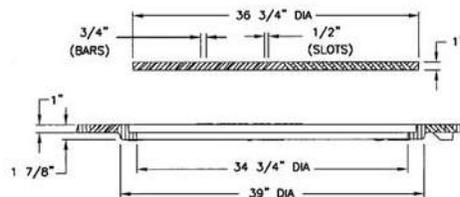
8027 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces



8032 FRAME & GRATE

Light duty (Non-traffic)
Adapter frame grate
Approximate 1729 sq. in. open area



8040 METER FRAME & COVER

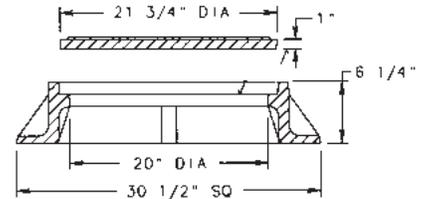
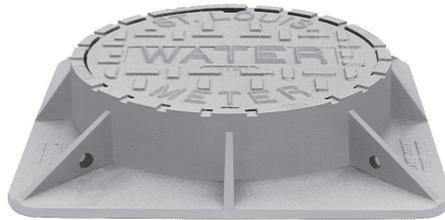
Light duty (Non-traffic)
Meter frame and cover



8045 FRAME & COVER

Heavy duty
Machined bearing surfaces
Uses 8035 covers

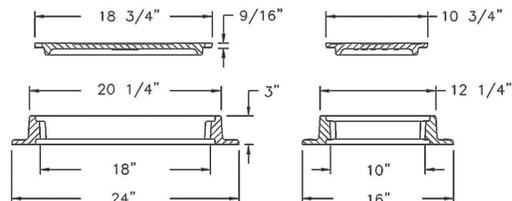
Options
Special lettered covers



8047 JUNCTION BOX FRAME & COVER

Medium duty
Ground strap
Pick bar

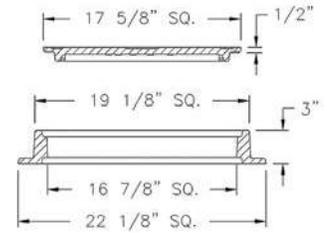
Options
Special lettered covers
Bolted assembly



8048 JUNCTION BOX FRAME & COVER

Light duty
Reversible frame
Pick holes

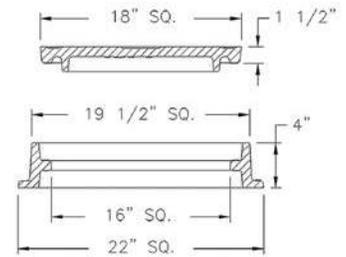
Options
Special lettered covers



8049 JUNCTION BOX FRAME & COVER

Heavy duty
Reversible frame
Pick holes

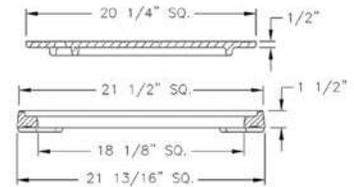
Options
Special lettered covers



8052 JUNCTION BOX FRAME & COVER

Light duty (Non-traffic)
Pick hole
Bolting

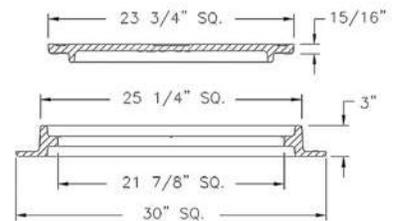
Options
Special lettered covers



8053 JUNCTION BOX FRAME & COVER

Light duty (Non-traffic)
Reversible frame
Pick holes

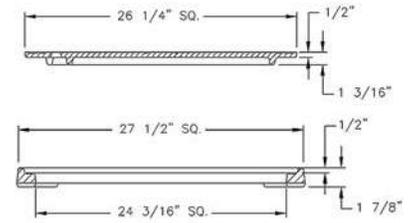
Options
Special lettered covers
Medium duty
Pick bar
Bolted assembly
Ground strap
Handle pick hole



8054 JUNCTION BOX FRAME & COVER

Light duty (Non-traffic)
 Pick hole
 Bolting

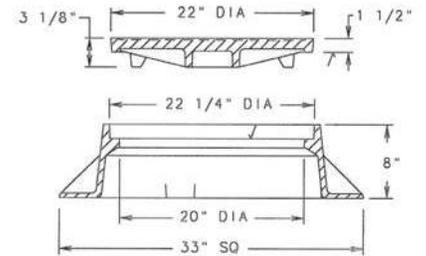
Options
 Special lettered covers



8055 FRAME & COVER

Heavy duty
 Machined bearing surfaces

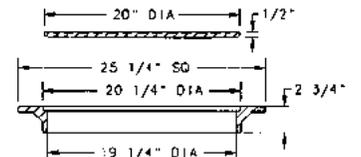
Options
 Extra heavy duty ductile iron covers
 Special lettered covers
 Gasket seal covers



8065 WATER METER FRAME & COVER

Light duty (Non-traffic)

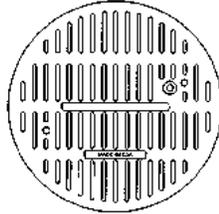
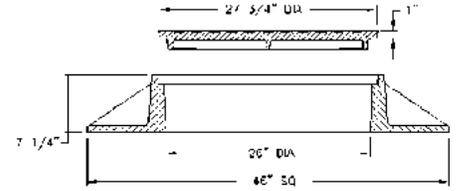
Options
 Special lettered covers



8075 FRAME & COVER

Heavy duty
Vertical and horizontal machined surfaces

Options
Grate

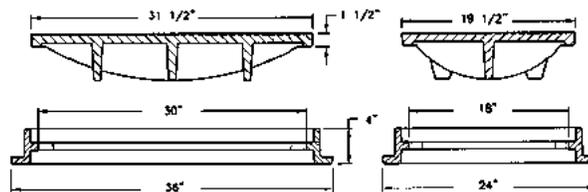


Type M Grate
Approx. 128 sq. in. open area

8083 FRAME & COVER

Extra heavy duty
Reversible frame
Ductile iron cover
Watertite assembly
Drop handles

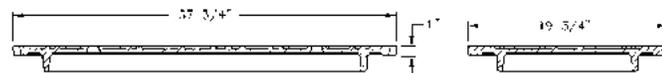
Options:
Special lettered covers
Recessed SS hex head bolts or special security bolts



8100 COVER

Medium duty
Steel frame required

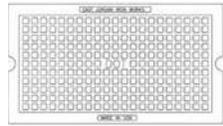
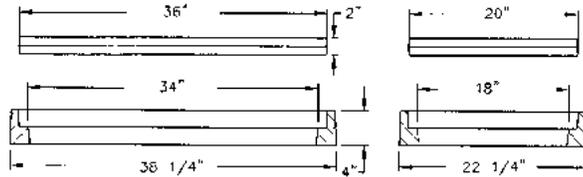
Options
Special lettered covers



8105 CATCH BASIN CURB INLET

Heavy duty
 With Type M1 grate
 Approximate 320 sq. in. open area
 "ONLY RAIN DOWN
 THE STORM DRAIN" lettering

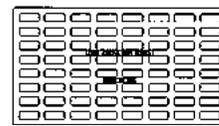
Options
 Solid cover



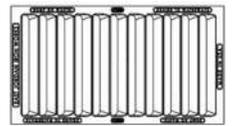
Solid Cover Heavy Duty



Type M2 Grate
 Approx. 370 sq. in.
 open area



Type M3 Grate
 Approx. 295 sq. in.
 open area



Type M4 Grate
 Heavy duty
 Approx. 312 sq. in.
 open area

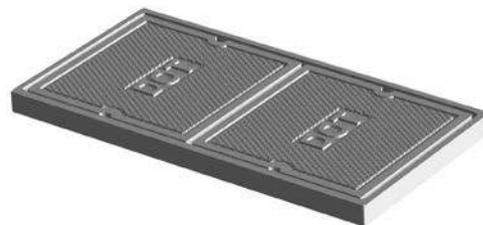
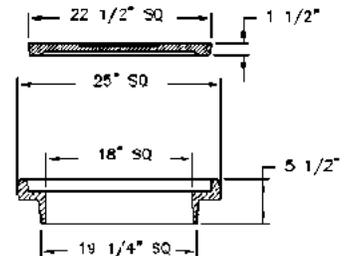
8106 JUNCTION BOX FRAME & COVER

Heavy duty
 Double unit available — 8107

Options
 Special lettered covers



Illustrating 8106



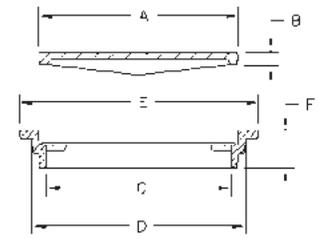
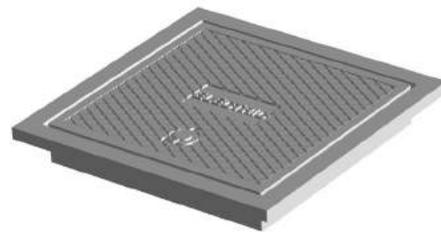
Illustrating 8107

8201 — 8233 SQUARE & RECTANGULAR COVERS & GRATES

Heavy duty
Specify cover or grate
Type 2 lift ring

Options
Special lettered covers
Hinged assembly with
safety bar — specify Type
Bolted assembly
Hasp lock

NOTE: Safety bar comes on hinged units



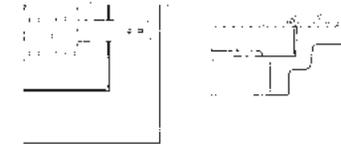
Specify Hinge Type



Concealed hinge



Heavy duty stainless steel hinge



Heavy duty hasp available

8201 — 8233 Square & Rectangular Covers & Grates

Catalog Number	A Cover Grate Size	B Cover Height	C Clear Opening	D Frame Outside	E Flange Size	F Frame Height	Open Area Sq. In.
Square Manholes							
8201	13 5/8	1 1/2	12	14 7/8	18	4	50
8204	20	1 1/2	18	22	24 1/4	4	NA
8205	21 1/2	1 1/2	20	23 1/4	26	4	155
8206	23 1/2	1 1/2	22	25	28	4	220
8208	25 3/4	1 1/2	23 1/2	27 1/2	30	4	270
8213	31 3/4	1 1/2	30	33 5/16	36 5/8	4	430
Rectangular Manholes							
8222	19 x 25	1 1/2	18 x 24	21 5/16 x 27 3/8	24 x 30	4	185
8228	25 1/2 x 31 1/2	1 1/2	24 x 30	27 1/4 x 33 1/4	30 x 36	4	350
8233*	32 x 50	1 1/2	30 x 48	34 1/4 x 52 1/4	38 x 54	4	640

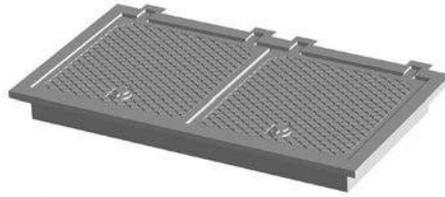
Note: All dimensions are in inches.
Type 2 lift ring will be furnished unless otherwise specified.
*Two piece cover or two piece grate

8244 — 8283 SQUARE & RECTANGULAR MANHOLE FRAME & COVER

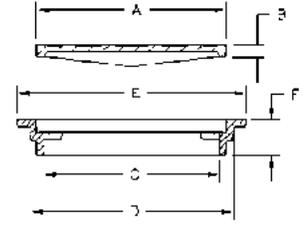
Light duty (Non-traffic)
Type 2 lift ring

Options

- Special lettered covers
- Hinged assembly with safety bar — specify type, page 279
- Bolted assembly
- Hasp lock, page 279



Illustrating 8273 with concealed hinges



NOTE:

Safety bar comes with hinged units.
Type 2 lift ring will be furnished unless otherwise specified.

8244 — 8283 Square & Rectangular Manhole frame & Cover

Catalog Number	A Cover Size	B Cover Thickness	C Clear Opening	D Frame Outside	F Frame Height	E Flange Size
Square Manholes						
8244	19 3/4 sq.	11/16	18 3/4 sq.	21 11/16 sq.	4	24 sq.
8247	25 1/4 sq.	11/16	24 sq.	28 sq.	4	30 sq.
8249	31 3/4 sq.	3/4	30 sq.	32 5/8 sq.	4	37 sq.
Rectangular Manholes						
8270	25 3/4 x 31 3/4	11/16	24 x 30	28 x 34	4	30 x 36
8271	25 3/4 x 37 3/4	5/8	23 7/8 x 35 7/8	26 3/4 x 38 3/4	4	30 x 42
8273*	25 5/8 x 51 1/4	3/4	24 x 49	27 x 52 1/2	4	30 x 55 1/2

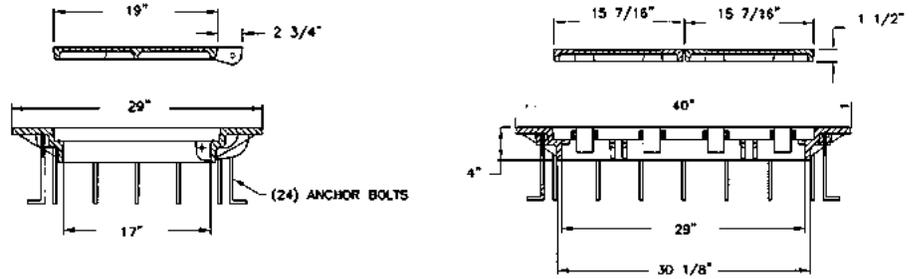
Note: All dimensions are in inches.

*Two Piece Cover

8267 FRAME & COVER

Heavy duty
Ductile iron covers
Lift rings
Anchor bolts on frame
Ductile iron safety arm

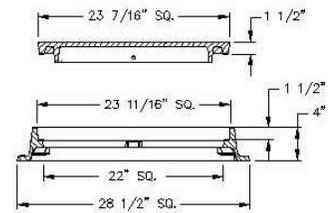
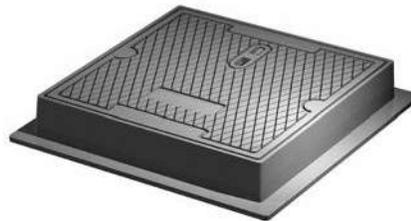
Options
Special lettered covers



8297 SQUARE JUNCTION BOX

Heavy duty

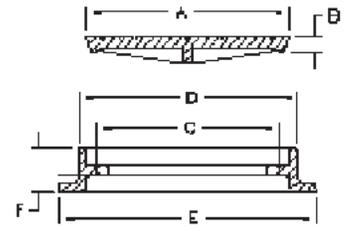
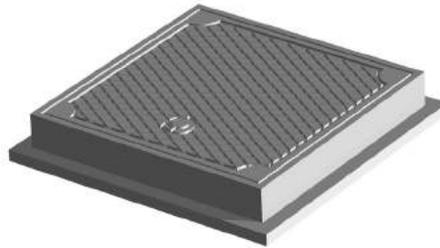
Options
Special lettered covers



8301 — 8333 SQUARE & RECTANGULAR FRAME & COVER

Heavy duty
 Reversible frame
 Type 2 lift ring

Options
 Watertite bolted assembly
 Grates



NOTE: Type 2 lift ring will be furnished unless otherwise specified.

8301 — 8333 Square & Rectangular frame & Cover

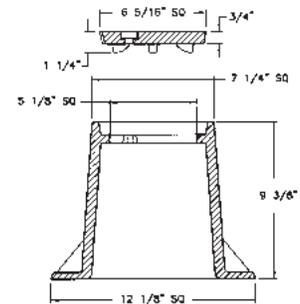
Catalog Number	A Cover Grate Size	B Cover Height	C Clear Opening	D Frame Outside	E Flange Size	F Frame Height	Open Area Sq. In.
Square Manholes							
8301	13 5/8 sq.	1 1/2	12	15 1/8 sq.	18 sq.	4	50
8304	20 sq.	1 1/2	18	21 1/4 sq.	24 sq.	4	NA
8305	21 3/4 sq.	1 1/2	20	23 1/8 sq.	26 sq.	4	155
8306	23 1/2	1 1/2	22	24 15/16 sq.	28 sq.	4	215.
8308	25 3/4	1 1/2	24	26 7/8 sq.	30 sq.	4	270
8313	31 3/4 sq.	1 1/2	30	33 1/4 sq.	36 sq.	4	425
8315	37 5/16 sq.	1 1/2	35 5/16	38 7/8 sq.	41 5/8 sq.	4	500
Rectangular Manholes							
8322	19 x 25	1 1/2	18 x 24	20 5/8 x 26 9/16	24 x 30	4	190
8328	25 1/2 x 31 1/2	1 1/2	24 x 30	27 x 33	30 x 36	4	350
8333*	32 x 50	1 1/2	30 x 48	33 3/4 x 51 7/8	38 x 54	4	640

Note: All dimensions are in inches.
 * Two Piece Cover or Two Piece Grate

8340 METER BOX & COVER

Heavy duty
 Bolted assembly

Options
 Special lettered covers
 Adjusting risers



8350 SQUARE FRAME & COVER

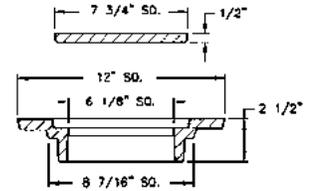
Extra heavy duty
 Bolted assembly recommended
 Due to small size, 9" x 9" loading
 not applicable

Options

- Recessed stainless steel hex bolts or special security bolts
- Special lettered covers

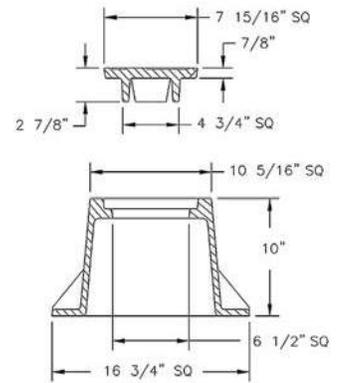
MATERIAL SPECIFICATIONS

Frame - Gray Iron ASTM A48, Class 35B
 Cover - Gray Iron ASTM A48, Class 35B



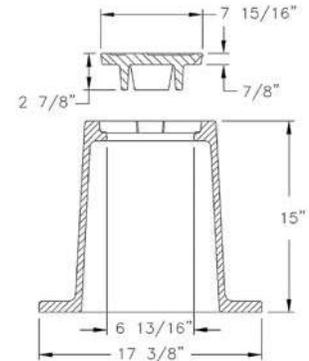
8360 MONUMENT BOX

Heavy duty
 Special lettered covers
 Adjustment risers available
 15" height frame — 8365



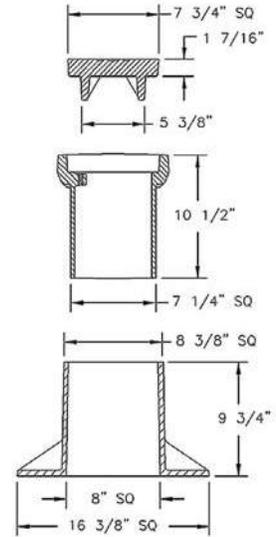
8365 MONUMENT BOX

Heavy duty
 Special lettered covers
 Adjustment risers available
 10" height frame — 8360



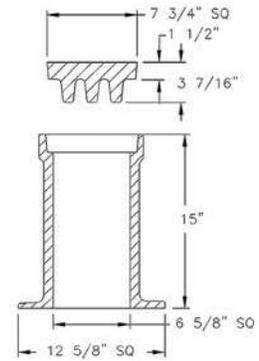
8371 MONUMENT BOX

Heavy duty
 3 piece unit
 Special lettered covers
 Adjustable frame



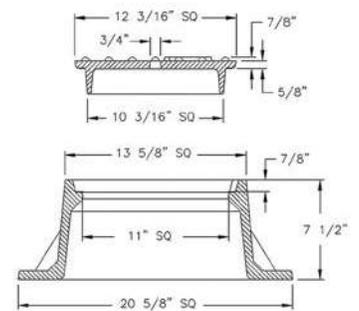
8375 MONUMENT BOX

Heavy duty
 2 piece unit
 Special lettered covers
 Bolted and unbolted



8380 MONUMENT BOX

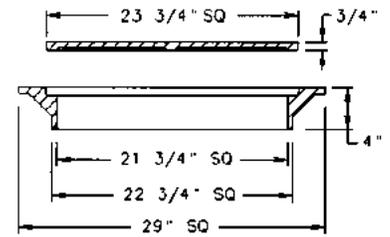
Heavy duty
 Bolted and unbolted



8390 SQUARE FRAME & COVER

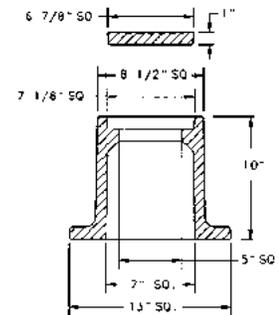
Heavy duty

Options
Special lettered covers



8396 MONUMENT BOX

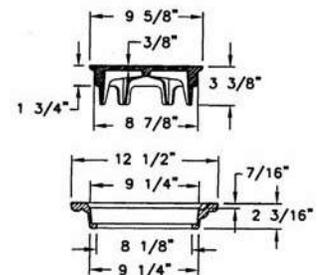
Heavy duty
Monument box



8425 VALVE BOX FRAME & COVER

Heavy duty

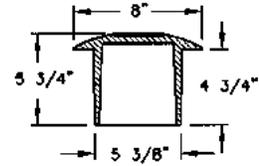
Options
Special lettered covers



V- 8457-1 MUSHROOM COVER

Heavy duty
Fits inside 6" ID pipe

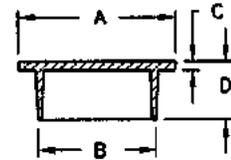
Options
"S" or "G" marking



8464 DROP-IN VALVE COVER

Heavy duty

Options
Special lettered covers



8464 Drop-In Valve Cover

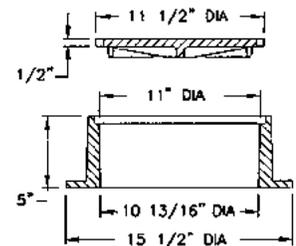
Catalog Number	Pipe I.D.	A Cover Dia.	B Skirt Dia.	C Cover Thk.	D Height
8464	6	7 3/8	5 1/2	7/16	2 3/4

Note: All dimensions are in inches.

V-8502 CLEANOUT FRAME & COVER

Light duty (Non-traffic)

Options
Special lettered covers



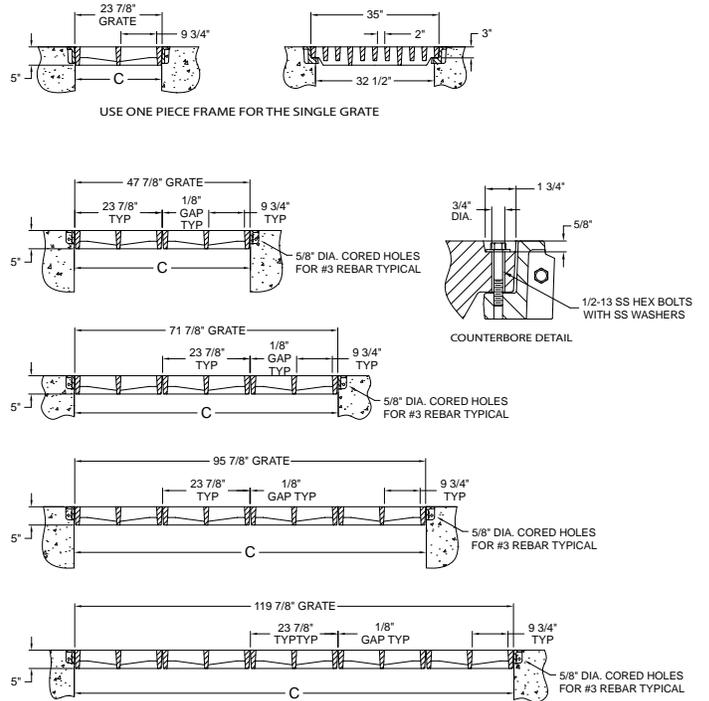
Linear Trench Grates



5436 FRAME, GRATE, AND COVER

Airport extra heavy duty
 Ductile iron
 385 sq. in. of open area per grate

- Options
- Bolting
- Custom lettering
- One piece top flange frame — 5436Z5
- Modular/expandable top flange frame



Caution: Do not disassemble bolted grates before setting sections in concrete

5436 Standard Drainage Inlet, Frame and Grate Assembly Series Options

Catalog Number	Clear Opening	Grate Open Area Sq. In.
00543633B03—Single Grate	23 3/4 x 32	385
00543604—2 Grate	48 1/8 x 32 1/2	769
00543606—3 Grate	72 1/8 x 32 1/2	1155
00543608—4 Grate	96 1/4 x 32 1/2	1538
00543734B01—5 Grate	120 1/8 x 38 7/8	1930

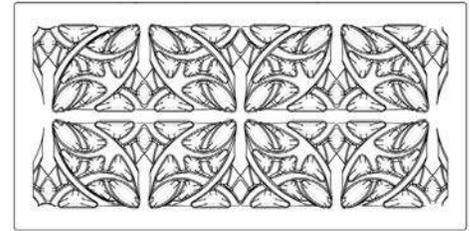
Note: All dimensions are in inches.

ARTISTIC TRENCH GRATES

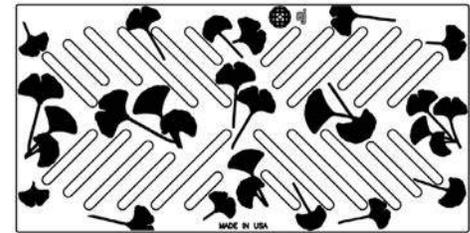
Surface drainage for dynamic public spaces require a unique solution. Make an impression with our cast iron ADA designer trench grates.

Patterns that coordinate with our exclusive tree grates are cast in 24" lengths, 1-1/2" seat. Optional 6950 cast iron frames are available in 24", 36" and 48" lengths.

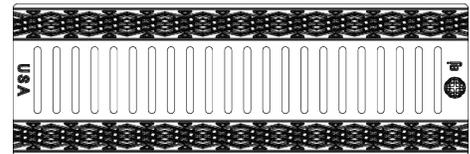
For security, bolted trench grate units are assembled in 24" sections using stainless steel 1/2" hex bolts and special lock washers. Call for additional widths.



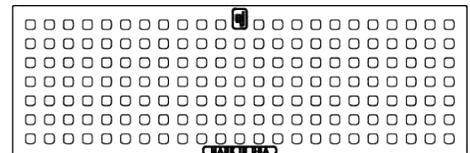
6873 Garland 12" x 24"



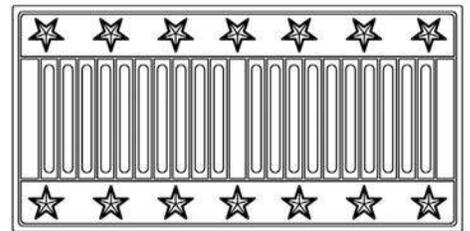
6883 Ginkgo 12" x 24"



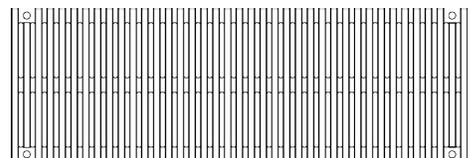
6851M Metropolis 8" x 24"



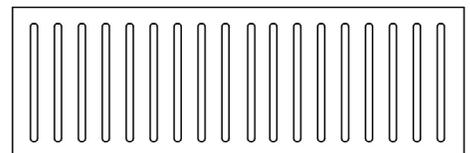
6898M Manhattan 8" x 24"



6893 Patriot 12" x 24"



6861M Trench Grate 8" x 24"



V7381 Trench Grate 8" x 24"

Artistic Trench Grates Series

Series Name	Series	Size	Options	Load Rating
Metropolis	6851M	8" x 24" (203 x 610 mm)	Security bolting	Heavy duty
Ginkgo	6883	12" x 24" (305 x 610 mm)	Security bolting	Heavy duty
Garland	6873	12" x 24" (305 x 610 mm)	Security bolting	Medium duty
Patriot	6893	12" x 24" (305 x 610 mm)	Security bolting	Heavy duty
Manhattan	6896M	4" x 24" (102 x 610 mm)		Non-traffic
Manhattan	6897M	6" x 24" (152 x 610 mm)		Non-traffic
Manhattan	6898M	8" x 24" (203 x 610 mm)		Non-traffic
Pedestrian	V7381	8" x 24" (203 x 610 mm)	Security bolting	Heavy duty
Pedestrian	V7382	10" x 24" (254 x 610 mm)	Security bolting	Heavy duty
Pedestrian	V7383	12" x 24" (305 x 610 mm)	Security bolting	Heavy duty
Pedestrian	V7384	14" x 24" (356 x 610 mm)	Security bolting	Heavy duty
Pedestrian	V7385	17" x 24" (432 x 610 mm)	Security bolting	Heavy duty
Pedestrian	V7386	20" x 24" (508 x 610 mm)	Security bolting	Heavy duty
Pedestrian	6861M	8" x 24" (203 x 610 mm)	Security bolting	Heavy duty
Pedestrian	6932M	9" x 36" (229 x 914 mm)	Security bolting	Heavy duty

6900 LINEAR TRENCH DRAINAGE

Airport Extra Heavy Duty
Holes in rail for rebar

Options

- Top flange and angle style rails
- 24" top flange rail length
- 24 and 48" angle rail length
- Bolting



Top flange style rail

Note: Rebar not supplied



Angle style rail

6900 Trench Frame 'Rail' and grate Options

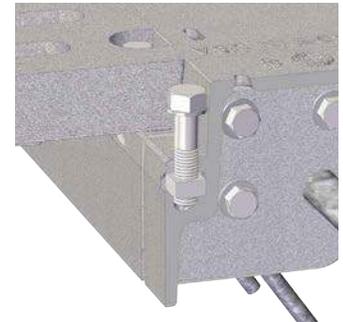
Catalog Number	Trench Width	Sq. In. of Opening per Linear Foot
6901M	6	29
6902M2DI	8	33
6903M2DI	10	40
6904M2DI	12	49
6905M2DI	15	66
6906M3M4DI	18	90
6908M4DI	24	102
6909M1DI	30	254
6910M2DI	32	138
6912M	48	248

Note: All dimensions are in inches.

Trench frame and grate with EON LOCK® security feature

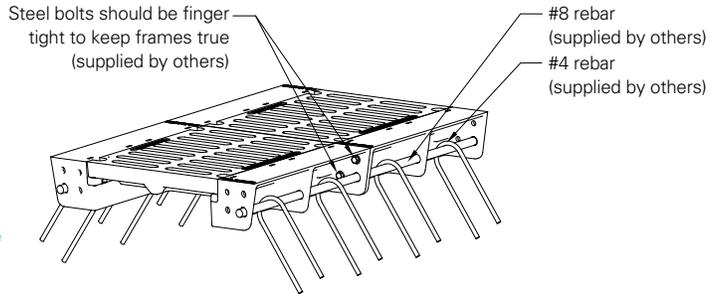
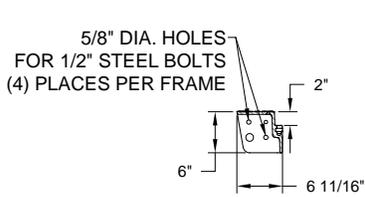
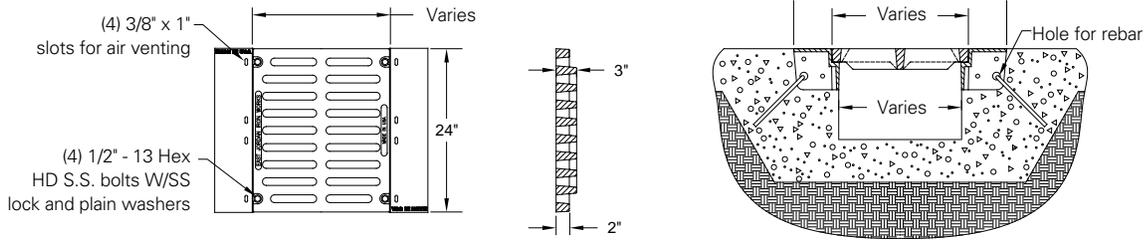


EON LOCK® square nut out horizontally

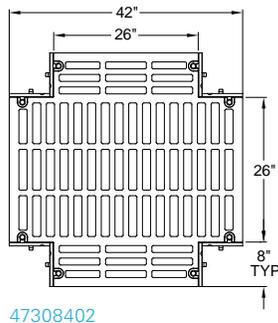
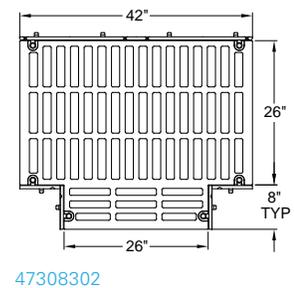
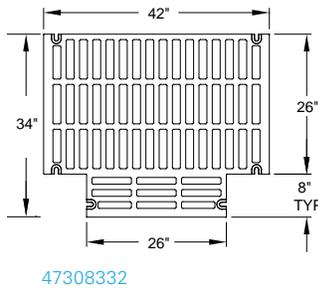
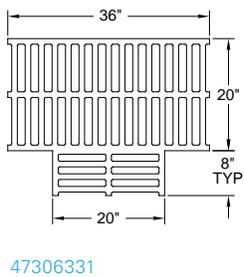
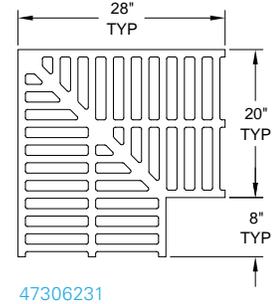
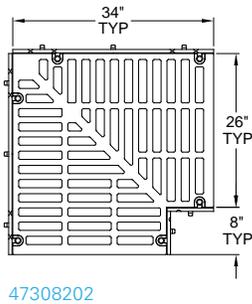
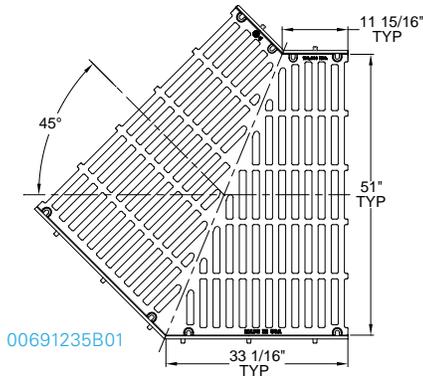


EON LOCK® square nut in horizontally

6900 LINEAR TRENCH DRAINAGE (CONTINUED)



Caution: Do not disassemble bolted grates before setting sections in concrete



6950 TRENCH GRATE & FRAME SERIES

Heavy duty

Available bolted or unbolted (standard)

Standard trench grates are furnished in
23 7/8" lengths

Frames are available in 24", 36" and
48" lengths

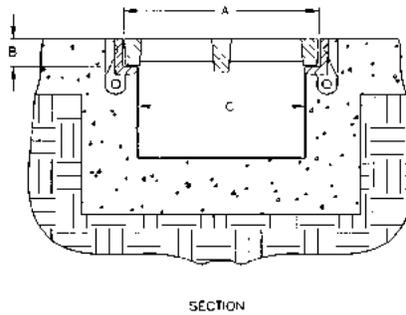
Bolted trench grate units are assembled in
24" sections using stainless steel 1/2" hex
bolts and special lock washers

Solid covers available



Standard 48" Length Illustrated

Caution: Do not disassemble bolted
grates/covers before setting frame/grate
or cover sections in concrete.



6950 Series, Angle Style Frame and Grate Options*

Catalog Number	Trench Width	Grate Width	Open Area Sq. In/Ft
6951	6	8	23
6952	8	10	34
6953	10	12	45
6954	12	14	56
6955	15	17	73
6956	18	20	89
6957	21	23	106
6958	24	26	122

Note: All dimensions are in inches.

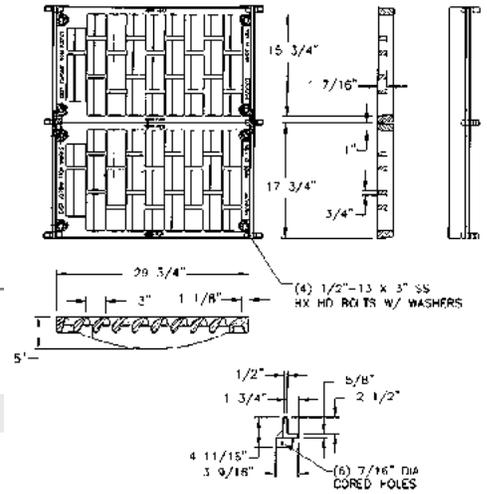
* See product drawings for load ratings

6970 BOLTED VANE STYLE TRENCH ASSEMBLY

Heavy duty
 Available in 18" and 36" assemblies
 Riser frame available



18" Assembly



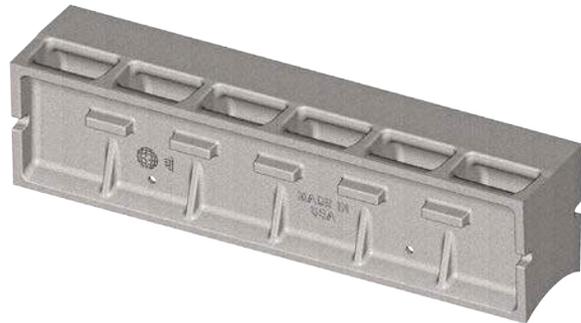
6970 Series

Assembly Length	Open Area per Assembly/Sq. In
18	186
36	372

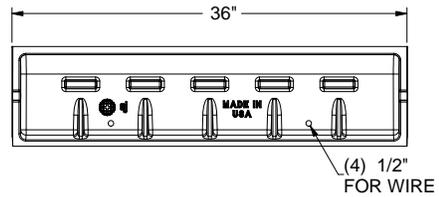
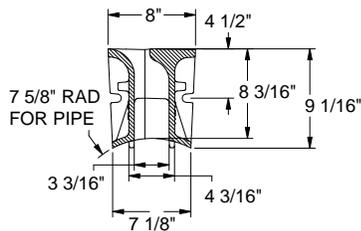
Note: All dimensions are in inches.

6979 LINEAR SLOTTED DRAIN VANE GRATE

Airport extra heavy duty
 9" tall
 Vane style grate
 Fits into slot cut into PVC pipe
 Allows for capture of surface water between catch basins



Cross section view



V-7300 TRENCH GRATE & FRAME SERIES

Heavy duty

Standard trench grates are furnished in 23 7/8" lengths

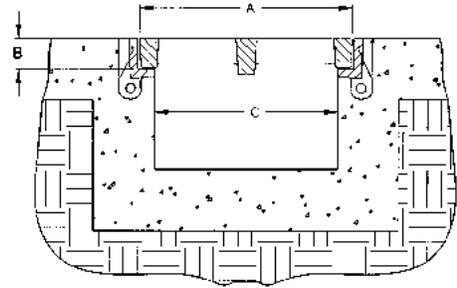
Frames are available in 24", 36" and 48" lengths

Trench frame ends available

Specify trench length and part number of desired trench width (dimension "C")

V-7300 Trench Grate & Frame Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Open Area Sq. In/Ft.
V-7301	8	1 1/2	6	42
V-7302	10	1 1/2	8	57
V-7303	12	1 1/2	10	64
V-7304	14	2	12	78
V-7305	17	2	15	99
V-7306	20	2	18	120
V-7307	23	2	21	133
V-7308	26	2	24	154
V-7309	30	2 1/2	27	182
V-7310	33	2 1/2	30	190
V-7311	36	2 1/2	33	211
V-7312	39	2 1/2	36	232
V-7313	45	2 1/2	42	266
V-7314	51	2 1/2	48	305



V-7300 & V-7320

Note: All dimensions are in inches.

V-7320 BOLTED TRENCH GRATE & FRAME SERIES

Heavy duty

Bolted trench grate units are assembled in 24" sections using stainless steel 5/8" hex bolts and flat washers

Trench frame ends available

Specify trench length and part number of desired trench width (dimension "C")

Caution: Do not disassemble bolted grates before setting frame/grate sections in concrete.



See drawing in V-7300 series for measurement reference drawing

V-7320 Bolted Trench Grate & Frame Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Open Area Sq. In/Ft.
V-7322	11	1 1/2	8	63
V-7325	18	2	15	105
V-7329	30	2 1/2	27	180
V-7330	33	2 1/2	30	196
V-7331	36	2 1/2	33	210
V-7332	39	2 1/2	36	231
V-7333	45	2 1/2	42	266
V-7334	51	2 1/2	48	305

Note: All dimensions are in inches.

V-7340 CROSS DRAINAGE TRENCH GRATE & FRAME SERIES

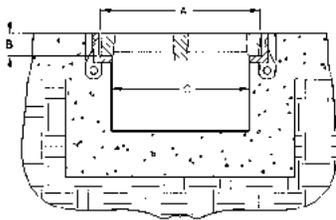
Heavy duty

Designed for cross-street drainage with slot openings perpendicular to traffic (Type C)

Standard trench grates are furnished in 23 7/8" lengths

Frames are available in 24", 36" and 48" lengths

Specify trench length and part number of desired trench width (dimension "C")



V-7340 & V-7360

V-7340 Cross Drainage Trench Grate & Frame Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Open Area Sq. In./Ft.
V-7341	8	1 1/2	6	40
V-7342	10	1 1/2	8	50
V-7343	12	1 1/2	10	64
V-7344	14	2	12	80
V-7345	17	2	15	93
V-7346	20	2	18	115
V-7347	23	2	21	124
V-7348	26	2	24	154
V-7349	30	2 1/2	27	162
V-7350	33	2 1/2	30	183
V-7352	39	2 1/2	36	216
V-7353	45	2 1/2	42	250
V-7354	51	2 1/2	48	290

Note: All dimensions are in inches.

V-7360 CROSS DRAINAGE BOLTED TRENCH GRATE & FRAME SERIES

Heavy duty

Designed for cross-street drainage with slot openings perpendicular to traffic (Type C)

Bolted trench grate units are assembled in 24" sections using stainless steel 5/8" hex bolts and flat washers

Specify trench length and part number of desired trench width (dimension "C")

Caution: Do not disassemble bolted grates before setting frame/grate sections in concrete.



See drawing in V-7340 series for measurement reference drawing

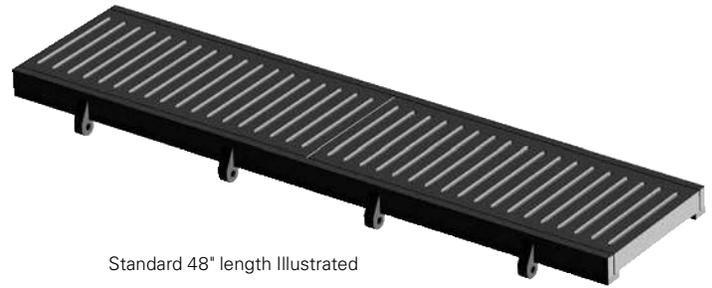
V-7360 Cross Drainage Bolted Trench Grate & Frame Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Open Area Sq. In./Ft.
V-7361	9	1 1/2	6	45
V-7362	11	1 1/2	8	63
V-7363	13	1 1/2	10	73
V-7364	15	2	12	87
V-7365	18	2	15	101
V-7366	21	2	18	120
V-7367	24	2	21	138
V-7368	27	2	24	160
V-7369	30	2 1/2	27	162
V-7370	33	2 1/2	30	183
V-7373	45	2 1/2	42	250

Note: All dimensions are in inches.

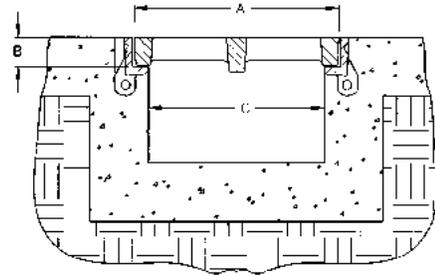
V-7380 ADA TRENCH GRATE & FRAME SERIES

Heavy duty
 ADA compliant
 Available bolted or unbolted (standard)
 Designed with 3/8" slot openings
 Standard trench grates are furnished in 23 7/8" lengths
 Frames are available in 24", 36" and 48" lengths
 Specify trench length and part number of desired trench width (dimension "C")
 Bolted trench grate units are assembled in 24" sections using stainless steel 5/8" hex bolts and flat washers



Standard 48" length Illustrated

Caution: Do not disassemble bolted grates before setting frame/grate sections in concrete.



V-7380 & V-7390

V-7380 ADA

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Open Area Sq. In./Ft.	Specify Trench Frame
V-7381	8	1 1/2	6	21	
V-7382	10	1 1/2	8	28	6950
V-7383	12	1 1/2	10	29	
V-7384	14	2	12	39	
V-7385	17	2	15	48	6900
V-7386	20	2	18	58	

Note: All dimensions are in inches.

V-7380 ADA Bolted Assemblies

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Open Area Sq. In./Ft.
V-7381-20	9	1 1/2	6	21
V-7382-20	11	1 1/2	8	28
V-7383-20	13	1 1/2	10	32
V-7384-20	15	2	12	36
V-7385-20	18	2	15	48
V-7386-20	21	2	18	58

Note: All dimensions are in inches.

V-7500 TRENCH COVER & FRAME SERIES

Heavy duty

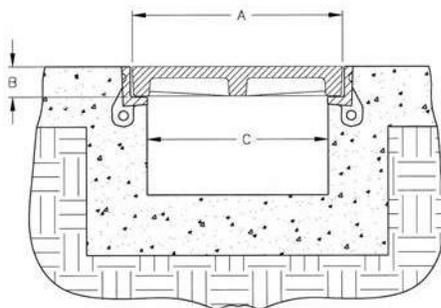
Standard trench covers are furnished in

23 7/8" lengths

Frames are available in 24", 36" and

48" lengths

Specify trench length and part number of desired trench width (dimension "C")



V-7500 & V-7520

V-5700 Trench Cover & Frame Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Pick Type	Specify Trench Frame
V-7504	14	2	12	Pick Hole	6900
V-7508	26	2	24	Pick Bar	
V-7509	30	2 1/2	27	Pick Bar	
V-7510	33	2 1/2	30	Pick Bar	V-7300 48" Long Only
V-7512	39	2 1/2	36	Pick Bar	
V-7513	45	2 1/2	42	Pick Bar	
V-7514	51	2 1/2	48	Pick Bar	

Note: All dimensions are in inches.

V-7520 BOLTED TRENCH COVER & FRAME SERIES

Bolted trench cover units are assembled in 24" sections using stainless steel 5/8" hex bolts and flat washers

Specify trench length and part number of desired trench width (dimension "C")

Caution: Do not disassemble bolted grates before setting frame/grate sections in concrete.



See drawing in V-7500 series for measurement reference drawing

V-7520 Bolted Trench Cover & Frame Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Pick Type
V-7530	33	2 1/2	30	Pick Bar
V-7532	39	2 1/2	36	Pick Bar
V-7533	45	2 1/2	42	Pick Bar
V-7534	51	2 1/2	48	Pick Bar

Note: All dimensions are in inches.

V-7600 30" TRENCH GRATE SERIES

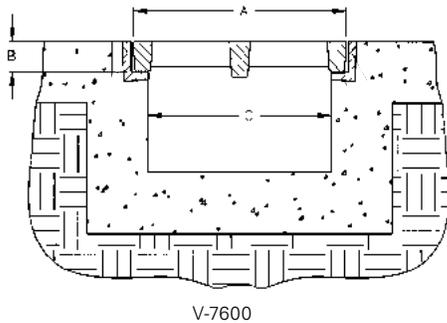
Heavy duty

Trench grates are furnished in 30" lengths

Grates are designed to fit popular steel angle sizes

Build your trench using trench width and steel angle iron frame per dimensions shown. Maintain dimension "C" and the opening between the top of the frames will be dimension "A" + 1/4". The extra 1/4" width at top represents necessary tolerance for proper grate fit.

Specify trench length and part number of desired trench width (dimension "C")



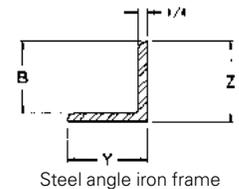
V-7600 30" Trench Grate Series

Catalog Number	A Grate Width	B Seat Depth	C Trench Width	Grate Length
V-7601	8 3/4	1 1/2	6	30
V-7602	10 3/4	1 1/2	8	30
V-7603	12 3/4	1 1/2	10	30
V-7604	15 1/4	1 3/4	12	30
V-7605	18 1/4	1 3/4	15	30
V-7607	24 1/4	1 3/4	21	30
V-7608	27 1/4	1 3/4	24	30

Note: All dimensions are in inches.

Steel Angle Frame

B	Y	Z
1 1/2	1 3/4	1 3/4
1 3/4	2	2
2 3/4	2	3



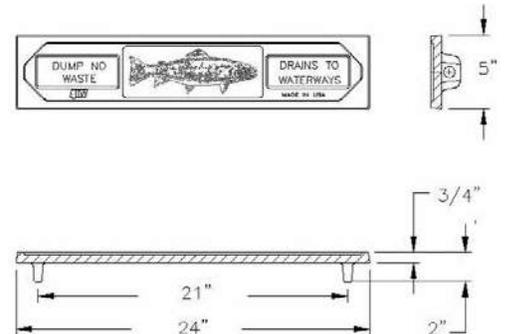
Note: All dimensions are in inches.

7001 CURB PLATE

Used in sidewalk above a trench grate

Embedded into concrete during construction

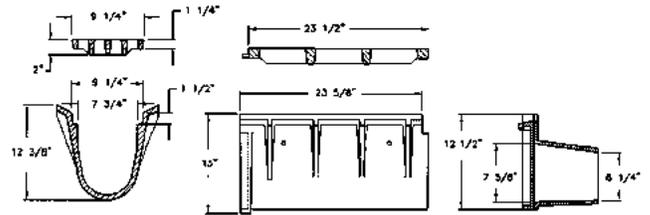
Customized messages available



7743 GUTTER INLET WITH END OUTLET

Heavy duty
 Approximate 94 sq. in. open area
 Expandable to any length

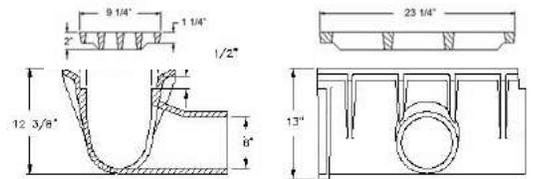
Options
 Adjusting risers
 Optional end caps



7744 GUTTER INLET WITH SIDE OUTLET

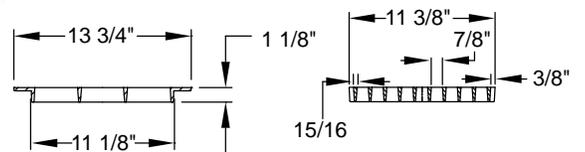
Heavy duty
 Accepts 7743 grate
 Expandable to any length

Options
 Adjusting risers
 Optional end caps



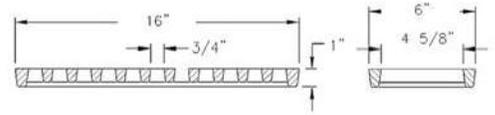
7796 TRENCH GRATE

Non-traffic



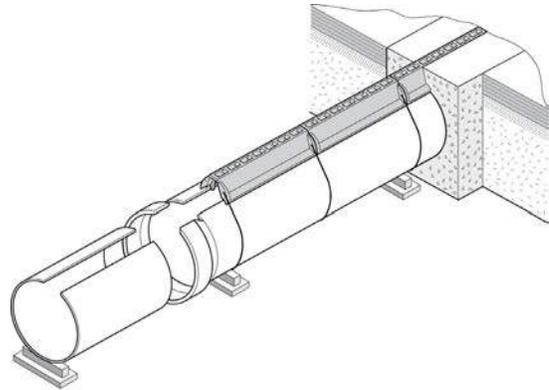
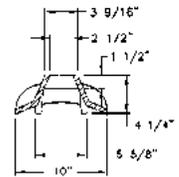
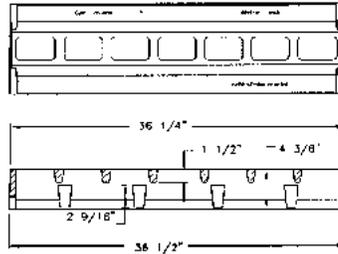
7799 TRENCH GRATE

Heavy duty



V-7950 SLOTTED GRATE FOR PIPE

Heavy duty

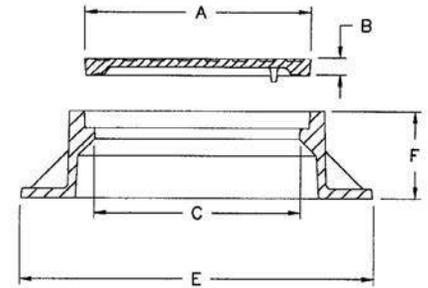


Master Tables of Casting Dimensions



ROUND MANHOLE BASE FLANGE

EJ is continually adding new construction castings and drainage grates to our product offering. Please consult with your EJ representative or email us at us.sales@ejco.com to request a sales drawing not shown in this catalog.



A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
6 1/2	1 1/2	5 1/16	7 3/8	6 5/16	2960
6 1/8	9/16	5 1/4	10	6	1567
7 3/8	1 1/8	6 1/2	12 1/2	6	1571
8	1	6 1/2	11 1/2	10	2966
7 3/4	1	6 3/4	11 3/8	2	3691
8	1	6 3/4	13 1/4	7	1570
8 7/8	11/16	7 1/2	15 5/8	8	1574
8 13/16	5/8	8 1/8	15	4	3675
9	1 1/2	7 7/8	19 1/2	10	1575
9 3/8	2	7 7/8	18	4	1445
9 1/4	3/4	8	11 9/16	9	3695
9 5/8	3/4	8	12 1/2	2 5/16	2885 Rev
10	1/2	8	16	8	1576
10 1/4	1 1/2	8 1/2	14 1/2	4	V-1610-1 Rev
10 1/2	2	9	16	8	1565
10	1	9 1/4	16	8	1566
11 5/8	1	10 1/2	18	4	3661
11 13/16	1 1/8	10 5/8	18	8	1564
11 1/4	1 5/16	9 3/4	20	8	1578
11 1/2	1/2	10 13/16	15 1/2	5	V-8502
13 1/4	1	11 1/4	14 7/8	5	1150
13	1 1/2	11 1/4	20	4	1562
13 1/4	1 1/2	11 1/2	17 5/8	4	V-1610-2 Rev
13 3/4	1 1/8	13	20	6	1572
16	1 1/2	14 1/4	23	4	1563
16 1/4	1 1/2	14 3/8	20 1/2	4	V-1610-3 Rev
18	1	16 1/2	22 3/4	3	2912 Rev
17 3/4	1 1/2	16 7/8	28	6	1740
18	1	17	25	4 1/2	1680
20	2 3/16	18	29	4	1525
19 1/4	1 1/2	18 1/8	21	2 1/2	V-1700-1
19 1/4	1 1/2	18 1/8	24	4	V-1600-1 Rev
19 9/16	1 5/8	18 1/8	22 1/8	4 1/2	3005
20 1/4	1 3/4	18 3/16	34 3/8	9 1/8	3718Z2

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
19 3/4	1 1/2	18 3/8	24	4 1/2	V-1887
19 7/8	9/16	18 3/8	27 1/2	4	1495
20 1/4	3/4	18 1/2	22	5	1160
20 13/16	1	19	29	5	1085
20 1/4	1 3/8	19	21 3/4	1 7/8	3033
20	1 3/8	19 3/8	21 1/8	1 3/4	V-1701
21 5/16	1 3/16	19 11/16	32	7 1/2	2005
21 3/4	1	20	40	5	1190
21 3/4	1 1/8	20	34 1/4	5	1180
22 1/8	1 1/2	20	26 1/2	2 3/8	V-1610-4
22 3/4	1 1/2	19 3/4	37 7/8	10	1641
21 3/4	1 1/4	19 7/8	30 1/2 SQ	6 1/4	8045
22 1/4	1 1/2	19 3/4	32	11	1670
24	1 1/2	19 7/8	33 7/8	7	1123
21 3/4	1 1/8	19 7/8	27 3/4	5	1170
21 3/4	1 1/8	20	26	5	1171
21 3/4	1 1/8	20	33	6 1/2	1030
21 3/4	1 1/8	20	36	8 1/2	1060
21 3/4	1 1/4	20 1/16	34	8	1945
21 3/4	1 3/8	20	30	9 3/4	1837
22	1 1/2	20	28 1/4	6	1140
22	1 1/2	20	31	4	1135 Rev
22	1 1/2	20	33	8	1125
22 3/4	1 3/4	20	36	7 7/8	V-1476
23	1 1/4	20	32 1/4	7	1010
22	1 1/2	20	27 7/8	4	1130
21 3/4	1	20 1/4	33	9 1/2	1955
21 7/8	1 1/2	20 1/4	26 5/8	4	V-1610-4 Rev
22	1	20 1/4	23 3/4	4	1285
22	1	20 1/4	32	8	1535
22 3/4	1 1/8	20 1/4	36 1/2	8	1075
23	1 1/4	20 1/4	32 1/4	7	1000
23	1 1/4	20 1/4	32 1/4	7	1002
23 1/2	2 1/4	20 3/8	30 1/2	4 7/8	V-1438
23	1 1/4	20 7/16	34 13/16	7 1/4	1070
22	1 1/2	20 1/2	28	4	1490
22	1 1/2	20 1/2	26 1/2	4	1490Z2 Rev
22 1/4	1	20 5/8	30	9 3/4	1661
22 3/4	1 1/2	20 1/2	36	7	V-1345-1
22 3/4	1 3/4	20 1/2	34	8	1550

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
22 3/4	2	20 1/2	36	7	V-1344
23 3/4	1 5/8	20 5/8	27 1/2	6	V-1866-3
22 1/4	1	20 11/16	28 1/2	4 3/4	1660
22 1/4	1	20 3/4	24 7/8	4	1505
22 3/4	1 3/4	20 3/4	36	7	1875Z2
22 3/4	1 3/4	20 3/4	36	7	1875Z3
22 3/4	1 3/4	20 13/16	36	9	1051Z2
22 3/4	1 3/4	20 13/16	34	9	1051Z3
23	1 1/2	20 7/8	36	9	1058
22 3/4	1 3/4	21	34	4	1037
22 3/4	1 3/4	21	36	4	1077
22 3/4	1 3/4	21	32 1/2	4	1880
22 3/4	1 3/4	21	34	4 1/2	2996 Rev
22 3/4	1 3/4	21	34	6	1020
22 3/4	1 3/4	21	34	7	1023
22 3/4	1 3/4	21	34	7	1024
22 3/4	1 3/4	21	34	9	1050
22 3/4	1 3/4	21	36	5 1/2	1559
22 3/4	1 3/4	21	36	7	1076
22 3/4	1 3/4	21	35 3/4	7 1/8	1022
23 3/4	1 1/2	21	37 5/8	9	1260
22 3/4	1 3/4	21	36	9	1560
23	1 3/4	21	35 3/4	9	1920
23 1/4	1 1/4	21 3/8	32	4	V-1383-1
23 1/4	1 1/4	21 1/4	34 1/2	8 1/4	V-1383
23 3/4	1 1/4	21 1/4	37	7	1771
23 1/4	1	21	35 5/8	7 3/4	1850
23 3/4	1 1/2	21 3/8	35 5/16	7 7/16	1620
23 1/4	1	21 7/16	33	9	2015Z1
23 3/4	1	21 7/16	36 7/8	7 1/8	2045
23	3/4	21 1/2	28	4	2910Z1
23 1/4	1	21 5/8	33	9	2015
23 3/4	1	21 1/2	38	7	1665
23 3/4	1	21 1/2	38	9	1450
23 3/4	1	21 1/2	33 13/16	9	1450Z1
23 13/16	3	21 1/2	31 1/2	4	1834
23 13/16	3	21 1/2	31 1/2	7	1835Z1
24	2	21 3/4	31	2 3/4	V-1140
23 1/4	1	21 3/4	32 3/8	4 1/2	V-1406
23 3/4	1 1/4	21 7/8	30	2 1/2	V-1136

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
23 3/4	1 5/16	21 3/4	39	8	2060
23 3/4	1 3/4	21 3/4	33 1/4	7	1925
23 3/4	1 3/4	21 3/4	33 1/4	11	1928
23 13/16	3	21 3/4	31 3/8	7 1/4	1835
23 13/16	3	21 3/4	31 3/8	7 1/4	1840
26	1 1/2	21 3/4	25 3/4	9	1290
23 1/2	1	21 13/16	33 1/4	7 1/2	V-1384
23 3/4	1	21 13/16	35	7	1775
23 3/4	1 5/8	21 13/16	30	4 1/2	V-1866 Rev
23 1/2	1 1/2	21 3/4	28 1/2	4	V-1600-2 Rev
23 3/4	2	21 3/4	32	5	2023
23 1/4	1	21 7/8	29 1/8	5	1622 Rev
23 1/4	1	21 7/8	32 1/4	6 3/8	V-1403
23 1/4	1	21 7/8	33 1/4	6 3/8	V-1503
23 1/4	1	21 7/8	36	5	1622Z1 Rev
23 1/4	1	21 7/8	40 1/2	9	V-1501
24	1 1/2	21 7/8	30 3/4	4 1/8	3100
23 3/4	2 1/2	21 7/8	31 1/2	8	1960
23 1/4	1	22	30	4	2132Z1 Rev
23 1/4	1	22	29 1/2	4 7/8	V-1105
23 1/4	1	22	33 1/2	8	2132
23 1/2	1	22	26	1 1/2	3110
23 1/2	1	22	31	6	V-1384-2
23 1/2	1 1/2	22	25 3/4	2 1/2	V-1700-2
23 1/2	1 1/2	22	31 3/4	4	V-1481
23 1/2	1 1/2	22	32 1/4	4 1/2	V-1418-2
23 1/2	1 1/2	22	32	5 3/4	1348
23 1/2	1 1/2	22	32 1/4	6	V-1480-10
23 1/2	1 1/2	22	33 1/4	8 1/2	V-1418-1
23 3/4	1	22	32	6	1251
23 3/4	1	22	37 1/2	10 1/2	2020
23 3/4	1	22	36	11	2035
23 3/4	1 1/8	22	36 3/8	8 1/2	1410
23 3/4	1 3/16	22	32 1/2	6	V-1327
23 3/4	1 3/16	22	34	8	V-1326
23 3/4	2	22	31 3/4	5	V-1317
23 3/4	2	22	30	7 1/4	V-1243
23 3/4	2	22	36	9	1715
23 3/4	2 1/2	22	32	5	1202
23 7/8	1	22	30	4	2425 Rev

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
23 3/4	2	22 1/16	34 7/8	8	1710
23 1/2	1	22 1/8	31	6	V-1284-3
24	1	22 1/4	33 1/2	4	1267Z Rev
24	1	22	34	7	1122
24 1/4	1	22	32	6 3/4	V-1482-2
24	1 3/16	22	34	7	1325
24	1 1/2	22	34	7	1119
24	1 1/2	22	36	7	1120
24	1 5/8	22	30	6	1606
24	3	22	32	7 1/2	1272
24 7/8	2	22	32	6	1733 Adj.
26 1/4	1 1/2	22	32	6	V-1339
23 3/4	1 3/8	22 1/16	33 5/8	7 1/8	1590
23 3/4	2	22 1/16	32	5	2022 Rev
23 7/8	1	22 1/8	34 1/16	4	2410
23 7/8	1	22 1/8	34 1/16	6	2430
23 7/8	1	22 1/8	34 1/16	8	2420
23 7/8	1	22 1/8	34	8	2420Z1
24	2	22 1/8	31 7/8	5	1343
24	2	22 1/8	31 7/8	5	1342
24	2 1/2	22 1/8	31	6	2024
26	1 1/2	22 1/8	38 3/4	7	1044
24	1 1/2	22 1/4	34	4	1118
24	1 1/2	22 1/4	34 3/4	7 1/2	1117
24 1/4	1	22 1/4	31 3/4	7	V-1324
24 3/4	1 1/4	22 1/4	34	4	1433Z3
25	1 1/2	22 1/4	32	6	V-1339
23 1/4	1	22 1/8	34	7 3/8	V-1301
23 3/4	1	22 3/8	36 SQ	7 1/4	287
24	2 1/2	22 3/8	32	5 1/2	2040
24 7/16	2	22 3/8	32 1/4	7	1734
25 3/4	1 1/2	22 7/16	33 1/2	6	3115
24 3/4	1	22 7/16	36	7 1/4	1600
23 1/2	1	22 1/2	33 1/4	7 1/2	V-1304
23 3/4	3/4	22 1/2	34	7	1460
23 3/4	1 1/4	22 1/2	31 1/2	6	1337
23 3/4	2	22 1/2	32	5	V-1168
23 7/8	2 1/8	22 1/2	32	5	2350
24	1 3/8	22 1/2	34	7	1310
24 1/4	1	22 1/2	31 3/4	6	V-1407

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
27	1 7/8	22 1/2	31 3/4	6	3118
23 3/4	1	22 1/2	31 1/4	4 5/8	1690
24	1 5/16	22 9/16	32	5 7/8	1224
23 3/4	1	22 5/8	28 1/2	3	3024
24	1 9/16	22 5/8	31 1/2	4 1/2	1500
24	1 9/16	22 5/8	34	9	1500Z1
24	2 1/4	22 5/8	32	5	1177
24 3/4	7/8	23	31	3	2601
24 3/4	7/8	23	31	6	2600
24 3/4	7/8	23	31	10	2603
24 3/4	15/16	23	32	4	3020 Rev
24 3/4	1 1/4	23	34	8	1433Z2
25 3/8	1 1/4	23	38 5/8	7	2055
25 3/8	2	23	39	8	1212
25 1/2	2	23	38	5	1703
25 1/2	2	23	38	10 1/2	1700
23 11/16	1	23 3/8	31 1/2	3	1510
25 5/8	1	23 3/8	38	7 7/8	1210
26	1 5/8	23 3/8	35 1/2	7	1720
25	1	23 7/16	33 5/8	4	3710 Rev
24 7/8	7/8	23 1/2	34	6	3108
25 1/2	1	23 5/8	36	6	1930
25 1/2	1 5/16	23 5/8	32 7/8	6	3740
25 1/8	1 1/4	23 3/4	36	8	V-1360-1
25 3/8	1	23 3/4	34	6	3736
25 3/8	1 1/2	23 3/4	35 1/4	7	V-1357
25 13/16	2 1/2	23 3/4	32	8	1548
26 5/16	1 3/4	23 7/8	34	6 1/16	3767
25	1	23 7/8	34 1/8	6	3700
25 3/4	1 1/2	23 7/8	35 1/4	8	V-1312
25 1/4	1 1/4	23 15/16	41 3/4	4	1530
25 1/4	1 1/2	24	35 1/4	6	1520
25 3/8	1 1/2	24	27	2 1/2	V-1700-3
25 3/8	1 7/16	24	35 1/4	6	1522
25 1/2	1	24	35	3	1975Z1
25 1/2	1	24	36	8	1944
25 1/2	1 5/8	24	29 3/4	4 1/2	V-1890
25 5/8	1	24	32	5	1625 Rev
25 3/4	7/8	24	35 1/2	4	1205Z1
25 3/4	7/8	24	35 1/2	7	1205Z

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
25 3/4	7/8	24	35 1/2	8	1936Z1
25 3/4	7/8	24	51 1/2	8	1936Z2
25 3/4	7/8	24	35 1/2	8	1936Z3
25 3/4	1	24	34	8	V-1358
26	1	24	34	6	3725
26 3/16	1	24	34	4	3726
26 1/4	1 1/8	24	32	3 1/2	3180
25 3/4	1 3/8	24	39	4	1203Z1
25 3/4	1 3/8	24	34	6	1405
25 3/4	1 3/8	24	39	8	1203Z2
25 3/4	1 3/8	24	36	8	1207
25 1/4	1 1/2	24	32 1/8	4	V-1600-3 Rev
25 3/4	2	24	35	7	1227
25 3/4	2 1/4	24	28	2 3/4	2222
25 3/4	2 1/2	24	34	4	1543
25 3/4	2 1/2	24	36	7	1970
25 3/4	2 1/2	24	35	7	1970Z1
25 13/16	2 1/2	24	34	9	1545Z1
26	1 1/4	24	35 3/4	7 1/4	V-1550
26	1 3/8	24	34	4	2026
26	1 1/2	24	36	4	1046
26	1 1/2	24	34	5	2450 Rev
26	1 1/2	24	32 1/2	4	1080
26	1 1/2	24	36	6	V-1380-1
26	1 1/2	24	36	6	V-1424-2
26	1 1/2	24	39	7	1040
26	1 1/2	24	36	7	1045
26	1 1/2	24	36	7	1045Z1
26	1 1/2	24	39	7	2025
26	1 1/2	24	36	8	1047
26	1 1/2	24	36	9	1048
26	1 1/2	24	36	10	1049
26	2	24	39	5 1/2	1271 Rev
26	3	24	29	3 3/4	6487
26 1/8	1 3/16	24	33 3/4	3 9/16	2224
26 1/8	1 3/16	24	31	4	2224Z1 Rev
26 1/8	1 3/8	24	35	7 3/8	V-1355
26 1/4	1 3/4	24	34	7	3730
26 3/4	1 1/4	24	35 1/2	7	V-1349
27	2 1/2	24	36	9	1900

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
27 1/8	1 1/2	24	32 1/2	6	3162
28 3/4	1 1/4	24	36	4	1935
29	3 3/4	24	37	5 1/2	2830
26	1 1/8	24	36	7 5/8	V-1570
26	1 3/8	24	34	7 1/2	2027
26	1 1/8	24	34	7	1154Z2
25 1/2	1	24 1/8	35	9	1975
26 3/4	1 5/8	24 1/8	38	7	1965
25 5/8	1 1/2	24 3/16	32	4	1854 Rev
25 3/4	1 1/4	24 3/16	43 1/4	11 1/2	1705
25 3/4	1 1/4	24 3/16	43 1/4	11 1/2	1706
25 1/2	1/2	24 1/4	31	4	1155 Rev
25 5/8	7/8	24 5/16	34	6	1731
28 3/4	1 3/8	24 1/2	37 1/2	7	1893
25 5/8	7/8	24 5/8	35 1/2	10	1730
26 1/4	1 1/8	25	35 3/4	7	V-1115
27 7/16	2 7/16	25 1/8	35 7/8	7	2080
27 7/8	2 1/8	25 3/8	40 1/4	4	3761-4
25 3/4	1 3/8	25 3/8	34 1/2	6 1/2	1208 Adj.
27 7/8	2 1/8	25 1/2	40	9 1/4	3761-9
27 3/4	1	26	46 SQ	3 1/2	288
27 3/4	1	26	46 SQ	7 1/4	8075
27 7/8	1 3/8	26	38 1/4	4 3/8	2100 Rev
28	1	26	33 7/8	4	1250
27 7/8	1 3/8	26	38 1/4	4 3/8	2101 Rev
27 7/8	1 1/2	26 3/8	32 1/2	4 1/8	V-1610-5 Rev
28 3/4	1 3/8	26 7/8	37 1/4	7	1890Z1
28 3/4	1 3/8	26 3/4	37 1/4	3 1/8	1891Z1
29	1 3/8	27	46	5 5/8	1802
29	1 3/8	27	46	10	1805
30 1/8	1 1/2	28 1/4	37	6	3164
33 1/8	1 1/2	27	40 1/4	6	3163Z1
29 5/8	1 1/2	28	36	4	1892
29 7/8	1 1/16	28	41 5/16	7 1/4	1470
29 5/8	7/8	28 1/2	36 1/2	5	2760
31 1/2	1 1/2	29 1/4	56	10 1/2	425
31 1/2	1 1/8	29 9/16	44 7/8	7 7/8	1220
31 1/2	1 1/2	29 5/8	37 1/2	4	2230Z1 Rev
31 5/8	1 3/4	29 5/8	38 3/4	6	2010
31 9/16	1 1/8	29 11/16	44 1/2	7 3/4	1266

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
31 1/2	1 1/2	29 3/4	39	5 1/4	2295
31 1/2	1 1/2	30	39 1/8	5 1/4	2230
31 1/2	1 1/2	30	44 1/4	6	2232
31 3/4	1 3/8	30	41	4	1230
31 3/4	1 3/8	30	41	6 1/2	1232
31 3/4	1 3/8	30	41 1/2	7 1/2	1370
31 3/4	1 3/8	30	41	8	1234
31 7/8	1 3/8	30	34 7/8	2 3/8	V-1700-4
31 7/8	1 3/8	30	38	4	V-1600-4 Rev
31 7/8	1 3/8	30	40 1/4	6 7/8	V-7032
31 7/8	1 1/2	30	40 3/4	4 1/2	V-1420/1480Z1
31 7/8	1 1/2	30	40 3/4	6	V-1420
32	1 3/8	30	46	5 5/8	1820
32	1 3/8	30	49	5 5/8	1822
32	1 3/8	30	41 SQ	7	8027
32	1 3/8	30	48 3/4	10	1810
32	1 1/2	30	38	4	1480 Rev
32	1 1/2	30	40 1/4	4 7/8	V-1432
32	1 1/2	30	46	6 1/2	1320
32 1/8	3/4	30	34	1 1/2	1136
33 1/8	1 1/2	30	38 1/2	6	3163
37 7/16	1 1/2	30	45 SQ	11 13/16	1830
32	1 3/8	30	46	10	1825
32 1/2	2	30	41 3/4	9	1895
32	1 1/2	30 1/4	40	6 1/2	1322
32	1 1/2	30 9/16	42	8 1/2	V-1419
34 1/8	1 1/2	31 9/16	40 1/2	4	1161Z1
34 1/8	1 1/2	31 3/4	40 1/2	4	1161
33 3/4	1 3/8	32	46 SQ	5	V-7069-1
34 1/4	1 1/2	32	40	4	1475Z1
34 1/4	1 1/2	32 3/16	38 1/2	4	1475 Rev
34	1 1/2	32 1/4	38 1/2	4	V-1610-6 Rev
34 3/4	1	33	41 SQ	4	V-7070
35	2	33	44	6	1330
38	1 1/4	33 1/8	48 1/2	6	3166
35 3/4	1 1/8	34	45	5 1/4	2455
36	1 1/8	34	45	7 1/2	2228
36	1 1/2	34	45	4 1/2	1586
36	1 1/2	34	45	8 1/2	1585
36 3/4	2 7/16	34	45	4	1990

Note: All dimensions are in inches. Rev = Reversible

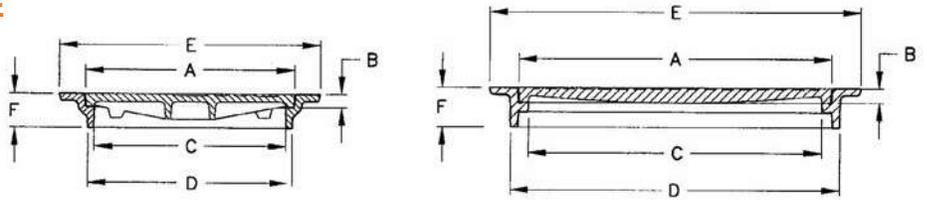
ROUND MANHOLE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
38 5/16	1 1/2	34	45	10 1/8	1583
37	2 9/16	34 1/4	46 3/4	6	1588
37	2	35	47 SQ	8	V-7068
37 1/4	1 5/8	35 1/4	44 SQ	5	V-7067
37 1/2	1 1/2	35 3/8	46	8	1995
38	2	35 3/4	46	6	V-1600-5 Rev
37 3/4	1 1/2	36	52 SQ	10	1833
37 7/8	1 1/2	36	46	10	1812Z2
38	1 1/4	36	44	6	3106
38 1/4	1 5/8	36	44	6	3144
38 5/16	1 1/2	36	46	4 1/2	1581 Rev
39 1/8	1 1/2	36	44 1/2	6	3165
38	2	36	46	6	V-7058
38	2	36 1/8	40 5/8	3	V-1700-5
39 13/16	3	38	46 SQ	7 1/4	289
39 5/8	1 1/2	38 1/4	44 1/2	4	V-1610-7 Rev
40 5/8	1 3/4	39 1/8	50 1/8	4	430
44 1/8	2 1/2	41 13/16	61 x 50	4	8025
44 1/4	2	41 3/4	51 3/4	4	1843
44 1/8	2 1/2	42	62 x 50	6	8026
44 1/4	1 1/2	42	55	8	1986
44 1/4	2	42 1/4	51 1/2	4 1/8	1845Z1
45 3/4	1 1/2	43 3/4	50 1/2	4	V-1610-8 Rev
45 3/4	7/8	44 1/8	53 1/4	5 3/4	3109
50	2	48	59	10	1985
50 1/4	2	48	52 1/2	3	V-1700-6
50 1/4	2	48	56 1/2	6	V-1600-6 Rev
50 1/2	2	48	62	10	V-7048

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE TOP FLANGE

EJ is continually adding new construction castings and drainage grates to our product offering. Please consult with your EJ representative or email us at us.sales@ejco.com to request a sales drawing not shown in this catalog.



A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Siv. OD	E Flange Dia.	F Frame Ht.	Catalog Number
6 1/4	5/8	5 1/2	6 5/16	8	1	2820
7	1	6	6 13/16	15 1/4	3	440
7 1/4	11/16	6	6 3/4	10 1/8	2 1/2	2790
7 7/8	1	6 1/2	8	9 5/8	10	2965
8 5/16	1	6 3/4	9	9 3/4	10	2967
8 1/4	3/4	7 1/8	7 3/4	9 7/16	6 1/4	2970
10 1/4	1 1/2	7 1/2	11 1/2	14 1/2	4	V-2610-1 Rev
8 1/2	11/16	7 5/8	8 3/8	10 3/16	1 11/16	2840
9 5/8	13/16	8	10 5/16	12 1/2	2 5/16	2885 Rev
10	1/2	8	10	17	8	1576
9 5/8	3/4	8 3/8	9	10 5/8	7 1/2	2975
10 1/2	7/16	8 3/8	9 1/2	11 3/8	3 1/4	3670
9 3/4	9/16	8 7/16	9 3/8	14 1/4	2 1/4	2790-8"
10 1/4	1 1/2	8 1/2	11 1/2	14 1/2	4	V-1610-1 Rev
13 1/4	1 1/2	11 1/2	14 1/2	17 5/8	4	V-1610-2 Rev
14 3/8	5/8	13 7/16	14 3/16	17 15/16	3	2790-12"
16 1/4	1 1/2	14 3/8	17 1/2	20 1/2	4	V-1610-3 Rev
16 3/4	3/4	15 5/16	17 7/8	20 5/8	2 3/8	2890
17 1/4	1 1/4	15 13/16	18	21 7/8	3	2982
18	1	16 1/2	19 1/2	22 3/4	3	2912 Rev
18 7/8	7/8	16 1/2	18 3/4	22	3 13/16	102L
19 7/16	7/8	16 1/2	18 3/4	22 1/8	3 13/16	3034
17 7/8	1	16 5/8	18 1/4	19 7/8	4 1/2	1846Z3
20	1 1/4	17 1/8	20 15/16	23 3/16	3	V-1815
19 1/4	1	17 2/3	19 1/2	38	3 1/2	1110
20	1	17 3/4	21 3/4	29	3 5/8	2982
20 1/2	5/8	18	21	24	3 1/2	3015
19 1/4	1 1/2	18 1/8	20 1/2	24	4	V-1600-1 Rev
19 13/16	5/8	18 1/4	21	24	3 1/4	2900
20	1	18 1/2	21 1/16	29	5 3/8	2990
20 1/2	1 1/2	18 3/4	19 1/2	21 7/16	4	3010
21 3/4	1/2	19	21 1/2	24 3/4	1 1/2	2955
20	5/8	19 1/4	20 1/4	25 1/4 SQ	2 3/4	8065
22 9/16	3/4	19 7/8	21 3/4	24 1/2	4	V-1867

Note: All dimensions are in inches. Rev = Reversible



ROUND MANHOLE TOP FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Siv. OD	E Flange Dia.	F Frame Ht.	Catalog Number
21 3/4	1 1/8	19 13/16	23 1/2	34	4	2850
22	1 1/2	20	23 1/4	31	4	1135 Rev
22	1 1/2	20	23	28	4	2935
21 7/8	1 1/2	20 1/4	23 5/8	26 5/8	4	V-1610-4 Rev
22 3/4	1 3/4	20 3/8	23 3/4	34	4	2995
21 3/4	1	20 1/2	21 7/8	28	3 1/4	2755
22	1 1/2	20 1/2	23 1/4	26 1/2	4	1490Z2 Rev
23 5/16	3/4	20 1/2	22 3/4	26 3/8	4	106-4L
23 3/8	3/4	20 1/2	22 3/4	26 3/8	6	106-6L
23 3/8	3/4	20 1/2	22 3/4	26 3/8	8	106-8L
22 3/4	1 3/4	21	24	34	4 1/2	2996 Rev
23	7/8	21 9/16	23	28	4	2915
23 1/4	1	21 3/4	23 3/8	25 1/2	6	V-1886
23 1/2	1 7/16	21 3/4	24 3/4	28 1/2	4	V-2800-2
23 7/8	1	21 3/4	23 1/2	29 1/4	4	2416
23	3/4	21 13/16	23 7/8	27 5/8	3	2910
23 1/2	1	21 13/16	24 1/2	26 7/8	6	V-1883
23 1/4	1	21 7/8	25 1/8	36	5	1622 Rev
23 1/2	1 1/2	21 3/4	24 3/4	28 1/2	4	V-1600-2
23 1/4	1	21 7/8	24 1/2	36	5	1622Z1 Rev
23 3/4	1	21 7/8	23 3/4	30	4	2925
23 1/4	1	22	24 3/4	30	4	2132Z1 Rev
23 1/2	1 1/2	22	24 3/4	30	6	V-1814
23 5/8	7/8	22	23 1/2	28 1/2	5 1/2	1851Z2
23 5/8	7/8	22	24	33 1/2	6	1851Z1
23 5/8	7/8	22	23 3/8	28 1/2	6	1851Z3
23 3/4	2	22	25	30	4 3/4	2982
24	3/4	22	25 1/2	30	4	3000
24	1 1/2	22	23 7/16	30	4	2860
24	2	22	25 1/4	32	5	1842
24	3	22	26	32	7 1/2	1272 Rev
24 1/4	3/4	22	23 13/16	29	3 1/2	1855
23 3/4	7/8	22 1/8	24 1/2	28 1/2	4	2790-21
24	2 3/4	22 1/8	23 2/3	28 1/2	6	V-1874
23 5/8	1/2	22 1/4	24 1/2	28	4	V-1865
23 3/4	1 1/4	22 3/8	23 3/4	31 1/2	4	2855
24	2 1/4	22 3/8	26 1/2	32	5	2141
23 3/4	3/4	22 1/2	24 13/16	29 3/8	4	G1860
23 3/4	3/4	22 1/2	25	29 3/8	4	V-1860
24	1 5/8	22 1/2	23 7/8	31	6	2750

Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE TOP FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Siv. OD	E Flange Dia.	F Frame Ht.	Catalog Number
23 3/4	1 5/8	22 13/16	25 1/2	30	4 1/2	V-1866 Rev
24	1/2	23	25 1/4	29 1/4	4	1515
25	1	23 7/16	26 2/3	33 5/8	4	3710 Rev
25 1/4	1 1/2	23 1/2	26 3/4	29 1/2	4	2932 Rev
27 1/4	2 1/2	23 5/8	26	33 3/8	5	2870
26	1 1/2	23 7/8	25 1/2	33 1/2	4	2800
25 1/4	1	24	26 3/8	32	6	1847
25 1/4	1 1/2	24	26 1/2	32 1/8	4	V-1600-3 Rev
25 1/4	1 1/2	24	26 3/4	29 1/2	4	V-1624 Rev
25 5/8	1	24	27 3/8	32	5	1625 Rev
25 7/8	3/4	24	27	31	3 1/4	2920
26	1 3/8	24	27 3/8	34	4	2026
26	1 1/2	24	27 7/8	34	5	2450 Rev
26	1 1/2	24	27 1/4	34	4	2800Z1
26	2	24	27 5/8	39	5 1/2	1271 Rev
26 1/8	1 3/16	24	27 3/8	31	4	2224Z1 Rev
26	1	24 1/8	27 13/16	32 1/2	3 1/2	1154Z1
25 5/8	1 1/2	24 3/16	27 3/8	32	4	1854 Rev
25 1/2	1/2	24 1/4	26 5/8	31	4	1155 Rev
27 1/8	7/8	25 3/4	28	34 1/8	3 5/8	2790
27 7/8	1 3/8	26	29 3/4	38 1/4	4 3/8	2100 Rev
27 7/8	1 3/8	26	29 3/4	38 1/4	4 3/8	2101 Rev
27 7/8	1 1/2	26 3/8	29 5/8	32 1/2	4 1/8	V-1610-5
28 3/4	1 3/8	27	30 1/2	36	6	V-1827
30 3/4	1 1/2	28 1/4	32 1/8	34	2 1/4	2805
31 1/2	1 1/2	29 5/8	32 3/4	37 1/2	4	2230Z1 Rev
31 7/8	1 3/8	30	33 1/8	38	4	V-1600-4 Rev
31 7/8	1 3/8	30	32	36 5/8	6	V-1830-2
32	1 1/2	30	33 5/8	40 3/4	4 1/2	V-1816
32	1 1/2	30	33 2/3	38	4	1480 Rev
32	1 1/2	30	33 2/3	38	4	2810
32 3/4	2	30 1/8	32 1/4	39 1/2	6	2880
34	1 1/2	32 1/4	35 1/2	38 1/2	4	V-1610-6 Rev
34 1/4	1 1/2	32 3/16	35 9/16	38 1/2	4	1475 Rev
38	2	35 3/4	39 3/4	46	6	V-1600-5 Rev
38	1 1/2	36	37 7/8	46	4 1/2	2812
38 5/16	1 1/2	36	39 7/8	46	4 1/2	1581 Rev
38 5/16	1 1/2	36	39 7/8	46	4 1/2	2815
39 5/8	1 1/2	38 1/4	41 1/2	44 1/2	4	V-1610-7 Rev
44 1/4	2	41 3/4	46 1/4	52 1/2	4	1843Z2

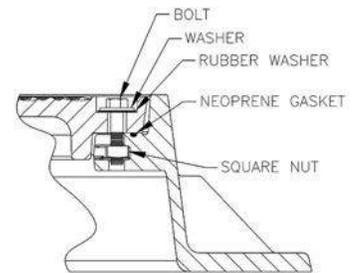
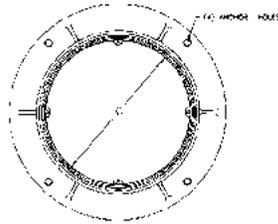
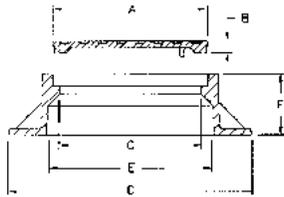
Note: All dimensions are in inches. Rev = Reversible

ROUND MANHOLE TOP FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Siv. OD	E Flange Dia.	F Frame Ht.	Catalog Number
45 3/4	1 1/2	43 3/4	47 3/4	50 1/2	4	V-1610-8 Rev
50 1/4	2	48	52	56 1/2	6	V-1600-6 Rev

Note: All dimensions are in inches. Rev = Reversible

WATERTITE BASE FLANGE



A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Dia.	E Flange ID	F Frame Ht.	Catalog Number
10 1/4	1 1/2	7 1/2	14 1/2	10 1/2	4	V-2610-1 Rev
8 13/16	5/8	8 1/8	15	7 3/4	4	3675
13 1/4	1 1/2	9 2/3	17 5/8	13 1/2	4	V-2610-2 Rev
11 1/4	1 5/16	9 3/4	20	13	8	1578
11 5/8	1	10 1/2	18	13 5/8	4	3661
11 13/16	1 1/8	10 5/8	18	13 7/8	8	1564
15	1 1/4	13 2/3	19	15 3/16	4 1/8	3678
16 1/4	1 1/2	14 3/8	20 1/2	16 1/2	4	1755
20 1/8	1 3/4	17 7/8	29 3/8	20 3/8	4 5/16	3718
20 1/8	1 3/4	17 7/8	29 3/8	20 3/8	4 5/16	3718 Rev
21 7/8	1 1/2	18 1/4	26 3/4	22 1/8	4	V-2610-4 Rev
23	1 1/4	20	32 1/4	20	7	1010
24	1	20	33 1/2	25 1/4	4	1267
21 1/2	1 1/4	20 1/8	32	22 13/16	4	1915
23 1/2	1 1/2	20 1/4	32 1/4	25 1/2	4 1/2	V-2418-2
24	1 1/2	20 1/4	32	24 1/4	5	2134
24	1 1/2	20 1/4	31	24 1/4	6	V-2386
23 1/2	2 1/4	20 3/8	30 1/2	23 5/8	4 7/8	V-2438
23 3/4	1 1/8	20 3/8	32 1/2	26 1/4	6	V-2327
22	1 1/2	20 1/2	28	22 1/4	4	1490 Rev

Note: All dimensions are in inches. Rev = Reversible

WATERTITE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Dia.	E Flange ID	F Frame Ht.	Catalog Number
22 3/4	1 3/4	20 1/2	34	24 3/4	8	1550
23 1/2	1 1/2	20 1/2	32 1/4	24 7/16	6	V-2480
23 3/4	1 1/8	20 1/2	34	26	8	V-2326
23 3/4	1 3/16	20 1/4	32 1/2	25 15/16	5	V-2328
22 3/4	1 3/4	20 13/16	36	24 1/2	9	1051Z1
22 3/4	1 3/4	21	32 3/16	23 3/4	4	1885
22 3/4	1 3/4	21	34	25 1/8	7	1022Z1
22 3/4	1 3/4	21	34	25	4	1037
22 3/4	1 3/4	21	34	25 1/8	6	1020
22 3/4	1 3/4	21	34	25 1/8	7	1022Z2
22 3/4	1 3/4	21	35 3/4	24 3/4	7 1/8	1022Z3
22 3/4	1 3/4	21	34	24 13/16	9	1050
23	1 1/2	21	36	24 1/2	9	1058
24 1/4	1 3/4	21	36	24 5/8	9	1561
23 3/4	1	21 1/2	38	23 3/4	7	1665
23 1/2	1 7/16	21 3/4	28 1/2	23 3/4	4	V-2600-2
23 3/4	1	21 3/4	37 7/8	25 7/16	7	1665Z1
23 3/4	1 5/16	21 3/4	39	26	8	2060
24	1 1/2	21 3/4	31	26 1/4	7	1325
25 1/4	1 1/2	21 7/8	32 1/8	25 1/2	4	V-2600-3 Rev
23 3/4	2	22	31 3/4	25 15/16	5	V-1317
24	1 1/2	22	34	25 7/8	7	1119
24	1 1/2	22	36	26 3/16	7	1120Z1
24	1 1/2	22	36	24 7/16	7	1120
26 1/4	1 1/2	22	32	26 5/8	6	V-2339
24	2	22	31 7/8	24 7/8	5	1342Z1
24	2	22 1/8	31 7/8	25 7/8	5	1342Z2
23 7/8	1	22 1/8	34 1/16	26 3/16	8	2420Z1
26	1 1/2	22 1/8	38 3/4	22 1/8	7	1044
24	1 1/2	22 1/4	34	25 15/16	4	1118
24 3/4	1	22 3/8	36	26	7 1/4	1600
24 3/4	1	22 7/16	36	27 5/16	7 1/4	1600Z1
23 3/4	1 1/4	22 1/2	31 1/2	26 3/8	6	1337
24	1 3/8	22 1/2	34	26 1/4	7	1310
24	1 5/16	22 9/16	32	24 5/8	5 7/8	1224
25 3/8	2	23	39	31 1/4	8	1212Z1
25 3/8	2	23	39	31	8	1212
24 3/4	7/8	23	31	23	6	2600
24 3/4	7/8	23	31	23	5 1/2	2601
24 3/4	7/8	23	31	23	10	2603

Note: All dimensions are in inches. Rev = Reversible

WATERTITE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Dia.	E Flange ID	F Frame Ht.	Catalog Number
25	1	23 7/16	33 5/8	25 1/4	4	3710 Rev
25	1	23 3/8	34 1/8	27 5/16	6	3715
25	1	23 1/2	33	23 1/2	6 1/8	3705
25 1/4	1 1/2	23 1/2	29 1/2	25 1/2	4	2932 Rev
25 1/2	1 3/8	23 1/2	36	26 9/16	8	1950
26 1/2	1 5/8	23 1/2	36	27	6	V-2357
25 3/8	1	23 3/4	34	23 3/4	6	3736
26 5/16	1 3/4	23 7/8	34	26	6 1/16	3767
25	1	23 7/8	34 1/8	26 3/4	6	3700
25	1	24	33 3/4	24 3/4	6	3717
25 1/4	1	24	32	27 5/16	6	1847
25 1/4	1	24	32	27 3/16	4	1848
25 1/4	1 1/2	24	35 1/4	25 1/4	6	1520
25 1/2	1	24	36	26 3/8	8	1944
25 3/4	1	24	36	28 9/16	8	2028
25 3/4	1 3/8	24	39	30	8	1203Z2
26	1	24	34 1/8	26 3/4	6	3725
26	1 1/2	24	36	28	4	1046
26	1 1/2	24	39	28 7/16	7	1040
26	1 1/2	24	36	28 3/8	7	1045
26	1 1/2	24	34	28 7/16	7	1045Z2
26	1 1/2	24	36	28 9/16	8	1047
26	1 1/2	24	36	27 3/8	9	1048
26	1 1/2	24	36	27 3/8	10	1049
26 1/8	1 3/8	24	35	26 3/4	7 3/8	V-2355
27	2 1/2	24	36	24	9	1900
28 3/4	1 1/4	24	36	28 1/2	4	1935
25 5/8	7/8	24 5/16	34	24 5/16	6	1731
25 5/8	7/8	24 5/8	35 1/2	24 5/8	10	1730
27 7/8	1 1/2	25 1/8	32 1/2	28 1/8	4	V-2610-5 Rev
32	1 1/2	28	40 1/4	33 5/8	4 7/8	V-2432
31 5/8	1 3/4	29 5/8	38 3/4	32 9/16	6	2010
31 1/2	1 1/2	29 3/4	46	37	5 3/4	1821
31 7/8	1 5/16	29 3/4	44	34	8	2070
33 7/8	1 1/2	29 3/4	38 1/2	31 1/8	4	V-2610-6 Rev
31 1/2	1 1/2	30	39 1/8	31 11/16	5 1/4	2230
31 7/8	1 1/2	30	40 3/4	32 3/8	4 1/2	V-1420/1480
32	1 3/8	30	46	37	5 5/8	1820
32	1 1/2	30	38	32 1/4	4	1480
32 1/2	2	30	41 3/4	30	9	1895

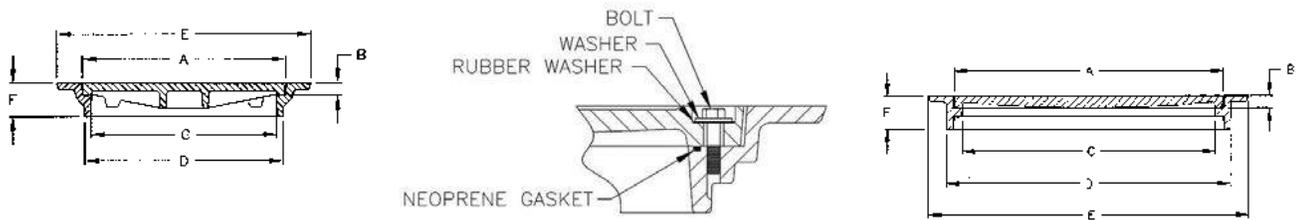
Note: All dimensions are in inches. Rev = Reversible

WATERTITE BASE FLANGE (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Dia.	E Flange ID	F Frame Ht.	Catalog Number
34	1	30	35 1/4	30	2	1106
32	1 3/8	30 1/16	46	38	10	1825
31 15/16	1 3/8	30 3/16	40	32 3/16	5 3/4	3790 Rev
32	1 1/2	30 1/4	40	34	6 1/2	1322
36	1 1/8	34	45	37	7 1/2	2228
36	1 1/2	34	45	36	8 1/2	1585
38	2	34 3/8	46	38 1/4	6	V-2600-5 Rev
37 3/4	1 5/16	35 3/4	50	40	8	2075
38 1/2	1 1/2	36	46	38 3/4	4 1/2	1581 Rev
38 1/2	1 1/2	36	48	40 3/8	7	2688
39 3/4	1 1/4	37 3/4	52	37 3/4	8	1225-40
39 5/8	1 1/2	38 1/4	44 1/2	39 7/8	4	V-2610-7
44 1/4	2	42	51 1/2	42	4 1/8	1843Z1
45 3/4	1 1/2	42 3/8	50 1/2	46	4	V-2610-8 Rev
50 1/4	2	48	56 1/2	50 1/2	6	V-2600-6 Rev

Note: All dimensions are in inches. Rev = Reversible

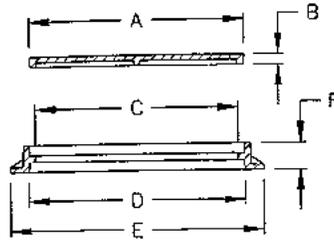
WATERTITE TOP FLANGE



A Cover Dim.	B Cover Thk.	C Clear Opening	D Flange Siv. OD	E Flange Dia.	F Frame Ht.	Catalog Number
10 1/4	1 1/2	7 1/2	11 1/2	14 1/2	4	V-2610-1 Rev
13 1/4	1 3/8	9 2/3	14 1/2	17 5/8	4	V-2610-2 Rev
14	1 1/4	12	13	18	3	1716
16 1/4	1 1/2	14 3/8	17 1/2	20 1/2	4	2905 Rev
20 1/8	1 3/4	17 7/8	22	29 3/8	4 5/16	3718
21 7/8	1 1/2	18 1/4	23 5/8	26 5/8	4	V-2610-4 Rev
22	1 1/2	19 7/8	23 3/8	27 3/4	4	1490Z1 Rev
24	1	20	25 1/4	33 1/2	4	1267
22	1 1/2	20 1/2	23 1/4	26 1/2	4	1490Z2 Rev
22 3/4	1 3/4	20 3/8	23 3/4	34	4	2995
23 1/2	1 7/16	21 3/4	24 3/4	28 1/2	4	V-2800-2
25 1/4	1 1/2	21 7/8	26 1/2	32 1/8	4	V-2600-3 Rev
24 1/4	1 1/2	22	23 1/4	30	4	2860
25	1	23 7/16	26 11/16	33 5/8	4	3710 Rev
25 1/4	1 1/2	23 1/2	26 1/2	29 1/2	4	2932 Rev
25 1/4	1	23 13/16	34	25 1/2	4	1849 Rev
27 7/8	1 1/2	25 1/8	29 3/8	32 1/2	4	V-2610-5 Rev
33 7/8	1 1/2	29 3/4	35 1/2	38 1/2	4	V-2610-6 Rev
32	1 1/2	30	33 2/3	38	4	2810
38 1/2	1 1/2	36	39 7/8	46	4 1/2	1581 Rev
38 5/16	1 1/2	36	39 7/8	46	4 1/2	2815
40	1 1/2	38 1/2	41 3/4	45	4	1484
44 1/4	2	41 3/4	46 1/4	52 1/2	4	1843Z2
45 3/4	1 1/2	42 3/8	47 3/4	50 1/2	4	V-2610-8 Rev

Note: All dimensions are in inches. Rev = Reversible

WATERTITE HATCH



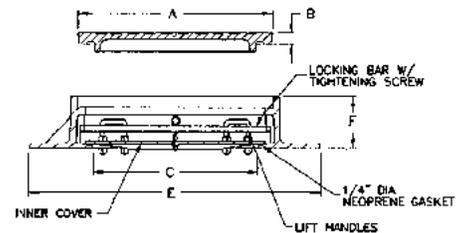
A Cover Dim.	B Cover Thk.	C Clear Opening	D Frame Inside	E Flange Size	F Frame Ht.	Catalog Number
Square						
13 3/4 SQ	1 1/2	12 SQ	14 SQ	18 SQ	4	8001
13 5/8 SQ	1 1/2	12 1/8 SQ	13 7/8 SQ	18 SQ	4	8301
19 3/4 SQ	1 1/2	18 SQ	20 SQ	24 SQ	4	8004
20 SQ	1 1/2	18 1/4 SQ	20 1/4 SQ	24 SQ	4	8304
21 3/4 SQ	1 1/2	20 SQ	22 SQ	26 SQ	4	8305
23 1/2 SQ	1 1/2	21 7/8 SQ	23 3/4 SQ	28 SQ	4	8306
25 3/4 SQ	1 1/2	24 SQ	26 SQ	29 15/16 SQ	4	8308
26 3/4 SQ	1 1/2	24 SQ	27 SQ	33 1/2 SQ	4	8008
31 3/4 SQ	1 1/2	29 15/16 SQ	32 SQ	33 1/4 SQ	4	8313
37 3/4 SQ	1 3/8	34 1/4 SQ	37 13/16 SQ	43 1/4 SQ	4	V-6436
43 3/4 SQ	1 7/8	41 SQ	44 SQ	50 1/8 SQ	5	V-6442
Rectangular						
19 x 24 3/4	1 1/2	17 x 23 1/16	19 3/16 x 25 1/8	24 x 30	4	8322
25 1/2 x 31 1/2	1 1/2	24 x 30	25 7/8 x 31 7/8	30 x 36	4	8328
23 x 35	1 3/8	23 x 35	26 x 38	31 1/2 x 43 1/2	4	V-6465
31 7/8 x 37 3/4	1 7/8	29 x 35	32 1/8 x 38	38 1/4 x 44 1/4	5	V-6468
31 3/4 x 49 3/4	1 3/8	28 5/8 x 46 5/8	32 x 50	37 1/2 x 55 1/2	4	V-6469

Note: All dimensions are in inches.

FROST PROOF

A Cover Dim.	B Cover Thk.	C Clear Opening	E Flange Dia.	F Frame Ht.	Catalog Number
24	1 1/2	19 7/8	33 7/8	7	1123
26	1 1/2	22 1/8	38 3/4	7	1044
25 3/4	1 1/4	22 1/16	43 1/4	11 1/2	1706
26	1 1/2	22 1/8	38 3/4	7	1044
28 3/4	1 3/8	24 1/2	37 1/2	7	1893
31 3/4	1 3/8	28	40	7	1233
32	1 1/2	28	40	6.5	1323
38 1/2	1 1/2	34	45	10 1/8	1583

Note: All dimensions are in inches.



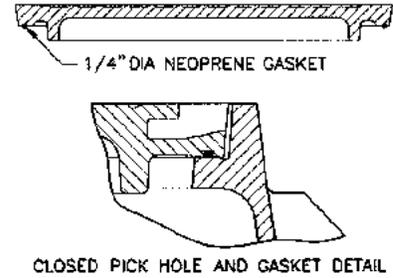
GASKET SEAL

EJ can supply a Gasket Seal Cover to fit most existing manhole frames. The EJ Gasket Seal Cover design features a machined bearing surface and a machined dovetail groove with a factory installed gasket and closed pick holes.

Historically, older sanitary manhole covers were produced with large open pick holes plus vent holes to facilitate the dispersal of sewer gases. These large openings allowed storm water to enter into the sanitary system.

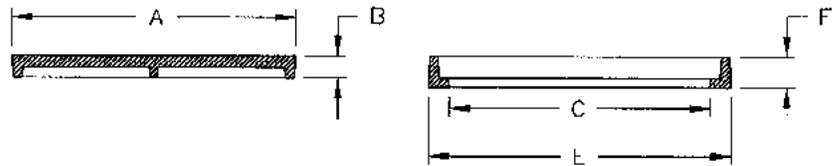
Current civil engineering practices dictate that sanitary collection systems are designed to allow only sanitary sewage flow in the pipelines, for a more cost efficient sewage treatment system. Communities are now mandated to reduce storm water infiltration into their existing systems through manhole rehabilitation projects.

Using EJ Gasket Seal Covers for rehab projects is a practical and cost effective way to help reduce surface water infiltration into the sanitary collection systems and are recommended when it is cost prohibitive to replace the complete unit with an EJ "Watertite" Frame and Cover.



SQUARE AND RECTANGULAR COVERS

EJ is continually adding new construction castings and drainage grates to our product offering. Please consult with your EJ representative or email us at us.sales@EJ.com to request a sales drawing not shown in this catalog.



A Cover Dim.	B Cover Thk.	C Clear Opening	D Frame Opening	E Flange Size	F Frame Ht.	Catalog Number
6 5/16 x 6 5/16	3/4	5 1/8 x 5 1/8	7 3/8 x 7 3/8	12 1/8 x 12 1/8	9 3/8	8340
7 3/4 x 7 3/4	1 1/2	6 9/16 x 6 9/16	8 x 8	16 1/2 x 16 1/2	9 3/4	8371
7 15/16 x 7 15/16	15/16	6 13/16 x 6 13/16	11 1/8 x 11 1/8	17 3/8 x 17 3/8	15	8365
7 15/16 x 7 15/16	7/8	6 1/2 x 6 1/2	11 1/8 x 11 1/8	16 3/4 x 16 3/4	10	8360
7 3/4 x 7 3/4	1 1/2	6 5/8 x 6 5/8	6 5/8 x 6 5/8	12 5/8 x 12 5/8	15	8375
7 3/4 x 7 3/4	1 1/2	6 5/8 x 6 5/8	6 5/8 x 6 5/8	15 x 15	12 1/4	8370
11 x 26 1/2	1 1/2	9 1/4 x 24	9 1/4 x 24	14 1/4 x 33 1/4	5	8650
11 3/4 x 11 3/4	1	10 x 10	10 x 10	13 1/4 x 13 1/4	1 1/2	8111
12 x 12	7/8	10 1/2 x 10 1/2	10 1/2 x 10 1/2	13 7/16 x 13 7/16	1 1/4	V-6712
12 3/16 x 12 3/16	7/8	11 x 11	13 13/16 x 13 13/16	20 5/8 x 20 5/8	7 1/2	8380
13 3/8 x 13 3/8	1 5/8	11 5/8 x 11 5/8	11 5/8 x 11 5/8	15 3/8 x 15 3/8	2 1/8	V-6713
13 5/8 x 13 5/8	1 1/2	12 1/8 x 12 1/8	13 7/8 x 13 7/8	18 x 18	4	8301 Rev
13 3/4 x 13 3/4	1	12 x 12	12 x 12	15 1/8 x 15 1/8	1 1/2	8115
13 3/4 x 13 3/4	1 1/2	12 x 12	14 x 14	18 x 18	4	8001
13 7/8 x 25 7/8	1	12 x 24	12 x 24	15 1/8 x 27 1/8	1 1/2	V-6751
13 5/8 x 13 5/8	1 1/2	12 1/16 x 12 1/16	13 3/8 x 13 3/8	18 x 18	4	8201 TF
14 3/8 x 14 3/8	1	12 7/8 x 12 7/8	12 7/8 x 12 7/8	15 7/8 x 15 7/8	1 1/2	V-6714
15 7/8 x 15 7/8	1 1/4	14 1/4 x 14 1/4	14 1/4 x 14 1/4	17 1/4 x 17 1/4	1 3/4	8117

Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

SQUARE AND RECTANGULAR COVERS (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Frame Opening	E Flange Size	F Frame Ht.	Catalog Number
17 3/4 x 17 3/4	1 9/16	16 x 16	16 x 16	19 1/4 x 19 1/4	2	8120
18 1/4 x 26 1/4	1 1/2	16 x 24	20 1/16 x 28 1/16	24 x 32	4	8016
18 1/8 x 18 1/8	1 1/2	16 3/8 x 16 3/8	16 3/8 x 16 3/8	19 1/4 x 19 1/4	2	V-6718
19 x 24 3/4	1 1/2	17 x 23 1/16	19 1/4 x 25 1/4	24 x 30	4	8322 Rev
17 3/4 x 21 3/4	1/2	17 1/4 x 21 1/4	17 1/4 x 21 1/4	23 x 27	3	8040 TF
22 1/2 x 45 Dbl	1 9/16	17 7/8 x 40 1/2	18 1/8 x 40 3/4	24 1/2 x 46 7/8	5 1/2	8107 TF
19 3/4 x 19 3/4	1 1/2	18 x 18	20 x 20	24 x 24	4	8004
19 3/4 x 19 3/4	1 1/2	18 x 18	20 x 20	25 1/2 x 25 1/2	4	V-6875-2
19 3/4 x 19 3/4	1 1/2	18 x 18	18 x 18	21 1/4 x 21 1/4	2	V-6720
20 x 20	1 1/2	18 1/4 x 18 1/4	20 1/4 x 20 1/4	24 x 24	4	8304 Rev
20 x 20	1 1/2	18 1/16 x 18 1/16	18 3/8 x 18 3/8	24 1/4 x 24 1/4	4	8204 TF
18 3/4 x 24 3/4	1 1/2	18 x 24	18 x 24	24 x 30 1/8	4	8222 TF
20 x 36	2	18 x 34	18 x 34	22 5/16 x 38 5/16	4	8105
19 3/4 x 19 3/4	11/16	18 11/16 x 18 11/16	18 3/4 x 18 3/4	24 1/16 x 24 1/16	4	8244 TF
19 7/8 x 19 7/8	3/8	18 7/8 x 18 7/8	20 x 20	24 x 24	4	8050
21 3/4 x 21 3/4	1 1/2	20 x 20	22 x 22	26 x 26	4	8305 Rev
21 9/16 x 21 9/16	1 1/2	20 1/8 x 20 1/8	20 1/8 x 20 1/8	26 x 26	4	8205 TF
23 3/4 x 23 3/4	3/4	21 3/4 x 21 3/4	21 3/4 x 21 3/4	28 15/16 x 28 15/16	4	8390 TF
23 3/4 x 23 3/4	1 1/2	22 x 22	24 x 24	29 1/2 x 29 1/2	4	V-6875-3
23 3/4 x 23 3/4	1 1/2	22 x 22	24 x 24	29 1/2 x 29 1/2	4	V-6622
23 1/2 x 23 1/2	1 1/2	21 7/8 x 21 7/8	23 3/4 x 23 3/4	28 x 28	4	8306 Rev
23 1/2 x 23 1/2	1 1/2	22 x 22	22 x 22	28 x 28	4	8206 TF
23 3/4 x 35 3/4	1 1/2	22 x 34	24 x 36	29 1/2 x 41 1/2	4	V-6660
24 1/8 x 24 1/8	1 3/4	22 1/4 x 22 1/4	22 1/4 x 22 1/4	25 7/8 x 25 7/8	2 5/8	V-6724
25 3/4 x 31 3/4	1 3/8	23 x 29	26 x 32	31 1/2 x 37 1/2	4	V-6482
25 3/4 x 37 3/4	1 3/8	23 x 35	26 x 38	31 1/2 x 43 1/2	4	V-6465
25 3/4 x 25 3/4	1 1/2	23 1/2 x 23 1/2	23 1/2 x 23 1/2	30 x 30	4	8208 TF
25 3/4 x 31 3/4	11/16	23 13/16 x 29 15/16	24 3/16 x 30 3/16	30 x 36	4	8270 TF
25 11/16 x 37 11/16	5/8	23 7/8 x 35 7/8	26 3/4 x 38 3/4	30 x 42	4	8271 TF
25 3/4 x 25 3/4	2	24 x 24	24 x 24	27 3/4 x 27 3/4	3	V-6726
25 3/4 x 25 3/4	2	24 x 24	26 1/4 x 26 1/4	32 x 32	6	V-6726-2 Rev
25 3/4 x 25 3/4	2	24 x 24	26 x 26	34 x 34	5	V-6726-1 Rev
25 3/4 x 25 3/4	1 1/2	24 x 24	26 x 26	31 1/2 x 31 1/2	4	V-6624 Rev
25 3/4 x 25 3/4	1 1/2	24 x 24	26 x 26	29 15/16 x 29 15/16	4	8308 Rev
25 1/4 x 25 1/4	11/16	24 x 24	24 x 24	30 x 30	4	8247 TF
26 x 26	1	24 x 24	24 x 24	27 1/8 x 27 1/8	1 1/2	8132
26 3/4 x 26 3/4	1 1/2	24 x 24	27 x 27	33 1/2 x 33 1/2	4	8008
25 1/2 x 31 1/2	1 1/2	24 x 30	25 3/4 x 31 3/4	30 x 36	4	8328 Rev
25 1/2 x 31 1/2	1 1/2	24 x 30	24 x 30	30 x 36	4	8228 TF
25 3/4 x 49 3/4	1 1/2	24 x 48	26 x 50	31 1/2 x 55 1/2	4	V-6875-17

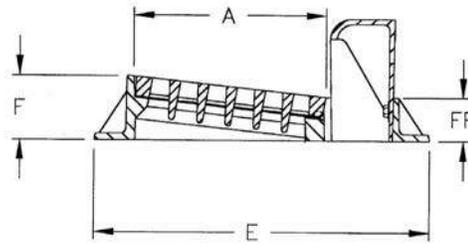
Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

SQUARE AND RECTANGULAR COVERS (CONTINUED)

A Cover Dim.	B Cover Thk.	C Clear Opening	D Frame Opening	E Flange Size	F Frame Ht.	Catalog Number
25 3/4 x 49 3/4	1 1/2	24 x 48	26 x 50	31 1/2 x 55 1/2	4	V-6667
25 5/8 x 51 1/4	3/4	24 x 49	24 x 49	30 x 55 1/2	4 1/8	8273 TF
25 3/4 x 37 3/4	1 1/2	24 1/8 x 36 1/8	26 x 38	31 1/2 x 43 1/2	4	V-6665
27 x 33	1 3/8	24 3/4 x 29	24 3/4 x 29	44 x 50	11 1/2	8395
31 3/4 x 49 3/4	1 1/2	28 5/8 x 46 5/8	32 x 50	37 1/2 x 55 1/2	4	V-6469
31 7/8 x 37 3/4	2	29 x 35	32 x 38	38 1/8 x 44 1/8	5	V-6468
32 x 50 dbl	1 1/2	29 7/8 x 48	30 1/8 x 50 5/16	36 x 54 1/8	4	8333 Rev
31 3/4 x 31 3/4	1 1/2	30 x 30	32 x 32	36 x 36	4	8313 Rev
31 3/4 x 31 3/4	9/16	30 x 30	30 x 30	36 15/16 x 36 15/16	4	8249 TF
31 7/8 x 37 3/4	2	30 x 36	32 1/8 x 38	38 1/4 x 44 1/4	5	V-6668
31 3/4 x 49 3/4	1 1/2	30 x 48	32 x 50	37 1/2 x 55 1/2	4	V-6875-19
32 x 50 dbl	1 1/2	30 x 48	34 1/4 x 52 1/4	38 x 54	4	8233 TF
31 3/4 x 31 3/4	1 1/2	30 1/8 x 30 1/8	30 5/16 x 30 5/16	36 5/8 x 36 5/8	4	8213 TF
31 3/4 x 31 3/4	1 1/2	30 1/8 x 30 1/8	32 x 32	37 1/2 x 37 1/2	4	V-6630
31 7/8 x 31 7/8	2	30 1/4 x 30 1/4	30 1/4 x 30 1/4	33 7/16 x 33 7/16	2 3/4	V-6732
36 x 60 dbl	2	33 7/8 x 58	33 7/8 x 58	47 7/8 x 72	6	8020
37 3/4 x 49 3/4	1 3/8	34 7/8 x 47	38 x 50	43 1/2 x 55 1/2	4	V-6470
37 3/4 x 37 3/4	1 1/2	35 x 35	38 x 38	43 1/2 x 43 1/2	4	V-6436
37 1/2 x 37 1/2	1 1/2	35 5/16 x 35 5/16	37 5/8 x 37 5/8	41 5/8 x 41 5/8	4	8315 Rev
37 3/4 x 37 3/4	1 1/2	36 1/8 x 36 1/8	38 x 38	43 1/2 x 43 1/2	4	V-6636
37 3/4 x 49 3/4	1 1/2	36 1/8 x 48 1/8	38 x 49 7/8	43 1/2 x 55 3/8	4	V-6875-20
37 3/4 x 49 3/4	1 1/2	36 1/8 x 48 1/8	38 x 49 7/8	43 1/2 x 55 3/8	4	V-6670
38 1/2 x 38 1/2	2	36 1/2 x 36 1/2	36 1/2 x 36 1/2	40 3/8 x 40 3/8	2 3/4	V-6736
43 3/4 x 43 3/4	2	41 x 41	44 x 44	50 1/8 x 50 1/8	5	V-6442
43 7/8 x 43 7/8	2	41 3/4 x 41 3/4	44 1/4 x 44 1/4	50 1/8 x 50 1/8	5	V-6875-9
43 7/8 x 43 7/8	2	41 3/4 x 41 3/4	44 1/4 x 44 1/4	50 1/8 x 50 1/8	5	V-6642
50 5/8 x 50 5/8	1 5/8	48 5/8 x 48 5/8	51 x 51	58 3/4 x 58 3/4	4 3/8	V-6875-10
50 5/8 x 50 5/8	1 1/2	48 5/8 x 48 5/8	51 x 51	58 3/4 x 58 3/4	4 3/8	V-6648

Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

CURB INLETS



Grate Dimension Width length	Base Flange width length	Frame Ht. F	Frame Ht. FF	Square In. Open	Grate Style	Frame Series
11 3/8 x 28 3/4	29 x 36	10	8 1/2	85	7210M4 Vane	7210
10 7/8 x 20	31 x 31	7	6	100	7205M1	7205
16 5/8 x 21 7/8	36 x 34 7/8	10	7 3/4	100	7220M4 Vane	7220
17 3/4 x 23 3/4	28 x 30	5	4	100	7700M2 Vane	7701
17 3/4 x 23 3/4	28 x 30	5	4	100	7700M3 Bidirect.	7701
24 x 13 5/8	33 1/4 x 36	6	9 3/4	110	7545M2 Vane	7545
16 x 23	36 x 36	8	7	125	7010M4 Vane	7010
17 3/4 x 23 3/4	28 x 30	5	4	128	7700M1	7701
16 1/16 x 23	36 x 36	8	7	130	7010M1	7010
11 3/8 x 28 3/4	29 x 36	10	8 1/2	130	7210M1	7210
16 1/4 x 24	34 1/2 x 34 1/2	9 3/8	10 1/2	130	7463M2*	7463
16 1/4 x 24	29 1/4 x 34 1/2	9 1/2	10 1/2	130	7463M2*	7464
17 x 21 3/8	34 x 34	6 1/2	5 1/2	135	7000M1	7000
11 1/4 x 28 11/16	29 x 36	10	8 1/2	135	7210M2	7210
17 3/4 x 23 3/4	28 x 30	5	4	135	7700M4 ADA	7701
17 x 21 3/8	27 1/4 x 34 3/8	6 3/4	5 1/2	135	7000M1*	7290
18 x 22 1/2	37 x 37	6 3/4	6 1/4	140	7010M2 Sinusoidal	7020
18 x 22 1/2	37 x 37	6 3/4	4 3/4	140	7010M2 Sinusoidal	7022
16 x 23	36 x 36	8	7	140	7010M3 Sinusoidal	7010
16 1/4 x 22 1/4	26 7/16 x 29	12 15/16	10 3/4	140	7170M2	7170
16 1/4 x 22 1/4	29 1/2 x 32 1/4	10 5/8	12 3/8	140	7170M2	7171
17 x 22	38 x 38	6 1/4	5 1/4	140	7310M2	7310
19 7/8 x 22 7/8	26 3/4 x 32 11/16	7	7	142	V-4091-2	V-4091
16 7/8 x 22	36 x 31	10	7 3/4	145	7220M2	7220
16 7/8 x 22	36 x 31	10	7 3/4	145	7220M3 Sinusoidal	7220
20 1/8 x 21 5/8	32 x 32	10 1/4	10 1/4	145	7500 Cover	7500
15 5/8 x 21 5/8	33 5/8 x 33 3/8	7 7/8	7 7/8	145	7520M2	7520
17 x 21 3/8	34 x 34	6 1/2	5 1/2	150	7000M2 Sinusoidal	7000
19 7/8 x 22 7/8	26 3/4 x 32 11/16	7	7	156	V-4091-1	V-4091
19 7/8 x 22 7/8	26 3/4 x 32 11/16	7	7	156	V-4091 Vane	V-4091
16 x 23	36 x 36	8	7	160	7010M5 Diagonal	7010
18 5/8 x 22 1/4	36 x 36	9 1/8	7 3/4	160	7040M1	7045
18 11/16 x 22 1/4	36 x 36	9 1/8	7 11/16	160	7040M1	7050
18 5/8 x 22 1/4	36 5/16 x 36 5/16	9 1/8	7 3/4	160	7045M1	7056

Note: All dimensions are in inches. * Other style grates available ** Double Inlet

CURB INLETS (CONTINUED)

Grate Dimension Width length	Base Flange width length	Frame Ht. F	Frame Ht. FF	Square In. Open	Grate Style	Frame Series
18 5/8 x 22 1/4	36 x 36	9 1/8	7 3/4	160	7045M1	7065
18 5/8 x 22 1/4	36 x 36	9 1/8	7 3/4	160	M1 Sinusoidal	7045
18 5/8 x 22 1/4	36 x 36	9 1/8	7 3/4	160	M2 Adj. Sinusoidal	7045
16 7/8 x 21 7/8	36 x 34 7/8	10	7 3/4	165	7220M1	7220
16 7/8 x 22	31 x 36	10	7 3/4	165	7221M1	7221
24 x 20 1/8	33 1/4 x 36	6	9 3/4	165	7545M1 Vane	7545
17 1/4 x 24	30 x 33	5	8	165	7711M3 Vane LH & RH	7711
18 x 22 1/2	37 x 37	6 3/4	6 1/4	170	7010M3 Sinusoidal	7020
18 x 22 1/2	37 x 37	6 3/4	4 3/4	170	7010M3 Sinusoidal	7022
17 x 22	38 x 38	6 1/4	5 1/4	170	7310M1	7310
22 3/4 x 22 3/4	31 3/16 x 38	9 3/4	8 7/8	170	7570M3 Vane	7570
19 1/4 x 19 1/4	28 1/4 x 30	10	12 1/2	175	7280M	7280
19 1/4 x 19 1/4	30 x 31	10	12 1/2	175	7280M	7281
15 x 23	35 x 35	9	6	175	7420M	7420
18 5/8 x 22 1/4	36 x 36	7 2/3	9 1/8	180	M3 Sinusoidal	7045
16 1/4 x 22 1/4	26 7/16 x 29	10 5/8	12 3/8	185	7170M1	7170
16 1/4 x 22 1/4	29 x 32 1/4	10 5/8	12 3/8	185	7170M1	7171
23 1/2 x 26	29 3/4 x 38	5 3/4	10 1/8	185	7495M4 Bidirect.	7495
17 1/4 x 24 1/4	30 x 33	5	8	189	7711M1	7711
16 x 31	25 3/4 x 40 3/4	6	6	189	7765M Vane	7765
18 1/2 x 21 7/8	23 5/8 x 23 5/8	9	16 1/2	190	7411M	7411
15 5/8 x 34 3/4	31 1/2 x 43 1/2	7 7/8	7 1/8	190	7505M1	7505
22 3/4 x 22 3/4	31 13/16 x 38	9 3/4	8 7/8	190	7570M1 Vane	7570
22 3/4 x 22 3/4	31 3/16 x 38	9 3/4	8 7/8	190	7570M1 Vane*	7571
22 3/4 x 22 3/4	31 3/16 x 38	8 7/8	9 3/4	190	7570M1 Vane*	7582
22 3/4 x 22 3/4	31 13/16 x 38	9 3/4	8 7/8	192	7570M2 Diagonal	7570
17 x 21 3/8	34 x 34	6 1/2	5 1/2	195	7000M3	7000
18 x 22 1/2	37 x 37	6 3/4	6 1/4	195	7020M1	7020
18 x 22 1/2	37 x 37	6 3/4	4 3/4	195	7020M1	7022
18 5/8 x 22 1/4	30 1/16 x 36	9 1/8	7 3/4	195	7045M1	7066
16 3/4 x 29 7/8	24 1/2 x 36 9/16	7 1/2	5 1/2	195	7350M2 Bar grate	7350
16 3/4 x 29 7/8	24 1/2 x 36 9/16	7 1/2	5 1/2	212	7350M3 Vane	7350
25 3/4 x 25 3/4	33 1/2 x 33 1/2	10 7/8	10	213	7550M RH & LH	7550
17 1/4 x 28 3/4	29 x 36	10	15 3/4	215	7180M2	7180
22 x 22 1/8	36 x 36	10	13 5/8	215	7236M2	7236
23 5/8 x 24 1/4	36 x 36	6 3/4	8 3/4	220	7075M1	7076
23 1/4 x 24 1/4	31 x 36	8 3/4	12 1/2	220	7085M1	7085
22 3/4 x 22 3/4	34 7/8 x 34 7/8	10	12	220	7300 DNW	7300
23 1/4 x 23 1/4	32 3/4 x 32 3/4	7 1/4	11 1/8	220	7490M1	7490
17 3/4 x 35 1/2	31 x 43	6	4	225	7030M5 Diagonal	7030

Note: All dimensions are in inches. * Other style grates available ** Double Inlet

CURB INLETS (CONTINUED)

Grate Dimension Width length	Base Flange width length	Frame Ht. F	Frame Ht. FF	Square In. Open	Grate Style	Frame Series
18 3/4 x 25 5/8	27 1/2 x 34 1/8	10	10 3/4	225	7250M1	7250
22 1/4 x 24	29 1/4 x 34 1/2	10 1/2	9	225	7466M2 Vane	7467
19 1/16 x 25 1/2	36 x 35 7/8	8	10 1/2	225	7525M	7525
23 9/16 x 26	29 3/4 x 38	5 3/4	10 1/8	227	7495M3	7495
11 3/8 x 28 3/4	29 x 36	10	8 1/2	230	7210M3	7210
23 1/4 x 23 1/4	32 3/4 x 32 3/4	7 1/4	11 1/8	230	7490M3	7490
16 7/8 x 38	23 3/16 x 41 3/8	5 1/2	5 1/2	230	V-4092 Vane (1/2)	V-4092
23 5/8 x 24 1/4	31 x 36	8 3/4	6 3/4	240	7075M1	7070
23 5/8 x 24 1/4	36 x 36	6 3/4	8 3/4	240	7075M2 Sinusoidal	7076
21 3/8 x 22 11/16	36 x 36	10	15 5/8	250	7235M1	7235
22 x 22 3/4	36 x 36	10	15 5/8	250	7235M2	7235
17 5/8 x 35 3/8	47 5/16 x 47 5/16	9 1/8	6 7/8	250	7360M1	7360
23 1/2 x 26	29 3/4 x 38	5 3/4	10 1/8	250	7495M1 & M2	7495
22 1/2 x 22 1/2	26 1/2 x 34 7/8	9	10	250	7535M	7535
22 1/2 x 22 1/2	32 1/2 x 35 1/8	10	8 3/4	250	7535M	7540
17 3/4 x 35 1/2	31 x 43	6	4	260	7030M2	7030
17 3/4 x 35 1/2	31 x 43	6	4	260	7030M4 Vane	7030
17 3/4 x 35 1/2	31 1/4 x 43	9 1/8	7 1/8	260	7030M2*	7035
17 3/4 x 35 1/2	31 x 43	6	4	260	7030M6 Vane	7030
21 1/8 x 31 1/2	33 7/8 x 35 1/4	6	6	266	V-4285-3 Vane	V-4078
21 1/8 x 31 1/2	24 5/8 x 36 3/4	6	6	266	V-4285-3 Vane	V-4078
17 1/4 x 28 3/4	29 x 36	10 5/16	16	270	7180M1	7180
21 1/8 x 31 1/2	24 5/8 x 36 3/4	6	6	273	V-4285-1	V-4078
21 1/8 x 31 1/2	24 5/8 x 36 3/4	6	6	273	V-4285-1	V-4078
22 x 36	30 x 37 11/16	6	8 3/4	290	7555M2	7555
21 1/8 x 31 1/2	24 5/8 x 36 3/4	6	6	300	V-4285-2	V-4078
21 1/8 x 31 1/2	24 5/8 x 36 3/4	6	6	300	V-4285-2	V-4078
23 1/2 x 29 5/8	33 3/4 x 37 7/8	6	8 11/16	305	7370M	7370
18 x 36	25 1/8 x 47 5/8	6	6	312	V-4070	V-4070
17 3/4 x 35 1/2	31 x 43	6	4	315	7030M3 Diagonal	7030
17 3/4 x 35 1/2	46 9/16 x 46 9/16	9 1/8	7 1/8	315	7030M3 Diagonal*	7037
27 3/4 x 28	34 x 35 1/4	5 3/8	9	316	7430M1	7430
23 3/4 x 35 7/8	36 x 43	6 1/2	4	324	7510M4	7510
22 x 36	30 x 37 11/16	6	8 3/4	325	7555M1	7555
22 x 36	30 x 37 11/16	6	11 3/4	325	7555M1*	7560
27 3/4 x 29	36 1/4 x 38 3/8	8	11 1/2	330	7390M2	7390
22 x 36	30 x 37 11/16	6	8 3/4	330	7555M3 Vane	7555
27 3/4 x 29	44 x 44	11 1/2	8	330	7390M2*	7395
21 3/4 x 47 3/4	48 x 54	5 1/2	5	338	7590M1	7590
21 3/4 x 47 3/4	36 x 54	5 1/2	5	338	7590M1	7591

Note: All dimensions are in inches. * Other style grates available ** Double Inlet

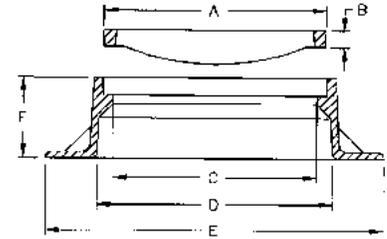
CURB INLETS (CONTINUED)

Grate Dimension Width length	Base Flange width length	Frame Ht. F	Frame Ht. FF	Square In. Open	Grate Style	Frame Series
27 3/4 x 29	36 1/4 x 38 3/8	8	11 1/2	340	7390M3 Sinusoidal	7390
23 3/4 x 35 7/8	36 x 43	6 1/2	4	340	7510M2 Sinusoidal	7510
22 3/4 x 39 1/2	30 x 40 1/2	5	5	340	7567M Vane	7568
21 3/4 x 36 1/4	24 1/4 x 44 1/2	5	5	359	V-4071 Vane	V-4074
23 3/4 x 35 3/4	28 3/4 x 43 3/4	7	7	368	V-4067-3	V-4067
22 3/4 x 39 1/2	30 x 40 1/2	5	5	370	7567M2	7568
23 3/4 x 35 3/4	31 1/4 x 43	7	4	370	V-4066-3 Diagonal	V-4066
23 3/4 x 35 3/4	31 1/4 x 43	7	4	370	V-4066-4 Diagonal	V-4066
23 3/4 x 35 1/2	31 x 43 1/2	6	4	380	7034M Flat	7034
24 3/8 x 36 1/2	45 1/16 x 45 1/16	8	6 5/8	382	V-4069-1	V-4069
23 3/4 x 35 3/4	28 3/4 x 43 3/4	7	7	383	V-4067-1	V-4067
16 3/4 x 29 7/8	24 3/4 x 67	7 1/2	5 1/2	390**	7350M2 Bar grate	7355
16 3/4 x 29 7/8	24 1/2 x 69	7 1/2	5 1/2	390**	7350M2 Bar grate	7358
15 5/8 x 34 3/4	31 1/2 x 43 1/2	7 7/8	7 1/8	400	7505M3 Vane	7505
28 x 36	31 5/8 x 41	4 1/4	3	400	V-4842	V-4140
23 3/4 x 35 7/8	36 x 43	6 1/2	4	410	7510M1 Diagonal	7510
28 x 36	31 5/8 x 41	4 1/4	3	410	V-4843	V-4140
28 x 36	31 5/8 x 41	4 1/4	3	410	V-4844	V-4140
21 3/4 x 47 3/4	48 x 54	5 1/2	5	415	7590M	7590
21 3/4 x 47 3/4	36 x 54	5 1/2	5	415	7590M	7591
16 3/4 x 29 7/8	24 3/4 x 67	7 1/2	5 1/2	424**	7350M3 Vane	7355
16 3/4 x 29 7/8	24 1/2 x 69	7 1/2	5 1/2	424**	7350M3 Vane	7358
23 3/4 x 35 13/16	31 1/4 x 43	7	4	435	V-4066-1	V-4066
23 3/4 x 35 3/4	31 1/4 x 43	7	4	435	V-4066-2	V-4066
22 1/2 x 22 1/2	35 1/2 x 55 1/2	7 7/8	7 7/8	440	5425M2 Vane	7565
23 3/4 x 35 7/8	36 x 43	6 1/2	4	446	7510M3 Vane	7510
28 x 36	31 5/8 x 41	4 1/4	3	460	V-4840	V-4140
22 1/2 x 45	24 11/16 x 60 3/16	9	10	500	7535M	7536
17 3/4 x 35 1/2	31 x 80	6	4	520	7030M2 Double*	7031
35 3/4 x 17 3/4	31 1/4 x 80 3/4	9 1/8	7 1/8	520	7030M2 Double*	7036
23 1/2 x 59 3/8	33 3/4 x 69 3/4	6	8 11/16	610**	7370M	7371
28 x 29	38 1/2 x 67 1/2	8	11 1/2	660**	7390M2	7391
28 x 29	38 1/2 x 67 1/2	8	11 1/2	680**	7390M3 Sinusoidal	7391
17 3/4 x 35 1/2	31 x 117	6	4	780	7030M2 Triple*	7032
23 3/4 x 35 7/8	37 x 81 1/2	6 1/2	4	820**	7510M1 Diagonal	7511
22 x 22	38 Diameter	9 3/4	9 3/4	NA	7530A	7530
22 3/4 x 22 3/4	34 x 34	4	4	NA	Solid cover	7260
21 x 28 3/4	23 3/8 x 31 1/8	3 1/4	3 1/4	NA	Bar grate	V-4275
24 1/2 x 27 3/4	36 x 41 3/4	9	7 1/2	NA	Steel grate	7140
24 1/2 x 37 1/2	46 x 41 3/4	9	7 1/2	NA	Steel grate	7150
24 1/2 x 47 1/2	56 x 41 3/4	9	7 1/2	NA	Steel grate	7155

Note: All dimensions are in inches. * Other style grates available ** Double Inlet

CATCH BASINS

EJ is continually adding new construction castings and drainage grates to our product offering. Please consult with your EJ representative or email us at us.sales@ejco.com to request a sales drawing not shown in this catalog.



A Grate Dimension	B Grate Thk.	C Clear Opening	D Frame Opening	E Base Flange	F Frame Ht.	Sq. In. Open.	Catalog Number
5 3/4 x 35 3/4	2	4 3/4 x 32 1/2	4 3/4 x 32 1/2	9 3/4 x 36 3/4	5 3/4	75	5310
9 1/2 x 9 1/2	1	8 x 8	8 x 8	10 3/4 x 10 3/4	1 1/2	33	V-5708
12 x 12	1	10 x 10	10 x 10	13 1/4 x 13 1/4	1 1/2	56	8111
12 x 12	7/8	10 1/2 x 10 1/2	10 1/2 x 10 1/2	13 7/16 x 13 7/16	1 1/4	66	V-5712
11 7/8 x 11 7/8	1	10 5/8 x 16 5/8	10 5/8 x 16 5/8	13 5/8 x 19 5/8	1 1/2	93	V-5750-1
13 3/8 x 13 3/8	1 5/8	11 5/8 x 11 5/8	11 5/8 x 11 5/8	15 3/8 x 15 3/8	1 1/8	55	V-5713
13 1/4 x 27 1/4	2	11 3/4 x 25 3/4	11 3/4 x 25 3/4	16 x 30	4	77	V-4274
13 1/2 x 13 1/2	1	12 x 12	12 x 12	15 1/8 x 15 1/8	1 1/2	Solid Cover	8115
13 7/8 x 25 3/8	1 7/8	12 x 23 1/2	12 x 23 1/2	22 x 33 1/2	3	130	V-5104
13 5/8 x 13 5/8	1 1/2	12 1/8 x 12 1/8	12 1/8 x 12 1/8	18 x 18	4	50	8201 TF
13 5/8 x 13 5/8	1 1/2	12 1/8 x 12 1/8	12 1/8 x 12 1/8	18 x 18	4	50	8301 Rev
14 x 19 3/4	1	12 1/2 x 18 5/8	12 1/2 x 18 5/8	19 13/16 x 25 1/4	1 3/4	100	7720
14 1/2 x 14 1/2	1	13 1/4 x 13 1/4	13 1/4 x 13 1/4	16 x 16	1 9/16	77	V-5714
14 3/4 x 21 3/4	2	13 1/16 x 20	13 15/16 x 21 13/16	20 x 30 1/8	10 1/2	131	5150
14 1/2 x 29 1/2	2	13 3/16 x 28	15 7/16 x 30 5/8	22 x 37	7	155	5190
14 1/2 x 29 1/2	2	13 1/2 x 28 1/2	15 x 30	22 x 34 7/16	7	300	5191
14 1/2 x 29 1/2	2	13 3/16 x 28	15 7/16 x 30 5/8	37 x 19 1/2	7	300	5192
15 x 38	1 1/4	13 7/8 x 38 5/16	16 1/2 x 40	23 x 46	7 1/4	NA	5410
15 3/4 x 15 3/4	1 1/8	14 1/4 x 14 1/4	14 1/4 x 14 1/4	17 1/2 x 17 1/2	1 3/4	90	V-5716
16 1/16 x 36	3 1/2	14 1/8 x 33 5/16	14 1/8 x 33 5/16	18 5/6 x 37 3/4	4 1/2	256	5360
16 x 34	1 1/2	14 1/4 x 32 1/2	16 x 34 1/4	22 1/4 x 40 1/2	4	260	V-5434
16 3/16 x 22 1/8	2 1/4	14 1/2 x 20	16 1/2 x 22 3/8	36 1/4 x 36 1/4	7 7/8 x 8 7/8	148	5120
16 3/4 x 29 3/4	2	14 1/2 x 27 1/2	17 x 29 7/8	29 1/4 x 42 1/4	7 1/2	200	5335
14 1/2 x 20 3/8	1 3/4	14 5/8 x 20 1/2	14 5/8 x 20 1/2	23 x 29	7	128	5060
16 5/8 x 29 5/8	1 3/8	15 1/4 x 28 3/8	17 5/16 x 30 5/8	21 7/8 x 38	6	Cover	V-4241
20 3/4 x 22 7/8	1 3/4	15 1/4 x 20 3/4	15 5/8 x 20 3/4	23 5/16 x 50 1/2	7	350	5280
20 3/4 x 22 7/8	1 3/4	15 1/2 x 20 3/4	15 1/2 x 20 3/4	23 1/2 x 50 1/2	7	350	5281
20 3/4 x 35 1/2	1 3/4	15 1/2 x 30 1/2	15 1/2 x 30 1/2	23 1/2 x 38 1/2	7	255	5285
20 3/4 x 35 1/2	1 3/4	15 1/2 x 30 1/2	15 1/2 x 30 1/2	23 1/2 x 38 1/2	7	255	5286
17 3/4 x 23 3/4	1 1/2	16 x 22	18 x 24	25 x 31	4	128*	7700
18 1/8 x 30 1/8	2 9/16	16 x 28	18 1/4 x 30	26 x 38	5	250	V-4230
17 3/4 x 35 3/4	2	16 x 34	19 1/2 x 37 1/2	28 x 46	7	210	5245
18 x 18	1 1/2	16 1/4 x 16 1/4	18 3/8 x 18 3/8	30 x 30	6	140	5090
18 x 23 3/4	1 3/8	16 1/4 x 22	16 1/4 x 22	19 3/8 x 25 1/8	2	188	V-5752

* Other style grates available Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

CATCH BASINS (CONTINUED)

A Grate Dimension	B Grate Thk.	C Clear Opening	D Frame Opening	E Base Flange	F Frame Ht.	Sq. In. Open.	Catalog Number
18 x 18	1 1/2	16 3/8 x 16 3/8	16 3/8 x 16 3/8	19 1/2 x 19 1/2	2	152	V-5718
19 x 24 3/4	1 1/2	17 x 23 1/16	19 1/4 x 25 1/4	24 x 30	4	185	8322 Rev
16 7/8 x 21 7/8	1 3/4	17 1/8 x 22 1/8	17 1/8 x 22 1/8	25 x 30	5 1/4	140	5031
17 3/4 x 22 3/4	1 3/4	17 1/4 x 20 3/4	17 1/4 x 20 3/4	34	6 3/4	160*	5080
19 3/4 x 26 3/4	2	17 1/4 x 24 1/2	20 1/4 x 27 1/4	38 x 38	8 3/8	215	5130
17 1/8 x 22	1 3/4	17 3/8 x 22 3/8	17 3/8 x 22 3/8	25 1/8 x 29 1/8	5 1/8	140	5030
19 3/4 x 19 3/4	1 1/2	18 1/4 x 18 1/4	18 1/4 x 18 1/4	21 1/4 x 21 1/4	2	175*	V-5720
17 3/4 x 22 3/4	1 3/4	18 x 22 3/4	18 x 22 3/4	23 3/4 x 31 3/4	6 3/4	160*	5000
17 3/4 x 22 3/4	1 3/4	17 3/4 x 22 13/16	17 3/4 x 22 13/16	21 11/16 x 32 1/16	6 3/4	160*	5020
18 3/4 x 24 3/4	1 1/2	18 x 24	18 x 24	24 x 30 1/8	4	185	8222 TF
19 3/4 x 25 3/4	1 1/2	18 x 24	20 x 26	25 1/2 x 31 1/2	4	220	V-5654
17 7/8 x 29 7/8	2 1/2	18 x 30	18 x 30	26 x 38	5	195*	V-4230-1
19 13/16 x 31 5/8	1 1/2	18 x 30	20 x 32	25 1/2 x 37 1/2	4	300	V-5655
19 3/4 x 37 3/4	1 1/2	18 x 35 3/4	20 x 38	25 1/4 x 43	4	376	V-5656
20 x 36	2	18 x 34	18 x 34	22 5/16 x 38 5/16	4	320*	8105
21 x 28 3/4	2 9/16	18 3/4 x 26 1/2	18 3/4 x 26 1/2	23 3/8 x 31 1/8	3 1/4	220	V-4275
20 x 24	1 5/8	18 3/8 x 22 1/2	20 1/4 x 24 1/4	25 1/4 x 29 1/4	4 1/2	185	7750
20 x 30	2					270	5421
22 1/2 x 22 1/2	2	19 1/2 x 20 11/16	22 1/2 x 45	29 11/16 x 57	8	440	5425
21 1/8 x 31 1/2	2	19 1/2 x 29 7/8	19 1/2 x 29 7/8	24 1/2 x 36 1/2	6	303	V-4285-2
21 3/4 x 47 3/4	1 1/4	19 1/2 x 45 1/2	22 1/2 x 48 3/8	28 x 54	5	415	7593
21 3/4 x 21 3/4	1	19 9/16 x 19 9/16	22 x 22	33 3/4 x 33 3/4	8	185	5340
22 x 30	2	19 3/4 x 25 3/4	22 x 30	33 1/4 x 41 1/4	7 1/4	280	5385
21 3/4 x 33 3/4	2 3/4	19 3/4 x 31 3/4	20 3/4 x 31 3/4	24 x 36	2 3/4	361	V-4280-1
21 5/8 x 33 3/4	2 3/4	19 5/8 x 31 9/16	19 5/8 x 31 9/16	248 x 36	2 3/4	255	V-4280-2
21 5/8 x 33 3/4	2 3/4	19 3/4 x 31 3/4	20 3/4 x 31 3/4	23 5/8 x 35 5/8	2 3/4	363	V-4280-3
22 1/4 x 22 1/4	2 1/2	19 7/8 x 19 7/8	22 7/8 x 22 7/8	36 x 36	8 1/8	175	5100
21 3/4 x 21 3/4	1 1/2	20 x 20	22 x 22	26 x 26	4	155	8305 Rev
22 1/8 x 22 1/8	2 1/2	20 x 20	24 1/2 x 24 1/2	36 x 36	10	175	5125
22 1/4 x 34 1/4	2	20 x 32	20 x 32	30 1/2 x 42 1/2	4 1/4	345	V-5134
21 3/4 x 21 3/4	1 1/2	20 x 20	22 x 22	26 x 26	4	155	8205 TF
22 1/2 x 22 1/2	2	20 3/8 x 20 1/2	22 5/8 x 23 7/8	34 1/2 x 48	8	500	5375
22 1/2 x 22 1/2	2	20 3/8 x 20 3/8	23 23	34 1/2 x 47 7/8	8	500	5376
21 1/2 x 21 1/2	1 3/4	20 1/2 x 20 1/2	20 1/2 x 20 1/2	28 x 28	6	220	V-5150
22 1/2 x 22 1/2	2	20 3/8 x 21	23 7/8 x 23 7/8	25 3/8 x 34 1/2	8	250	5380
23 3/4 x 23 3/4	2	21 x 21 1/2	23 x 23 1/4	31 1/8 x 60	9 1/2	350	5344
23 1/2 x 23 1/2	2	21 x 23 9/16	21 x 23 9/16	28 1/2 x 29 1/4	4	180	5391 Sgl
47 x 23 1/2	2	21 x 49	21 x 49	29 1/2 x 52	4	360	5391 Dbl
22 3/4 x 39 1/2	2	21 x 37 9/16	23 1/2 x 39 3/16	30 x 45 1/2	5	370*	7568
23 3/4 x 23 3/4	2	21 1/8 x 21 1/8	24 x 24	31 x 36	9 1/2	175	5342

Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

CATCH BASINS (CONTINUED)

A Grate Dimension	B Grate Thk.	C Clear Opening	D Frame Opening	E Base Flange	F Frame Ht.	Sq. In. Open.	Catalog Number
22 x 26	1	21 1/8 x 25	24 1/2 x 27 7/8	33 7/8 x 36	8 5/8	245	5220
22 1/2 x 36 3/8	1 3/4	21 1/8 x 35	21 1/8 x 35	27 3/8 x 41 1/4	3	260	5395
24 x 36	2	21 1/2 x 33 1/2	21 1/2 x 33 1/2	28 x 40 1/4	2 3/4	413	V-5760
24 x 36	2	21 1/2 x 33 1/2	24 1/4 x 36 1/4	28 x 40 1/4	2 3/4	413	V-5760
23 3/4 x 23 3/4	2	21 3/4 x 21 3/4	24 x 24	32 1/2 x 32 1/2	6	215	5370
23 1/2 x 23 1/2	1 1/2	21 7/8 x 21 7/8	23 3/4 x 23 3/4	28 x 28	4	215	8306 Rev
23 1/2 x 23 1/2	1 1/2	22 x 22	22 x 22	28 x 28	4	220	8206 TF
23 5/8 x 23 5/8	1 1/2	22 x 22	24 1/8 x 24 1/8	34 x 34	8	220	5235
23 5/8 x 23 5/8	1 1/2	22 x 22	23 15/16 x 23 15/16	34 x 29 11/16	8	440	5236
23 3/4 x 23 3/4	1 1/2	22 x 22	24 x 24	29 1/4 x 29 1/4	4	266	V-5622-4
23 3/4 x 35 3/4	1 1/2	22 x 34	24 x 36	29 1/2 x 41 1/2	4	390	V-5660
21 1/2 x 47	3	22 x 42 1/4	23 x 42 1/4	25 3/4 x 48 1/4	6	396	V-4210-1
23 5/8 x 23 5/8	1 1/2	22 x 22	25 7/16 x 25 7/16	32 3/4 x 32 3/4	6	220	5250
24 x 24	2 15/16	22 1/4 x 22 1/4	25 7/8 x 25 7/8	37 7/8 x 37 7/8	7 5/8	300	5230
24 x 24	1 7/8	22 1/8 x 22 1/8	22 1/8 x 22 1/8	30 x 30	2 5/8	268	V-5724-1
24 x 24	1 7/8	22 1/4 x 22 1/4	22 1/4 x 22 1/4	25 7/8 x 25 7/8	2 5/8	212	V-5724-2
23 7/8 x 39	1 3/4	22 3/8 x 37 1/2	22 3/8 x 37 1/2	25 7/8 x 41	2 3/4	392	V-5759-1
24 x 24	2	22 1/2 x 22 1/2	25 13/16 x 25 13/16	32 x 32	6 1/4	243	V-5324-1
24 x 36	2	22 1/2 x 34 1/2	25 13/16 x 37 13/16	32 x 44	6 1/4	405	V-5360-1
26 x 26	1 1/2	23 x 23	28 13/16 x 28 13/16	33 x 33	3	245	5050
28 5/8 x 45 1/4	2	23 7/16 x 40	23 7/16 x 40	37 7/16 x 54	2 1/2	750	5400
23 7/8 x 26	2 1/2	23 1/16 x 24	23 1/16 x 24	24 3/4 x 32	1 1/2	240	V-4821
25 1/4 x 47 3/4	4	22 15/16 x 45 13/16	26 1/16 x 48 9/16	33 1/2 x 56	9	Steel grate	7156
26 x 52	2	23 1/8 x 23 9/16	25 3/4 x 25	32 1/4 x 64 1/2	9 1/2	300	5350
25 3/4 x 25 3/4	1 1/2	23 1/2 x 23 1/2	23 1/2 x 23 1/2	30 x 30	4	270	8208 TF
25 3/4 x 25 3/4	1 1/2	23 1/2 x 23 1/2	23 1/2 x 23 1/2	30 x 30	4	270	8308 Rev
25 3/4 x 25 3/4	1 1/2	23 1/2 x 23 1/2	23 1/2 x 23 1/2	30 x 30	4	270	8308
25 3/4 x 25 3/4	1 1/2	24 x 24	26 x 26	31 3/8 x 31 3/8	4	295	V-5624
25 3/4 x 25 3/4	2	24 x 24	26 x 26	32 x 32	5	321	V-5626
25 1/2 x 31 3/4	1 1/2	24 x 30	27 1/4 x 33 1/4	30 x 36	4	350	8228 TF
25 1/2 x 31 1/2	1 1/2	24 x 30	25 3/4 x 31 3/4	30 x 36	4	350	8328 Rev
26 1/2 x 47 3/4	2 9/16	24 x 45 1/4	24 x 45 1/4	32 x 53 1/4	3 1/4	470*	5355
25 3/4 x 31 3/4	1 1/2	24 x 30	26 x 32	31 3/8 x 37 3/8	4	390	V-5662
25 3/4 x 49 3/4	1 1/2	24 x 48	26 x 50	31 1/2 x 55 1/2	4	600	V-5667
26 1/4 x 50 1/4	1	24 x 48	24 x 48	32 x 56	4	520	V-4195-1
25 3/4 x 37 3/4	1 1/2	24 1/8 x 36 1/8	26 x 38	31 1/2 x 43 1/2	4	463	V-5665
25 7/8 x 37 7/8	2	24 3/8 x 36	26 x 38	31 1/2 x 43 1/2	5	397	V-5666
25 3/4 x 25 3/4	2	24 1/4 x 24 1/4	24 1/4 x 24 1/4	27 7/8 x 27 7/8	2 3/4	321	V-5726
28 x 28	2 1/4	24 1/2 x 24 1/2	24 1/2 x 24 1/2	29 3/4 x 29 3/4	3	326	V-5775
25 7/8 x 31 7/8	1 3/4	24 1/2 x 30 3/8	24 1/2 x 30 3/8	27 7/8 x 33 7/8	2 3/8	402	V-5763

Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

CATCH BASINS (CONTINUED)

A Grate Dimension	B Grate Thk.	C Clear Opening	D Frame Opening	E Base Flange	F Frame Ht.	Sq. In. Open.	Catalog Number
28 1/4 x 40	2 1/4	24 1/2 x 36	24 1/2 x 36	31 x 41	2 1/2	Steel	V-4290
27 x 27	2	25 x 25	25 x 25	28 11/16 x 28 11/16	2 1/2	390*	5115
27 x 27	2	25 x 25	25 x 25	30 x 30	2 1/2	300*	5116
27 1/2 x 27 1/2	1 1/16	25 1/2 x 25 1/2	25 1/2 x 25 1/2	29 x 29	1 9/16	360*	5110
28 x 36	2	25 3/4 x 33 3/4	25 3/4 x 33 3/4	33 1/4 x 41 1/4	3 5/8	460	V-4840
27 5/8 x 27 5/8	2	25 7/8 x 25 7/8	25 7/8 x 25 7/8	33 1/4 x 33 1/4	6	336	V-5155
28 x 28	2	25 7/8 x 25 7/8	25 7/8 x 25 7/8	30 1/8 x 30 1/8	2 3/4	370	V-5728
32 x 32	1 9/16	29 11/16 x 32 1/2	32 11/16 x 32 3/16	41 x 41	7 5/8	425	5225
31 3/4 x 31 3/4	1 1/2	29 15/16 x 29 15/16	32 x 32	36 x 36	4	426	8313 Rev
31 3/4 x 31 3/4	1 1/2	29 15/16 x 29 15/16	32 x 32	36 x 36	4	426	8213 TF
30 x 36	2 1/8	30 1/16 x 33	29 7/8 x 36 3/4	37 x 43 1/8	6 1/2	510	5240
31 7/8 x 31 7/8	2	30 1/4 x 30 3/4	30 1/4 x 30 1/4	33 3/4 x 33 3/4	2 3/4	490	V-5732
31 7/8 x 31 7/8	2	30 x 30	32 1/8 x 32 1/8	38 1/8 x 38 1/8	5	490	V-5632
31 3/4 x 37 3/4	2	30 x 36	32 1/8 x 38	38 1/4 x 44 1/4	5	562	V-5668
32 x 50 dbl	1 1/2	30 x 48	32 1/4 x 50 3/8	36 x 54	4	640	8333 Rev
31 15/16 x 49 7/8	1 1/2	30 x 48	30 x 48	38 x 54	4	640	8233 TF
31 3/4 x 31 3/4	1 1/2	30 1/8 x 30 1/8	32 x 32	37 1/2 x 37 1/2	4	474	V-5630
31 3/4 x 49 3/4	1 1/2	30 1/8 x 48 1/8	32 x 50	37 1/2 x 55 1/2	4	724	V-5669
29 7/8 x 32 3/8	3 1/4	30 7/8 x 30 1/8	30 7/8 x 30 1/8	36 15/16 x 76 3/8	4 1/8	1040	5418
29 7/8 x 32 3/8	3 1/8	30 7/8 x 31 3/16	30 7/8 x 31 3/16	39 1/2 x 41 1/4	4 1/8	520	5416
29 7/8 x 32 3/8	3 1/8	30 7/8 x 31 3/16	30 7/8 x 31 3/16	39 1/2 x 76 7/16	4 1/8	1085	5417
37 1/2 x 37 1/2	1 1/2	35 1/4 x 35 1/4	37 5/8 x 37 5/8	41 5/8 x 41 5/8	4	500	8315 Rev
41 1/8 x 41 1/8	3 1/2	36 x 36	36 x 36	46 x 46	4	780	5390
37 3/4 x 37 3/4	1 1/2	36 x 36	37 3/4 x 37 3/4	44 1/4 x 44 1/4	4	651	V-5636
37 3/4 x 49 3/4	1 1/2	36 1/8 x 48 1/8	38 x 49 7/8	43 1/2 x 55 3/8	4	900	V-5670
38 1/2 x 38 1/2	2	36 1/2 x 36 1/2	36 1/2 x 36 1/2	40 3/4 x 40 3/4	2 3/4	651	V-5736
21 3/4 x 47 3/4	1 1/4	39 x 45 1/2	48 x 48 3/8	51 x 54	5	830	7592
30 x 30	2	Steel Frame Available		Steel Frame Available		335	5420

Note: All dimensions are in inches. Rev = Reversible TF = Top Flange

DRAINAGE TABLES — ROUND GRATES

EJ is continually adding new construction castings and drainage grates to our product offering. Please consult with your EJ representative or email us at us.sales@ejco.com to request a sales drawing not shown in this catalog.

Grate Option	Manhole Grate Dia.	Catch Basin Grate Thk.	Sq. In. Opening	Grate Wier Perimeter	Grate Description	Frame Series
V-3610-1	10 1/4	1 1/2	33	32		V-1610-1
3660M	11 5/8	1 1/16	36	37	Light duty (Non-traffic)	3660Z
3660M2	11 5/8	1 1/16	33	37	ADA	3660Z
V-8501	13	3/4	35	41		V-8501
1150M	13 1/4	1	44	42	Medium duty	1150
1150N	13 1/4	1	50	42	Oval, Medium duty	1150
V-3610-2	13 1/4	1 1/2	54	42		V-1610-2
1750M	13 3/4	2	50	43		1750
V-3610-3	16 1/4	1 1/2	73	51		V-1610-3
1740M	17 3/4	1 1/2	50	56		1740
V-3600-1	19 1/4	1 1/2	110	60		V-1600-1, V-1700-1
1160N	20	3/4	105	63	Oval, Medium duty	1160
1160M	20 1/8	3/4	89	63	Medium duty	1160
3719M	20 1/4	1 1/2	121	64		3719
1060-01	21 3/4	1 1/8	135	68	Beehive	1030, 1060, 1170, 1171, 1180, 2850
1060-02	21 3/4	1 1/2	135	68	Beehive	1030, 1060, 1170, 1171, 1180, 2850
1060M1	21 3/4	1	115	68	Medium duty	1030, 1060, 1170, 1171, 1180, 2850
1060M2	21 3/4	1	145	68		1030, 1060, 1170, 1171, 1180, 2850
1060N	21 3/4	1 1/8	135	68	Oval	1030, 1060, 1170, 1171, 1180, 2850
V-3610-4	21 7/8	1 1/2	159	69		V-1610-4
1130-01	22	1 1/2	135	69	Beehive	1125, 1130, 1135, 1140, 1490
1130-02	22	1 1/2	135	69	Beehive	1125, 1130, 1135, 1140, 1490
1130M1	22	1 1/2	115	69	Medium duty	1125, 1130, 1135, 1140, 1490
1130M2	22	1 1/2	145	69		1125, 1130, 1135, 1140, 1490
1130M3	22	1 1/2	170	69	Medium duty	1125, 1130, 1135, 1140, 1490
1130N	22	1 1/2	135	69	Oval	1125, 1130, 1135, 1140, 1490
1660M	22 1/4	1	120	70		1660, 1661
1640M	22 5/8	1 1/2	132	71		1641
1020P	22 11/16	1 3/4	159	71	Concave	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996
1020-01	22 3/4	1 3/4	115	71	Beehive	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996
1020-02	22 3/4	1 3/4	150	71	Beehive	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996
1020M1	22 3/4	1 3/4	120	71	DNW	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996

Note: All dimensions are in inches.

DRAINAGE TABLES — ROUND GRATES (CONTINUED)

Grate Option	Manhole Grate Dia.	Catch Basin Grate Thk.	Sq. In. Opening	Grate Wier Perimeter	Grate Description	Frame Series
1020M2	22 3/4	1 3/4	150	71	DNW	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996
1020M3	22 3/4	1 3/4	100	71	ADA, DNW	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996
1020N	22 3/4	1 3/4	135	71	Oval	1020, 1022, 1037, 1050, 1051, 1510, 1550, 1880, 2996
1075M	22 3/4	1 1/8	140	71		1075
1000-01	23	1 1/4	140	72	Beehive, DNW	1000, 1010, 1070
1000-02	23	1 1/4	145	72	Beehive	1000, 1010, 1070
1000-03	23	1 1/4	130	72	Beehive	1000, 1010, 1070
1000M	23	1 1/4	140	72		1000, 1010, 1070
1000N	23	1 1/4	115	72	Oval, DNW	1000, 1010, 1070
1058M1	23	1 1/2	120	72		1058
1058M2	23	1 1/2	120	72	DNW	1058
1850M	23 1/4	1	105	73		1850, 1622
V-3501	23 1/4	1	137	73		1622, 2132, V-1105, V-1402, V-1403, V-1406, V-1501, V-1503
V-3384	23 1/2	1	159	74		V-1384
V-3418-1	23 1/2	1 1/2	166	74		V-1418, V-1480, V-1481, V-1600-2, V-1700-2
1202M	23 3/4	2 1/2	117	75	DNW	1202
1251M	23 3/4	1	148	75		1251
1450M	23 3/4	1	110	75		1450, 1690, 2020, 2035, 2410, 2415, 2416, 2420, 2425, 2430, 2925
1460M	23 3/4	3/4	140	75	Heavy duty	1460
1590M	23 3/4	1 3/8	140	75		1590
1665M	23 3/4	1	175	75		1665
1710M	23 3/4	2	115	75		1710, 1715, 2022, 2023, V-1140, V-1168, V-1243, V-1317
1710-O	23 3/4	2	140	75	Beehive	1710, 1715, 2022, 2023, V-1140, V-1168, V-1243, V-1317
1410M	23 13/16	1 1/8	170	75		1410
1120M	24	1 1/2	125	75		1120
1177M	24	2 1/4	192	76		1177Z
1855M	24 1/4	3/4	62	76	Non-Traffic, ADA, DNW, Logo	1855
1733M	24 7/16	2	161	77	DNW	1733, 2734
3770M	24 1/2	1	156	77		3770
1433M	24 3/4	1 1/4	100	78		1433
1600M	24 3/4	1	175	78		1600
2603M	24 3/4	7/8	185	78		2600, 2601, 2603, 2615, 2640
2603M2	24 3/4	7/8	152	78	ADA	2603, 2625TF, 2615Z, 3020Z

Note: All dimensions are in inches.

DRAINAGE TABLES — ROUND GRATES (CONTINUED)

Grate Option	Manhole Grate Dia.	Catch Basin Grate Thk.	Sq. In. Opening	Grate Wier Perimeter	Grate Description	Frame Series
3777	24 3/4	1	153	78	ADA	
2640P	24 3/4	7/8	136	78	Concave	2600, 2601, 2603, 2615, 2640
3700-O	24 13/16	7/8	117	78	Beehive	3700, 3705, 3710
3700M	25	1	152	79	DNW	3700, 3705, 3710
3700M2	25	1	152	79	ADA	3700Z, 3705Z, 3710Z
V-3600-3	25 3/8	1 1/2	180	80		V-1357, V-1600-3, V-1624, V-1700-3
1700M	25 1/2	2	120	80		1700, 1703
1975M	25 1/2	1	125	80		1975Z
1203M	25 3/4	1 3/8	159	81		1203, 1207, 1405
1205-02	25 3/4	7/8	185	81	Beehive	1203, 1204, 1205, 1207, 1405 1936
1205M	25 3/4	7/8	200	81	DNW	1203, 1204, 1205, 1207, 1405 1936
V-3312	25 3/4	1 1/2	215	81		V-1312
3772M	25 3/4	1	164	81	DNW	
1040-02	26	1 1/2	185	82	Beehive	1040, 1045, 1046, 1047, 1048, 1049, 1080, 2800
1040M1	26	1 1/2	190	82	DNW	1040, 1045, 1046, 1047, 1048, 1049, 1080, 2800
1040M2	26	1 1/2	170	82	DNW	1040, 1045, 1046, 1047, 1048, 1049, 1080, 2800
1040M3	26	1 1/2	130	82	ADA, DNW	1040, 1045, 1046, 1047, 1048, 1049, 1080, 2800
1040N	26	1 1/2	140	82	Oval	1040, 1045, 1046, 1047, 1048, 1049, 1080, 2800
1040N1	26	1 1/2	232	82	Oval	1040, 1045, 1046, 1047, 1048, 1049, 1080, 2800
1720N	26	1 5/8	140	82	Oval	1720
1720P	26	1 9/16	180	82	Concave	1720
3730M	26	1 3/4	170	82		3730
3726M	26 3/16	1	142	82		3725
2870M	27	2 1/2	236	85	Catch basin grate	2870Z
8075MVH	27 3/4	1	124	87	ADA	
2100M	27 7/8	1 3/8	205	88	DNW	2100, 2101
V-3610-5	27 7/8	1 1/2	243	88	DNW	V-1610-5
1890M	28 3/4	1 3/8	244	90		1890, 1891
266M	31 9/16	1 1/8	182	99		1266
1811M	31 2/3	1 5/16	240	100		1230, 1232, 1234, 1820, 1825, V-1600-4, V-1700-4, V-7032
V-3600-4	31 7/8	1 3/8	350	100		1230, 1232, 1234, 1820, 1825, V-1600-4, V-1700-4, V-7032
8025MVH	32	1 3/8	209	100	ADA	8027
1480M1	32	1 1/2	262	101	ADA, DNW	1320, 1322, 1480, 2810, V-1419, V-1420, V-1432
1320M	32	1 1/2	360	101	Cross bar	1320, 1322, 1480, 2810, V-1419, V-1420, V-1432
1322M	32	1 1/2	240	101		1320
1480M	32	1 1/2	275	101	Non-Traffic	1320, 1322, 1480, 2810, V-1419, V-1420, V-1432
8028MVH	32 1/4	1 3/8	209	101	ADA	8027
2880M	32 3/4	2	2419	103		2880Z TF

Note: All dimensions are in inches.

DRAINAGE TABLES — ROUND GRATES (CONTINUED)

Grate Option	Manhole Grate Dia.	Catch Basin Grate Thk.	Sq. In. Opening	Grate Wier Perimeter	Grate Description	Frame Series
V-7069	33 3/4	1 3/8	236	106	ADA	V-7069-1
V-3610-6	33 7/8	1 1/2	350	106		V-1610-6
1330M	35	2	375	110		1330
1585M	36	1 1/2	400	113		1585, 1586
8029MVH	37 1/4	1 1/2	308	117	ADA	
V-3600-5	38	2	480	119		V-1600-5, V-1700-5
1580M	38 1/2	1 1/2	468	121	Heavy duty & Extra Heavy duty	1581, 1821, 2815
1580M2	38 1/2	1 1/2	304	121	ADA	1581, 1821, 2815
V-3610-7	39 5/8	1 1/2	516	125		V-1610-7
1843M1	44 1/8	2	639	139		1843, 1845
V-3610-8	45 5/8	1 1/2	810	143		V-1610-8
V-3600-6	50 1/4	2	760	158		V-1600-6, V-1700-6

Note: All dimensions are in inches.

DRAINAGE TABLES — CATCH BASIN GRATES

EJ is continually adding new construction castings and drainage grates to our product offering. Please consult with your EJ representative or email us at us.sales@ejco.com to request a sales drawing not shown in this catalog.

Grate Option	Sq In. Opening	3-Sided Perimeter	4-sided Perimeter	Grate Description	Frame Option
5000M3	10	58	81	Restricted Flow, DNW	5000, 5020, 5080
V-5708	33	28	38		V-5708
8201M	50	41	55	ADA	8201, 8301
5100M2	50	66 3/8	88 1/2	Restricted Flow (variable)	5100, 5125
V-5713	55	40	54		V-5613, V-5713
V-5712	66	36	48		V-5712
7797M	70	41	54		7797
V-5714	76	44	58		V-5714
V-5716	90	48	64		V-5716
7720M	100	48	68		7720
7700M2*	100	59	83	Vane, DNW	7700
7700M3*	100	59	83	Bi-directional Vane, DNW	7700
V-5720-80	105	59	79	ADA	V-5620, V-5720
5800M1	112	51	73		5150
7700M1	128	59	83	Diagonal, DNW	7700
5800M2	130	51	73		5150
7463M2*	130	57	81	Vane	7464
7700M4	135	59	83	ADA, Diagonal, DNW	7700
5031M	140	56	78	Concave	5030, 5031
5030M	140	56	79	Concave,	5030
5090M	144	54	72		5090
5120M	148	54	77		5120
5110M5	148	83	110	ADA	5110
5190M2	150	59	89	Sinusoidal, two grate unit available	5190, 5191, 5192, 5193
V-5718	152	54	72		V-5718
V-4274	155	54	81		V-4274
8205M	155	65	86		8205, 8305
V-5622-80	156	71	95	ADA, DNW, Two grate unit available	5235, 5236, 5250, V-4875, V-5622
V-5751	158	54	80		V-5751
5000M1	160	58	81	DNW	5000, 5020, 5080
5000M2	160	58	81	Sinusoidal, DNW	5000, 5020, 5080
V-5724-80	164	72	96	ADA	V-5724
V-5720	175	59	79		V-5620, V-5720
5105M1	175	66	89	Sinusoidal, DNW	5100, 5125
5344M*	175	71	95	Vane	5342, 5344, 5370, V-5324-1
V-4410	195	66	88	Valley Gutter	V-4410-1, V-4410-2, V-4410-3
5391M	180	71	94		5391
8222M	185	62	87		8222, 8322

Note: All dimensions are in inches.

* 2-sided perimeter suggested for vane grate calculation

DRAINAGE TABLES — CATCH BASIN GRATES (CONTINUED)

Grate Option	Sq In. Opening	3-Sided Perimeter	4-sided Perimeter	Grate Description	Frame Option
7750M1	185	64	88	Herringbone, DNW	7750
5340M	185	65	87	DNW	5340
V-5752	188	60	84		V-5752
7765M*	189	63	94	Vane	7765, 7766
V-5726-80	194	77	103	ADA	V-5626, V-5726
V-5624-80	194	77	103	ADA, DNW	V-5624
V-4873-1	195	86	123	ADA	V-4873
V-4230-2*	195	66	97	Vane	V-4230, V-4231
5335M	200	63	93	Concave	5335
V-4246	200	66	96	DNW	V-4246
5250M	200	71	95	DNW	5250, 5235, V-4875, V-5622
7569M1	205	67	94		7569
7569M2	205	67	94	Concave	7569
5245M	210	71	107	DNW	5245
5370M	215	71	95		5370
7750M2*	216	64	88	Vane, DNW	7750
7750M3*	216	64	88	Bi-directional Vane, DNW	7750
7600M*	220	65	95	Vane, DNW	7600, 5460
8206M	220	71	94		8206, 8306
V-4275	220	71	100		V-4275
7075M1	220	72	96	Sinusoidal	7076
7466M2*	225	69	93	Vane	7466, 7467
7030M5	225	71	107	Diagonal	5245, 7030, 7031, 7032, 7035, 7037
7750-0	229	64	88	Beehive	7750
5130M1	235	66	93		5130
7535M*	235	68	90	Vane, Two grate unit available	7535
5410M	239	69	107	Concave	5410
V-4243-1	240	63	93	DNW	V-4240, V-4241, V-4854
5130M3	240	66	93	Diagonal	5130
V-5324	243	72	96	Concave	V-5324
5050M	245	78	104		5050
5380M*	250	68	90	Vane	5380
V-4435	251	78	108	Valley Gutter — Slight	V-4435
V-4280-2*	255	77	111	Vane	V-4280
5360M	256	68	104	Sloped	5360
V-4230-1	260	66	97	DNW	V-4230, V-4231
7030M2	260	71	106		5245, 7030, 7031, 7032, 7035, 7037
7030M6*	260	71	107	Vane	5245, 7030, 7031, 7032, 7035, 7037
5395M1	260	81	117		5395
V-5660-80	260	83	119	ADA, DNW	V-5660

Note: All dimensions are in inches.

* 2-sided perimeter suggested for vane grate calculation

DRAINAGE TABLES — CATCH BASIN GRATES (CONTINUED)

Grate Option	Sq In. Opening	3-Sided Perimeter	4-sided Perimeter	Grate Description	Frame Option
V-4430	265	78	108	Valley Gutter	V-4430
V-5622	266	71	95	DNW, Two grate unit available	5250, 5235, V-4875, V-5622
7075M2	266	72	96	Sinusoidal, Expressway use	7076
V-5724-1	268	72	96	DNW	V-5724
V-5622-5	269	71	95	Two grate unit available	5250, 5235, V-4875, V-5622
8208M	270	77	103		8208, 8308
V-4530	272	76	98	Valley Gutter — Sloped, DNW	V-4530-1, V-4530-2
7030M4*	272	71	107	Vane	5245, 7030, 7031, 7032, 7035, 7037
5345M1	276	78	104	Parallel Bar, Two grate unit available	5345, V-5626
5055M2	280	71	106		5055
5385M	280	74	104		5385
5055M	283	71	106	M1	5055
V-4880	283	89	119	ADA, Two grate unit available	4595, V-4880
V-5732-80	283	96	128	ADA	V-5632, V-5732
V-5630-80	283	96	128	ADA	V-5630
V-4410	290	88	132	Two grate unit, Valley Gutter	V-4410-2
V-5655	293	71	103		V-5655
8105M3	295	76	112	DNW	8105
V-5624	295	77	103		V-5624
5110M4	295	83	110	Medium duty, DNW	5110
5355M6	298	101	149	ADA, Non-slip, 1/2 grate	5355, 5356, 5357
5230M	300	72	96		5230
5115M2	300	81	108	DNW	5115
5110M3	300	83	110	Sinusoidal, DNW	5110
V-5664	300	83	115		V-5664
5190M2	300	89	148	Two grate unit, Sinusoidal	5191, 5192
V-4510-1	310	83	119	Valley Gutter, DNW	V-4510
V-5622-80	312	95	142	Two grate unit, ADA, DNW	5236L & 5236R
7030M3	315	71	107	Diagonal, Medium duty	5245
8105M1	320	76	112	Diagonal	8105
5345M2	320	78	104	Two grate unit available	5345, 5346
V-5726	321	77	103		V-5626, V-5726
V-5775	326	84	112		V-5775
8228M	328	83	114		8228, 8328
V-4855-1	332	72	110	High Capacity	V-4855
5450M	335	77	107		5450
5420M	335	90	120	Steel angle frame, DNW	5420
7590M1	338	91	139	DNW, Two grate unit available	7593
7567M	340	85	125	Vane, Two and three grate units available	7568

Note: All dimensions are in inches.

* 2-sided perimeter suggested for vane grate calculation

DRAINAGE TABLES — CATCH BASIN GRATES (CONTINUED)

Grate Option	Sq In. Opening	3-Sided Perimeter	4-sided Perimeter	Grate Description	Frame Option
5110M2	350	83	110	DNW	5110
5344M	350	95	143	Two grate unit, Vane	5344
V-4880-4	350	89	119	Two grate unit available	4595, V-4880
V-5736-80	356	115	153	ADA	V-5736
V-4280-1	361	77	111		V-4280
V-4280-3	363	77	111		V-4280
5416M3*	365	93	126	Vane, DNW, Two grate unit available	5416
8105M2	370	76	112	Parallel Bar	8105
V-5728	370	84	112		V-5728
7567M2	370	85	125	Concave, DNW, Two & three grate unit available	7568
5110M1	375	83	110	Non-Traffic, DNW	5110
7034M	380	83	119	Sloped, two grate unit available	7034
V-4067-1	383	83	119		V-4867-1
5115M1	390	81	108		5115, 5116
V-5662	390	83	115		V-5662
V-5660	390	83	119	DNW	V-5660
V-4230-2*	390	97	157	Two grate unit, Vane	V-4232L & V-4232R
V-5666	397	90	128		V-5666
5250M	400	95	142	Two grate unit, DNW	5236L & 5236R
V-5763	402	84	116		V-5763
V-5360	405	84	120	Concave	V-5360-1
7590M	415	91	139	DNW, Two grate unit available	7593
7595M	415	99	147		7595
5355M3	416	101	149	DNW, 1/2 grate	5355, 5356, 5357
V-5760	413	84	120		V-5760
8213M	426	95	127		8213, 8313
5425M2*	440	90	135	Two grate unit, Vane	5425
7600M*	440	97	158	Two grate unit, Vane, DNW	7600L & 7600R
V-4880-3	442	89	119	Two grate unit available	4595, V-4880
V-4520-1	458	89	125	Valley Gutter	V-4520
V-5665	463	89	127		V-5665
5355M1	465	101	149	Diagonal	5355, 5356, 5357
7535M*	470	90	135	Two grate unit, Vane, barrier wall	7536
V-4880-1	473	89	119	DNW, two grate unit available	4595, V-4880
V-5630	474	95	127	DNW	V-5630
V-4243-1	480	93	152	Two grate unit, DNW	V-4243L & V-4243R
5416M1	490	93	126	Sinusoidal, two grate unit available	5416
V-5732	490	96	128		V-5632, V-5732
V-4873	492	86	123		V-4873

Note: All dimensions are in inches.

* 2-sided perimeter suggested for vane grate calculation

DRAINAGE TABLES — CATCH BASIN GRATES (CONTINUED)

Grate Option	Sq In. Opening	3-Sided Perimeter	4-sided Perimeter	Grate Description	Frame Option
5355M5*	514	101	149	Vane, 1/2 grate	5355, 5356, 5357
V-4230-1	520	97	157	Two grate unit, DNW	V-4232L & V-4232R
5380M*	500	90	135	Two grate unit, Vane	5375, 5376
8315M	500	112	150	Two grate unit	8315
5240M	510	96	132	DNW	5240
5416M2	520	92	125	Two grate unit available	5416
V-4410	585	110	176	Three grate unit, Valley Gutter	V-4410-3
V-5622	536	96	143	Two grate unit, DNW	5236L & 5236R
V-5622-5	538	96	143	Two grate unit,	5236L & 5236R
V-4880-6	540	89	119	Two grate unit available	4595, V-4880
5355M4	540	101	149	Diagonal, 1/2 grate	5355, 5356, 5357
V-4530	544	98	151	Two grate unit, Sloped grate	V-4530-2
5345M1	552	104	156	Two grate unit, Parallel Bar	5350
V-5668	562	101	139		V-5668, V-5768
V-4880	566	119	179	Two grate unit, ADA	V-4883
7585M	575	109	159	DNW	7585
V-4230-2*	585	127	217	Three grate unit, Vane	V-4232L & V-4232R & V-4233C
V-5667	598	101	151	1/2 frame & grate unit	V-5667, V-5767
V-4880-2	630	89	119	Non-Traffic, two grate unit available	4595, V-4880
5345M2	640	104	156	Two grate unit	5350
8233M	640	114	164	Two grate unit	8233, 8333
V-5636	651	113	150	DNW	V-5636
V-5736	652	115	153		V-5736
7600M*	660	303	393	Three grate unit, Vane, DNW	7600L & 7600R & 7600C
7590M1	676	135	183	Two grate unit, DNW	7592
7567M*	680	125	204	Two grate unit, Vane	7568L & 7568R
V-4880-4	700	119	179	Two grate unit	V-4883
V-5669	724	113	163		V-5669, V-5769
5416M3*	730	126	192	Two grate unit, Vane, DNW	5417, 5418
7567M2	740	125	204	Two grate unit, Concave, DNW	7568L & 7568R
5400M	750	103	148	Two grate unit available	5400
7034M	760	119	190	Two grate unit, Sloped	7034L & 7034R
V-4230-2*	780	132	192	Four grate unit, Vane	(2) V-4232L & (2) V-4232R
V-4230-1	780	126	216	Three grate unit	V-4232L & V-4232R & V-4233C
7590M	830	135	183	Two grate unit, DNW	7592
V-5742	868	131	175	1/2 grate assy	V-5642, V-5742
V-4880-3	884	119	179	Two grate unit	V-4883
V-5670	708	125	174	1/2 frame & grate unit	V-5670, V-5770
V-4880-1	946	119	179	Two grate unit, DNW	V-4883

Note: All dimensions are in inches.

* 2-sided perimeter suggested for vane grate calculation

DRAINAGE TABLES — CATCH BASIN GRATES (CONTINUED)

Grate Option	Sq In. Opening	3-Sided Perimeter	4-sided Perimeter	Grate Description	Frame Option
5390M	908	121	161	One piece frame with two piece grate	5390
5416M1	980	126	192	Two grate unit, Sinusoidal	5417, 5418
7567M*	1020	164	283	Three grate unit, Vane, Concave	7568L & 7568R & 7568C
V-4230-1	1040	132	192	Four grate unit	(2) V-4232L & (2) V-4232R
5416M2	1040	126	192	Two grate unit	5417, 5418
V-4880-6	1080	119	179	Two grate unit	V-4880
7567M2	1110	164	283	Three grate unit, Concave, DNW	7568L & 7568R & 7568C
V-5648	1176	152	202	1/2 grate assy	V-5758
V-4880-2	1260	119	179	Two grate unit, Non-traffic-Heavy duty	V-4883
5400M	1500	148	238	Two grate unit	5405

Note: All dimensions are in inches.

* 2-sided perimeter suggested for vane grate calculation

SINUSOIDAL AND VANE GRATE FLOW CHARACTERISTICS

It is generally accepted that sinusoidal and vane grates are more efficient than standard bar grates when capturing water that is moving across them. Sinusoidal and vane grates have greater efficiency due to better directional flow characteristics. Sinusoidal and vane grates typically allow less water to bypass the grate. Please note that if a vane grate is installed improperly (i.e. backwards) the grate could have poor flow characteristics, while sinusoidal grates accept water equally in either direction. See page 28 for calculating flow capacities of inlet grates.



Illustrating 5416



Illustrating 7467M2



Illustrating V-5622

CROSS REFERENCE GUIDE

EJ provides this partial list for your reference only and recommends that you compare actual prints and/or castings when interchangeability is necessary or when writing specifications. Please contact our sales office for additional cross reference assistance.

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-1049	1049	R-1553	1311	R-1640-A	1204
R-1120	1490	R-1554	1310	R-1640-B	1805
R-1255	1825	R-1555	1310	R-1640-B1	1805
R-1272	2010	R-1557	1232	R-1640-C	1810
R-1275	1820	R-1557-A	1322	R-1640-C1	1810
R-1290	1805	R-1557-A4	1322	R-1640-C1	1822
R-1290-A	1802	R-1558	1234	R-1640-C1S	1820
R-1404-A	1700	R-1560	1212	R-1640-CS	1820
R-1411-A	2055	R-1566	1525	R-1640-D	1812
R-1412-A	1690	R-1568	1555	R-1642	1040
fR-4990	1590	R-1569	1555	R-1642-1	1625
R-1418	2020	R-1570	1000	R-1642-1S	1625
R-1420	1410	R-1570-A	1000	R-1642-A	2450
R-1422-B	1620	R-1572	3115	R-1643	V-1312
R-1422-C	1665	R-1573	3108	R-1645	1020
R-1422-D	1850	R-1574	3160	R-1645-A	3010
R-1423	1450	R-1575	3162	R-1646	1020
R-1433-B	1835	R-1576	3164	R-1647-A	1020
R-1437-B	1660	R-1578	V-1600-5	R-1648	1246
R-1455	1955	R-1579	3110	R-1648	1337
R-1466	1010	R-1580	1140	R-1649	V-1326
R-1466-2	1000	R-1581-A	1136	R-1653-A	1965
R-1466-A	1670	R-1582	3115	R-1653-D	1965
R-1467	1641	R-1582	1322	R-1653-E	1965
R-1500	1125	R-1582	1480	R-1653-F	1965
R-1510-A	1030	R-1582-A	1322	R-1654	1850
R-1530	1020	R-1583	3118	R-1656	1925
R-1534-A	1500	R-1585	1118	R-1657-1	1122
R-1535-A	1500	R-1586	3144	R-1657-1	1325
R-1535-C	1500	R-1590	1205	R-1658	1122
R-1536	V-1383	R-1593	3771	R-1660	1641
R-1537	1501	R-1595	2224	R-1661	1641
R-1538	V-1383-1	R-1596	1202	R-1664	1665
R-1540	1078	R-1597	2222	R-1664-A	1665
R-1550	1050	R-1598	1251	R-1668	1590
R-1550-A	1058	R-1599-A	1224	R-1669-A1	1325
R-1551	1060	R-1600	3725/3726	R-1669-B	V-1326
R-1552	1315	R-1635	3730	R-1670-A	1117

EJ provides this partial list for your reference only and recommends that you compare actual prints and/or castings when interchangeability is necessary or when writing specifications. Please contact our sales office for additional cross reference assistance.

CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-1670-A	1119	R-1714	1925	R-1750-0067	1810
R-1671	1600	R-1715	1020	R-1750-0068	1820
R-1672	1020	R-1720	2110	R-1750-0090	1810
R-1673-A	2030	R-1720-A	2111	R-1750-A	2027
R-1673-B	1040	R-1722	1010	R-1750-B	1805
R-1673-C	1090	R-1722-AVH	1875	R-1750-B1	1802
R-1673-C	1795	R-1722-B	1000	R-1750-B2	1802
R-1676-A	V-1304	R-1723	1268	R-1750-C	1810
R-1677	1559	R-1726-A	1117	R-1750-C1	1820
R-1677	1560	R-1727-A	V-1438	R-1750-C1S	1810
R-1677-A	1020	R-1728	1210	R-1750-C1S	1820
R-1677-A	1559	R-1728-B	1210	R-1750-CS	1810
R-1677-A	1560	R-1729	1700	R-1751-A	1323
R-1678-A	1775	R-1729-1	1703	R-1751-C	1830
R-1680	V-1344	R-1733	1205	R-1753-A	1890
R-1682	2101	R-1733-B	1205	R-1753-ALM	1890
R-1682-1	2101	R-1734-B	1734	R-1753-B	1891
R-1684	1970	R-1735	1975	R-1754-A	1892
R-1688	1342	R-1736-A	V-1383	R-1755-B	1120
R-1689	1078	R-1737	1501	R-1755-B	1123
R-1690	1490	R-1739-A	2287	R-1755-C	1123
R-1690-A	1490	R-1740-B	1320	R-1755-E	1044
R-1691-B	1490	R-1740-D	1812	R-1755-F	1893
R-1693	1660	R-1740-D2	1580	R-1755-F2	1890
R-1695	3119	R-1740-D2	1581	R-1755-G	1480
R-1696	1030	R-1740-E	1843	R-1755-G	1323
R-1697	2205	R-1740-E	1986	R-1755-G1	1323
R-1700-A	1140	R-1740-F	V-7048	R-1757-G	1893
R-1703	V-1326	R-1741-D	1581	R-1758-E	1044
R-1705	1837	R-1741-D	V-1600-5	R-1758-E1	1706
R-1706	2420	R-1741-E	1843	R-1758-G	1323
R-1706-1	2425	R-1741-E	1986	R-1761	1140
R-1706-1S	2425	R-1741-E1	1843EZ	R-1762	1661
R-1707	1661	R-1741-F	1985	R-1762-A	1660
R-1710	1125	R-1741-F1	V-1600-6	R-1763	1620
R-1711-A	1130	R-1743	2006	R-1763-B	1040
R-1711-B	1130	R-1743-LM	ERGO XL 30	R-1764	1120
R-1712	1020	R-1749-A	V-1700-3	R-1765	1670
R-1712-B	1051	R-1749-B	1136	R-1769-A	1520
R-1713	1020	R-1749-B1	1136	R-1771	2020

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-1772	1020	R-1797	2132	R-1878-B8G	V-5667
R-1772-A	1022	R-1798	2508	R-1878-B8L	V-5667
R-1772-B	1022	R-1798-1	2510	R-1878-B9G	V-5668
R-1772-C	1022	R-1799-E	V-1700-1	R-1878-B9L	V-5668
R-1772-CVH	1875	R-1799-H	1020	R-1879-A10G	V-5636
R-1775	1771	R-1799-O	V-1700-4	R-1879-A10L	V-5636
R-1776	V-1480-1	R-1800-C	5520	R-1879-A1G	V-5613
R-1777	V-1407	R-1804	1622	R-1879-A1L	V-5613
R-1779	1995	R-1833-A	V-5660/ V-6660	R-1879-A4G	8205
R-1780-A	1342	R-1863	7750	R-1879-A4L	8205
R-1781	1342	R-1868	8445	R-1879-A5G	V-5622
R-1784	1060	R-1871	8395	R-1879-A5L	V-5622
R-1785	1450	R-1873-P1	8395	R-1879-A6G	V-5624
R-1786	1460	R-1877-E1	V-5667	R-1879-A6L	V-5624
R-1787	1690	R-1878-A10G	V-5636	R-1879-A9G	V-5630
R-1788-A	1835	R-1878-A10L	V-5636	R-1879-A9L	V-5630
R-1788-A1	1835	R-1878-A1G	V-5613	R-1879-B10G	V-5669
R-1788-B	1835	R-1878-A1L	V-5613	R-1879-B10L	V-5669
R-1792-AG	V-3610-1	R-1878-A3G	8304	R-1879-B6G	V-5662
R-1792-AL	V-1610-1	R-1878-A3L	8304	R-1879-B6L	V-5662
R-1792-BG	V-3610-2	R-1878-A4G	8205	R-1879-B7G	V-5665
R-1792-BL	V-1610-2	R-1878-A4L	8205	R-1879-B7L	V-5665
R-1792-CG	V-3610-3	R-1878-A5G	V-5622	R-1879-B8G	V-5667
R-1792-CL	V-1610-3	R-1878-A5L	V-5622	R-1879-B8L	V-5667
R-1792-DG	V-3600-1	R-1878-A6	8308	R-1879-B9L	V-5668
R-1792-DL	V-1600-1	R-1878-A6G	V-5624	R-1883-B1MA	8012
R-1792-EL	1130	R-1878-A6L	V-5624	R-1883-B3	V-6712
R-1792-FG	V-3600-3	R-1878-A9G	V-5630	R-1883-C1	V-6714
R-1792-FL	V-1600-3	R-1878-A9L	V-5630	R-1883-E1	V-5720
R-1792-GG	V-3610-5	R-1878-B10	8333	R-1883-E4	V-6724
R-1792-GL	V-1610-5	R-1878-B10L	V-5669	R-1883-G1	V-6724
R-1792-HG	V-1610-6	R-1878-B11G	V-5670	R-1883-G2	V-6724
R-1792-HL	V-1610-6	R-1878-B11L	V-6670	R-1883-G2A	V-6726
R-1792-JG	V-1610-7	R-1878-B3G	8222	R-1883-G3	V-6726
R-1792-JL	V-1610-7	R-1878-B3L	8322	R-1883-J2	V-6732
R-1792-KG	V-3610-8	R-1878-B6	8328	R-1883-K	V-6736
R-1792-KL	V-1610-8	R-1878-B6G	V-5662	R-1889	2055
R-1794-EB	V-7069-1	R-1878-B6L	V-5662	R-1892	2990
R-1795-F	V-7071	R-1878-B7G	V-5665	R-1896	8065
R-1796-F	1320	R-1878-B7L	V-5665	R-1896	8065

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-1897	8035	R-1978	8396	R-2502-B	1022
R-1899-1	8400	R-1978-A2	8375	R-2502-D	1020
R-1901	BH1225	R-1978-A3	8360	R-2504	1020
R-1911-B	1430/1440	R-1978-B	8380	R-2504 TYPE C	1050
R-1912-A1	8035	R-1978-B10G	V-5669	R-2504 TYPE D	1050
R-1912-B	8249	R-1979-B9G	V-5668	R-2504 TYPE G	1020
R-1912-B1	8270	R-2014	1020	R-2510 TYPE C	1130
R-1913	6800	R-2050	1050	R-2510-A	1130
R-1913-7100	8500	R-2060 TYPE C	1130	R-2533	1125
R-1913-7150	8500	R-2077-A	1022	R-2533 TYPE C	1130
R-1915-G	1040	R-2077-B	1022	R-2534	1000
R-1915-G2	1040	R-2077-C	1022	R-2535 TYPE C	1130
R-1915-S1	1915	R-2080	1020	R-2535-A TYPE C	1130
R-1916	1040	R-2090 TYPE C	1130	R-2540	1020
R-1916-C	1058	R-2100	1550	R-2548	1205
R-1916-C2	1561	R-2100 TYPE C	1130	R-2549	1020
R-1916-D	V-2384	R-2110 TYPE C	1130	R-2556-A	1205
R-1916-E	1040	R-2112	1140	R-2557	1322
R-1916-F	1040	R-2112 TYPE C	1130	R-2557-A	1322
R-1916-H	1324	R-2120 TYPE C	1130	R-2557-A4	1322
R-1916-K	2812	R-2270	1320	R-2560-C1	1130
R-1917	REVOLUTION	R-2290-B	1890	R-2560-C2	1130
R-1919	1020	R-2404	1700	R-2560-D1	1130
R-1924	V-1418-2	R-2410 TYPE C	1130	R-2560-D2	1130
R-1924-A	V-1480-1	R-2412-A	1690	R-2560-D3	1130
R-1924-AB	V-2480	R-2412-A4	1590	R-2560-E1	1205
R-1925	1410	R-2418	1251	R-2560-E10	1205
R-1927	1020	R-2422-A1	1251	R-2560-E2	1205
R-1955-1	3025	R-2422-C	1251	R-2560-E5	1205
R-1960	1020	R-2423	1251	R-2560-E6	1205
R-1960-A	1040	R-2437	1880	R-2560-E7	1205
R-1964	V-1384-3	R-2437-B	1660	R-2560-E8	1205
R-1964-R	8625	R-2461-A TYPE C	1130	R-2560-EA	1205
R-1964-S	8630	R-2464	1078	R-2560-EB	1205
R-1968	8370/8371	R-2467	1641	R-2560-G	1324
R-1971	2966	R-2475 TYPE C	1130	R-2561	1205
R-1973-1	1570	R-2501	1045	R-2561-A	1205
R-1973-A	1574	R-2502	1020	R-2563	1130
R-1974-A	1574	R-2502 TYPE G	1020	R-2564	1130
R-1976	1578	R-2502-A	1022	R-2565-C	2860

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-2565-E	2800	R-3037-A	7070	R-3174	7700
R-2565-F	2870	R-3038-A	7085	R-3191-CM1	7140
R-2565-G	2870	R-3039-A	7045	R-3191-CU1	7140
R-2565-J	2880	R-3040	7010	R-3192-CM2	7150
R-2572	1205	R-3065	7015	R-3192-CU2	7150
R-2573	1205	R-3065-L	7015	R-3193-CM3	7155
R-2573-1	1205	R-3065-V	7015	R-3193-CU3	7155
R-2573-A	1205	R-3067	7030	R-3203-A	V-5720
R-2573-B	1205	R-3067 TYPE C	7030	R-3205	5030
R-2573-C	1205	R-3067 TYPE R	7030	R-3210-A	V-5324-1
R-2577	1205	R-3067-C	7030	R-3210-L	5344
R-2577-B	1205	R-3067-L	7030	R-3210-Q	5424
R-2577-F	1205	R-3067-V	7030	R-3222-C	7562
R-2578	1205	R-3067-VB	7030	R-3222-LA	7562
R-2580-A	1320	R-3069	7010	R-3223	5850-12
R-2586-D	V-1700-1	R-3070	7000	R-3223-A	5850-12
R-2586-E	V-1700-1	R-3070	7001	R-3223-B	5850-12
R-2586-F	V-1700-1	R-3076	7600	R-3235	7015
R-2586-M	V-1700-3	R-3076-4M	7600	R-3236	7050
R-2586-O	V-1700-4	R-3076-6B	7600	R-3236-1	7050
R-2586-P	V-1700-5	R-3076-6M	7600	R-3236-A	7050
R-2588-C	2830	R-3076-8B	7600	R-3236-B	7050
R-2595	1880	R-3077	7600	R-3237	7060
R-2595-A	1020	R-3077-L	7600	R-3237-1	7060
R-2600	1720	R-3077-R	7600	R-3237-A	7050
R-2650	1700	R-3078	7600	R-3237-B	7050
R-2668	1590	R-3079	7600	R-3238	5100
R-2680	1665	R-3079-L	V-4230-2	R-3239-A	7340
R-2682	2100	R-3080	7000	R-3240	7070
R-2750	1820	R-3081	7000	R-3240-A	7085
R-3010	7010	R-3157	V-4091	R-3246	7030
R-3015	7010	R-3157-1	V-4091	R-3246 TYPE C	7030
R-3030	7010	R-3157-2	V-4091	R-3246 TYPE V	7030
R-3031-B	7045	R-3157-A	V-4091-2	R-3246-A	7510
R-3032-B	7045	R-3157-AL	V-4091	R-3246-A TYPE R	7510
R-3033-A	7056	R-3159-A	7020	R-3246-AL	7510
R-3033-B	7056	R-3161	7310	R-3246-AM	7510
R-3034-B	7045	R-3165	7504	R-3246-CC	7030
R-3035-A	7045	R-3169	7205	R-3246-CC TYPE C	7030
R-3036-B	5100	R-3170	7205	R-3246-CC TYPE R	7030

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-3246-CL	7030	R-3278-A TYPE L	7220	R-3295-2 TYPE R	7030
R-3246-D	7035	R-3278-AL	7221	R-3295-2 TYPE V	7031
R-3246-E	7030	R-3278-AR	7222	R-3295-2L	7030
R-3246-F	7360	R-3281-A	7210	R-3295-3	7030
R-3247-2D	5355	R-3281-AL	7210	R-3295-3 TYPE R	7030
R-3247-2L	5355	R-3283	7600	R-3295-3L	7030
R-3247-2Q	5355	R-3286-8V	7520	R-3295L	7030
R-3250	7550	R-3286-9V	7520	R-3296-B	7032
R-3250-1	7550	R-3287	5380	R-3297-1	5193
R-3250A	7550	R-3287-10V	7505	R-3297-1 TYPE C	5193
R-3250-A	7550	R-3287-15	5425	R-3297-1 TYPE L	580J/5193
R-3250-B	7571	R-3287-15	7565	R-3303	7501
R-3250-BSP	7570	R-3287-5	5375	R-3305	7500
R-3250-CB	7570	R-3287-SB10	7505	R-3308	7500
R-3250-CL	7570	R-3288	7350	R-3312-A	7485
R-3250-CL	7571	R-3288-E2	7350	R-3312-B	7486
R-3250-CV	7570	R-3288-HV	7355/7350/7358	R-3313	7488
R-3250-DV	7570	R-3288-HV2	7350	R-3326	7265
R-3250-DVSP	7571	R-3289	7350	R-3326A	7265
R-3250-EV	7570	R-3289-C	7350	R-3331	7260
R-3251	5000	R-3289-HV	7350	R-3334-F	7460
R-3252-A	7570	R-3290	7030	R-3335-1	7092
R-3254	7380	R-3290 TYPE C	7030	R-3336	5050
R-3256	7530	R-3290 TYPE L	7030	R-3337-A	5150
R-3261-A	7700	R-3290 TYPE R	7030	R-3338-F	5260
R-3262	7262	R-3290 TYPE V	7030	R-3338-G	5260
R-3264	7502	R-3290-A	7034	R-3339	5130
R-3266	5470	R-3290-B	7034	R-3339-1	5130
R-3270	7420	R-3290-C	5240	R-3339-B	5230
R-3273-A	7310	R-3290-C	7034	R-3345	5030
R-3274	7020	R-3290-VB	7030	R-3346	5410
R-3274-A	7020	R-3293	7510	R-3347	5220
R-3274-B	7022	R-3295	7030	R-3349-A	V-4430
R-3275	7220	R-3295 TYPE C	7030	R-3350	5225
R-3277-A	7220	R-3295 TYPE L	7031	R-3351	5225
R-3277-A TYPE L	7220	R-3295 TYPE R	7030	R-3352	5225
R-3277-AC	7220	R-3295 TYPE V	7030	R-3356-A	5100
R-3277-AL	7220	R-3295-2	7030	R-3357-A	5385
R-3277-AR	7222	R-3295-2 TYPE C	7031	R-3360-A	5335
R-3278-A	7220	R-3295-2 TYPE L	7031	R-3362	7568

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-3362-1	7568	R-3455-C	V-5360-1	R-3492-A	1895
R-3362-L	7567	R-3456-B	V-5360	R-3492-A1	1895
R-3363	7568	R-3457-C2	V-5670	R-3492-B	2812
R-3363-1	7568	R-3460-A	5800	R-3492-BG	2812
R-3382	7567	R-3460-D	5150	R-3492-C	1812
R-3382	7568	R-3461	V-4246	R-3492-CG	1812
R-3387	V-4091-2	R-3464-F	7411	R-3493-A	1770/1771
R-3393	5360	R-3465	5800	R-3495	8080
R-3396	V-4410-2	R-3467	5800	R-3497-A	8083
R-3397	V-4091	R-3470	5358	R-3498	8350
R-3403-F	V-5140-1	R-3470-2	5358	R-3498-J3S	8092
R-3405	5250	R-3472	5340	R-3498-K2S	8195
R-3406	5395	R-3475	5430	R-3498-P2S	8196
R-3408	5190	R-3475-1	5430	R-3498-R2GS	8197
R-3408-AL	5190	R-3475-3	5440	R-3498-R2S	8197
R-3408-AL	5192	R-3475-A	5435	R-3498-R3S	8197
R-3408-BL	5190	R-3475-E	5436	R-3498-T2S	8198
R-3408-BL	5192	R-3475-F	5436	R-3499	V-5648
R-3408-L	5190	R-3475-G	5436	R-3499	8198
R-3408-L	5192	R-3475-H	5436	R-3499	V-6648
R-3413	5245	R-3477-A	V-5668	R-3501	7510
R-3420	6861	R-3480	5440	R-3501-D2A	7170
R-3425-A	V-4091-2	R-3480-A	V-5626-1	R-3501-E2	7250
R-3425-A TYPE L	V-4092	R-3480-A	V-5626-2	R-3501-H4	7430
R-3425-B	V-4091-2	R-3480-A	V-5726	R-3501-HL	7430
R-3429-A	5090	R-3481	V-5636	R-3501-L1A	7420
R-3433	5100	R-3485-B	1130	R-3501-L2	7495
R-3443-B	5150	R-3486	8350	R-3501-N	7490
R-3448-B	5000	R-3487	2965	R-3501-P	7250
R-3448-C	5080	R-3490	5993	R-3501-PL	7525
R-3448-D	5080	R-3490-A	5996	R-3501-PR	7525
R-3451	5245	R-3490-B	5999	R-3501-R	7432
R-3451-B	5130	R-3491-AG	V-3600-1	R-3501-TL	7495
R-3451-D	5130	R-3491-GG	2870	R-3501-TR	7495
R-3454-B	V-5360-1	R-3491-GL	2870	R-3501-U	7545
R-3454-B	7510	R-3491-JG	2880	R-3502-A	7235
R-3454-BL	V-5360-1	R-3491-JL	2880	R-3502-B	7236
R-3454-C	V-5360-1	R-3492	1900	R-3502-D2	7235
R-3455-A	V-5360-1	R-3492-1	1900	R-3503-A	7180
R-3455-A	7510	R-3492-1	2870	R-3503-B	7180

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CROSS REFERENCE GUIDE (CONTINUED)

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R-3504-F	V-4520-2	R-3573-2D	5355	R-3701-15	5954
R-3506	6411	R-3573-2D	5356	R-3701-8	5954
R-3506-A2	7280	R-3573-2L	5355	R-3705-12	5944
R-3508	6411	R-3573-2L	5356	R-3705-6	5944
R-3508-A2	7300	R-3573-2Q	5355	R-3705-8	5944
R-3510	7030	R-3573-2Q	5356	R-3707-12	5964
R-3514-F	7390	R-3574	5355	R-3707-15	5964
R-3516	V-4530	R-3574-2D	5355	R-3712	5980
R-3516-1	V-4530	R-3574-2L	5355	R-3801	6412
R-3525-L	7463	R-3574-2Q	5355	R-3805	6411
R-3526-L	7466	R-3575	V-4280	R-3806	6411
R-3527-M	5375	R-3576	8105	R-3807	5390
R-3527-V	7535	R-3577	7590	R-3808-1	5400
R-3528-V	7535	R-3578	V-5360-1	R-3808-2	5400
R-3529-V	7536	R-3580	V-4230-2	R-3900-B	5358
R-3531	7595	R-3580	7600	R-3900-C	5358
R-3531-E	5550	R-3580-1	V-4230-2	R-3936-A	Miscellaneous
R-3540	5416	R-3580-1	7600	R-3952	5840
R-3540-2	5416	R-3581	V-4280	R-3961	5890
R-3540-2	5417	R-3588	5520	R-4003	5800
R-3541	5413	R-3588-A	5524	R-4003-B	5800
R-3541-2	5413	R-3588-A	5370	R-4005-A2	5833
R-3541-A	5413	R-3588-LL	5520	R-4007	5820
R-3550-2	7592	R-3588-LL4	5525	R-4007-A6	5844
R-3555	5595	R-3588-LL4	V-5324-1	R-4014-B1	5845
R-3560	5423	R-3588-LR	5520	R-4014-C1	5845
R-3561	5419	R-3589	5520	R-4014-T	5845
R-3562	5050	R-3589	5370	R-4014-TL	5845
R-3563-HB	7750	R-3589-A	5520	R-4016-K	5840
R-3563-L	7750	R-3589-A	5342	R-4030-10	6010
R-3570	5320	R-3589-A	5370	R-4030-15	6015
R-3570-A	5320	R-3589-LL	5520	R-4030-18	6018
R-3571	5320	R-3589-LL4	5544	R-4030-6	6006
R-3571-A	5320	R-3589-LR	5520	R-4030-8	6008
R-3572	5356	R-3594	7076	R-4040-24	6024
R-3572-2D	5355	R-3599-A	6979	R-4055-10	6310
R-3572-2D	5357	R-3599-B	6979	R-4055-12	6312
R-3572-A	5356	R-3700	5924	R-4055-18	6318
R-3572-A	5357	R-3701-10	5954	R-4055-24	6324
R-3573	5356	R-3701-12	5954	R-4055-6	6306

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-4055-8	6308	R-4880	V-5728	R-4990-FX TYPE A	6956
R-4215-C	6610	R-4880-C	V-4880-3	R-4990-FX TYPE C	V-7346
R-4216-B	6490	R-4882	V-5934	R-4990-FX TYPE D	6956
R-4216-C	6490	R-4882-A	V-5934-1	R-4990-FX TYPE P	V-7386
R-4217	6498	R-4884-A	V-5736	R-4990-GX A	V-7307
R-4340-A	6508	R-4938-B	6405	R-4990-GX TYPE A	6957
R-4340-B	6527	R-4990 FX TYPE D	6906	R-4990-GX TYPE C	V-7347
R-4341-A	6488	R-4990-AA	6901	R-4990-GX TYPE D	6957
R-4342	6489	R-4990-AX	6951	R-4990-HA	6908
R-4343	V-4810	R-4990-AX A	V-7301	R-4990-HX A	V-7308
R-4344	5850-12	R-4990-AX TYPE C	V-7341	R-4990-HX TYPE A	6958
R-4345	V-5726-1	R-4990-AX TYPE D	6951	R-4990-HX TYPE C	V-7348
R-4346	V-5726-1	R-4990-AX TYPE P	V-7381	R-4990-HX TYPE D	6908
R-4348	V-5736	R-4990-BA	6902	R-4990-JX A	V-7309
R-4349-A	6487	R-4990-BX	6902	R-4990-JX TYPE C	V-7349
R-4349-C	6487	R-4990-BX A	V-7302	R-4990-JX TYPE D	V-7509
R-4350-B	6532	R-4990-BX TYPE A	6952	R-4990-KA2	6910
R-4350-C	6533	R-4990-BX TYPE C	V-7342	R-4990-KX A	V-7310
R-4350-D	6534	R-4990-BX TYPE D	6952	R-4990-KX C	V-7350
R-4350-E	6536	R-4990-BX TYPE P	V-7382	R-4990-KX TYPE D	V-7510
R-4351-B	6495	R-4990-CA	6903	R-4990-LX A	V-7311
R-4351-D	6509	R-4990-CX A	V-7303	R-4990-MX A	V-7312
R-4352	6517	R-4990-CX TYPE A	6953	R-4990-MX TYPE C	V-7352
R-4353	1205	R-4990-CX TYPE C	V-7343	R-4990-MX TYPE D	V-7512
R-4353	3772	R-4990-CX TYPE D	6953	R-4990-NX A	V-7313
R-4360-A	6112	R-4990-CX TYPE P	V-7383	R-4990-NX TYPE D	V-7513
R-4360-B	6115	R-4990-DA	6904	R-4990-OA	6912
R-4360-D	6121	R-4990-DX A	V-7304	R-4990-OX A	V-7314
R-4360-E	6124	R-4990-DX TYPE A	6954	R-4990-OX TYPE C	V-7354
R-4370-13	1130	R-4990-DX TYPE C	V-7344	R-4990-OX TYPE D	V-7514
R-4370-18	1020	R-4990-DX TYPE D	6954	R-4993	6900
R-4370-5	1740	R-4990-DX TYPE P	V-7384	R-4993-AAB	6900
R-4380-17-D	1020	R-4990-EA	6905	R-4993-BAB	6900
R-4850	5115	R-4990-EX A	V-7305	R-4993-CAB	6900
R-4852	5115	R-4990-EX TYPE A	6955	R-4993-CB TYPE A	6953
R-4859	5110	R-4990-EX TYPE C	V-7345	R-4993-DAB	6900
R-4859-C	5110	R-4990-EX TYPE D	6955	R-4993-DAB TYPE A	6904
R-4859-Q	5110	R-4990-EX TYPE P	V-7385	R-4993-EAB	6900
R-4859-S	5110	R-4990-FA	6906	R-4993-EAB TYPE A	6905
R-4871	5110	R-4990-FX A	V-7306	R-4993-FAB	6900

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-4993-FAB TYPE A	6906	R-4999-GX	6907	R-5901-G	V-1610-5
R-4993-FB TYPE A	6956	R-4999-GX TYPE C	V-7367	R-5901-H	V-1610-6
R-4993-HAB	6900	R-4999-GX TYPE D	6957	R-5901-J	V-1610-7
R-4993-HAB TYPE A	6908	R-4999-HX C	V-7368	R-5901-K	V-1610-8
R-4993-HAB TYPE D	6908	R-4999-HX D	6958	R-5901-K	V-3610-8
R-4993-HB TYPE A	6958	R-4999-HX TYPE A	6958	R-5915-C	1563
R-4993-KAB	6900	R-4999-HX TYPE D	6908	R-5915-E	1135
R-4993-KAB TYPE A	6910	R-4999-JX C	V-7369	R-5915-G	3030
R-4993-OAB	6900	R-4999-JX TYPE C	V-7369	R-6008	2890
R-4994	6900	R-4999-JX TYPE D	V-7509	R-6012	3015
R-4994-HALM	6900	R-4999-KX C	V-7370	R-6014	2885
R-4999	6970	R-4999-KX TYPE D	V-7530	R-6016	V-1610-2
R-4999 FX TYPE D	6906	R-4999-L2	6953	R-6016-A	1716
R-4999-AX	6901	R-4999-L6	5358	R-6017	V-1610-3
R-4999-AX TYPE A	6951	R-4999-L6	7700	R-6020	V-1610-4
R-4999-AX TYPE D	6951	R-4999-L6	7750	R-6021	1337
R-4999-AX TYPE P	V-7381-20	R-4999-L7	5358	R-6034	V-1865
R-4999-BX TYPE A	6952	R-4999-L9	6970	R-6040	2910
R-4999-BX TYPE D	6952	R-4999-LX TYPE A	V-7311	R-6041	2860
R-4999-BX TYPE P	V-7382-20	R-4999-MX A	V-7332	R-6041-A	2860
R-4999-BX TYPE P 3	V-7382-20	R-4999-MX TYPE A	V-7332	R-6044-A	V-1600-3
R-4999-CX	6953	R-4999-MX TYPE D	V-7532	R-6052-C	2860
R-4999-CX TYPE A	6953	R-4999-NX TYPE C	V-7373	R-6052-D	2800
R-4999-CX TYPE C	V-7363	R-4999-OX A	V-7334	R-6052-J	2880
R-4999-CX TYPE D	6953	R-4999-OX TYPE A	V-7334	R-6060	1625
R-4999-CX TYPE P	V-7383-20	R-5900-A	V-1610-1	R-6074	V-1610-5
R-4999-DX	6904	R-5900-B	V-1610-2	R-6078	2880
R-4999-DX Q	6954	R-5900-C	V-1610-3	R-6080	V-1610-6
R-4999-DX TYPE A	6954	R-5900-D	2912	R-6095	1580
R-4999-DX TYPE C	V-7364	R-5900-E	V-1610-4	R-6099	V-1600-6
R-4999-DX TYPE D	6954	R-5900-F	2932	R-6113	2860
R-4999-DX TYPE Q	6954	R-5900-G	V-1610-5	R-6114	2800
R-4999-EX	6905	R-5900-H	V-1610-6	R-6115	2870
R-4999-EX D	6955	R-5900-J	V-1610-7	R-6120	V-1600-6
R-4999-EX TYPE A	6955	R-5900-K	V-1610-8	R-6137	V-1610-6
R-4999-EX TYPE P	V-7385-20	R-5901-A	V-1610-1	R-6141	1154
R-4999-FX TYPE A	6956	R-5901-B	V-1610-2	R-6142	V-1874
R-4999-FX TYPE D	6906	R-5901-C	V-1610-3	R-6144	2925
R-4999-FX TYPE E	6906	R-5901-E	V-1610-4	R-6146	2755
R-4999-FX TYPE P	V-7386-20	R-5901F	V-1600-3	R-6147	2850

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.	Neenah Cat. No.	EJ Cat. No.
R-6229	6224	R-6660-PH	V-5636	R-6663-PP	8236
R-6310-A	2885	R-6660-RP	V-5642	R-6665-1HH	8270
R-6320-E	3015	R-6661-HH	8270	R-6665-1HP	8270
R-6400-AD	V-1610-2	R-6661-HP	V-5662	R-6665-1JH	V-6465
R-6400-AS	V-1610-2	R-6661-JH	8271	R-6665-1JP	V-6465
R-6400-BO	V-1600-1	R-6661-JP	8271	R-6665-2BP	8001
R-6400-BS	V-1600-1	R-6661-LH	8273	R-6665-2EP	8204
R-6400-CO	V-1600-3	R-6661-LP	V-5667	R-6665-2HP	8206
R-6450-AL	2885	R-6661-TH	V-5668	R-6665-2KP	8208
R-6450-DG	2890	R-6661-TP	V-5668	R-6665-2LH	8208
R-6450-DL	2890	R-6661-V1H	8217	R-6665-2LP	8208
R-6450-EG	V-1600-1	R-6661-VP	V-5669	R-6665-2PP	8213
R-6450-EL	V-1600-1	R-6662-2BP	8301	R-6665-2SH	V-6442
R-6450-FG	V-1610-4	R-6662-BP	8201	R-6665-2SP	V-6442
R-6450-GG	V-1600-2	R-6662-CH	V-5718	R-6665-2TH	8198
R-6450-HG	V-1600-3	R-6662-CP	V-5718	R-6665-3CP	8222
R-6450-HL	V-1600-3	R-6662-EH	V-5620	R-6665-3JH	V-6465
R-6450-JG	V-1600-4	R-6662-EH	8204	R-6665-3JP	V-6465
R-6450-JL	V-1600-4	R-6662-EP	8204	R-6665-3JP	V-5665
R-6461-EH	V-2800-1	R-6662-GH	V-6720	R-6665-3KH	V-5667
R-6461-FH	V-2600-2	R-6662-GH	V-5620	R-6665-3KP	V-5667
R-6461-GH	V-2610-5	R-6662-HP	8206	R-6665-3NH	V-5669
R-6461-HH	V-2610-6	R-6662-KP	8208	R-6665-3NP	V-5669
R-6461-JH	V-2610-7	R-6662-PP	8313	R-6665-ORH	V-6442
R-6461-KH	V-2610-8	R-6662-RH	8213	R-6665-ORP	V-6442
R-6462-EH	V-1600-1	R-6662-RP	8315	R-6668-L1	8080
R-6462-FH	V-2600-2	R-6662-TH	V-5648	R-6668-L3	8080
R-6462-GH	V-2610-5	R-6662-TP	V-5648	R-6668-L6	8080
R-6462-HH	V-2610-6	R-6662-TS	8198	R-6668-P1	8080
R-6462-JH	V-2610-7	R-6663-01P	V-6670	R-6668-P3	8080
R-6462-KH	V-2610-8	R-6663-CP	8322	R-6668-P6	8080
R-6470-B	REVOLUTION	R-6663-HP	8228	R-6670-B2	V-5620
R-6660-CP	V-5613	R-6663-JH	8192	R-6670-C	V-5620
R-6660-GP	V-5620	R-6663-KH	V-5667	R-6672-B	8301
R-6660-JH	V-5622	R-6663-KP	V-5667	R-6672-D	8205/8305
R-6660-JP	8390	R-6663-MH	V-5668	R-6672-E	8306
R-6660-KP	V-5624	R-6663-MP	V-5668	R-6672-E	8206
R-6660-KP	8208	R-6663-NH	8233	R-6672-F	8308
R-6660-NH	8249	R-6663-NP	8233	R-6672-K	8213
R-6660-NP	V-5630	R-6663-OH	8217	R-6672-K	V-5630

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CROSS REFERENCE GUIDE (CONTINUED)

Neenah Cat. No.	EJ Cat. No.
R-6672-K	V-6630
R-6672-M	8315
R-6672-M	V-5636
R-6673-A	5595
R-6673-B	V-5751
R-6673-C	8222
R-6673-J	8328
R-6673-L	V-5667
R-6673-N	V-5668
R-6673-O	8333
R-6673-Q	V-5670
R-6679-B	2855
R-6680-A	3612
R-6686-D	8106
R-6687-E	8052
R-6687-F	8054
R-6689	8018
R-7500-22	8700
R-7500-44	8700
R-7506-B	3664
R-7506-C	3639
R-7506-C	3664
R-7506-C	3690
R-7506-C	8555
R-7506-D	1576
R-7506-D	3670
R-7506-D	3680
R-7506-D	3690
R-7506-D	3695
R-7506-D	8520
R-7506-E	1576
R-7506-E	8520
R-7506-F	3671
R-7506-F	3673
R-7506-F	3698
R-7514	1621
R-7516	1020

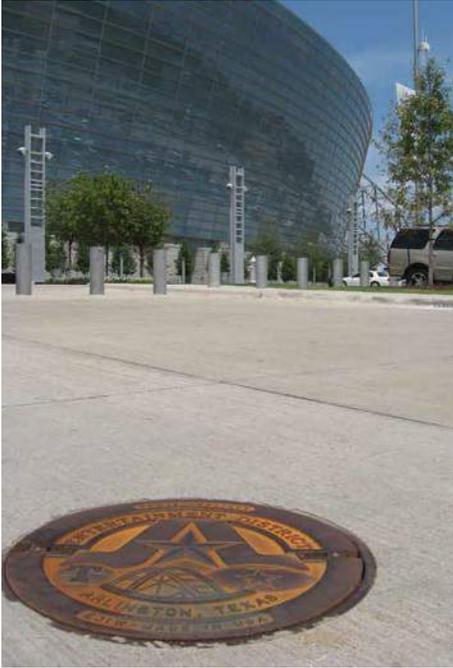
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Additional Information



MANHOLE FRAMES AND COVERS



EJ produces street castings to meet ASTM and AASHTO criteria. In addition, our castings meet federal and state DOT specifications, and that of individual customers. Non-traffic, light, medium, heavy, extra heavy-duty, and extra heavy-duty airport are the load designations assigned, which indicate where (on which application) a product should be used.

As a result of continued research and development—the product line is increasingly expanding—and has become more complex and diverse than ever. New features such as ergonomic lift-assist devices; new configurations that are more modular and scalable; new advanced security attributes help prevent theft or mitigate explosions; and applied technology provides capabilities like remote sensing with wireless telemetry.

DRAINAGE CASTINGS



Drainage castings or grates are designed to accept water and can be round, square, or rectangular. They are typically sold with a frame, curb inlet frame, monument box, or bridge drain. Some markets call these slotted covers.

Specifying the appropriate drainage solution is an important part of a storm water management plan. EJ offers a wide array of products designed for storm water drainage including ditch grates, pipe grates, curb and gutter inlets, and catch basins. Drainage castings are available as an assembly or set. EJ also offers bridge drains, scuppers, and ADA grates.

Optional “Dump No Waste! Drains To Waterways” and other permanent cast-in lettering is an effective, low cost, and long-term means to support local environmental initiatives.

TRENCH GRATES



From pedestrian areas to airport loading ramps, EJ has the trench drainage solution to fit your application. With a grate that is designed to be supported on two sides, it is expandable and available in numerous widths.

Grating options include parallel grates, perpendicular cross-street drainage, and ADA styles - available in 24" lengths, and widths from 8" to 51". Frames available in standard 24", 36", and 48" lengths.

Standard heavy duty grates and covers are suitable for general traffic service and AASHTO H-20 loading conditions. Our ADA style trench grating and solid trench covers are available for either general traffic loading or non-traffic applications. Extra heavy duty (EXA) airport trench grating is made with ductile iron and is proof load tested to 200,000 pounds.

For that artistic touch, EJ offers designer trench grates that can be stand alone architectural enhancements, or can accompany matching tree grate designs.

AIRPORT AND PORT AUTHORITY



Environments that undergo excessive load conditions require construction castings specifically designed to meet or exceed heavy duty load rating standards. EJ offers many solutions for these types of applications.

From round or square manhole frames and covers, catch basins, drainage inlets, trench grating, and mooring eyes, EJ has you covered.

All extra heavy duty construction castings are manufactured with gray iron conforming to ASTM A48 Class 35B and ductile iron conforming to ASTM A536. Many of our airport castings can be made-to-order with custom logos and messaging, in most languages, to meet your project specifications.

UTILITY AND TELECOMM CASTINGS



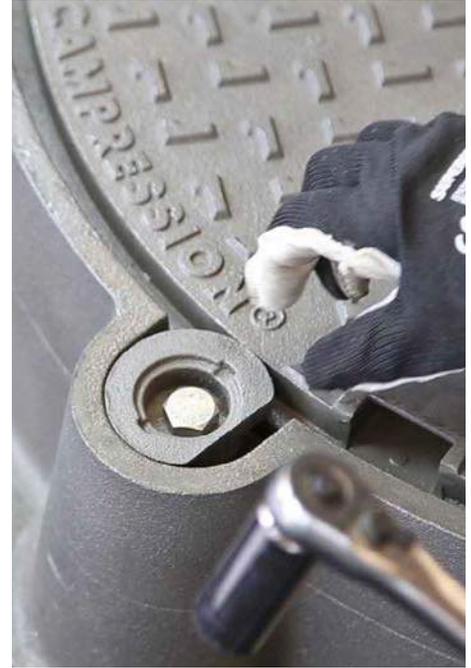
EJ offers a comprehensive line of high quality utility construction casting solutions for specialized applications such as telecommunication, electric, gas, traffic signals, and street lighting.

Utilities are the lifeblood of any facility, and uninterrupted service is crucial. Our product designs offer superior access and unparalleled security for critical infrastructure —available in a variety of sizes, shapes, materials, and load ratings to fit the needs of any project.

EJ is the world leader in telecommunication and utility solutions, offering features and attributes to meet your unique requirements:

- Ergonomic and safety
- Vented covers
- Composite materials
- Wireless monitoring
- Specialty and custom
- Explosion mitigation

INNOVATIVE ACCESS SOLUTIONS



Innovative access solutions are a classification of products that address issues beyond standard manhole frames and covers. This product series includes ergonomic solutions, advanced locking mechanisms, and products that prolong your infrastructure.

For example, the SELFLEVEL® manhole assembly allows the upper frame to adjust with the surface of the roadway; keeping the cover level at all times. This product is ideal for extreme freeze/thaw (frost heave) environments.

INFRA-RISER® adjustment risers prolong structure life by dissipating traffic vibrations.

The mechanical strut on our ductile iron hatch line reduces the lifting force of covers weighing up to 560 pounds to less than 35 pounds.

EJ has taken generations of knowledge and experience and fine-tuned designs to offer you the best innovative access solutions.

ERMATIC RANGE AND OTHER MODULAR SOLUTIONS



Worldwide, the ERMATIC® modular system is one of the most adaptable product ranges in the industry. This comprehensive and highly engineered range of access covers can be customized to fit any underground vault dimension or cover configuration.

Some of the world's most prestigious infrastructure projects have selected the ERMATIC range as their preferred solution: from airports, docks and tunnels to sewage, telecommunications and other utility networks.

Specifiers, contractors, and end users choose this product because it is reliable, durable and serviced by the most professional technical support teams. EJ provides solutions that lead the industry, act as best-in-class benchmarks, and satisfy the most demanding customer expectation.

Features and options include security locking, various load ratings and standard sizes between 2' x 2' to 10' x 17'. Custom sizes are available to fit your needs. Cover options include solid or recessed for concrete infill or brick pavers. This product is manufactured at our regional facility in France.

HINGED HATCH ACCESS ASSEMBLIES



Hinged access assemblies offer ergonomic benefits with the strength of ductile iron. The 8190 and 8210 series of hinged hatch access assemblies are typically installed in traffic areas, airports, and ports.

This hatch provides a secure and easy access point to underground utility structures, and the mechanical strut reduces the lifting force of the cover to less than 35 pounds. The pre-assembled unit saves time and money on the job site; just "drop and pour." The cover opens to 105 degrees and removes at 90 degrees, and features a self-engaging safety bar.

COMPOSITE COVERS AND FRAMES



Field performance has proven that composite manhole covers are ideal for the most challenging environment. Safety for pedestrian traffic and utility workers has driven EJ to develop an advanced solution offering the highest level of safety and performance. Composite manhole covers will conduct neither stray voltage nor high heat, thus shielding pedestrians from the underground environment. The advanced ergonomic aspects of composite manhole covers and frames help to safeguard the municipal workforce from injuries.

Contact your local Sales Representative for the solution that best fits your unique needs: stray voltage, heat transfer, steam covers, ergonomics, radio frequency and cellular transmissions, theft (no scrap value), corrosion, identification (color options), and noise abatement.

Patented design features and advanced fiber reinforced polymer (FRP) material technology make our composite products strong, lightweight, and safe for everyone.

ALUMINUM ACCESS HATCHES



EJ has a broad offering of access hatch products available in aluminum, steel, and ductile iron.

Our hatches are designed to provide easy and secure access to below ground, and below floor installations. The aluminum SAFE HATCH® safety grate system is available in all hatch series. This additional fall through protection and controlled confined space entry enhances worker safety. Heavy duty stainless steel hinges are standard on all units.

Access hatches are used in areas such as sewer pump stations, water treatment plants, gas valve vaults, water meter pits, water valve vaults, telephone and electric vaults, industrial plant pits, fuel storage pits, de-icing control facilities, storm drains, monitoring wells, and collection pits.

EJ also has a complete line of fabricated steel reticulate and welded type drainage grates.

Our modern manufacturing facilities are capable of producing custom fabrications. Contact our expert design team next time you need a custom solution for your project.

RISER RINGS



Riser rings are an adjustable solution to bring a manhole or catch basin to grade on your resurfacing projects. They are used in conjunction with a frame to increase its overall height. A typical application would be during pavement overlays.

Avoid unnecessary project costs by eliminating extra labor, equipment and materials. There are reduced traffic disruptions—when the street is paved the job is done and the manhole cover is finished to grade.

- Solid or adjustable styles
- Steel and cast iron risers available to fit all your grade adjustments
- Load tested to ensure dependable strength and long lasting durability
- Large inventory ready for delivery nationwide
- Made to order sizes for custom application
- Sloped risers available
- DOT approved in many states

ADJUSTMENT RISERS



Maintain the integrity of your infrastructure by reducing traffic vibration damage. Adjust any manhole or catch basin to grade on your resurfacing projects, new installations, or rehabilitation work with INFRA-RISER® rubber composite adjustment risers.

Below ground, the rubber composite adjustment riser reduces traffic vibration damage—prolonging the life of manhole structures and surrounding pavement:

- Protects against load concentration stress
- Dramatically reduces water infiltration
- Perfect grade adjustment in moments with uniform precision
- Will not break, split, rot, crack, or chip
- Made of 92% recycled raw materials
- Round, square, and rectangular designs; flat and tapered risers, select bolt hole patterns
- Custom sizes available

INFRA-RISER adjustment riser is a simple, economic, efficient, and long-lasting solution. It dissipates the energy transferred between the casting and the manhole structure.

FIRE HYDRANTS



WaterMaster® Fire Hydrants have set the standard for reliability and ease of maintenance. With 2 and 3-nozzle hydrant designs, along with multiple shoe connection options, WaterMaster hydrants offer the right options to meet your standard specifications. All hydrants are compliant with the Reduction of Lead in Drinking Water Act 2011. Computer aided design and analysis, along with ductile iron construction, ensures superior performance. All cast components are made and assembled in the USA.

Each hydrant is pressure tested to twice the rated working pressure. WaterMaster 5CD250 and 5BR250 fire hydrants meet or exceed the requirements of ANSI/AWWA C502 Standard for Dry-Barrel Fire Hydrants, Underwriters Laboratories Standard UL246, and Factory Mutual 1510.

Options include individual hydrants being assembled to your (municipal) specification. Additionally, EJ offers hydrant accessories, including the snow barrel for BR models to keep hydrants accessible for areas with high snowfall, and Storz nozzle connections for quick pumper nozzle attachment.

GATE VALVES



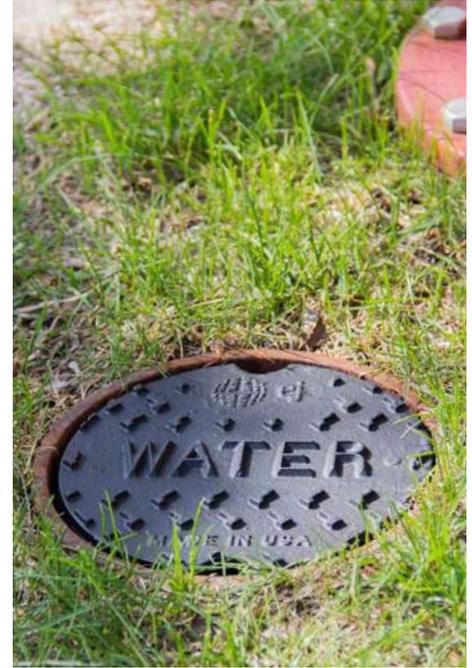
FlowMaster® Resilient Wedge Gate Valves are designed to control the flow of water in fire hydrant applications—but can also be utilized for other water distribution or sewer system applications. All valves are compliant with the Reduction of Lead in Drinking Water Act 2011.

The valves incorporate quality parts and a simple design. All-ductile iron construction delivers superior strength, impact resistance and reduced weight ensuring long service life. All valve parts are manufactured and assembled in the USA.

Available in 2" through 24" sizes, with multiple end connections, and bevel or spur gear operators for 20" and 24" valves. The valves are available as either an assembly or set.

FlowMaster valves meet or exceed the performance requirements of AWWA C515 and Underwriters Laboratories Standards UL262. The valve body and other ductile iron components are manufactured from material conforming to ASTM A536. The wedge is fully rubber encapsulated to meet ASTM D429 requirements.

VALVE BOXES



Valve boxes are used to access an underground valve and can be adjustable using multiple pieces with either a screw type or slip type arrangement.

Valve boxes are available to accommodate 4" through 20" valves.

- Natural gray iron or water-based asphaltic coating
- Covers with special lettering and custom logos
- Locking lids
- Valve box risers—raise valve box lid to adapt to a new grade
- Made in the USA

The slip type has interchangeable pieces that allow for overall height adjustment with parts sliding past each other, while the screw type has interchangeable pieces that allow for overall height adjustment with parts threaded into each other. Valve boxes are available as either an assembly or set.

METER BOXES



The meter box product is specifically intended to cover a water meter. It is typically large enough to allow for inspection and limited access, and is often intended for non-traffic situations.

EJ offers an assortment of meter boxes, covers, and rings to fit your application. Our broad meter box product offering includes customized logo covers to help promote your identity, special lettered covers that clearly identify the access point, and touch read covers.

- Oval meter boxes
- Round meter boxes
- Rectangular meter boxes
- Meter pits
- Meter lids
- Meter box cover accessories including security locking

Meter boxes are available as either an assembly or set.

TREE GRATES



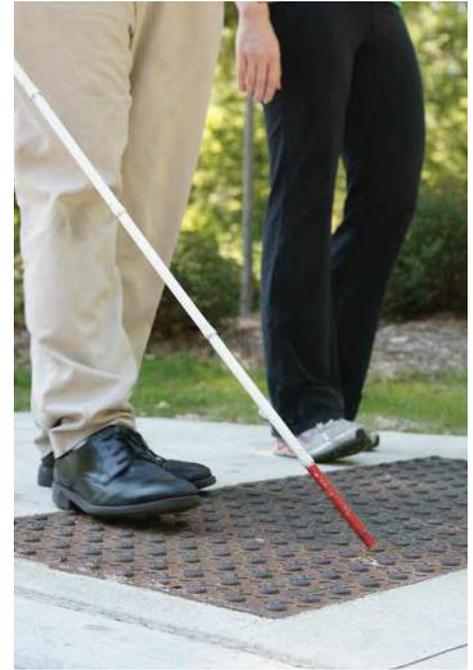
Style your surroundings with timeless and appealing streetscape products manufactured by EJ. Tree grates are durable, functional, and architecturally appealing, and promote healthy tree growth. Designed for pedestrian traffic; our full line of tree grates provide natural drainage and enhance any urban, campus, or park setting.

The slotted design allows for efficient watering and is ADA compliant for pedestrian safety. The narrow slot of an ADA grate also prohibits litter from collecting in the tree well and minimizes the growth of weeds.

Optional expandable tree openings consist of removable center rings, which are a convenient way to adjust diameter of the grate opening as the tree trunk grows in width. Other options include security bolting features, and light port options.

Cast iron grating is strong and stands up to harsh environmental conditions. As an added value, the tree grates can carry community logos and mottos and are made in the USA.

DETECTABLE WARNING PLATES



DURALAST® Detectable Warning Plates help warn visually impaired pedestrians of the approaching street. Engineered to outlast the sidewalk, this cast iron plate is a long-lasting streetscape product that can withstand rigorous urban conditions, such as snow plows, street cleaning machines, and vehicular traffic.

Lower your maintenance and product life cycle costs by using DURALAST detectable warnings—your ADA compliant and environmentally friendly solution.

- Long-wearing cast iron (over 500 times more wear resistant than composites*)
- Withstands vehicular and snow plow traffic
- Corrosion resistant
- Permanently embedded into concrete
- Comply with the latest ADA guidelines regarding pedestrian and vehicular traffic

*An independent third party laboratory test was conducted to determine the wear index values of DURALAST® Detectable Warning Plates versus a competing composite surface. Test results indicate that DURALAST plates are over 500 times more wear resistant than composites.

BUY AMERICAN IRON FOUNDRY PRODUCTS PROVISIONS PROMOTE U.S. MADE FOUNDRY PRODUCTS

The Country of Origin

The country of origin law requires that all products imported into the United States include a mark that “clearly and conspicuously” identifies, in English, where the product was made. As a buyer, specifier, or inspector of municipal castings, you should be aware of the country of origin law. In 1979, the U.S. Customs Service recognized that country of origin markings on manhole covers and frames lacked consistency. Some had the country of origin painted on them; others had no other marking except the U.S. distributor’s name. For uniformity, in 1984 the U.S. Congress legislated specific requirements:

The country of origin must be legibly and permanently marked by die stamping, molding or etching.

The country of origin mark on manhole covers, frames or rings, and assemblies must appear on the top surface of the product (marking other than the top surface is equivalent to no marking at all).

If the name of any city or locality in the U.S. appears on the product, the name of the country of origin, preceded by “Made in” or “Product of” or words of similar meaning, must also appear. This phrase must be of comparable size and placed close to the name of the city or locality. These requirements are enforced by the U.S. Customs Service.

Introduction

By law, American-made iron foundry products must be used in all federal transportation projects and state and local government projects that use federal transportation dollars. Products covered by the law include manhole frames and covers, catch basin frames and grates, iron and steel inlet grating, and various miscellaneous iron products. The Buy American provisions of the law, known as the Intermodal Surface Transportation Act of 1991, explicitly require that iron castings manufactured in U.S. foundries be used for federal transportation infrastructure projects. Such a provision first appeared in the Surface Transportation Act of 1982. Then, however, the law required that only U.S.-made “steel and manufactured products” could be used in transportation projects funded by the federal government. With the passage of the 1991 legislation, Congress clarified the 1982 legislation by specifically stating that iron products are covered by the Buy American provision. The Department of Transportation’s Buy American provision now reads U.S.- made “steel, iron, and manufactured products.”

Canadian Products

Note that while the Buy American regulations of certain federal agencies now define Canadian products as domestic (with some restrictions), Canadian products are considered foreign-made under the Buy American regulations of the Departments of Transportation and Energy.

Penalties

Because the Buy American provisions of the 1991 law explicitly require that iron castings manufactured in U.S. foundries be used for federal transportation infrastructure projects, knowing country of origin is particularly important for purchasing officials who procure iron products for such projects. If a contractor violates the law by using foreign products, the normal remedy is to penalize the contractor by reducing the contract price by an amount equal to the difference between the cost of the foreign material provided and the cost of similar domestic materials. A contractor who falsely certifies that U.S.-made products will be provided may also incur civil penalties under the False Claims Act. Severe penalties exist for a government contractor or subcontractor who deceptively affixes a “Made in the USA” label or intentionally misrepresents the country of origin of a product to be used in a federal highway project. These penalties include placement on the “List of Parties Excluded from Procurement Program” that is circulated to all federal agencies. Moreover, the offending party may be subject to further civil and criminal penalties of up to \$5,000 and/or imprisonment for one year per violation. A construction contractor who fails to comply with the Buy American provisions will be prohibited from receiving any further construction contracts from any federal government agency for a three-year period. The three-year ban also applies to subcontractors or suppliers associated with the contractor.

SUGGESTED SPECIFICATION FOR CONSTRUCTION AND UTILITY CASTINGS

General

This specification is applicable for gray and ductile iron construction castings. All castings shall be manufactured in the United States of America by EJ USA, Inc. All manufacturers shall be approved suppliers and be able to demonstrate that there is an acceptable quality control program at the producing foundry, prior to supplying castings.

Material

Gray iron castings for heavy duty applications shall be manufactured from iron conforming to ASTM A48, Class 35B of AASHTO M306, or as requested by the purchaser. Gray iron castings for sidewalk or pedestrian applications shall be manufactured from iron conforming to ASTM A48, Class 30B or 35B, or as requested by the purchaser. Ductile iron castings shall conform to ASTM A536. The iron material used in products provided shall have a minimum recycled material content of 85%. The recycled materials shall consist of post-consumer material.

Manufacture

Castings shall be of uniform quality, free from sand holes, gas holes, shrinkage, cracks and other surface defects. Castings shall be ground smooth and well cleaned by shot blasting. For traffic service castings, bearing surfaces between manhole rings and covers or grates and frames shall be cast or machined with such precision to prevent rocking. As-cast dimensions may vary within accepted foundry tolerances as outlined in the Iron Castings Handbook published by the American Foundry Society. Nominally, casting dimensional tolerances shall be +/- 1/16" per foot. All published casting weights are average and approximate values and shall vary +/- 5%. Castings shall be furnished painted or unpainted as specified by the purchaser.

Proof Load Testing

Traffic service castings shall have a first article proof load test conducted and the results of that proof load shall be made available to the purchaser upon request. The proof load shall be conducted in accordance with the method and procedure that is outlined in AASHTO M306. The casting shall be tested on a suitable and calibrated load testing machine and the casting shall hold a 40,000 pound proof load for one minute without experiencing any cracks or detrimental permanent deformation.

Inspection

Inspections shall be in accordance with AASHTO M306. Results of these tests shall be furnished to the purchaser upon request. The heat or production date and product numbers shall be cast on the casting. This information shall be used for casting traceability and testing.

Marking

Each casting shall be identifiable and show, at a minimum, the following: name of the producing foundry, country of manufacture (such as "Made in USA"), ASTM material designation, recycle symbol, individual part number, cast or heat date. Castings shall include all lettering as shown on the specification drawings.

Sampling

Random checks on the castings may be conducted by the purchaser. These random checks shall be conducted in accordance with AASHTO M306.

Records

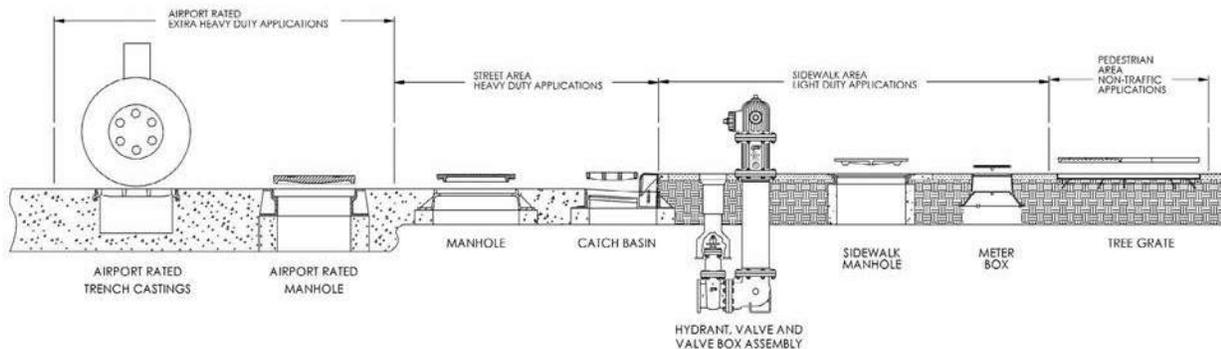
Test results for each lot of castings shall be maintained by the foundry for a minimum of seven years and shall be made available to the purchaser upon request.

Certification/Standards Compliance

ASTM A48	Material
ASTM A536	Material
AASHTO M306	Product Performance/Quality
ISO 9001:2008	Quality Assurance

Quality Assurance

System of manufacturing quality assurance must conform to the requirements of ISO 9001:2008 and be certified by a third party.





Index



INDEX

Section / Series	Page Number	Section / Series	Page Number	Section / Series	Page Number
Innovative Access Solutions	11	1106 Frame & Cover	49	1320 Frame & Cover	64
ERGO® Access Assembly	12-13	1110 Frame & Cover	49	1322 Frame & Cover	64
ERGO® XL Access Assembly	13-14	V-1115-3 Frame & Cover	49	1323 Frame & Cover	65
Captive Hinge Access Assembly	16	1117 Frame & Cover	50	1324 Frame & Cover	65
HINGECO® Frame and Cover	17	1118 - 1120 Frame & Cover	50	1325 Frame & Cover	66
SELFLEVEL® Asphalt Access Assembly	18-19	1122 Fram & Cover	51	V-1326 Frame & Cover	66
SELFLEVEL® Concrete Access Assembly	20-21	1123 Frame & Cover	51	1337 Frame & Cover	67
Revolution® Access Assembly	22	1125 Frame & Cover	51	1342 Frame & Cover	67
Campression® Watertite Assembly	23	1130 Frame & Cover	52	V-1344 Frame & Cover	68
Hinged Hatch Access Assembly	24-25	1135 Frame & Cover	52	V-1345 Frame & Cover	68
Hinged Grate Assembly with Slam Lock	26	1136 Frame & Cover	53	1348 Frame & Cover	68
MULTILEAF™ Hinged Covers	27	1143 Frame & Cover	53	V-1355 Frame & Cover	69
Ermatic® Modular Covers	28-29	1150 Frame & Cover	54	V-1357 Frame & Cover	69
Features & Options	30	1154 Frame & Cover	54	V-1357 Frame & Cover	69
Optimized Designs	31	1155 Frame & Cover	54	V-1360 Frame & Cover	70
Safety and Security	32-33	1160 Frame & Cover	55	V-1383 Frame & Cover	70
Ease of Use	34	1161 Frame & Cover	55	V-1384 Frame & Cover	70
Custom Logo Covers	35	V-1168 Frame & Cover	55	V-1403 Frame & Cover	71
Fabricated Products	36	1177 Frame & Cover	56	1405 Frame & Cover	71
Load Ratings	37	1202 Frame & Cover	56	V-1407-1 Frame & Cover	71
Flow Capacities of Inlet Grates	38-39	1203 Frame & Cover	57	1410 Frame & Cover	72
Manhole Frames and Covers	40	1205 Frame & Cover	57	V-1418-2 Frame & Cover	72
403 Frame & Cover	41	1208 Frame & Cover	58	V-1419 - V-1420 Frame & Cover	73
1000 Frame & Cover	41	1210 Frame & Cover	58	V-1432 Frame & Cover	73
1020 Frame & Cover	42	1212 Frame & Cover	58	1433 Frame & Cover	74
1022 Frame & Cover	43	1220 Frame & Cover	59	V-1438 Frame & Cover	74
1030 Frame & Cover	43	1224 Frame & Cover	59	1445 Meter Box Frame & Cover	74
1040 - 1049 Frame & Cover	44	1225 Frame & Cover	59	1450 Frame & Cover	75
1041 - 1049 Custome Logo Covers	45	1227 Frame & Cover	60	1460 Frame & Cover	75
1044 Frame & Cover	46	1230 Frame & Cover	60	1475 Frame & Cover	76
1050 Frame & Cover	46	1233 Frame & Cover	60	1480 Frame & Cover	76
1058 Frame & Cover	46	1240 Frame & Cover	61	V-1480 Frame & Cover	76
1060 Frame & Cover	47	V-1243 Frame & Cover	61	V-1481 Frame & Cover	77
1076 Frame & Cover	48	1251 Frame & Cover	61	1484 Frame & Cover	77
1080 Frame & Cover	48	1266 Frame & Cover	62	1490 Frame & Cover	77
1085 Frame & Cover	48	1267 Frame & Cover	62	1500 Frame & Cover	78
1090 Frame & Cover	49	V-1301 Frame & Cover	62	V-1501 Frame & Cover	78
		V-1304 Frame & Cover	63	V-1503 Frame & Cover	78
		1310 Frame & Cover	63	1510 Frame & Cover	79
		1311 Frame & Cover	63	1515 Frame & Cover	79
		V-1317 Frame & Cover	64	1520 Frame & Cover	79

INDEX (CONTINUED)

Section / Series	Page Number	Section / Series	Page Number	Section / Series	Page Number
1525 Frame & Cover	80	1730 Frame & Cover	95	1950 Frame & Cover	109
1530 Frame & Cover	80	1731 Frame & Cover	95	1960 Frame & Cover	109
1543 - 1545 Frame & Cover	80	1733 Frame & Cover	95	1965 Frame & Cover	110
1562 Frame & Cover	81	1734 Frame & Cover	96	1970 Frame & Cover	110
1563 Frame & Cover	81	1755 Frame & Cover	96	1975 Frame & Cover	110
1564 Frame & Cover	82	1771 Frame & Cover	96	1984 Frame & Cover	111
1565 Frame & Cover	82	1775 Frame & Cover	97	1985 Frame & Cover	111
1566 Frame & Cover	82	1802 - 1825 Frame & Cover	97	1986 Frame & Cover	112
1567 Frame & Cover	83	1812Z2 Frame & Cover	98	2010 Frame & Cover	112
1570 Frame & Cover	83	V-1814 Frame & Cover	98	2015 Frame & Cover	112
V-1570 Frame & Cover	83	V-1816 Frame & Cover	98	2023 Frame & Cover	113
1571 Frame & Cover	83	1832 Frame & Cover	99	2024 Frame & Cover	113
1572 Monument Box	84	1833 Frame & Cover	99	2027 Frame & Cover	114
1574 Monument Box	84	1835 Frame & Cover	99	2028 Frame & Cover	114
1575 Monument Box	84	1837 Frame & Cover	100	2029 Frame & Cover	114
1576 Monument Box	85	1842 Frame & Cover	100	2035 Frame & Cover	115
1577 Monument Box	85	1843 - 1845 Frame & Cover	100	2040 Frame & Cover	115
1578 Monument Box	85	1847 - 1849 Frame & Cover	101	2045 Frame & Cover	115
1581 Frame & Cover	86	1850 Frame & Cover	101	2055 Frame & Cover	116
1582 Frame & Cover	86	1854 Frame & Cover	101	2060 Frame & Cover	116
1585 Frame & Cover	87	1855 Frame & Cover	102	2070 Frame & Cover	117
1588 Frame & Cover	87	V-1860 Frame & Cover	102	2075 Frame & Cover	117
1590 Frame & Cover	87	V-1865 Frame & Cover	102	2080 Frame & Cover	117
1600 Frame & Cover	88	V-1866 Frame & Cover	103	2100 Frame & Cover	118
V-1600 Frames & Covers	88	V-1874 Frame & Cover	103	2132 Frame & Cover	119
1606 Frame & Cover	89	V-1883 Frame & Cover	103	2134 Frame & Cover	119
V-1610 Frames & Covers	89	V-1886 Frame & Cover	104	2222 - 2223 Frame & Cover	119
1622 Frame & Cover	90	1890 Frame & Cover	104	2224 Frame & Cover	120
1625 Frame & Cover	90	1892 Frame & Cover	104	2228 Frame & Cover	120
1641 Frame & Cover	90	1893 Frame & Cover	105	2230 - 2232 Frame & Cover	120
1660 Frame & Cover	91	1895 Airport Frame & Cover	105	2295 Frame & Cover	121
1665 Frame & Cover	91	1900 Airport Frame & Cover	106	V-2326 Watertite Frame & Cover	121
1680 Frame & Cover	92	1915 Frame & Cover	106	V-2327 Watertite Frame & Cover	121
1690 Frame & Cover	92	1920 Frame & Cover	106	V-2328 Watertite Frame & Cover	122
1700 - 1703 Frame & Cover	92	1925 Frame & Cover	107	V-2339 Watertite Frame & Cover	122
V-1701 Frame & Cover	93	1930 Frame & Cover	107	V-2357 Watertite Frame & Cover	122
V-1700 Frame & Cover	93	1932 Frame & Cover	107	V-2358 Watertite Frame & Cover	123
1706 Frame & Cover	93	1935 Frame & Cover	108	V-2384 Watertite Frame & Cover	123
1710 - 1715 Frame & Cover	94	1936 Frame & Cover	108	V-2386 Watertite Frame & Cover	123
1716 Airport Cleanout Frame & Cover	94	1940 Frame & Cover	108	2405 Cover	124
		1944 Frame & Cover	109		

INDEX (CONTINUED)

Section / Series	Page Number	Section / Series	Page Number	Section / Series	Page Number
V-2418-2 Watertite Frame & Cover	125	3010 Frame & Cover	140	3731 Sidewalk Frame & Cover	154
2450 Frame & Cover	125	3015 Frame & Cover	140	3735 Frame & Cover	155
2455 Frame & Cover	125	3020 Frame & Cover	140	3736 Frame & Cover	155
V-2480 Watertite Frame & Gvoer	126	3030 Frame & Cover	141	3740 Frame & Cover	155
2600 Frame & 2603 Cover	126	3033 Inlet Frame & Cover	141	3761 Frame & Cover	156
V-2600/V-2610 Frame & Cover	127	3034 Inlet Frame & Cover	141	3767 Frame & Cover	156
2603 Frame & Cover	127	3100 Frame & Cover	142	3770 Frame & Cover	156
2609 Frame & Cover	128	3101 Frame & Cover	142	3771 Frame & Cover	157
2615 Frame & Cover	128	3106 Frame & Cover	142	3772 Frame & Cover	157
2626 Frame & Cover	128	3110 Frame & Cover	143	3773 Frost Proof Frame & Cover	157
2640 Frame & Cover	129	3115 Frame & Cover	143	3777 Frame & Cover	158
2688 Frame & Cover	129	3124 Frame & Cover	143	3790 Frame & Cover	158
2750 Frame & Cover	129	3162 Frame & Cover	144	V-7048 Frame & Cover	158
2755 Frame & Cover	130	3163 Frame & Cover	144	V-7068 Frame & Cover	159
2790 Frame & Cover/Grate Series	130	3164 Frame & Cover	144	V-7069 Frame & Cover	159
2800 Frame & Cover	130	3165 Frame & Cover	145	V-7070-1 Frame & Cover	159
2805 Frame & Cover	131	3166 Frame & Cover	145	Drainage Grates, Frames, and Curb Inlets	160
2812 Airport Frame & Cover	131	3505 Area Drain	145	V-4066 Curb & Gutter Inlet	161
2850 Frame & Cover	132	V-3600 Frame & Grate Series	146	V-4069-1 Curb & Gutter Inlet	161
2860 Frame & Cover	132	V-3610 Frame & Grate Series	146	V-4074 Curb & Gutter Inlet	162
2870 Airport Frame & Cover	133	3612 Frame & Cover	147	V-4075 Curb & Gutter Inlet	162
2880 Frame & Cover	133	3614 Frame & Cover	147	V-4091 Curb & Gutter Inlet	163
2885 Frame & Cover	134	3633 Frame & Cover	148	V-4092 Curb & Gutter Inlet	163
2890 Frame & Cover	134	3638 Monument Box & Cover	148	V-4096 Curb & Gutter Inlet	164
2900 Frame & Cover	134	3639 Monument Box & Cover	148	V-4230 Gutter Inlet Frame & Bar Grate	164
2910 Frame & Cover	135	3648 Cleanout	149	V-4241 Curb & Gutter Frame & Cover	165
2912 Frame & Cover	135	3650 Frame & Cover	149	V-4243 Curb & Gutter Frame & Grates	165
2915 Frame & Cover	135	3651 Frame & Cover	149	V-4250 Gutter Inlet	166
2920 Frame & Cover	136	3661 Lamphole Frame & Cover	150	V-4274 Gutter Inlet	166
2925 Frame & Cover	136	3663 Frame & Cover	150	V-4275 Gutter Inlet	167
2932 Frame & Cover	136	3670 Meter Box	150	V-4280 Gutter Inlet	167
2935 Frame & Cover	137	3675 Cleanout	151	V-4290 Gutter Inlet	167
2960 - 2980 Monument Boxes	137	3680 Frame & Cover	151	V-4300 Curb Inlet Series	168
2982 Frame & Cover	138	3690 Frame & Cover	151	V-4340 Curb Inlet Series	169
2990 Frame & Cover	138	3698 Frame & Cover	152	V-4343-2 Curb Inlet	169
2995 Frame & Cover	138	3700-3715 Frame & Cover	152	V-4350 Curb Inlet	169
2996 Frame & Cover	139	3717 Frame & Cover	153	V-4410 Gutter Inlet Series	170
3000 Frame & Cover	139	3718 Frame & Cover	153	V-4430 Gutter Inlet	170
3005 Frame & Cover	139	3719 Frame & Cover	153		
		3725 Frame & Cover	154		
		3730 Frame & Cover	154		

INDEX (CONTINUED)

Section / Series	Page Number	Section / Series	Page Number	Section / Series	Page Number
V-4449 Gutter Inlet	171	5245 Catch Basin Inlet	186	5840 Elevated & Bridge Drain Inlet	206
V-4510 - V-4516 Gutter Inlet	171	5250 Catch Basin Inlet	187	5844 Elevated & Bridge Drain Inlet	206
V-4520 Gutter Inlet	172	V-5324-1 Frame & Grate	187	5845 Elevated & Bridge Drain Inlet	206
V-4530 Gutter Inlet	172	5334 Catch Basin Inlet	187	5890 Elevated & Bridge Drain Inlet	207
V-4540 Gutter Inlet	172	5335 Catch Basin Inlet	188	V-5913-1 Grate	207
V-4810 Ditch Inlet	173	5340 Catch Basin Inlet	188	V-5921-2 Grate	207
V-4821 Gutter Inlet	173	5342 Catch Basin Inlet	188	V-5934-1 Grate	208
V-4822 Ditch Inlet	173	5352 Catch Basin Inlet	189	V-5935 Grate	208
V-4823 Ditch Inlet	174	5353 Catch Basin Inlet	189	6004 - 6027 Sewer Pipe Grate & Cover	208
V-4824 Ditch Inlet	174	5355 Catch Basin Inlet	190	6104 - 6124 Drainage Grates	209
V-4825 Median Inlet	174	5356 Catch Basin Inlet	191	6140 Drainage Grate	209
V-4855 Frame & Grate	175	5357 Catch Basin Inlet	192	6204 - 6224 Drainage Grates	210
V-4860 Inlet Frame & Grate Series	175	5358 Catch Basin Inlet	192	6304 - 6324 Sewer Pipe Cover	210
V-4867 Inlet Frame & Grate	175	5360 Catch Basin Inlet	193	6340 Sewer Pipe Cover	211
V-4868-2 Frame & Grate	176	V-5360-1 Frame & Grate	193	V-6400 Watertite Access Hatch	211
V-4870 Inlet Frame & Grate	176	5370 Catch Basin Inlet	193	6407 Inlet Box	212
V-4873 Inlet Frame & Grate	176	5375 Catch Basin Inlet	194	6487 Beehive Ditch Grate	212
V-4880 Frame & Grate Series	177	5376 Catch Basin Inlet	194	6488 Beehive Ditch Grate	212
5000 Catch Basin Inlet	177	5380 Catch Basin Inlet	194	6489 Beehive Ditch Grate	213
5020 Catch Basin Inlet	178	5385 Catch Basin Inlet	195	6490 Beehive Ditch Grate	213
5030 Catch Basin Inlet	178	5390 Catch Basin Inlet	195	6492 Ditch Grate	213
5031 Catch Basin Inlet	178	5395 Catch Basin Inlet	195	6495 Beehive Ditch Grate	214
5050 Catch Basin Inlet	179	5400 Catch Basin Inlet	196	6496 Beehive Ditch Grate	214
5055 Frame & Grate	179	5416 Catch Basin Inlet	196	6498 Beehive Ditch Grate	214
5080 Catch Basin Inlet	179	5417 Catch Basin Inlet	197	6499 Beehive Ditch Grate	215
5085 Catch Basin Inlet	180	5418 Catch Basin Inlet	197	6500 Beehive Ditch Grate	215
5100 Catch Basin Inlet	180	5419 Catch Basin Inlet	198	6508 Beehive Ditch Grate	215
5110 Catch Basin Inlet	181	5420 Catch Basin Inlet Grate	198	6509 Beehive Ditch Grate	215
5114 Frame & Grate	181	5421 Catch Basin Inlet Grate	198	6517 Ditch Grate	216
5115 Catch Basin Inlet	182	5424 Catch Basin Inlet	199	6527 Ditch Grate	216
5120 Catch Basin Inlet	182	5425 Catch Basin Inlet	199	6532 - 6536 Beehive Ditch Grate	216
5125 Catch Basin Inlet	183	5440 Frame and Grates	199	6610 Beehive Ditch Grate	216
5130 Catch Basin Inlet	183	5450 Catch Basin Inlet	200	6626 Beehive Ditch Grate	217
5150 Catch Basin Inlet	184	5460 Catch Basin Inlet	200	V-6600/V-6700 Square and Rectangular Frame & Cover Series	217-218
5190 - 5192 Catch Basin Inlet	184	V-5600 Reversible Frames & Grates	201-202	V-6780 Frame & Cover	219
5216 Catch Basin Inlet	185	V-5700 Frame & Grate Series	203-204		
5230 Catch Basin Inlet	185	V-5775 Frame & Grate	205		
5235 Catch Basin Inlet	185	5810 Catch Basin Inlet	205		
5236 Catch Basin Inlet	186	5834 Elevated & Bridge Drain Inlet	205		
5240 Catch Basin Inlet	186				

INDEX (CONTINUED)

Section / Series	Page Number	Section / Series	Page Number	Section / Series	Page Number
7000 Catch Basin Curb Inlet	219	7236 Catch Basin Curb Inlet	238	7536 Catch Basin Curb Inlet	255
7003 Curb Plate	220	7248 Catch Basin Inlet	239	7540 Catch Basin Curb Inlet	256
7010 Catch Basin Curb Inlet	220	7250 Catch Basin Curb Inlet	239	7555 Catch Basin Curb Inlet	256
7020 Catch Basin Curb Inlet	221	7260 Catch Basin Curb Inlet	240	7565 Catch Basin Curb Inlet	257
7022 Catch Basin Curb Inlet	221	7262 Curb Outlet	240	7568 Catch Basin Curb Inlet	258
7030 Catch Basin Inlet	222	7266 Catch Basin Curb Inlet	240	7570 Catch Basin Curb Inlet	259
7031 - 7032 Catch Basin Curb Inlet	223	7281 Catch Basin Curb Inlet	241	7571 Catch Basin Curb Inlet	259
7034 Catch Basin Curb Inlet	223	7300 Catch Basin Curb Inlet	241	7582 Catch Basin Inlet	260
7035 Catch Basin Curb Inlet	224	7310 Catch Basin Curb Inlet	241	7585 Catch Basin Inlet	260
7036 Catch Basin Curb Inlet	224	7350 Catch Basin Curb Inlet	242	7590 Catch Basin Inlet	261
7045 Catch Basin Curb Inlet	225	7351 Catch Basin Curb Inlet	242	7591 Catch Basin Inlet	262
7050 Catch Basin Curb Inlet	225	7355 Catch Basin Curb Inlet	243	7592 Catch Basin Inlet	262
7055 Catch Basin Curb Inlet	226	7358 Catch Basin Curb Inlet	243	7593 Catch Basin Inlet	263
7056 Catch Basin Curb Inlet	226	7360 Catch Basin Curb Inlet	244	7595 Inlet Frame & Grate	263
7060 Catch Basin Curb Inlet	227	7370 - 7371 Catch Basin Curb Inlet	244	7596 Curb & Gutter Inlet	264
7065 Catch Basin Curb Inlet	227	7380 Catch Basin Curb Inlet	245	7597 Curb & Gutter Inlet	265
7066 Catch Basin Curb Inlet	228	7390 Catch Basin Curb Inlet	245	7598 Curb & Gutter Inlet	265
7075 Catch Basin Curb Inlet	228	7391 Catch Basin Curb Inlet	245	7600 Catch Basin Series, A-D	266
7076 Catch Basin Curb Inlet	229	7392 Catch Basin Curb Inlet	246	7600 Catch Basin Series, A-D	267
7080 Catch Basin Curb Inlet	229	7395 Catch Basin Curb Inlet	246	7600 Catch Basin Series, A-D	268
7085 Catch Basin Curb Inlet	229	7420 Catch Basin Curb Inlet	246	7700 Catch Basin Inlet	269
7091 Catch Basin Inlet	230	7430 Catch Basin Curb Inlet	247	7701 Catch Basin Curb Inlet	269
7140 Catch Basin Curb Inlet	230	7432 Catch Basin Curb Inlet	247	7705 Catch Basin Curb Inlet	270
7150 Catch Basin Curb Inlet	231	7460 Catch Basin Curb Inlet	247	7711 Rolled Curb Frame & Grate	270
7155 Catch Basin Curb Inlet	231	7464 Catch Basin Curb Inlet	248	7715 Catch Basin Inlet	271
7156 Inlet Frame & Grate	232	7467 Catch Basin Curb Inlet	248	7720 Frame & Grate	271
7158 Curb & Gutter Inlet	232	7485 Catch Basin Curb Inlet	249	7737 Catch Basin	271
7159 Inlet Frame & Grate	233	7488 Catch Basin Curb Inlet	249	7738 Rectangular Inlet Grate	272
7160 Inlet Frame & Grate	233	7490 Catch Basin Curb Inlet	250	7739 Rectangular Inlet Grate	272
7170 Catch Basin Curb Inlet	233	7495 Catch Basin Curb Inlet	250	7750 Frame & Grate	272
7171 Catch Basin Curb Inlet	234	7500 Catch Basin Curb Inlet	251	7752 Curb & Gutter Inlet	273
7180 Catch Basin Curb Inlet	234	7501 Catch Basin Curb Inlet	251	7753 Round Base Catch Basin	273
7191 Catch Basin Inlet	235	7504 Catch Basin Curb Inlet	252	7756 Catch Basin Frame	274
7205 Catch basin Curb Inlet	235	7505 Catch Basin Curb Inlet	252	7761 Curb & Gutter Inlet	274
7210 Catch Basin Curb Inlet	236	7510 Catch Basin Curb Inlet	253	7765 Curb & Gutter Inlet	275
7220 Catch Basin Curb Inlet	236	7511 Catch Basin Curb Inlet	253	7766 Curb & Gutter Inlet	275
7221 Catch Basin Curb Inlet	237	7520 Catch Basin Curb Inlet	254	7770 Catch Basin	275
7222 Round Base Curb & Gutter Inlet	237	7525 Catch Basin Curb Inlet	254	7775 Curb & Gutter Inlet	276
7235 Catch Basin Curb Inlet	238	7530 Catch Basin Curb Inlet	254	7780 Catch Basin	276
		7535 Catch Basin Curb Inlet	255	7797 Frame & Grate	276

INDEX (CONTINUED)

Section / Series	Page Number	Section / Series	Page Number	Section / Series	Page Number
Miscellaneous Products	278				
8001 Junction Box Frame & Cover	279	8244 - 8283 Square & Rectangular Manhole Frame & Cover	289	V-7500 Trench Cover & Frame Series	306
8004 Junction Box Frame & Cover	279	8267 Frame & Cover	290	V-7520 Bolted Trench Cover & Frame Series	306
8008 Junction Box Frame & Cover	279	8297 Square Junction Box	290	V-7600 30" Trench Grate Series	307
8014 Junction Box Frame & Cover	280	8301 - 8333 Square & Rectangular Frame & Cover	291	7001 Curb Plate	307
8015 Junction Box Frame & Cover	280	8340 Meter Box & Cover	291	7743 Gutter Inlet with End Outlet	308
8016 Junction Box Frame & Cover	281	8350 Square Frame & Cover	292	7744 Gutter with Side Outlet	308
8018 Junction Box Frame & Cover	281	8360 Manument Box	292	V-7950 Slotted Grate for Pipe	308
8023 Catch Basin Curb Inlet	282	8365 Monument Box	292	7796 Trench Grate	309
8027 Frame & Cover	282	8371 Monument Box	293	7799 Trench Grate	309
8040 Meter Frame & Cover	282	8375 Monument Box	293	Master Tables and Casting Dimensions	310
8032 Frame & Grate	283	8380 Monument Box	293	Round Manhole Base Flange	311-320
8045 Frame & Cover	283	8390 Square Frame & Cover	294	Round Manhole Top Flange	321-324
8047 Junction Box Frame & Cover	283	8396 Monument Box	294	Watertite Base Flange	324-327
8048 Junction Box Frame & Cover	284	8425 Valve Box Frame & Cover	294	Watertite Top Flange	328
8049 Junction Box Frame & Cover	284	V-8457-1 Mushroom Cover	295	Watertite Hatch	329
8052 Junction Box Frame & Cover	284	8464 Drop-In Valve Cover	295	Frost Proof	329
8053 Junction Box Frame & Cover	284	V-8502 Cleanout Frame & Cover	295	Gasket Seal	330
8054 Junction Box Frame & Cover	285	Trench Grates	296	Square and Rectangular Covers	330-332
8055 Frame & Cover	285	5436 Frame, Grate, and Cover	297	Curb Inlets	333-336
8065 Water Meter Frame & Cover	285	Artistic Trench Grate	298	Catch Basins	337-340
8075 Frame & Cover	286	6900 Linear Trench Drainage	299	Drainage Tables - Round Grates	341-344
8083 Frame & Cover	286	6900 Linear Trench Drainage (Continued)	300	Drainage Tables - Catch Basin Grates	345-350
8100 Cover	286	6950 Trench Grate & Frame Series	301	Sinusoidal and Vane Grate Flow Characteristics	350
8105 Catch Basin Curb Inlet	287	6970 Bolted Vane Style Trench Assembly	302	Cross Reference Guide	351-362
8106 Junction Box Frame & Cover	287	6979 Linear Slotted Drain Vane Grate	302		
8201 - 8233 Square & Rectangular Covers & Grates	288	V-7300 Trench Grate & Frame Series	303		
		V-7320 Bolted Trench Grate & Frame Series	303		
		V-7340 Cross Drainage Trench Grate & Frame Series	304		
		V-7360 Cross Drainage Trench Grate & Frame Series	304		
		V-7380 ADA Trench Grate & Frame Series	305		

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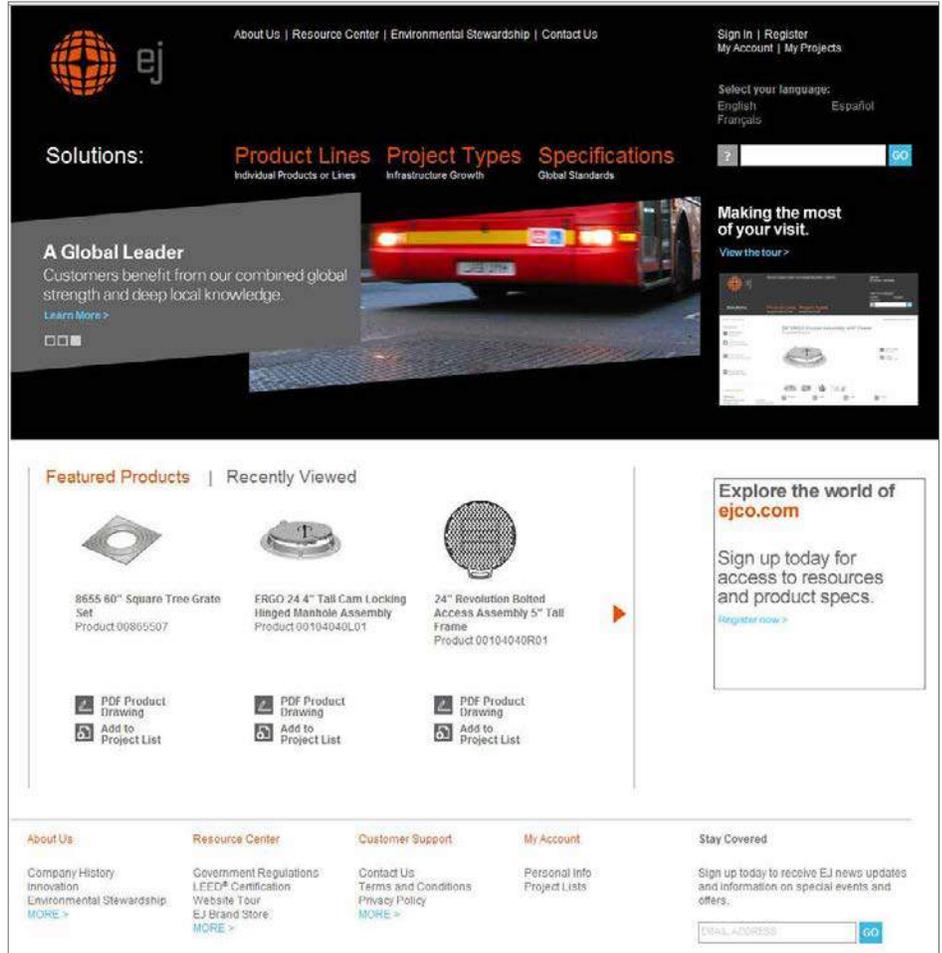
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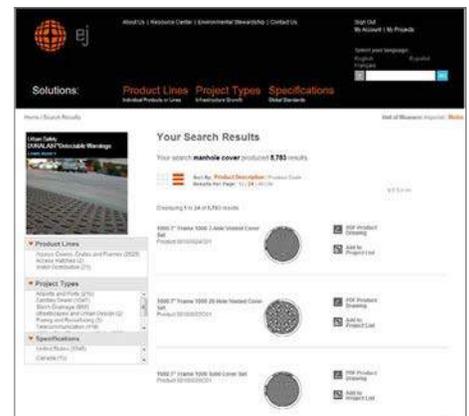
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