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#### Airport and Port Authority Access Solutions

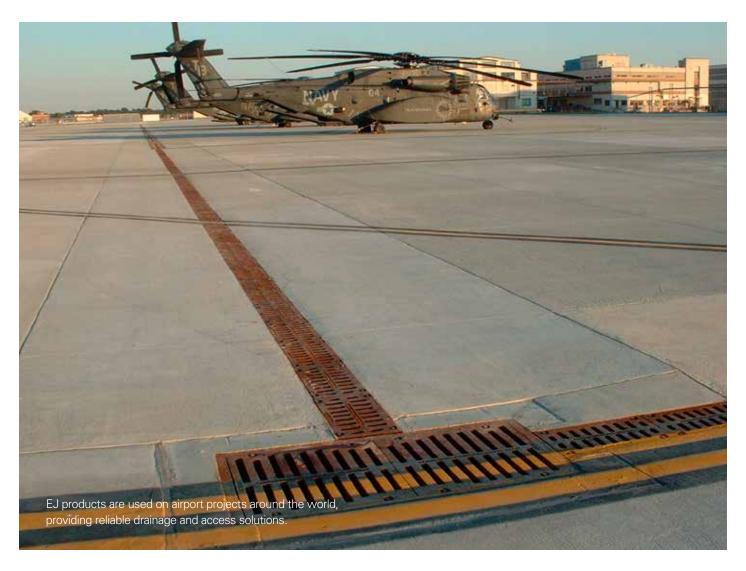
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1845 Series Up to 42 1/4" of clear opening (page 14)

Linear Trench Drainage Our most popular heavy duty trench series (page 34)

E C

# Airport and Port Construction Castings and Innovative Access Solutions



EJ offers many styles of construction castings specifically designed for airports and other environments that undergo excessive load conditions. 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 ASTMA 48 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.

These airport and sea port authority access solutions can be found installed and in use at numerous airports, ports and other large projects located in North America and other parts of the world. For a list of projects utilizing EJ products, please see page 53.



#### **Loading Requirements**

All of our products are designed to meet or exceed the specified loading requirements. They conform to AASHTO and ASTM standards. These standards specify product groups and minimum load classifications dependent on the place of installation. Additionally many casting are also certified by a third party to meet EN124 requirements.

#### **Proof Load Testing - Airport Castings**

All airport construction castings must pass a rigorous proof load test conducted in accordance with AASHTO M306 guidelines, with the proof load amount revised to 200,000 pounds to account for high loading environments. 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 200,000 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. EJ castings that are rated for airport service are designed to meet or exceed the loading requirements listed in Federal Aviation Administration (FAA) advisory circulars AC 150/5320-6D Appendix 3 and AC 150/5370-10A, Item D-751.

#### **Material Selection**

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Depending on the model, our construction castings can be manufactured using either gray iron or ductile iron. Gray iron has an unequaled 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.







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.



# 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. And, as an entrepreneurial family-owned company, we have a long, successful heritage of meeting change with innovation. With these combined strengths, EJ is uniquely positioned to lead our industry into the future.

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—ensuring that we're always ready with the solutions you need today.

Our state-of-the-art manufacturing plants employ world class manufacturing systems. Extensive testing ensures that our solutions meet and exceed expectations. We're also committed to the environment—our facilities use processes and controls that minimize the impact to our surroundings. Our products are manufactured using thousands of tons of post-consumer and recycled materials. At EJ, high quality and environmental responsibility go hand in hand.

We work with end-users around the world to develop designs that incorporate local knowledge and ideas, while meeting local specifications. Working with local engineering firms, precasters, distributors and contractors—we deliver infrastructure access products for transportation; energy; and telecommunication projects. In addition, EJ products are delivered through our loyal network of local and regional distributors.

Because EJ is a family-owned company, strong relationships are core to everything we do. As a result, we have a long heritage of forging strong bonds with our customers. Our network of passionate and knowledgeable employees is steeped in this heritage, and continues to deliver unparalleled customer service. This service includes the availability of seminars and training on the features and benefits of our broad range of products.

Our service also extends to the internet. At ejco.com, you can explore our leading innovations and access our endless resources—including specifications and drawings.

We offer you the best products, the most complete coverage, competitive pricing, and the support of our solid network of local employees.

Wherever you are, whatever your specific needs, we have the best access solutions for your infrastructure project.



#### Global Presence

Operations including distribution centers and strategic branch office locations exist in key markets throughout North America, Europe and the Asia Pacific and offer unparalleled customer service and responsiveness.



#### Quality Manufacturing

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



#### **Product Availability**

One of the largest inventories of construction castings is available worldwide through our distribution centers, branch office locations and extensive network of distribution partners.

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# 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 East Jordan Iron Works and originally produced castings for machine parts, ship parts, agricultural parts and railroads. East Jordan Iron Works is now EJ.

In the 1920s, when the lumbering era came to a close, the company expanded into new markets allowing continued success in changing times and shifted to the production of street castings, water works valves, and fire hydrants.

The increasing demands of World War II boosted the foundry's growth.

During the 1950s and 60s, the third generation converted the foundry to an automated high-pressure molding line complex complete with integrated automatic sand processing and mechanized casting handling facilities.

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By the mid-1960's, the company was operating the largest automated molding line in the United States. The new highly sophisticated equipment maximized production capabilities for the foundry.

Since the mid-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 construction castings by modernizing its facilities, acquiring and establishing additional branch operations.

In the 1990s, many new acquisitions throughout the United States put the company in a good position to expand product lines, sales offices, distribution capabilities and customer service across North America.

The 21st century had barely introduced itself when East Jordan Iron Works began turning its attention to expansion in other parts of the world, including. 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 has unified the company and supported its vision to be the global leader in infrastructure access solutions. This action leverages all company resources to improve internal operations, as well as provide superior product offerings and services to its valued customers. EJ has supplied products to infrastructure projects in over 140 countries around the world. EJ remains a family owned and operated company—including significant involvement by fifth-generation family members.



# 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
- · 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

#### 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

#### Distribution

- Delivering products quickly and smoothly worldwide
- · Over 20 stocking branch locations throughout U.S. and Canada
- · Largest inventory available in the world

















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# **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**

- · 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
- · Multi-Leaf® Hinged Covers
- · CAMPRESSION® Access Assemblies
- · Composite Access Covers

#### **Innovative Features**

- · LOCKEO® Security Feature
- · Mechanical Strut Lift Assist
- · Cam Lock

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- · EON LOCK® Designs
- · EPIC® Pick Bar
- · MPIC® Multi-tool Pick Bar









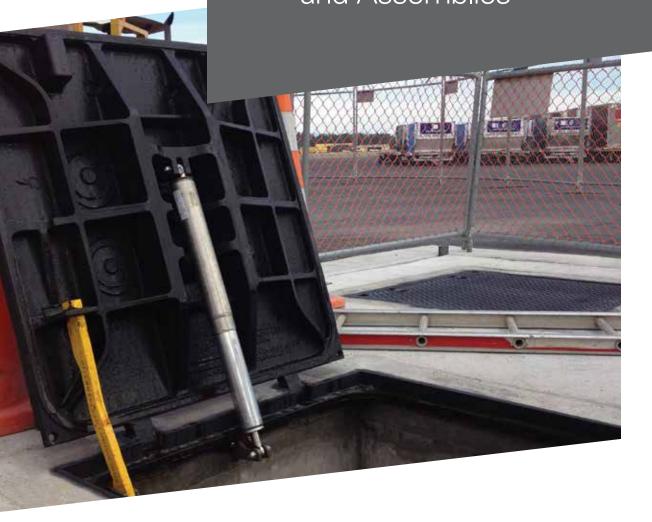








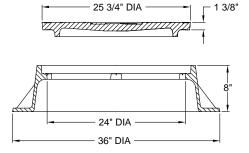
# Manhole Frames, Covers and Assemblies





## 1207 FRAME, COVER, AND GRATE



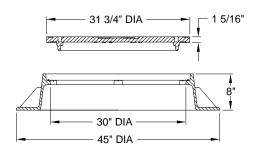


Features	Cover	Grate	Frame*	Lock Type	Other
Airport extra heavy duty Special proof load to 245,000 lbs Closed pickholes Threaded lift holes	Ductile iron Solid Vented Closed pickholes Threaded lift holes	Ductile iron Extra heavy duty 1203M1—202 sq. in. open area	Gray iron  Bottom Flange 4" frame—1203Z1 6" frame—1405Z 8" frame—1203Z3 10" frame—1204Z	Hex bolts Tamper proof bolts Pent head bolts	Gaskets Custom badging/ lettering
			Reversible 4" frame—3771Z		

<sup>\*</sup>Flange dimensions vary per series

## 1230 FRAME, COVER, AND GRATE





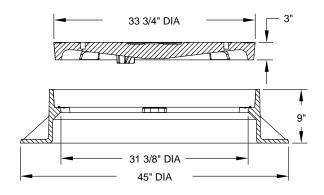
Features	Cover	Grate	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Vented Closed pickholes Threaded lift holes	Ductile iron Airport extra heavy duty V3600-4—350 sq. in. open area	Gray iron  Bottom Flange 4" frame—1230Z 5 5/8" frame—1820Z 6 1/2" frame—1232Z 7" frame with square base flange—8027Z 7 1/2" frame—1370Z 8" frame—1234Z1 10" frame—1825Z  Reversible 4" frame—V1600-4	Hex bolts Tamper proof bolts Pent head bolts	Gaskets Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series



## **1240 FRAME AND COVER**

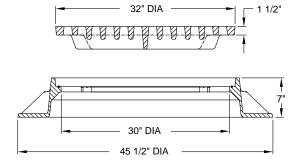




Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty Special proof load to 245,000 lbs	Ductile iron Solid Vented Closed pickholes Threaded lift holes	Gray iron <b>Bottom Flange</b> 9* frame—1240ZPT	Hex bolts Tamper proof bolts Pent head bolts	Gaskets Custom badging/ lettering

## 1324 FRAME, COVER, AND GRATE





Features	Cover	Grate	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Extra heavy duty Vented	Ductile iron Airport extra heavy duty 1324M—270 sq. in. open area	Gray iron  Bottom Flange 4 1/2" frame—V1420 5 1/2" frame—1496Z 6 1/2" frame—1320Z 6 1/2" frame—1322Z 6 1/2" frame with square base flange—1323Z 7" frame—1324Z 8 1/2" frame—V1419  Top Flange 4 1/2" frame—V1816  Reversible 4" frame—V1480Z	Hex bolts Tamper proof bolts Pent head bolts	Custom badging/ lettering

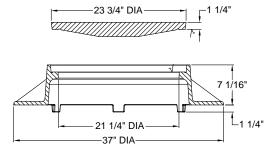
<sup>\*</sup>Flange dimensions vary per series





## **1770 FRAME AND COVER**



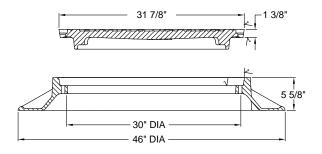


Features	Cover	Frame*		Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Closed pickholes	Gray iron  Bottom Flange 2 1/2" frame—V1136 4" frame—1244Z 4" frame with square base flange—1244Z 6" frame—1246Z1 6" frame—1337Z 6" frame—1338Z 7 1/16" frame—1771Z2 8" frame—1248Z1	Reversible 4" frame—1244Z1  Top Flange 4" frame—2855Z	Crack drill hex bolts Crack drill tamper proof bolts Crack drill pent head bolts	Gaskets Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series

## 1810 FRAME, COVER, AND GRATE





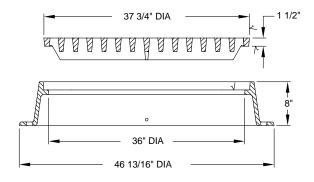
Features	Cover	Grate	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Pick bars Open pickholes	Ductile iron Airport extra heavy duty V3600-4—350 sq. in. open area	Gray iron  Bottom Flange 4" frame—1230Z 5 5/8" frame—1820Z 6 1/2" frame—1232Z 7" frame with square base flange—8027Z 7 1/2" frame—1370Z 8" frame—1234Z1 10" frame—1825Z  Reversible 4" frame—V16004	Hex bolts Tamper proof bolts Pent head bolts	Gaskets Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series



## **1833 FRAME AND GRATE**



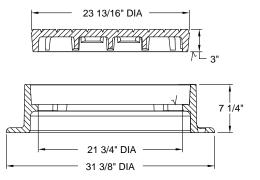


Features	Cover	Grate	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Closed pickhole Threaded lifting hole	Ductile iron 2812M/1580M—Airport extra heavy duty—458 sq. in. of open area 2812M2—Extra heavy duty ADA style—304 sq. in. of open area	Gray iron  Bottom Flange 4" frame—1833Z4 5" frame with square base flange—1833Z3 6" frame—2287Z 8" frame—1833Z2 8" frame with square base flange—1833Z1 10" frame—2381Z  Top Flange 4 1/2" frame—281ZZ	Hex bolts Tamper proof bolts Pent head bolts	Gaskets Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series

#### **1835 FRAME AND COVER**





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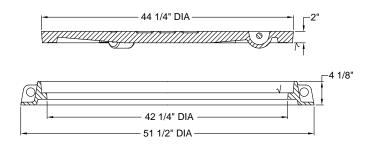
Features	Cover	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Vented Lift holes Closed pickholes	Gray iron  Bottom Flange 4" frame—1834Z 7 1/16" frame—1835Z 7 1/4" frame—1840Z	Crack drill hex bolts Crack drill pent head bolts	Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series



## **1845 FRAME AND COVER**

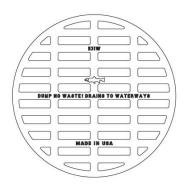


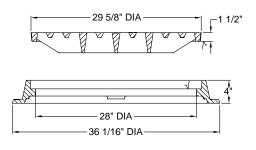


Features	Cover	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Pick bars Inner/outer cover— accepts 1810 inner cover	Gray iron <b>Bottom Flange</b> 4 1/8" frame—1845Z 8 1/2" frame—1845Z2	Crack drill hex bolts Crack drill pent head bolts Crack drill tamper proof	Custom badging/ lettering
		<b>Top Flange</b> 4" frame—1843Z2		

<sup>\*</sup>Flange dimensions vary per series

#### **1892 FRAME AND GRATE**



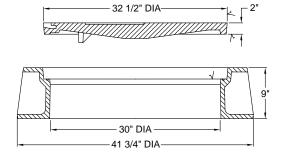


Features	Cover	Grate	Frame	Lock Type
Airport extra heavy duty	Ductile iron Solid Vented Lift holes Closed pickholes	Ductile iron 253 sq. in. of open area	Gray iron  Bottom Flange 4' frame—1892Z 7 1/4" frame—1470Z	Crack drill hex bolts Crack drill pent head bolts



# 1895 FRAME, COVER, AND GRATE

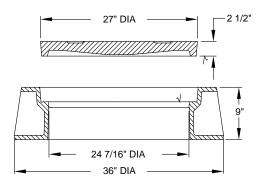




Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Vented Closed pickholes Pick bars	Ductile iron 378 sq. in. of open area	Gray iron  Bottom Flange 9" frame—1895Z	Hex bolts Pent head bolts	Gasketed Custom badging/ lettering

## 1900 FRAME, COVER, AND GRATE





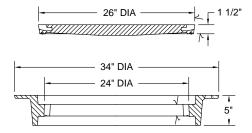
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Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Vented Closed pickholes Pick bars	Ductile iron 378 sq. in. of open area	Gray iron <b>Bottom Flange</b> 9" frame—1900Z	Hex bolts Pent head bolts	Gasketed Custom badging/ lettering



## 1905 FRAME AND COVER



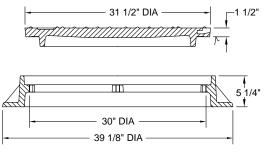


Features	Cover	Frame*		Lock Type	Other
Airport extra heavy duty Pick options available	Ductile iron Solid Closed pickholes	Gray iron  Bottom Flange 4" frame-1046Z 6" frame-V1380-1 6" frame-V1424-2 7" frame-1045Z 7" frame-1045Z 7" frame-1045Z1 7" frame-1045Z3 7 1/2" frame-2027Z1 8" frame-1047Z 9" frame-1048Z 10" frame-1049Z	Top Flange 4" frame-2800Z 4" frame-2800Z1  Reversible 5" frame-2450Z  Cast in Slab Type Frame 4" frame-1080Z	Hex bolts Pent head bolts	Gaskets Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series

## **2230 FRAME AND COVER**





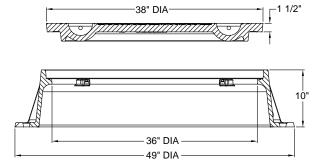
Features	Cover	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Closed pickholes	Gray iron  Bottom Flange 5 1/4" frame—2230Z 5 1/4" frame—2295Z 6" frame—2232Z  Reversible 4" frame—2230Z1	Hex bolts Pent head bolts	Gasketed Custom badging/ lettering

<sup>\*</sup>Flange dimensions vary per series



# 2812 FRAME, COVER, AND GRATE



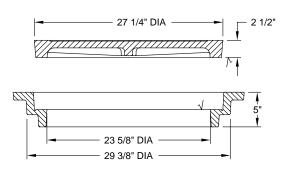


Features	Cover	Grate	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Pick bars Drop handles	Ductile iron Airport extra heavy duty—458 sq. in. of open area—812M/1580M Extra heavy duty ADA style—304 sq. in. of open area—2812M2	Gray iron  Bottom Flange 6" frame—2380Z 7" frame—1812Z3 10" frame—1812Z2 10" frame—2381Z	Hex bolts Tamper proof bolts Pent head bolts	Gaskets Custom badging/ lettering
			<b>Top Flange</b> 4 1/2" frame—2812Z		

<sup>\*</sup>Flange dimensions vary per series

## 2870 FRAME, COVER, AND GRATE





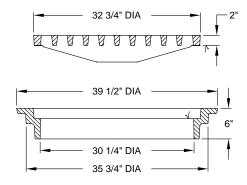
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Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Drop handles	Ductile iron 236 sq. in. of open area	Ductile iron <b>Top Flange</b> 5" frame—2870Z	Crack drill hex bolts Crack drill pent head bolts Crack drill tamper proof bolts Cross strap	Custom badging/ lettering



# 2880 FRAME, COVER, AND GRATE

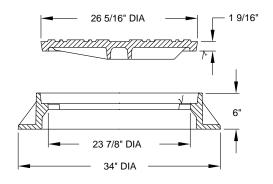




Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron	Ductile iron	Gray iron	Crack drill hex bolts	Custom badging/
	Solid Drop handles	378 sq. in. of open area	<b>Top Flange</b> 5" frame—2880Z	Crack drill pent head bolts	lettering

#### **3767 FRAME AND COVER**



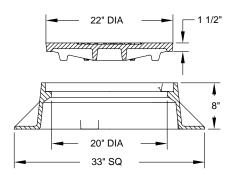


Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron	Gray iron	Allen head bolts	Custom badging/
	Vented Lift holes	<b>Bottom Flange</b> 6" frame—3767Z		lettering



# 8055 FRAME AND 1130 COVER





Features	Cover	Frame*	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Vented Lift hole Closed pickhole	Gray iron Bottom Transitional Frame with Square Base Flange 8" frame—8055Z	Hex bolts Pent head bolts	Custom badging/ lettering
		<b>Bottom Flange</b> 4" frame—1130Z 4" frame—1490Z 8" frame—1125Z		
		<b>Top Flange</b> 4" frame—2935Z		
		<b>Reversible</b> 4" frame—1135Z 4" frame—1490Z2		

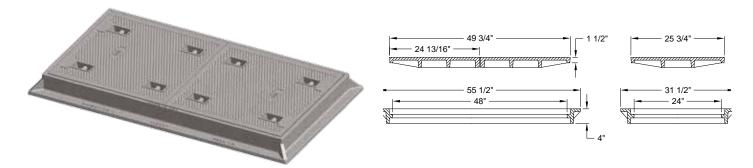
<sup>\*</sup>Flange dimensions vary per series



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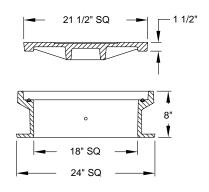
# **V6667 JUNCTION BOX FRAME WITH DOUBLE COVERS, GRATES**



Features	Cover	Grate	Frame	Lock Type	Other
Extra heavy duty	Ductile iron Solid Pick bar	Ductile iron V5667 (see pg. 30 for more information)	Gray iron Reversible	Crack drill hex bolts Crack drill pent head bolting	Custom badging/ lettering
	PICK Dar	more information)	4" frame—V6667	boiling	

#### 8080 JUNCTION BOX FRAME AND COVER



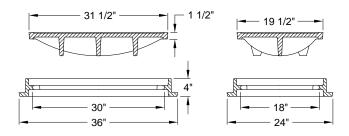


Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Pick bar	Gray iron  Bottom Flange 8" frame—8080Z	Hex bolts Pent head bolts	Gasketed Custom badging/ lettering



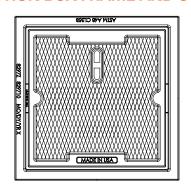
# 8083 JUNCTION BOX FRAME AND COVER

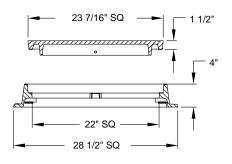




Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron	Gray iron	Hex bolts	Custom badging/
	Solid	Reversible	Pent head bolts	lettering
	Drop handles	4" frame—8083Z		

#### 8297 JUNCTION BOX FRAME AND COVER





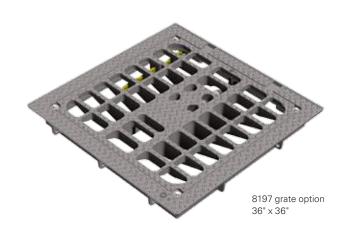
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Features	Cover	Frame	Lock Type	Other
Extra heavy duty	Ductile iron Solid Pick bar Location for grounding strap	Gray iron  Bottom Flange 4' frame—8297Z Location for grounding strap	Hex bolts Pent head bolts	Custom badging/ lettering



# 8192-8198 HINGED ACCESS ASSEMBLIES





Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty Self-engaging hold open arm Lift assist	Ductile iron Solid Vented MPIC multi-tool pick bar	Ductile iron 750 sq. in. of open area—8197 series only	Ductile iron  Top Flange 5" frame 6" frame—8198 48" x 48" series only  Bottom Flange 5" frame 6" frame—8198 48" x 48" series only	Hex bolts Pent head bolts Cam lock	Gasketed Custom badging/ lettering



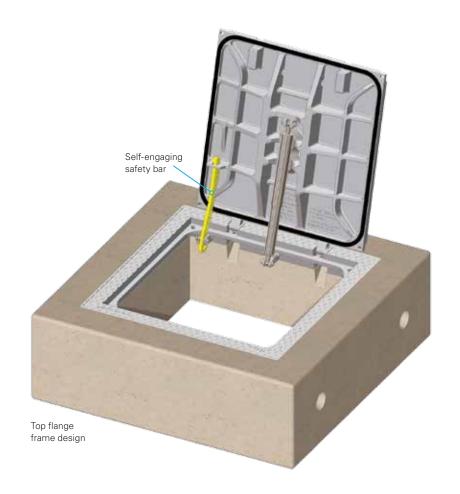
Airport Extra Heavy Duty Sizes

Series No.	Clear Opening
8195	24 x 24
8192	24 x 36
8196	30 x 30
8196—Double	30 x 62
8197	36 x 36
8197—Double	36 x 74
8198	48 x 48

Note: All dimensions are in inches. Heavy duty rated hatches available.



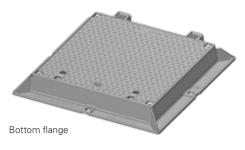
## 8192-8198 HINGED ACCESS ASSEMBLIES (CONTINUED)





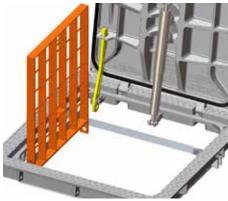


Lift assist is a corrosion-resistant stainless steel mechanical spring strut. Reduces the lifting force of the cover to less than 50 pounds.





Optional aluminum safety grate in the closed position



Optional aluminum safety grate in the open position



For a video on the functionality of our Hinged Hatches, please scan this QR code.



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# Trench and Drainage Grates

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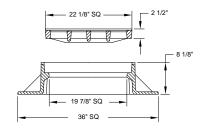


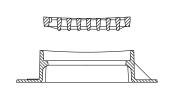


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# **V5105 FRAME AND GRATE**





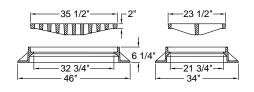


25

Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron	Gray iron	Crack drill hex bolting
	Sinusoidal style—		Crack drill pent head
	652 sq. in. of open area	Bottom Flange	bolting
	Dump No Waste	4" frame—5100Z1	
	messaging	8" frame—5100Z	

#### **5430 FRAME AND GRATE**

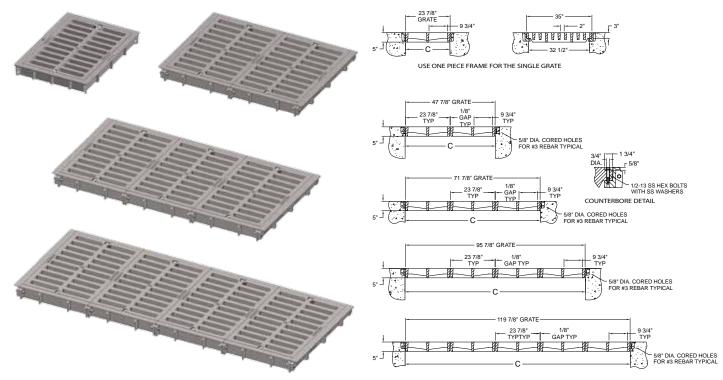




Features	Grate	Frame	Lock Type
Airport extra heavy duty	Gray iron 355 sq. in. open area Dump No Waste messaging	Gray iron  Bottom Flange 6 1/4" frame—5430Z	Crack drill hex bolts Crack drill pent head bolting



## **5436 FRAME, GRATE, AND COVER**



Caution: Do not disassemble bolted grates before setting sections in concrete

Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron	Ductile iron 385 sq. in. of open area per grate	Ductile iron  Top Flange—One Piece Single grate or cover (new)—5436Z5  Top Flange—Modular/ Expandable Multiple grate/cover assemblies 5436Z1—Load bearing support side frame (with new 1 1/2" thick support area) 5436Z2—End side frame	Hex bolts Pent head bolting	Custom badging/ lettering on cover

5436 Standard Drainage Inlet, Frame and Grate Assembly Series Options

Catalog Number	Clear Opening	Grate Open Area Sq. In.
00543633B03—Single Grate	24 1/4 x 32 1/2	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	119 7/8 x 38 7/8	1930

Note: All dimensions are in inches.



For more information about linear trench and other airport products, please scan this QR code.

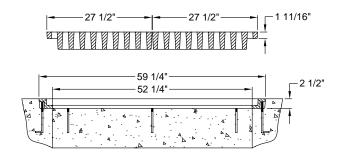
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# **5440 FRAME AND GRATES**

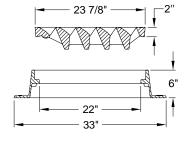


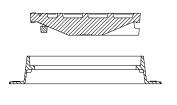


Features	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron 590 sq. in. of open area per assembly	Gray iron Top flange	Hex bolts Pent head bolting	Anchor bolts on frame

#### **5520 FRAME AND GRATE**







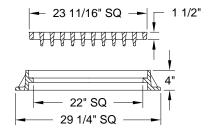
27

Features	Grate	Frame	Lock Type
Airport extra heavy duty	Flat bar style—Ductile iron—5520M5 217 sq. in. of open area  Vane style—Gray iron—5520M8 300 sq. in. of open area  Dump No Waste messaging	Gray iron  Bottom Flange 4" frame—5525Z 6" frame—5546Z 8" frame—5521Z  Reversible 6" frame—5370Z	Hex bolts Pent head bolting Cam lock—5520M8 only



# **V5622 FRAME AND GRATE**

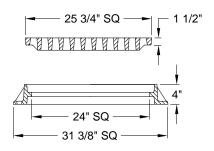




Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron 266 sq. in. of open area Dump No Waste messaging	Gray iron  Bottom Flange 5" frame—V5622-1 6" frame—5250Z 8" frame—5235Z  Reversible 4" frame—V5622	Crack drill hex bolts Crack drill pent head bolting

#### **V5624 FRAME AND GRATE**



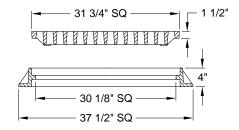


Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron 295 sq. in. of open area	Gray iron	Crack drill hex bolts Crack drill pent head
	Dump No Waste messaging	Reversible 4" frame—V5624	bolting



# **V5630 FRAME AND GRATE**

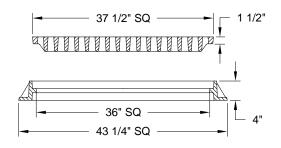




Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron	Gray iron	Crack drill hex bolts
	474 sq. in. of open area		Crack drill pent head
	Dump No Waste	Reversible	bolting
	messaging	4" frame—V5630	

#### **V5636 FRAME AND GRATE**





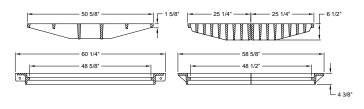
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Features	Grate	Frame	Lock Type	Other
Extra heavy duty	Ductile iron 651 sq. in. of open area Dump No Waste messaging	Gray iron  Reversible 4" frame—V5636	Crack drill hex bolts Crack drill pent head bolting	Anchor bolts on frame



# **V5648 FRAME AND GRATE**





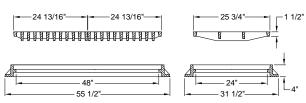
Features	Grate	Frame	Lock Type
Airport extra heavy duty	Ductile iron 1374 sq. in. of open area Dump No Waste messaging	Gray iron  Reversible 4 3/8" frame—V5648 2 piece frame	Crack drill hex bolts Crack drill pent head bolting

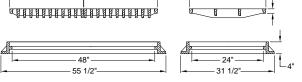
## V5667, V5668, V5669, AND V5670 FRAME, GRATE, AND COVER

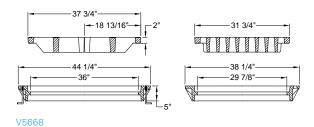


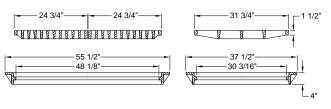
Series	Features	Grate	Frame	Lock Type	Other
V5667	Extra heavy duty	Ductile iron 598 sq. in. of open area per assembly	Ductile iron V6667 shown in junction box section (see pg. 20)	Gray iron  Reversible 4" Frame—V5667	Crack drill hex bolts Crack drill pent head bolting
V5668	Airport extra heavy duty	Ductile iron 472 sq. in. of open area per assembly	Gray iron  Reversible 5" frame—V5668	Hex bolting Pent head bolting	Anchor bolts in frame*
V5669	Extra heavy duty	Ductile iron 724 sq. in. of open area per assembly	Gray iron  Reversible 4" frame—V5669	Crack drill hex bolting Crack drill pent head bolting	
V5670	Extra heavy duty	Ductile iron 708 sq. in. of open area per assembly	Gray iron  Reversible 4" frame—V5670	Crack drill hex bolting Crack drill pent head bolting	

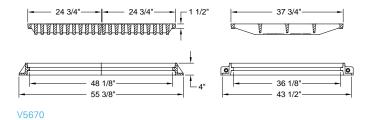
<sup>\*(12) 3/8-16</sup>NC anchor bolts supplied by EJ and added by the customer











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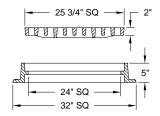
V5669

V5667

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# **V5726 FRAME AND GRATE**





Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron 321 sq. in. of open area Dump No Waste messaging	Gray iron  Angle Style 2 3/4" frame—V5726-1  Bottom Flange 5" frame—V5626-1  Reversible 6" frame—V5626-2	Crack drill hex bolting Crack drill pent head bolting



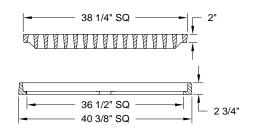
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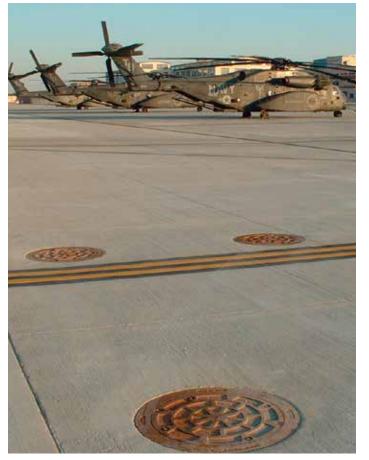
# **V5736 FRAME AND GRATE**





Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron 652 sq. in. of open area	Ductile or gray iron	Crack drill hex bolting Crack drill pent head
		Angle Style 2 3/4" frame—V5736	bolting





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## **LINEAR TRENCH DRAINAGE**



Features	Grate	Trench Rail	Lock Type	Other
Airport extra heavy duty Holes in rail for rebar	Ductile or gray iron	Top Flange Gray iron 24" lengths—6900Z4  Angle Style Gray iron or ductile iron 24" and 48" lengths— 6900Z1 and 6900Z2	Allen head bolts Hex bolts Pent head bolts	End cap for 24" wide trench 45 degree turns—20", 48" wide trenches 90 degree turns—20", 24", 26" wide trenches 90 degree tee—20", 24", 26" wide trenches 90 degree cross intersection—20", 24", 26" wide trenches

6900 Top Flange 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
6909M4DI	30	204
6910M2DI	32	138
6912M	48	248

Note: All dimensions are in inches.

#### Trench frame and grate with EON LOCK® security feature



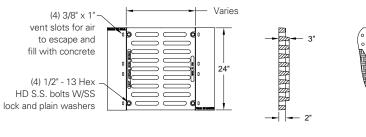


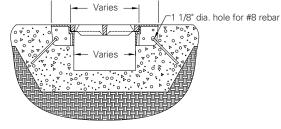


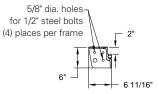
EON LOCK® square nut in horizontally



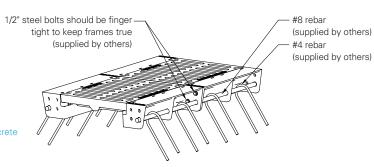
## **LINEAR TRENCH DRAINAGE (CONTINUED)**

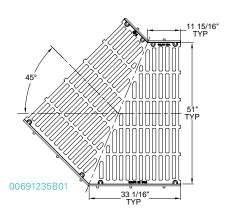


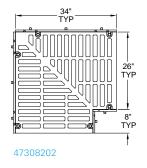


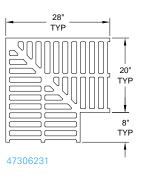


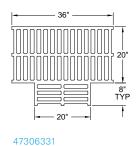
Caution: Do not disassemble bolted grates before setting sections in concrete

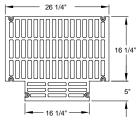


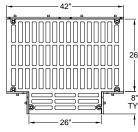






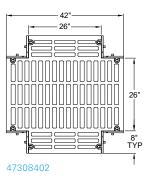






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For more information about linear trench and other airport products, please scan this QR code.

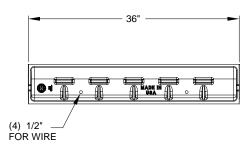
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## **6979 LINEAR SLOTTED DRAIN VANE GRATE**

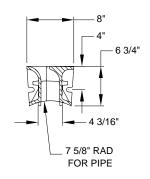




#### **Features**

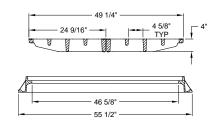
Airport extra heavy duty
9" tall
Vane style grate
Fits into slot cut into PVC pipe
Allows for capture of surface water between catch basins

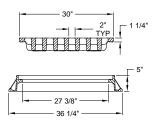




#### **7585 FRAME AND GRATE**





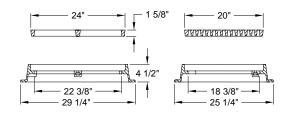


Features	Grate	Frame	Lock Type
Airport extra heavy duty	Ductile iron	Gray iron	Hex bolts
Special proof load to	560 sq. in. of open area		Pent head bolts
245,000 lbs	per assembly	Bottom Flange	
	Dump No Waste	5" frame—7585Z1	
	messaging		

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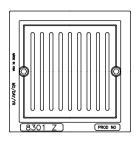
# 7750 FRAME AND GRATE

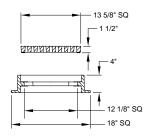




Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron	Gray iron	Allen head bolts
	Herringbone style— 185 sq. in. of open area—7750M1  Vane style—216 sq. in. of open area—7750M2  Dump No Waste messaging	Reversible 4 1/2" frame—7750Z	

## 8301 FRAME AND GRATE



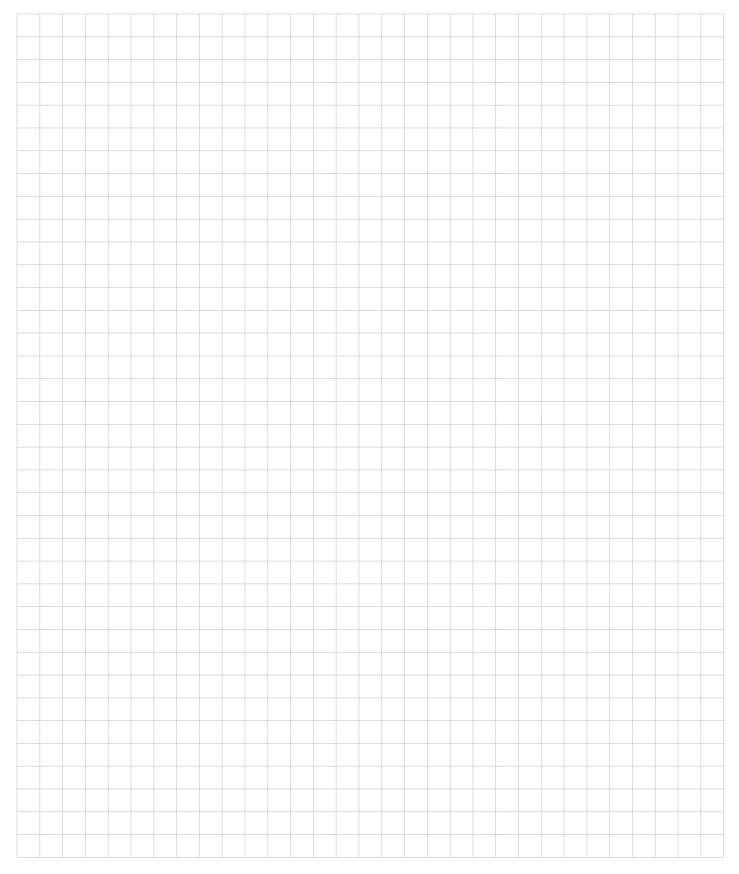


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Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron ADA style—50 sq. in. of	Gray iron	Crack drill hex bolts Crack drill pent head bolts
	open area—8201M	Reversible	
		4" frame—8301Z	



# Notes

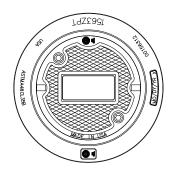


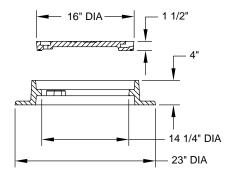
# Cleanout and Monument Boxes





# 1563 CLEANOUT/MONUMENT BOX FRAME AND COVER

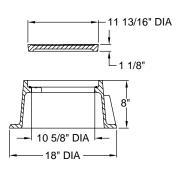




Features	Cover	Frame	Lock Type	Other
Extra heavy duty	Gray iron	Gray iron	Hex bolts	Gasketed
	Solid Closed pickholes	Reversible 4" frame—1563Z	Pent head bolts	Custom badging/ lettering

# 1564 CLEANOUT/MONUMENT BOX FRAME AND COVER



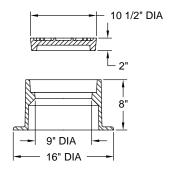


Features	Cover	Frame	Lock Type	Other
Extra heavy duty	Gray iron	Gray iron	Cam locking	Gasketed
	Solid Closed pickholes	<b>Bottom Flange</b> 8" frame—1564Z	Hex bolts Pent head bolts	Custom badging/ lettering



# 1565 CLEANOUT/MONUMENT BOX FRAME AND COVER

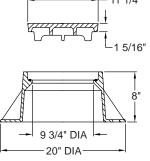




Features	Cover	Frame	Lock Type	Other
Extra heavy duty	Gray iron Solid	Gray iron	Crack drill hex bolts Crack drill pent head bolts	Gasketed Custom badging/
	Open pickholes	<b>Bottom Flange</b> 8" frame—1564Z		lettering

## 1578 CLEANOUT/MONUMENT BOX FRAME AND COVER





Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Closed pickholes	Gray iron <b>Bottom Flange</b> 8" frame—1578Z	Hex bolts Pent head bolts	Gasketed Custom badging/ lettering

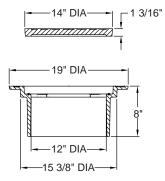


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# 1716 CLEANOUT/MONUMENT BOX FRAME AND COVER

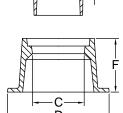




Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Closed pickholes	Gray iron  Top Flange 3" frame—1716Z	Hex bolts Pent head bolts	Gasketed Custom badging/ lettering
		8" frame—1716Z1		Anchor studs on 3" frame

# 2965 CLEANOUT/MONUMENT BOX FRAME, COVER AND GRATE



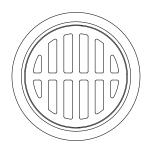


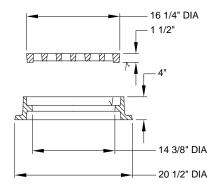
Illustrating bottom flange.

Features	Cover	Grate	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron Solid Extra deep 3" skirt on underside of cover Open pickholes	Ductile iron 2695M—17 Sq. In. of open area	Gray iron <b>Bottom Flange</b> 7" frame—1570Z 10" frame—2966Z	Crack drill hex bolts Crack drill pent head bolts	Custom badging/ lettering
			Top Flange 10" frame—2965Z custom badging/lettering		



# **V3610-4 FRAME AND GRATE**

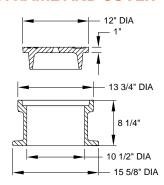




Features	Grate	Frame	Lock Type
Extra heavy duty	Ductile iron	Gray iron	Crack drill hex bolts
	73 sq. in. of open area—		Crack drill pent head bolts
	V3610-3	Reversible	
		4" frame—V1610-3	

## 3697 CLEANOUT/MONUMENT BOX FRAME AND COVER





Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Ductile iron	Gray iron	Crack drill hex bolts	Custom badging/
	Vented Lift hole	<b>Bottom Flange</b> 8 1/4" frame—3697Z	Crack drill pent head bolts	lettering

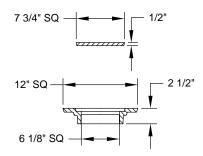


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### 8350 MONUMENT BOX FRAME AND COVER





Features	Cover	Frame	Lock Type	Other
Airport extra heavy duty	Gray iron	Gray iron	Countersunk screw	Custom badging/
	Solid Open pickhole	<b>Top Flange</b> 2 1/2" frame—8380Z		lettering

### **AIRPORT MOORING EYES**

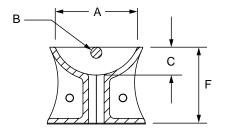


5993 Series



5996 Series

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Features Airport extra heavy duty Ductile iron

Ductile Iron

Airport Mooring Eyes					
Catalog Number	Width	Dia.	Depth	Height	Pull Out Force*
	А	В	С	F	
00599300	6 1/2"	7/8"	2 3/16"	3 1/2"	9000 lbs
00599600	6 1/2"	7/8"	2 3/16"	6"	9000 lbs
00599900	16"	2 3/8"	8"	9"	9000 lbs

<sup>\*</sup>Pull out force of mooring eyes is dependent on proper anchoring in the field.

These products are suitable for environments requiring much greater pull out force, if properly anchored.









# Aluminum Access Hatches

Hatches designed for pedestrian and unintended traffic rating, backed by proper engineering calculations. This product features heavy duty lift handles, stainless steel hinges with a 3/8" diameter stainless steel hinge pin, and stainless steel slam lock plugs. State-of-the-art manufacturing.

### Design Features

- Easy installation: in many cases, all that is needed is the removal of the existing cover and hinges. The new hatch is then lagged to the top of the existing structure.
- · All stainless steel hardware
- · Stainless steel lift-spring for ease of opening cover
- · Exposed padlock clip: other locking devices are available upon request.

### Design Benefits

- · Visual inspection: limited maintenance can be performed with safety grates in place.
- · Visible hazard barrier: safety orange epoxy coating is highly visible for hazard areas.
- · Corrosion resistant

Caution: Aluminum access hatches are not airport traffic rated and are intended for pedestrian rated applications.





Slam lock with plug



T-handle in slam lock



Lift hinges and hardware
—stainless steel



Recessed padlock clip closed



Recessed padlock clip open



Safety sure grip optional (left), slip resistant surface per ADA standards

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# ERMATIC® Modular Covers

The ERMATIC® 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)
- · Standard sizes between 2' x 2' to 10' x 17'
- · Custom sizes available
- · Water resistant
- · Security locking
- · Available with hinged and assisted opening (gas or spring loaded struts)
- · Ergonomic key for opening
- · Available with safety grates and/or safety railings
- · Cover options: solid cover with 4L 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**

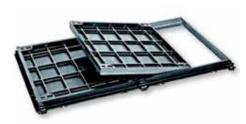
- Sewerage: inspection pits for sludge chambers, access shafts for large plants, etc.
- Telecommunications: cable jointing chambers, etc.
- · Utility: lighting, signals, transformer pits, cable joint boxes, etc.

### **Project Types**

- · Airports and ports
- · Railways
- ·Tunnels
- · Power stations
- · Water treatment and purification plants
- · Manufacturing plants
- · Exhibition and convention centers, leisure parks, stadiums, etc.



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. Above clear opening spans of 47 1/4\* (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.



1/2/3 covers and frames



Cover with removable beams



### Maximizes Surface Area for Unobstructed Use

ERMATIC products assure protection against damage, debris or aggressive chemicals, and allow designers to conceal underground services, maximizing productive use of the unobstructed surface area.

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# MANHOLE FRAMES AND COVERS



### **UTILITY CASTINGS**



### **DRAINAGE CASTINGS**



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.

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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 telecom 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

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 a grates.

Optional "Dump No Waste! Drains To Waterways" and other custom cast-in lettering is an effective, low cost and long term means to support local environmental initiatives.



### **TRENCH**

### **ADJUSTMENT RISERS**



### RISER RINGS



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 width from 8" up to 51". Frames come 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 standalone architectural enhancements, or can accompany matching tree grate designs.

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—INFRA-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.

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
- $\cdot$  Made to order sizes for custom application

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- · Slope risers available
- · DOT approved in many states



### **FIRE HYDRANTS**

### **GATE VALVES**



### **VALVE BOXES**



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.

FlowMaster® Resilient Wedge Gate Valves are designed to control the flow of water, such as 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® meets or exceeds 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 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 and asphalt coated
- · 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. The valve boxes are available as either an assembly or set—depending on whether assembled together before shipment to the customer.

### **METER BOXES**



### TREE GRATES



# DETECTABLE WARNING PLATES



The meter box product is specifically intended to cover a water meter. It is typically large enough 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 entity's 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—depending on whether assembled together before shipment to the customer.

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 made in the USA. DURALAST® Detectable Warning Plates help warn the blind or visually impaired 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 rules 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.

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Featuring a comprehensive product database with advanced search and browsing capabilities

### Information for Registered Users

- · Quick and easy registration
- · PDF sales drawings for download
- · Specification information
- · Customizable project lists
- · Detailed product info

### **Up-to-date Product Resources**

- ·Literature
- ·Videos
- · Installation instructions

### The Video Tour

· Collection of online videos providing an overview of key features and functions

### Finding your Solution

- · Search by Product Line
- · Search by Project Type
- · Search Bar
- · Narrow Search by Product Attributes
- · Search by Regional Specification

### **Product Specifications**

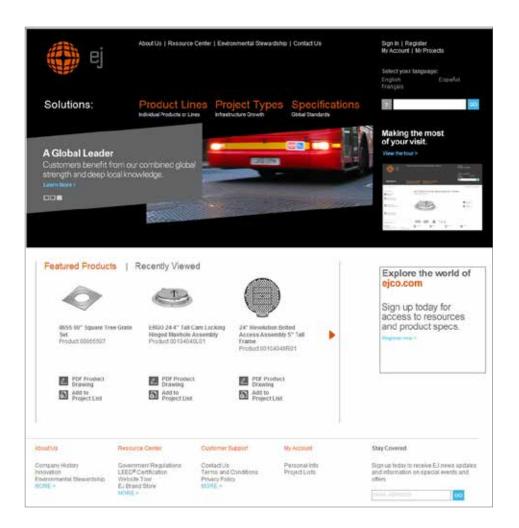
- · Available only to registered users
- · National and international specifications
- · Local Standards—City, County, State

### **Project Lists**

- · Simple to create
- · Quick access to frequently used products
- · Helps manage complex projects
- · Feature—request a quote with a click of a button
- · Feature—print project list
- · Feature—e-mail project list
- · No limit to the number of lists

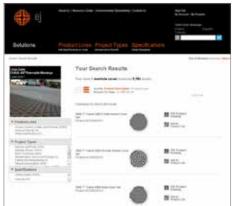


Scan this QR code to visit our web site to learn more about our products and to set up your user account.





The Website Tour is available on the home page, and in the Resource Center



The search results can be narrowed by using the facets and attributes on the left





# Airport and Port Projects

Projects	Country	Location		
Airport Projects				
AMERICAS	United States of America	Arizona Phoenix Sky Harbor Intl. (PHX) Tucson Intl. (TUS)	Indiana Indianapolis Intl. (IND)	Ohio Cleveland Hopkins (CLE)
		California John Wayne (SNA) Los Angeles Intl. (LAX) San Jose Intl. (SJC)	lowa Fort Dodge Regional (FOD)  Kentucky Cincinnati/Northern Kentucky	Pennsylvania Philadelphia Intl. (PHL) Pittsburgh Intl. (PIT)  Tennessee
		Santa Maria Public (SMX)	Intl. (CVG)	Memphis Intl. (MEM)
		Colorado Denver Intl. (DEN)	Maryland Baltimore/Washington Intl. (BWI)	Texas Dallas-Fort Worth Intl. (DFW) George Bush Intercontinental (IAH)
		Delaware New Castle County (ILG)	Massachusetts General Edward Lawrence Logan Intl. (BOS)	Scholes Intl. at Galveston (GLS) William P. Hobby (HOU)
		Florida Jacksonville Intl. (JAX) Miami Intl. (MIA) Sarasota-Bradenton (SRQ)	Michigan Detroit Metropolitan (DTW)	Virginia Ronald Reagan Washington National (DCA) Washington Dulles Intl. (IAD)
		Georgia Hartsfield-Jackson Atlanta Intl. (ATL) Savannah Airport (SAV)	Minnesota Minneapolis-Saint Paul Intl. (MSP)  Nevada Las Vegas-McCarran Intl. (LAS)	Washington Sea-Tac Intl. (SEA) Spokane Intl. (GEG)
		Illinois Chicago O'Hare Intl. (ORD)	Reno-Tahoe Intl. (RNO)	Wisconsin General Mitchell Intl. (MKE)
	Canada	Montréal Pierre Elliott Trudeau Intl. (YUL)		
	Mexico	Licenciado Benito Juarez Mexico Intl. (MEX)		
	Argentina	Ministro Pistarini Intl. (EZE)		
	Columbia	El Dorado Intl. (BOG)		
	Jamaica	Sangster Intl. (MBJ)		
	Puerto Rico	Luis Munoz Marin Intl. (SJU)		
EUROPE, MIDDLE EAST AND AFRICA (EMEA)	United Kingdom	Manchester Runway II (MAN), Londo	on Heathrow (LHR)	
Spain Madrid Barajas Intl. (MAD)				
	France	Charles de Gaulle Intl. (CDG)		
	Ireland	Dublin (DUB), Shannon (SNN)		
	Germany	Frankfurt am Main Intl. (FRA), Stuttga	art (STR), Franz Josef Strauss Intl. (MUC)	
	Greece	Eleftherios Venizelos Intl. (ATH)		
	Italy	Linate (LIN), Malpensa Intl. (MXP)		
	Poland	Warsaw Chopin (WAW)		
	Egypt	Cairo Intl. (CAI)		
	United Arab Emirates	Dubaï Intl. (DXB)		
	South Africa	OR Tambo Intl. (JNB)		
ASIA-PACIFIC	China	Beijing Capital Intl. (PEK)		
	Guam	Antonio B. Won Pat Intl. (GUM)		
	New Zealand	Christchurch Intl. (CHC)		
	Singapore	Singapore Changi Intl. (SIN)		
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Note: This list is not inclusive of all projects. Project references available upon request.

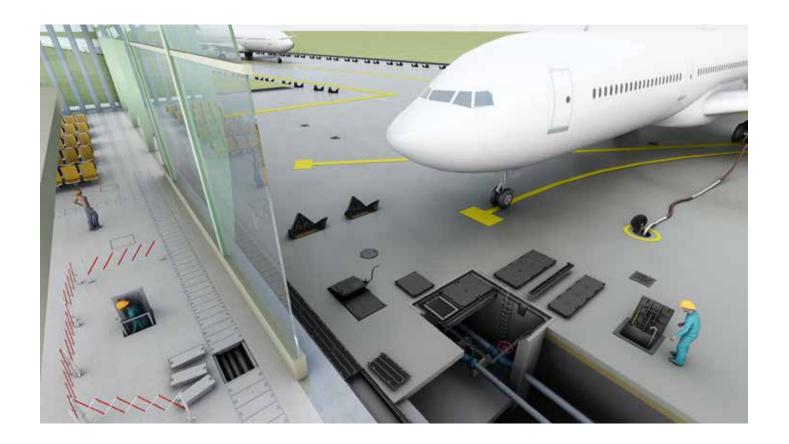


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# Airport and Port Projects (continued)

Projects	Country	Location	
Port Projects			
AMERICAS	United States of America	Long Beach (California), Port Authority of New York and New Jersey, Port of Houston (Texas), Blount Island Marine Terminal (Florida), Port of Savannah (Georgia)	
	Mexico	Port of Vera Cruz	
	Brazil	Paranagua	
EUROPE, MIDDLE EAST AND AFRICA (EMEA)	United Kingdom	DML Devonport Royal Dockyard, Portsmouth Naval Base HMS Warrior Portsmouth	
	France	Dunkerque - Rouen	
	Germany	Bremenhaven, Kiel, Frankfort	
	Spain	Valencia	
ASIA-PACIFIC	Australia	Port of Brisbane	
Large Project			
AMERICAS	United States of America	North Texas Tollway Extensions, Dallas Area Rapid Transit, Dallas Cowboys Metroplex Stadium, American Airlines Arena in Dallas, Texas, Heinz Field in Pittsburgh	
EUROPE, MIDDLE EAST AND AFRICA (EMEA)	United Kingdom	Wembley Stadium, Channel Tunnel	
	France	Disneyland Paris, TGV Train Stations	
	Spain	Bilbao Exhibition Centre	
ASIA-PACIFIC	Malaysia	Kuala Lumpur Exhibition Centre	
	Singapore	Night Race Formula 1 Circuit	

Note: This list is not inclusive of all projects. Project references available upon request.









### Americas

800 626 4653

231 536 2261

### **EMEA**

Europe, Middle East and Africa

+33 (0)344 08 28 00

### Asia-Pacific

EJ

+61 (0)7 3216 5000

### Asia-i aciiic

301 Spring Street PO Box 439 East Jordan, MI 49727 800 626 4653 231 536 2261 us.sales@ejco.com East Jordan Iron Works, Inc., East Jordan, Michigan, USA, and its affiliated companies including Norinco in France, Cavanagh in Ireland, McCoy Construction Castings in Canada, and HaveStock in Australia, are pleased to announce that since January 2012, all are conducting business under one brand, EJ.

As EJ, we will continue to provide the same quality products and excellent service that our customers have come to expect.

One global name and brand will unify the company and support our vision to be the global leader in infrastructure access solutions.

Registered Mark(s)

