### EJIW EASTJORDAN IRON WORKS EST.1883

#### **SWEETS 2010**

TREE GRATES
TREE GUARDS
TRENCH GRATING



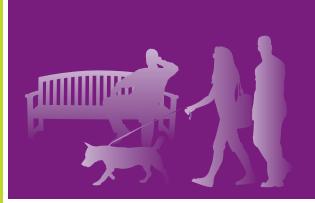


WE COVER YOUR INFRASTRUCTURE®

www.ejiw.com MADE IN THE USA

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**CATALOG ICONS** 

The icons throughout this product catalog aid as a quick reference in identifying features and options available in each product series.



Compliant



Logo



Lettered







Light Port

V-7300 & V-7320 Trench Grate and Frame.....

V-7340 & V-7360 Cross Drainage.....

V-7380 ADA Trench Grate and Frame.....

6900 Airport Trench Grate Series, EXA.....

6970 Bolted Vane....

SPECIFICATION.....



#### **IDENTIFY AND CUSTOMIZE**







your motto, logo or insignia to further strengthen your identity. Custom sizes, sub-grade lighting, tree guards and matching ADA trench grating are just a few of the options available. We can help you design a tree grate that will be uniquely yours.

#### REMOVABLE CENTER RINGS

Several EJIW tree grate designs offer removable center rings to accommodate tree growth. Look for removable center rings options in the catalog product descriptions.







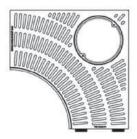
#### **ADA COMPLIANT TREE GRATES**

EJIW has numerous tree grates and trench grates designed to comply with ADA (Americans With Disabilities Act) standards. The guidelines specify that grating, whether tree grates or trench grating, located in pedestrian walkways shall have spaces (slots) no greater than 1/2 inch in one direction and holes (square or round) no greater than 1/2 inch in diameter. Additionally, if grating has elongated openings, the long dimension is to be perpendicular to the dominant direction of travel.

#### LIGHT PORT OPTIONS



Illuminate the beauty of your trees at night! Several EJIW tree grate designs offer a light port option allowing for the installation of sub-grade lighting units. Use direct lighting to create a special atmosphere and provide more light to surrounding areas.





Light Port

Light Port Access Grate

### TREE GUARD BOLTING TABS



Some EJIW tree grates are equipped with tree guard bolting tabs for easy and secure installation of EJIW tree guards.

#### SECURITY BOLTING FEATURE



EJIW has developed a hassle-free way to ensure solid, long lasting security. Compatible with standard hex bolts or special security designs, our Eon Lock™ design — an innovative approach to bolted tree grates, provides a reliable and permanent fastening solution.





Security bolting

Security bolting with plastic caps



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# Tree Grates that Complement your Streetscape

urable, functional and architecturally appealing, EJIW Tree Grates are a necessity for healthy trees. Outdoors, the grates provide natural drainage and enhance any urban, campus or park setting. Tree grates provide more area for pedestrian activity while protecting developing trees and root systems, also making them a perfect application for indoor malls. 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.



### Cast Iron ... The Natural Choice

Cast iron grating is strong, durable and stands up to harsh environmental conditions. In its natural state, gray iron develops a pleasant, dark brown patina color as it ages. Cast iron is inherently resistant to corrosion from natural elements and will last for many years in its original state. All EJIW grates are Made in the USA and contain a minimum of 85% recycled materials. Hundreds of tons per day of waste ferrous materials, including old car parts, appliances, and obsolete farm equipment are recycled to produce castings for your infrastructure.







#### **8580 ORBIT**

48" x 48" square 14" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame available











#### **8585 ORBIT**

60" x 60" square 18" and 24" diameter tree opening 1 1/2" seat height Four grates per assembly Ductile iron Steel frame



18" diameter removable center accommodates tree growth H-10 load rating available

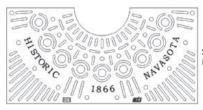








Custom logos



Special lettering

#### **8581 GINKGO**

48" x 48" square 15" diameter tree opening Expands to 17 1/2" 1 1/2" seat height Four grates per assembly Steel frame available



Matching trench grate









#### 8582 FOLIAGE

60" x 60" square 18" diameter tree opening 1 1/2" seat height Four grates per assembly Steel frame available







#### **DESIGNER** TREE GRATES

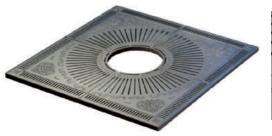


#### 8583 CHELSEA

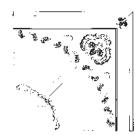
60" x 60" square 18" diameter tree opening 1 1/2" seat height Four grates per assembly Steel frame











#### 8584 METROPOLIS

60" x 60" square 18" square tree opening 1 1/2" seat height Four grates per assembly Steel frame











#### **8590 PATRIOT**

60" diameter 16 3/8" tree opening 1 1/2" seat height Five grates per assembly Steel frame

Options: Matching trench grate









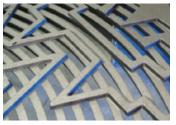


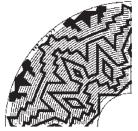
#### 8591 MESA

60" diameter 16" diameter tree opening 1 1/2" seat height Four grates per assembly Steel frame









#### **8592 TRADEMARK**

60" diameter 18" diameter tree opening 1 1/2" seat height Four grates per assembly Steel frame















#### 8698 GARLAND

36" x 60" rectangular 15" square tree opening 1 1/2" seat height Two grates per assembly Steel frame

Options: Matching trench grate











#### 8655 SQUARE

60" x 60" square 30" diameter tree opening 1 1/2" seat height Ductile iron Four grates per assembly Steel frame

#### Options:

18" and 24" removable center rings accommodate tree growth













Removable Center Grate 00865508



Removable Center Solid Ring 00865567

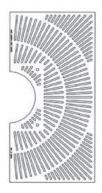
#### 8666 SQUARE

60" x 60" square 18" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame Tree guard bolting tabs









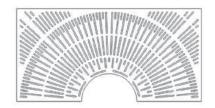
#### 8667 & 8671 SQUARE

18" diameter tree opening 1 1/2" seat height Steel frame



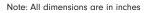






Illustrating 8667 - 60"

Catalog	Grate	Grates	Tree Opening
Number	Dimension	Per Assy	Diameter
8667	60 Sq.	2	12, 18
8671	48 Sq.	2	18





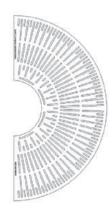


#### **8668 ROUND**

60" diameter 18" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame Tree guard bolting tabs







#### 8676 & 8686 RECTANGULAR

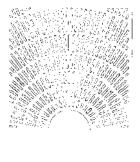
1 1/2" seat height Two grates per assembly Steel frame











Number	Dillielision	Didilielei	Options
8676	8676 36 x 72		Custom logo
8686	36 x 60	16	Light port

Tree Opening

Note: All dimensions are in inches

#### **8677 SQUARE**

72" x 72" square 18" and 30" diameter tree opening 1 1/2" seat height Four grates per assembly Steel frame

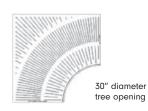
#### Options:

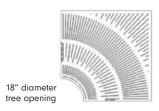
Square/round combination — 8678 18" and 24" removable center rings accommodate tree growth For round style see 8678













#### **8678 ROUND**

72" diameter 30" diameter tree opening 1 1/2" seat height Four grates per assembly Steel frame

#### Options:

Square/round combination — 8677 18" and 24" removable center rings accommodate tree growth





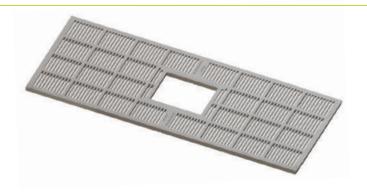


#### **8679 RECTANGULAR**

48" x 96" rectangular 18" square tree opening 1 1/2" seat height Two grates per assembly Steel frame







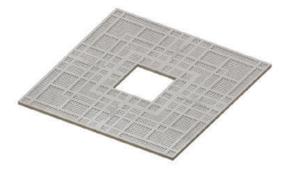


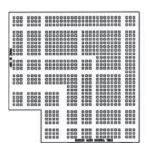
#### **8681 SQUARE**

72" x 72" square 18" square tree opening 1 1/2" seat height Ductile iron Four grates per assembly Steel frame







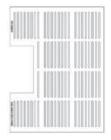


#### 8684 RECTANGULAR

48" x 72" rectangular 18" square tree opening 1 1/2" seat height Two grates per assembly Steel frame







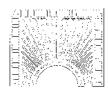


#### 8687 RECTANGULAR

36" x 60" rectangular 16" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame





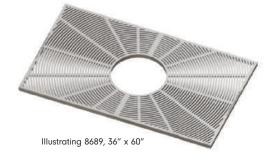


#### 8689 & 8690 RECTANGULAR

16" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame

Options: Special lettering — 8690 only







Grate
Dimension
36 x 48
36 x 60

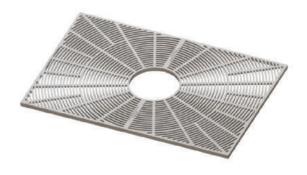
Note: All dimensions are in inches

#### **8691 RECTANGULAR**

48" x 72" rectangular 16" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame









#### **8692 RECTANGULAR**

48" x 72" rectangular 30" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame

#### Options:

18" and 24" removable center rings accommodate tree growth







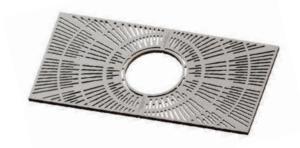
#### **8693 RECTANGULAR**

36" x 72" rectangular 18" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame











#### **8694 RECTANGULAR**

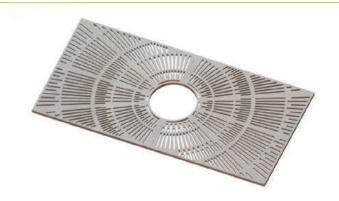
48" x 96" rectangular 18" and 26" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame

#### Options:

End pieces to create a 48" x 144" grate









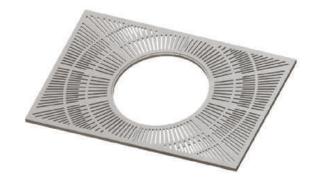
#### 8695 RECTANGULAR

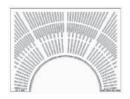
48" x 72" rectangular 30" diameter tree opening 1 1/2" seat height Two grates per assembly Steel frame

#### Options:

18" and 24" removable center rings accommodate tree growth







#### **V-8940 ROUND SERIES**

1 1/2" seat height Two grates per assembly Steel frame

#### Options:

V-8945 has square/round combination with V-8955







Catalog	Grate	Tree Opening
Number	Diameter	Diameter
V-8942	30	12
V-8943	36	12
V-8944	48	13
V-8945	60	18 square/round combination with V-8955

Note: All dimensions are in inches



#### V-8950 SQUARE SERIES

1 1/2" seat height Two grates per assembly Steel frame

#### Options:

48" used with 30" x 48" end pieces to create a 48" x 108" grate



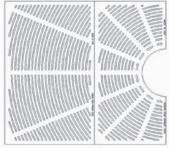






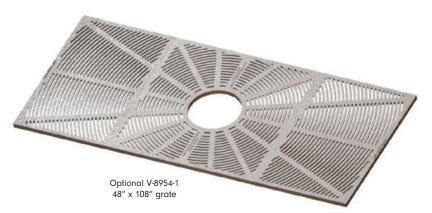






**End Piece** V-8954-1 30" x 48"

V-8954-1 24" x 48"

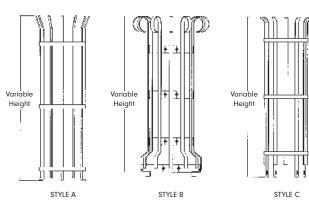


Catalog	Grate	Tree Opening	Grate
Number	Dimension	Diameter	Options
8952	30 Sq.	17	Special lettering
8953	36 Sq.	16	Special lettering
V-8954	48 Sq.	13	NA
V-8954-1	48 Sq.	16	Light port, end pieces
V-8955	60 Sq.	16, 18	Light port, logo, square/round combination with V-8945

Note: All dimensions are in inches

#### STEEL TREE GUARDS

EJIW tree guards are fabricated from hot rolled steel in several different styles, diameters and heights. Tree guards are fabricated in two halves, with welded connections between vertical and horizontal bars. The two halves are easily assembled and bolted together after placement around the tree. Tree guards are supplied standard with a flat black Rustoleum® finish. Custom designs can also be fabricated to meet your specifications. Our marketing and engineering team is available to help with any of your design needs.







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### **Environmentally** Friendly Our castings contain over 85% recycled content

and our foundries meet some of the most stringent environmental regulations in the world.

- Thousands of tons of **scrap metal**, that otherwise may be strewn across the country side or dumped in landfills, are recycled annually and turned into useable infrastructure products.
- EJIW foundries meet the Environmental Protection Agency's new air quality Maximum Achievable Control Technology Standards (MACT). The MACT rules require stack testing and additional record keeping and reporting on several air pollution control systems.
- Heated air once lost to the environment is now captured and reused in the melting process.
- Over 90% of our green sand is reclaimed daily and reused in our process.
- EJIW makes use of the by-products from the melt process whenever possible. One of these substances is, in foundry terms, called "Slag". It is known to other industries as "Calcium Stabilizer" because of its high calcium content and lack of metallics. It can be reused by other industries to replace fine aggregate in products such as asphalt, portland cement and concrete blocks. During harsh winter months, county road commissions use calcium stabilizer for sanding roads to improve vehicle traction.

To us, environmental protection is a **personal** concern because, like you, we want to breathe clean air, drink safe water, and enjoy our environment.



#### **Environmental Policy**

EJIW is committed to operate the business in full compliance with the letter and spirit of environmental laws and regulations. Facilities will strive for continuous environmental improvement and use production processes and controls that minimize the impact to the environment.

#### **EJIW LEADS THE WAY**

EJIW will continue to help improve the environment by taking responsible action. Therefore, we are phasing out painting of all construction castings.

EJIW greatly values our customers and the relationships we have cultivated over the past 125 years in the business. With your support we will continue to lead the construction castings industry and add value to the design, manufacture, and distribution of EJIW products.

#### **CAST IRON - Natural Patina**

Asphaltic base paint, powder coating, and other materials used to paint castings are simply cosmetic and provide no value to your infrastructure.

Unlike steel, cast iron has much higher concentrations of carbon and silicon, which provide a substantial resistance to corrosion. Cast iron has been known to function for centuries without failure.

Painting can be used to conceal casting defects, and many departments of transportation specify non-painted castings as a protective measure against this problem.



Over time, unpainted tree grates exposed to the elements develop a rich, dark brown patina coloring which complements the surrounding landscape in a warm, subtle manner.

#### **CAN EJIW PRODUCTS CONTRIBUTE TOWARD APPLICABLE LEED® CREDITS?**

**Yes!** Your EJIW sales representative can provide specific data to help you gain up to 4 LEED® credits when using the products in this catalog. EJIW products contain a minimum of 85% recycled materials and offer real benefits to any company choosing green construction.



### Trench Grate Solutions

#### When ordering trench products please specify the following:

- 1. Width of trench opening, dimension "A"
- 2. Seat depth, dimension "B"
- 3. Clear opening of trench, dimension "C"
- 4. Length of trench installation

- 5. Type of grate or solid cover
- 6. Are side frames required?
- 7. Are grates/covers bolted to the frames?
- 8. Load requirement



#### LOAD RATING ICONS -TRENCH GRATE SERIES









#### 6900 & 6950 TRENCH GRATE & FRAME SERIES

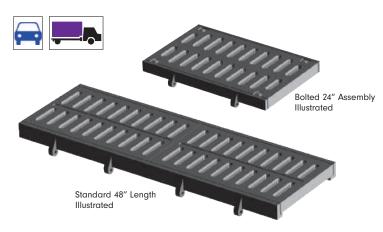
Heavy duty

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

Solid covers available



Catalog	А	В	С	Open Area
Number	Grate Width	Seat Depth	Trench Width	Sq. In/Ft
3900 Series	s, Standard and	Bolted		
6901	8	2	6	29
6902	10	2	8	33
6903	12	2	10	40
6904	14	2	12	49
6905	17	2	15	66
6906M2	20	2	18	90
6907	23	2	21	91
6908M2	26	2	24	130
6950 Series	s, Standard and	Bolted		
6951	8	1 1/2	6	23
6952	10	1 1/2	8	34
6953	12	1 1/2	10	45
6954	14	1 1/2	12	56
6955	17	1 1/2	15	73
6956	20	1 1/2	18	89
6957	23	1 1/2	21	106
6958	26	1 1/2	24	122

Note: All dimensions are in inches.

#### 6970 BOLTED VANE STYLE TRENCH ASSEMBLY

Heavy duty

Available in 18" and 36" assemblies

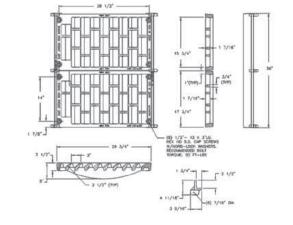
Riser frame available





Open Area
Per Assy/Sq. In.
186
372

Note: All dimensions are in inches.







#### V-7300 & V-7320 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 V-7320 Bolted trench grate units are assembled in 24" sections





CAUTION: DO NOT DISASSEMBLE BOLTED GRATES BEFORE SETTING FRAME/GRATE SECTIONS IN CONCRETE.

Table — Bolted Assemblies	

Catalog	А	В	С	Open Area
Number	Grate Width	Seat Depth	Trench Width	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
ALL ALL I		4 4		

Noto:	ΛΠ	dim	oncione	aro	in	inches.

Catalog	Α	В	С	Open Area
Number	Grate Width	Seat Depth	Trench Width	Sq. In/Ft
V-7321	9	1-1/2	6	49
V-7322	11	1-1/2	8	63
V-7323	13	1-1/2	10	70
V-7324	15	2	12	84
V-7325	18	2	15	105
V-7326	21	2	18	126
V-7327	24	2	21	137
V-7328	27	2	24	161
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 & V-7360 CROSS DRAINAGE TRENCH GRATE & FRAME SERIES

Heavy duty

Designed for cross-street drainage with slot openings perpendicular to traffic Standard trench grates are furnished in 23-7/8" lengths Frames are available in 24", 36" and 48" lengths V-7360 Bolted trench grate units are assembled in 24" sections ADA grates available





CAUTION: DO NOT DISASSEMBLE BOLTED GRATES BEFORE SETTING FRAME/GRATE

SECTIONS IN CONCRETE.

Catalog	А	В	С	Open Area
Number	Grate Width	Seat Depth	Trench Width	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-7351	36	2-1/2	33	191
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.



Table - Bolted Assemblies

Catalog	Α	В	С	Open Area
Number	Grate Width	Seat Depth	Trench Width	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-7371	36	2-1/2	33	191
V-7372	39	2-1/2	36	216
V-7373	45	2-1/2	42	250
V-7374	51	2-1/2	48	290

Note: All dimensions are in inches.



#### V-7380 ADA TRENCH GRATE & FRAME SERIES

**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 Bolted trench grate units are assembled in 24" sections







CAUTION: DO NOT DISASSEMBLE BOLTED GRATES BEFORE SETTING FRAME/GRATE SECTIONS IN CONCRETE.

Catalog	Α	В	С	Open Area	Specify
Number	Grate Width	Seat Depth	Trench Width	Sq. In/Ft	Trench Frame
V-7390 AD	A Non-traffic				
V-7394	14	1-1/2	12	39	
V-7395	17	1-1/2	15	50	6950
V-7396	20	1-1/2	18	53	
V-7390 ADA Non-traffic Bolted Assemblies					
V-7394-20	15	1-1/2	12	39	
V-7395-20	18	1-1/2	15	50	
V-7396-20	21	1-1/2	18	53	

Note: All dimensions are in inches.

Standard 48" Length Illustrated
6

Catalog	А	В	С	Open Area	Specify		
Number	Grate Width	Seat Depth	Trench Width	Sq. In/Ft	Trench Frame		
V-7380 AD	/-7380 ADA Heavy Duty						
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			
V-7380 AD	V-7380 ADA Heavy Duty Bolted Assemblies						
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.

#### 6900 AIRPORT TRENCH GRATE SERIES, EXA

Extra heavy duty, proof load tested 200,000 lbs. Bolted assembly recommended Bolted trench grate units are assembled in 24" sections using stainless steel 1/2" hex bolts and special lock washers

MATERIAL SPECIFICATIONS: Frame - Gray Iron ASTM A48 Class 35 Grate - Ductile Iron ASTM A536, or Gray Iron ASTM A48 Class 35







Α	В	C	Open Area
Grate Width	Seat Depth	Trench Width	Sq. In./Ft.
8	2	6	29
10	2	8	33
12	2	10	40
14	2	12	49
17	2	15	66
20	2	18	90
26	2	24	102
27	2	25	204
34	2	31	138
	8 10 12 14 17 20 26 27	Grate Width         Seat Depth           8         2           10         2           12         2           14         2           17         2           20         2           26         2           27         2	Grate Width         Seat Depth         Trench Width           8         2         6           10         2         8           12         2         10           14         2         12           17         2         15           20         2         18           26         2         24           27         2         25

Note: All dimensions are in inches.

### EJIW EASTJORDAN

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## Suggested specification for tree grate castings

#### **GENERAL:**

This specification is applicable for gray iron tree grate castings. All castings shall be manufactured in the USA by East Jordan Iron Works. All manufacturers shall be approved suppliers prior to supplying castings.

#### **MATERIALS:**

Gray iron castings shall be manufactured from iron conforming to ASTM A48, Class 35B. 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. Castings shall be furnished unpainted or as specified by the purchaser.

#### **CERTIFICATION:**

A foundry certification shall be furnished to the purchaser stating that the products supplied are in accordance with this specification.

#### **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"), individual part number and cast or heat date. Castings shall include all lettering as shown on the drawings.

#### **TREE FRAMES & GUARDS:**

Tree grate frames and guards shall be made in the USA and manufactured from fabricated steel.

#### EJIW SALES & BRANCH OFFICE LOCATIONS BY STATE:

AZ - Phoenix 480.797.3492 602.992.0784 F CA - Long Beach 562.528.0258 562 528 0259 F CO - Denver 303.286.8014 303.286.0051 F DE - Middletown 800.325.3549 302.378.1109 F GA - Atlanta 770.436.7300 770.434.1437 F IL - Chicago 800.344.3549 815.740.1633 F **IN** - Hartford City 765.744.1184 765.348.1020 F **LA - Denham Springs** 888.665.3549 225.665.4306 F MA - Boston 508.586.3130 508.580.2740 F MD - Baltimore 800 418 3549 410.833.9521 F

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