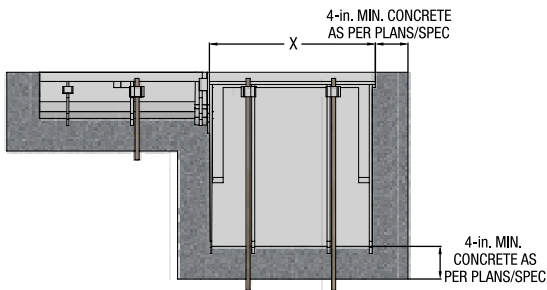


Z887 Applications

| | |
|------------------|-------------------|
| Highways | Industrial Parks |
| Driveways | Chemical Plants |
| Kitchens | Food Processing |
| Pools | Shopping Malls |
| Parking Lots | Industrial Plants |
| Gas Stations | Pharmaceuticals |
| Car Washes | Amusement Parks |
| Airports | Port Facilities |
| Airplane Hangars | Water Parks |

Installation Specification



Consult Plans and Specifications

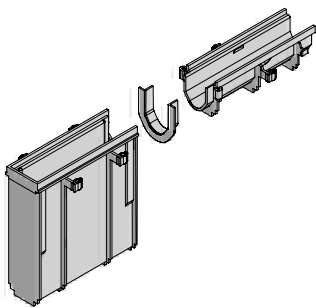
Features and Benefits

- **6" x 20" Catch Basin** – The 6" x 20" basin is meant to be used as an in-line sump for applications where, from the top surface, the visual appearance is of continuous 6" wide Z886 trenching. Simply trace and cut the trench section to be connected into the end of the basin, insert into the basin, bolt together, and caulk around the exterior. For grate options, refer to pages 24-25.
- **12" x 24" and 24" x 24" Catch Basins** – The larger catch basins, 12" x 24" x 24" and 24" x 24" x 24", provide greater sump capacities for larger trench runs. These catch basins can be used with Z882 and Z886 trenches. These basins have an external trench adapter supplied to make the transition between the trench and basin (see illustration). This adapter, along with the hardware, is supplied by Zurn to make a fast and easy connection to any basin. Additional adapters can be used to make numerous connections of trench into the catch basin. For grate options, refer to page 26.
- **Basin Extension for 24" x 24"** – This 12" polyethylene extension for 24" x 24" catch basin provides greater depths and capacities. These stackable units allow for depths in 12" increments. For grate options, refer to page 29.

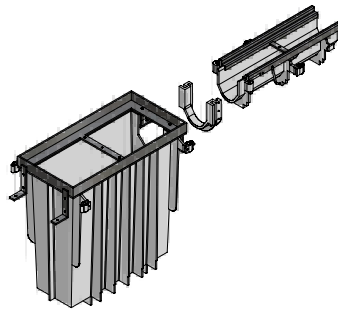
Z887 Dimensional Data

| Basin | Overall Top Dimensions | | | | Approx. Weight (Less Grate) | |
|---------|------------------------|-----|-----------------|-----|-----------------------------|-----|
| | Length Inches | mm | Width Inches | mm | Lbs. | Kg |
| 6 x 20 | 20-3/4 | 527 | 6-1/4 | 159 | 17.0 | 7.7 |
| 12 x 24 | 23-1/4 | 591 | 12 | 305 | 14.6 | 6.6 |
| 24 x 24 | 23-1/4 | 591 | 24-5/8 | 625 | 19.9 | 9.0 |

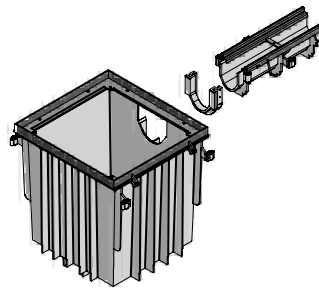
Z887 System Highlights



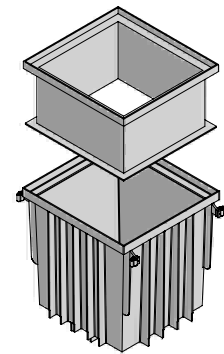
6" x 20" Catch Basin with Z886 Connecting Trench



12" x 24" Catch Basin with Z886 Connecting Trench



24" x 24" Catch Basin with Z886 Connecting Trench



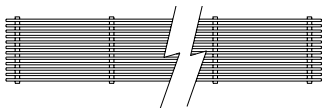
24" x 24" Catch Basin with 12" High Basin Extension

Engineering Specification Catch Basins shall be 6" wide x 20" long x 20" deep, 12" wide x 24" long x 24" deep, or 24" wide x 24" long x 24" deep and shall be made of High Density Polyethylene (HDPE). Choice of class A, B, C, D, E, and F grates shall be available with H-20, FAA, and/or ADA compliance with mechanical lockdown devices (refer to page 28). Outlets in 2", 3", 4", 6", and 8" diameters shall be available. Catch Basin shall be Flo-Thru model Z887. For downloadable CSI format specification, visit www.zurn.com.

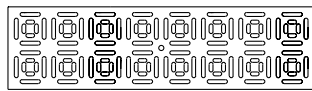
6" System Grates

| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
|--------|----------------------------|------------------|-------------------|--------|-----------------------------|-----------------------|-----|-------------|-----|------|-----|
| AWG | Aluminum Wire Grate | Aluminum | 0.70 | 40" | 37.50 | 0.250 | A | Light Duty | Yes | No | No |
| BCD | Circular Decorative | Bronze | 7.80 | 20" | 17.60 | 0.250 | A | Light Duty | No | No | No |
| BDD | Diagonal Decorative | Bronze | 6.90 | 20" | 17.90 | 0.250 | A | Light Duty | Yes | No | No |
| BZ | Bronze Decorative | Bronze | 6.20 | 20" | 16.90 | 0.250 | A | Light Duty | No | No | No |
| DDD | Diagonal Decorative | Ductile Iron | 5.50 | 20" | 17.90 | 0.250 | A | Light Duty | Yes | No | No |
| DWV | Decorative Wave Grate | Ductile Iron | 4.20 | 20" | 36.90 | 0.900 | A | Light Duty | No | No | No |
| FG | Fabricated Slotted | Galvanized Steel | 1.70 | 40" | 12.00 | 0.375 | A | Light Duty | No | No | No |
| FS | Fabricated Slotted | Stainless Steel | 1.70 | 40" | 12.00 | 0.375 | A | Light Duty | No | No | No |
| GG | Slotted Grate | Fiberglass | 0.98 | 40" | 41.60 | 0.750 | A | Light Duty | No | No | No |
| HPB | Heel-Proof Slotted | Bronze | 7.80 | 20" | 17.00 | 0.250 | A | Light Duty | Yes | No | No |
| HPP | Heel-Proof Slotted | HDPE | 0.90 | 20" | 14.50 | 0.250 | A | Light Duty | Yes | No | No |
| HPS | Heel-Proof Slotted | Stainless Steel | 7.10 | 20" | 17.00 | 0.250 | A | Light Duty | Yes | No | No |
| PG | Fabricated Perforated | Galvanized Steel | 1.60 | 40" | 5.30 | .250 Dia. | A | Light Duty | Yes | No | No |
| PS | Fabricated Perforated | Stainless Steel | 1.80 | 40" | 5.30 | .250 Dia. | A | Light Duty | Yes | No | No |
| SWG | Stainless Steel Wire Grate | Stainless Steel | 2.50 | 40" | 37.50 | 0.250 | A | Light Duty | Yes | No | No |
| DOG | Decorative | Ductile Iron | 4.90 | 20" | 16.90 | 0.250 | B | Medium Duty | No | No | No |
| HPD | Heel-Proof Longitudinal | Ductile Iron | 6.30 | 20" | 17.00 | 0.250 | B | Medium Duty | Yes | No | No |
| LD | Longitudinal Slotted | Ductile Iron | 6.48 | 20" | 20.94 | 0.5625 | B | Medium Duty | No | No | No |
| PVS | Slotted Grate | Fabricated Steel | 4.60 | 40" | 6.00 | 0.500 | B | Medium Duty | Yes | No | No |
| SCD | Circular Decorative | Stainless Steel | 7.20 | 20" | 17.60 | 0.250 | B | Medium Duty | No | No | No |
| SDD | Diagonal Decorative | Stainless Steel | 6.30 | 20" | 17.90 | 0.250 | B | Medium Duty | Yes | No | No |

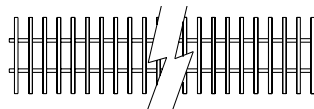
All gratings for the 6" systems have a width of 5.375" and a height of 3/4". For grate definitions and classifications, see page 37.



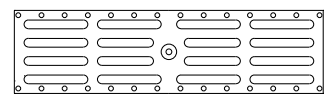
AWG/SWG



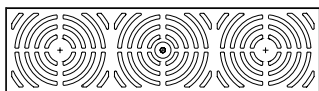
BZ/DOG/NBZ/SOG



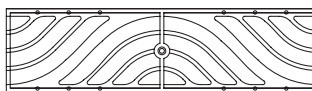
GG



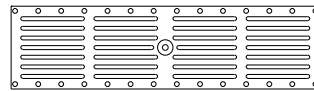
LD



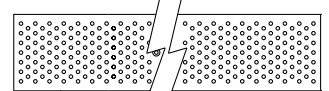
BCD/DCD/SCD



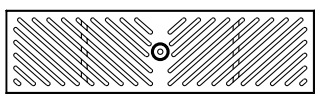
DWV



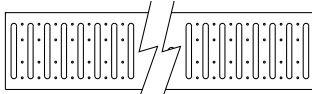
HPB/HPD/HPS



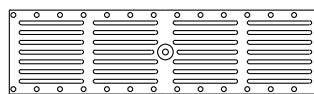
PG/PS



BDD/DDD/SDD



FG/FS



HPP

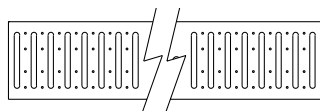


PVS/PVSG/PVSS

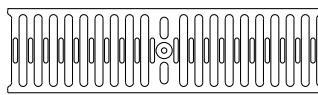
Indicates 40" Grate Length

| 6" System Grates | | | | | | | | | | | |
|------------------|--------------------------|-------------------------|-------------------|--------|-----------------------------|----------------------|-----|--------------|-----|------|-----|
| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/Hole Size | DIN | ANSI | ADA | H-20 | FAA |
| SOG | Decorative | Stainless Steel | 5.60 | 20" | 16.90 | 0.250 | B | Medium Duty | No | No | No |
| RFG | Reinforced Slotted | Galvanized Steel | 4.00 | 40" | 12.00 | 0.375 | B | Medium Duty | No | No | No |
| RFS | Reinforced Slotted | Stainless Steel | 4.00 | 40" | 12.00 | 0.375 | B | Medium Duty | No | No | No |
| RPG | Reinforced Perforated | Galvanized Steel | 4.00 | 40" | 5.30 | .250 Dia. | B | Medium Duty | Yes | No | No |
| RPS | Reinforced Perforated | Stainless Steel | 3.80 | 40" | 5.30 | .250 Dia. | B | Medium Duty | Yes | No | No |
| BG | Slotted Bar Grate | Galvanized Ductile Iron | 5.70 | 20" | 23.90 | 0.3600 | C | Heavy Duty | No | Yes | No |
| DBG | Slotted Bar Grate | Ductile Iron | 5.70 | 20" | 23.90 | 0.3600 | C | Heavy Duty | No | Yes | No |
| DCD | Circular Decorative | Ductile Iron | 6.30 | 20" | 17.60 | 0.250 | C | Heavy Duty | No | No | No |
| DGC | Slotted Grate | Ductile Iron | 4.50 | 20" | 28.10 | 0.500 | C | Heavy Duty | No | Yes | No |
| HDD | Fixed Grate | Ductile Iron | 7.70 | 20" | 38.80 | 1.750 | C | Heavy Duty | No | Yes | No |
| HR | Removable Grate | Ductile Iron | 12.30 | 20" | 32.80 | 1.625 | C | Heavy Duty | No | Yes | No |
| PPC | Perforated Grate | Vinylester | 3.30 | 20" | 6.60 | 0.300 | C | Heavy Duty | Yes | No | No |
| DCE | Solid Cover | Ductile Iron | 8.00 | 20" | N/A | N/A | E | Special Duty | Yes | Yes | Yes |
| DGE | Slotted Grate | Ductile Iron | 6.40 | 20" | 27.80 | 0.500 | E | Special Duty | No | Yes | Yes |
| GDE | Slotted Grate | Galvanized Ductile Iron | 6.40 | 20" | 27.80 | 0.500 | E | Special Duty | No | Yes | Yes |
| SBG | Slotted Bar Grate | Stainless Steel | 9.40 | 20" | 27.70 | 0.500 | E | Special Duty | No | Yes | Yes |
| FGF | Ductile Frame & Grate | Ductile Iron | 18.70 | 20" | 20.50 | 0.370 | F | Special Duty | No | Yes | Yes |
| GFG | Galvanized Frame & Grate | Galvanized Ductile Iron | 18.70 | 20" | 20.50 | 0.370 | F | Special Duty | No | Yes | Yes |

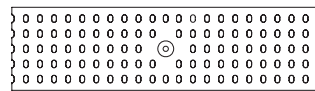
All gratings for the 6" systems have a width of 5.375" and a height of 3/4". For grate definitions and classifications, see page 37.



RFG/RFS



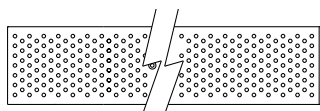
DGC



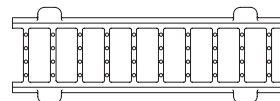
PPC



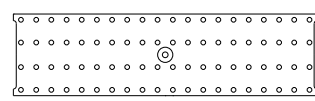
SBG



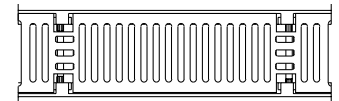
RPG/RPS



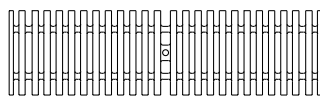
HDD



DCE



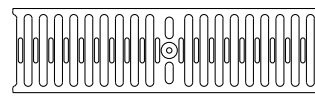
FGF/GFG



BG/DBG



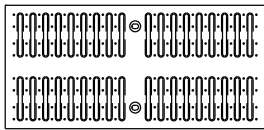
HR



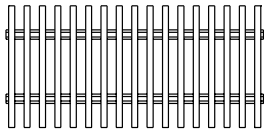
DGE/GDE

Indicates 40" Grate Length

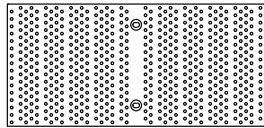
For downloadable CSI format specification, visit www.zurn.com.



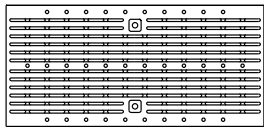
FG/FS



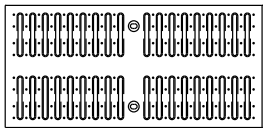
GG



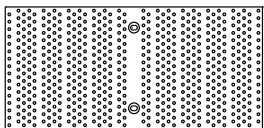
PG/PS



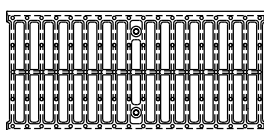
HPD



RFG/RFS



RPG/RPS

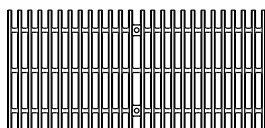


DGC

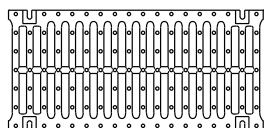
12" System Grates

| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
|------------|-------------------------|--------------------|-------------------|--------|-----------------------------|-----------------------|-----|--------------|-----|------|-----|
| FG | Fabricated Slotted | Galvanized Steel | 7.70 | 24" | 25.61 | 0.375 | A | Light Duty | No | No | No |
| FS | Fabricated Slotted | Stainless Steel | 7.70 | 24" | 25.61 | 0.375 | A | Light Duty | No | No | No |
| GG | Slotted Grate | Fiberglass | 2.80 | 24" | 82.50 | 0.875 | A | Light Duty | No | No | No |
| PG | Fabricated Perforated | Galvanized Steel | 7.00 | 24" | 14.90 | .250 Dia. | A | Light Duty | Yes | No | No |
| PS | Fabricated Perforated | Stainless Steel | 7.30 | 24" | 14.90 | .250 Dia. | A | Light Duty | Yes | No | No |
| HPD | Heel-Proof Longitudinal | Ductile Iron | 14.00 | 24" | 33.70 | 0.250 | B | Medium Duty | Yes | No | No |
| RFG | Reinforced Slotted | Galvanized Steel | 11.80 | 24" | 25.61 | 0.375 | B | Medium Duty | No | No | No |
| RFS | Reinforced Slotted | Stainless Steel | 12.20 | 24" | 25.61 | 0.375 | B | Medium Duty | No | No | No |
| RPG | Reinforced Perforated | Galvanized Steel | 11.30 | 24" | 14.90 | .250 Dia. | B | Medium Duty | Yes | No | No |
| RPS | Reinforced Perforated | Stainless Steel | 11.60 | 24" | 14.90 | .250 Dia. | B | Medium Duty | Yes | No | No |
| DGC | Slotted Grate | Ductile Iron | 14.70 | 24" | 86.70 | 0.980 | C | Heavy Duty | No | Yes | No |
| SBG | Slotted Bar Grate | Stainless Steel | 22.50 | 24" | 73.90 | 0.750 | C | Heavy Duty | No | Yes | No |
| BG | Slotted Bar Grate | Galv. Ductile Iron | 19.70 | 24" | 73.90 | 0.750 | D | Heavy Duty | No | Yes | No |
| DC | Solid Cover | Ductile Iron | 27.90 | 24" | N/A | N/A | E | Special Duty | Yes | Yes | Yes |
| DGE | Slotted Grate | Ductile Iron | 19.80 | 24" | 60.30 | 0.760 | E | Special Duty | No | Yes | Yes |
| DGF | Slotted Grate | Ductile Iron | 26.00 | 24" | 54.00 | 0.700 | F | Special Duty | No | Yes | Yes |

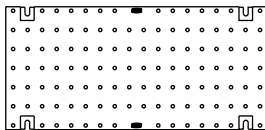
All gratings for the 12" systems have a width of 11-1/4" and a height of 1-1/2". For grate definitions and classifications, see page 37.



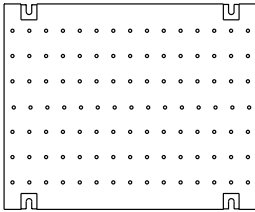
BG/SBG



DGE/DGF



DC

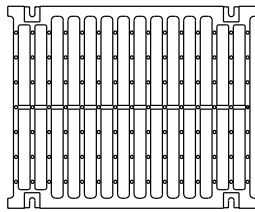


DCC

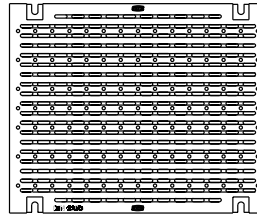
Z874-12 System Grates

| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
|--------|-------------------------|--------------|-------------------|--------|-----------------------------|-----------------------|-----|--------------|-----|------|-----|
| DCC | Solid Cover | Ductile Iron | 29.00 | 20" | N/A | N/A | C | Heavy Duty | Yes | Yes | No |
| DGC | Slotted Grate | Ductile Iron | 27.00 | 20" | 118.00 | .950 | C | Heavy Duty | No | Yes | No |
| HPD | Heel-Proof Longitudinal | Ductile Iron | 29.00 | 20" | 37.07 | .250 | C | Heavy Duty | Yes | Yes | No |
| DGF | Slotted Grate | Ductile Iron | 49.00 | 20" | 90.00 | .740 | F | Special Duty | No | Yes | Yes |

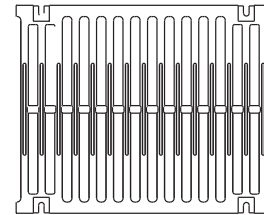
All gratings for the Z874-12 system have a width of 16-1/4" and a height of 1-3/4". For grate definitions and classifications, see page 37.



DGC

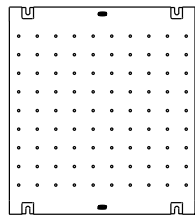


HPD



DGF

For downloadable CSI format specification, visit www.zurn.com.

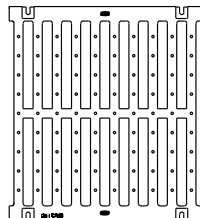


DCC

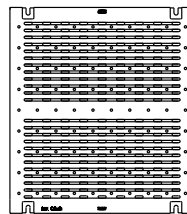
Z874-18 System Grates

| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
|--------|-------------------------|--------------|-------------------|--------|-----------------------------|-----------------------|-----|--------------|-----|------|-----|
| DCC | Solid Cover | Ductile Iron | 54.10 | 20" | N/A | N/A | C | Heavy Duty | Yes | Yes | No |
| DGC | Slotted Grate | Ductile Iron | 46.60 | 20" | 111.90 | 1.030 | C | Heavy Duty | No | Yes | No |
| HPD | Heel-Proof Longitudinal | Ductile Iron | 53.20 | 20" | 31.20 | .250 | C | Heavy Duty | Yes | Yes | No |
| DGF | Slotted Grate | Ductile Iron | 73.40 | 20" | 94.10 | 0.870 | F | Special Duty | No | Yes | Yes |

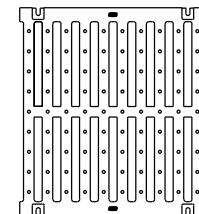
All gratings for the Z874-18 system have a width of 22-1/4" and a height of 1-3/4". For grate definitions and classifications, see page 37.



DGC



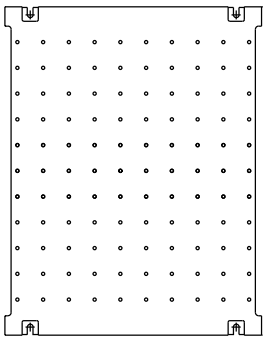
HPD



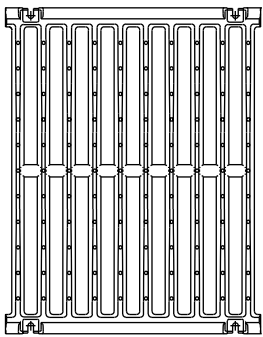
DGF

For downloadable CSI format specification, visit www.zurn.com.

Note: Ductile iron grating for Z874-12 and Z874-18 are furnished unpainted. Painted option available.



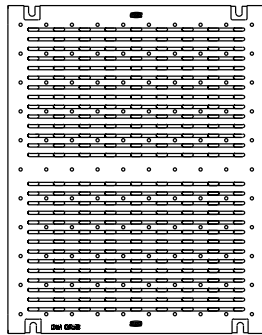
DCC



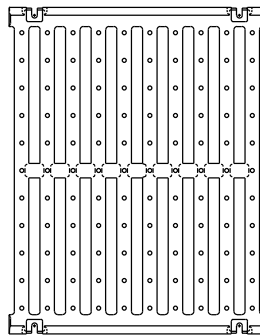
DGC

| Z874-21 System Grates | | | | | | | | | | | |
|-----------------------|-------------------------|--------------|-------------------|--------|-----------------------------|-----------------------|-----|--------------|-----|------|-----|
| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
| DCC | Solid Cover | Ductile Iron | 58.00 | 20" | N/A | N/A | C | Heavy Duty | Yes | Yes | No |
| DGC | Slotted Grate | Ductile Iron | 54.00 | 20" | 132.00 | 1.030 | C | Heavy Duty | No | Yes | No |
| HPD | Heel-Proof Longitudinal | Ductile Iron | 55.20 | 20" | 39.40 | .250 | C | Heavy Duty | Yes | Yes | No |
| DGF | Slotted Grate | Ductile Iron | 85.20 | 20" | 111.00 | 0.870 | F | Special Duty | No | Yes | Yes |

All gratings for the Z874-21 system have a width of 25-1/2" and a height of 1-3/4". For grate definitions and classifications, see page 37.



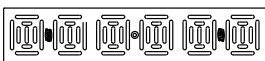
HPD



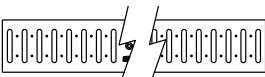
DGF

For downloadable CSI format specification, visit www.zurn.com.

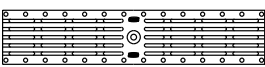
Note: Ductile iron grating for Z874-21 is furnished unpainted. Painted option available.



BZ



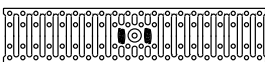
FG/FS



HPP



PG/PS



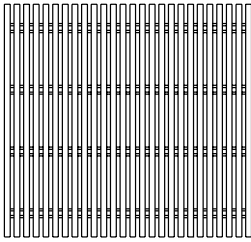
CG

| Z884 4" System Grates | | | | | | | | | | | |
|-----------------------|-----------------------|------------------|-------------------|--------|-----------------------------|-----------------------|-----|-------------|-----|------|-----|
| Suffix | Description | Material | Weight (lbs./ft.) | Length | Open Area (sq. in. per ft.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
| BZ | Bronze Decorative | Bronze | 4.50 | 20" | 11.50 | 0.250 | A | Light Duty | No | No | No |
| FG | Fabricated Slotted | Galvanized Steel | 1.80 | 40" | 10.20 | 0.375 | A | Light Duty | No | No | No |
| FS | Fabricated Slotted | Stainless Steel | 1.80 | 40" | 10.20 | 0.375 | A | Light Duty | No | No | No |
| HPP | Heel-Proof Slotted | HDPE | 0.78 | 20" | 10.30 | 0.250 | A | Light Duty | Yes | No | No |
| PG | Fabricated Perforated | Galvanized Steel | 1.20 | 40" | 5.90 | .250 Dia. | A | Light Duty | Yes | No | No |
| PS | Fabricated Perforated | Stainless Steel | 1.20 | 40" | 5.90 | .250 Dia. | A | Light Duty | Yes | No | No |
| CG | Slotted Grate | Cast Iron | 5.20 | 20" | 12.20 | 0.375 | B | Medium Duty | No | No | No |

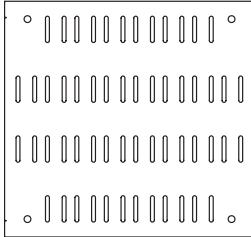
All gratings for the Z884 system have a width of 4-1/8" and a height of 3/4". For grate definitions and classifications, see page 37.

For downloadable CSI format specification, visit www.zurn.com.

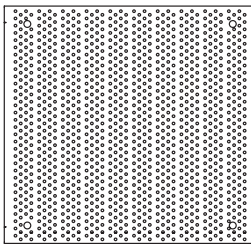
 Indicates 40" Grate Length



GG



RFG/RFS

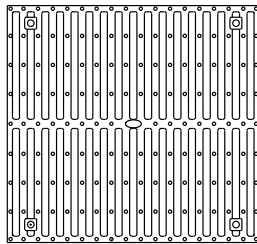


RPG/RPS

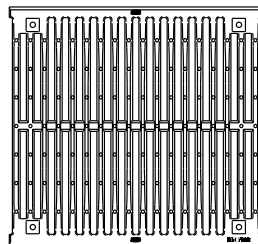
Z817 and Z887 24" x 24" System Grates

| Suffix | Description | Material | Weight (lbs.) | Open Area (sq. in.) | Slot Width/ Hole Size | DIN | ANSI | ADA | H-20 | FAA |
|---------|-----------------------|------------------|---------------|---------------------|-----------------------|-----|--------------|-----|------|-----|
| GG | Slotted Grate | Fiberglass | 15.29 | 208.50 | 0.375 | A | Light Duty | No | No | No |
| RFG-USA | Reinforced Slotted | Galvanized Steel | 46.20 | 101.00 | 0.380 | B | Light Duty | Yes | No | No |
| RFS-USA | Reinforced Slotted | Stainless Steel | 47.50 | 101.00 | 0.380 | B | Light Duty | Yes | No | No |
| RPG-USA | Reinforced Perforated | Galvanized Steel | 46.70 | 62.52 | 0.250 | B | Light Duty | Yes | No | No |
| RPS-USA | Reinforced Perforated | Stainless Steel | 48.00 | 62.52 | 0.250 | B | Light Duty | Yes | No | No |
| DGC | Slotted Grate | Ductile Iron | 96.00 | 228.80 | 0.344 | C | Heavy Duty | No | Yes | No |
| DGF | Slotted Grate | Ductile Iron | 115.20 | 206.40 | 0.344 | F | Special Duty | No | Yes | Yes |

All gratings for the Z817 and Z887 systems have a width of 24" and a height of 1-7/16". For grate definitions and classifications, see page 37.



DGC



DGF

For downloadable CSI format specification, visit www.zurn.com.

Material Definitions and Grate Loading Classifications

Definition of Terms

ACID-RESISTING EPOXY COATING (A.R.C.) is a baked-on powder coating which produces a smooth, hard, high-gloss finish. This epoxy-based coating offers high impact resistance and excellent life expectancy in all drainage applications.

GALVANIZING STEEL is a process of applying a coating of zinc to the finished sheet or fabricated parts to provide corrosion resistant properties. The coating is applied by hot dipping or electrolytic deposition.

POLYESTER is a thermosetting resin utilized to bond the individual fibers during the manufacture of molded fiberglass components. It provides high durability and excellent chemical- and weather-resistant properties.

POLYETHYLENE, HIGH DENSITY (HDPE) is a thermoplastic resin that offers excellent physical characteristics such as light weight, outstanding chemical resistance to household and industrial chemicals, good toughness, and 0% water absorption.

POLYPROPYLENE (PP) is a thermoplastic that offers excellent physical characteristics such as light weight, outstanding chemical and impact resistance, and 0% water absorption.

STAINLESS STEEL is any steel containing four or more percent chromium content. Chromium, along with other alloying elements like nickel and silicon, provides corrosion and heat resistant characteristics. Type 304 stainless steel is typical with 316 available as an option.

STAINLESS STEEL HARDWARE is used to secure steel angle frame to fiberglass trench for all Zurn Trench Systems.

VINYLESTER is a thermosetting resin utilized in the manufacture of molded fiberglass components. Its superior corrosion resistance in acidic and alkaline services, along with excellent impact and flexural fatigue resistance, make it ideal for hazardous chemical applications.

ZURN CAST IRON conforms to ASTM Specification for Gray Iron Castings A 48-83, Class 25. It is produced utilizing the latest equipment and newest developed foundry techniques. Zurn cast iron castings are characterized by a high degree of strength, corrosion resistance, workmanship, and finish.

ZURN DURA COAT is a specially formulated paint designed to resist cracking and chipping. Dura Coat is a latex-based coating developed to be used with cast iron substrates.

ZURN DURESIST is a ductile iron complying with ASTM Specification A 536-84, Grade 85-65-10. Its physical properties make it ideal for grates and drain components that are subjected to severe and heavy-duty service. Its chemical characteristics make possible a degree of corrosion resistance far superior to that of cast iron.

LLDPE (linear low density polyethylene) exhibits the following properties: excellent chemical resistance, low moisture absorption, extremely flexible, and very impact resistant.

Grate Top Loading Classifications

Two grate classification systems are shown to assist in grate selection. Both standards are used in the trench drain industry to choose the proper grating to meet loading requirements.

6.1 ANSI A112.21.1M

Grates and top rims shall be designed to meet the following loading classifications:

6.1.1 Light Duty – All grates having safe live load (as calculated in paragraph 6.1.6) under 2,000 lb. [900 kg] (i.e. Pedestrian).

6.1.2 Medium Duty – All grates having safe live load (as calculated in paragraph 6.1.6) between 2,000 lb. [900 kg] and 4,999 lb. [2,250 kg] (i.e. Light Vehicle).

6.1.3 Heavy Duty – All grates having safe live load (as calculated in paragraph 6.1.6) between 5,000 lb. [2,250 kg] and 7,499 lb. [3,375 kg] (i.e. H2O).

6.1.4 Extra Heavy Duty – All grates having safe live load (as calculated in paragraph 6.1.6) between 7,500 lb. [3,375 kg] and 10,000 lb. [4,500 kg] (i.e. Forklift).

6.1.5 Special Duty – Grates having safe live load (as calculated in paragraph 6.1.6) over 10,000 lb. [4,500 kg] shall be considered special and treated accordingly (i.e. Airport).

The maximum safe live load is computed by dividing the load at failure by two.

6.2 DIN 19580

Grates and top rims shall be designed to meet the following load classifications:

6.2.1 Classification A – Grate design load up to or exceeding 3372 lbf [15 kn] (i.e. Pedestrian).

6.2.2 Classification B – Grate design load of at least 28101 lbf [125 kn] (i.e. Light Vehicle).

6.2.3 Classification C – Grate design load of at least 56202 lbf [250 kn] (i.e. H2O).

6.2.4 Classification D – Grate design load of at least 89924 lbf [400 kn] (i.e. Pneumatic Forklift).

6.2.5 Classification E – Grate design load of at least 134885 lbf [600 kn] (i.e. Forklift).

6.2.6 Classification F – Grate design load of at least 202328 lbf [900 kn] (i.e. Airport).

In areas of extreme hard wheel forklift traffic (i.e. steel wheels), the Zurn -HD Frame Assembly is required.

Transportation Classifications

The American Association of State Highway and Transportation Officials' (AASHTO) "Standard Specification for Highway Bridges" defines H-20 loading as a two-axle truck with a maximum dual-wheel load of 16,000 pounds. HS-20 loading is defined as a tractor truck with a tandem axle semi trailer with a dual-wheel load of 16,000 pounds.

The FAA (Federal Aviation Administration) Advisory Circular AC 150/5320-6D describes aircraft loading as 100,000 pounds placed over a 9" x 9" area.

The Americans with Disabilities Act (ADA) stipulates that the slot width be limited on gratings in walkways and elongated slots must be placed longitudinally so they are perpendicular to the dominant direction of travel.