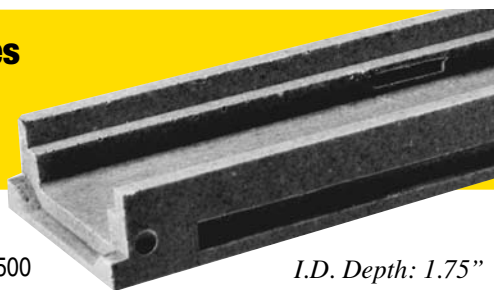


## 500 Series Deck Drain

DP0500

I.D. Depth: 1.75"



The POLYCAST® 500 Series Deck Drain System is ideally suited for a variety of above grade applications requiring drainage of incidental water run-off. The 500 Series is Polycast's shallowest drain, measuring: O.D. 48" x 6.25" x 2.5" and I.D. of 48" x 4.25" x 1.75". It is designed to be installed in suspended slab applications such as parking structures, pool deck areas and many other thin slab applications. The precast sections are made up of 4' lengths. Each section has a 4" bottom cut-out for pipe connections. Gratings available for this system are the slotted galvanized and stainless steel grates, part numbers DG0640 and DG0647, and fiberglass grates, part number DG0644. POLYCAST® 500 Series is available in either polyester or Vinyl Ester polymer concrete. The polyester polymer concrete would be used for most drainage applications. Vinyl ester polymer concrete is used for high corrosive and high temperature applications. The 500 Series drains are designed for pneumatic tire traffic only. For added depth and/or solid tire forklift (full traffic) applications, the 700 Series HARDNOSE frame can be added. Grating hold-down device DA0542 is recommended.

## 500 Series Gratings



**Application  
Load Class A  
(pg. 57)**

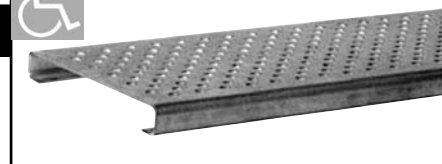
### Galvanized Steel Perforated

#### Part No. DG0646

Designed for use in pedestrian areas to minimize heel hazard and prevent entrance of large objects. Grating hold-down device Part No. DA0542 (not shown) should be used and maintained secure.

ADA Compliant

Open Area: 8.5 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24" or 48"  
Weight: 4 lbs. or 8 lbs.  
Perforation Diameter: 1/4"



### Stainless Steel Perforated

#### Part No. DG0657

Designed for use where sanitary conditions are essential, as well as the need for heel-resistant gratings. Grating hold-down device Part No. DA0542S (not shown) should be used and maintained secure.

ADA Compliant

Open Area: 8.5 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24" or 48"  
Weight: 4 lbs. or 8 lbs.  
Perforation Diameter: 1/4"



### Galvanized Steel Solid

#### Part No. DG0645

Designed for pipe runs, e.g., secondary containment or cable runs. Removable cover allows full access. Grating hold-down device Part No. DA0542 (not shown) should be used and maintained secure.

ADA Compliant

Dimensions: 5-1/4" x 24" or 48"  
Weight: 4 lbs. or 8 lbs.



### Stainless Steel Solid

#### Part No. DG0667

Designed for pipe runs, e.g., secondary containment or cable runs. Especially suited for areas exposed to mild acids or bases. Removable cover allows full access. Grating hold-down device Part No. DA0542S (not shown) should be used and maintained secure.

ADA Compliant

Dimensions: 5-1/4" x 24" or 48"  
Weight: 4 lbs. or 8 lbs.



**NOTE:** ADA Code—4.5.4 gratings. If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2" (13mm) wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominate direction of travel.

## 500 Series Gratings



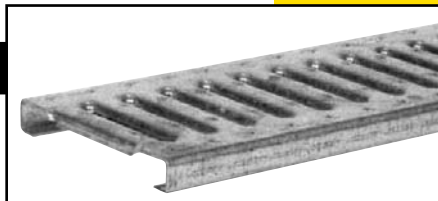
**Application**  
**Load Class B**  
(pg. 57)

### Stainless Steel Slotted

**Part No. DG0647**

Application for use where sanitary conditions are essential. Grating hold-down device Part No. DA0542S (not shown) should be used and maintained secure.

Open Area: 10.2 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24" or 48"  
Weight: 4 lbs. or 8 lbs.

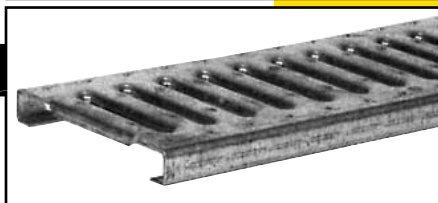


### Galvanized Steel Slotted

**Part No. DG0640**

An economical alternative, the galvanized grate is appropriate for many general use conditions. Grating hold-down device Part No. DA0542 (not shown) should be used and maintained secure.

Open Area: 10.2 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24" or 48"  
Weight: 4 lbs. or 8 lbs.



### DURAGUARD® Slotted

**Part No. DG0670**

A high density polyethylene slotted grate appropriate for corrosive applications or where sanitary conditions are necessary. Provides excellent chemical resistance and durability. Polyethylene construction helps protect bare feet. Grating hold-down device Part No. DA0542 (not shown) should be used and maintained secure.

Open Area: 11 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24"  
Weight: 4 lbs.  
NOTE: Part No. DG0670G available, color: gray



### DURAGUARD® Longitudinal Slotted

**Part No. DG0675**

A versatile and economical alternative high density polyethylene composite grate. When used in high velocity transverse sheet flow applications, the longitudinal slots create turbulence to improve entry of flow into the channel. Grating hold-down device Part No. DA0542 (not shown) should be used and maintained secure.

Open Area: 12.6 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24"  
Weight: 3.5 lbs.  
NOTE: Part No. DG0675G available, color: gray



ADA Compliant



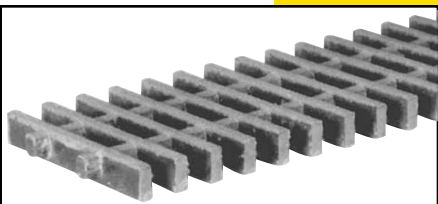
**Application**  
**Load Class C**  
(pg. 57)

### Fiberglass

**Part No. DG0644**

Designed for use with POLYCAST® Vinyl Ester trench in areas requiring extreme chemical resistance. The clear opening between the bars is 5/8". Grating hold-down device Part No. DA0542F (not shown) should be used and maintained secure.

Open Area: 29.6 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24" or 48"  
Weight: 2-1/2 lbs. or 5 lbs.

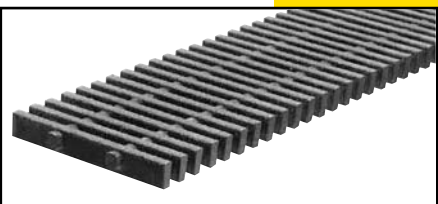


### Fiberglass

**Part No. DG0644SP**

Designed for use with POLYCAST® Vinyl Ester trench in areas requiring extreme chemical resistance. The clear opening between the bars is 3/8". Grating hold-down device Part No. DA0542F (not shown) should be used and maintained secure.

Open Area: 25.5 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24" or 48"  
Weight: 3 lbs. or 6 lbs.



**NOTE:** ADA Code—4.5.4 gratings. If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2" (13mm) wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominate direction of travel.

## 500 Series Gratings



**Application  
Load Class D**  
(pg. 57)

### Ductile Iron Longitudinal Slotted Part No. DG0675HD

Designed for general use and pedestrian traffic applications, as well as heavy vehicular traffic applications. Grating hold-down device Part No. DA0642B (not shown) should be used and maintained secure.

ADA Compliant

Open Area: 32 in<sup>2</sup>/Linear Foot (26%)  
Dimensions: 5-1/4" x 24"  
Weight (grate plus frame): 30 lbs.  
ASTM A536 Class 65-45-12  
Black Finish  
Grate In-Flow: See chart pg. 20



### Gray Iron Slotted Part No. DG0641

The gray iron grate is appropriate for many general use conditions. Grating hold-down device Part No. DA0542B (not shown) should be used and maintained secure.

Open Area: 19.8 in<sup>2</sup>/Linear Foot  
Dimensions: 5-1/4" x 24"  
Weight: 15 lbs.

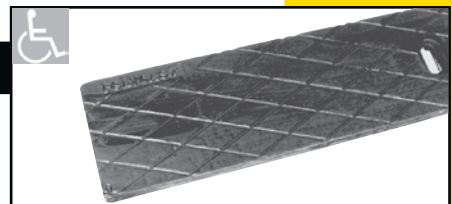


### Gray Iron Solid Part No. DG0641S

Designed for pipe raceway, e.g., secondary containment and cable runs. Removable cover allows full access. Grating hold-down device Part No. DA0542 (not shown) should be used and maintained secure.

ADA Compliant

Dimensions: 5-1/4" x 24"  
Weight: 18 lbs.  
Black Finish



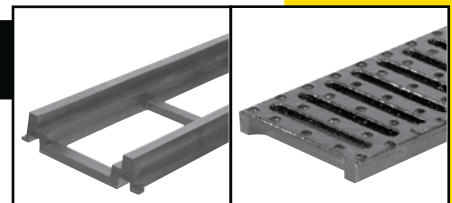
## 500 Series Frames and Grates

### DURAGUARD® Frame w/Gray Iron Slotted Part No. DG0700PE w/ DG0641

DG0700PE Series Frame and Part No. DG0641 gray iron are designed for moderate heavy use conditions. Grating hold-down device Part No. DA0542BH (not shown) **must be used and maintained secure**. Improves strength and impact resistance. Infrequent forklift traffic, low speed. Light duty.

Open Area: 19.8 in<sup>2</sup>/Linear Foot  
Dimensions: 6-1/4" x 24"  
Weight (grate plus frame): 16 lbs.

**NOTE: Grates & locking devices must be in place and secure prior to concrete placement.**



DG0700PE

DG0641



**Application  
Load Class E**  
(pg. 57)

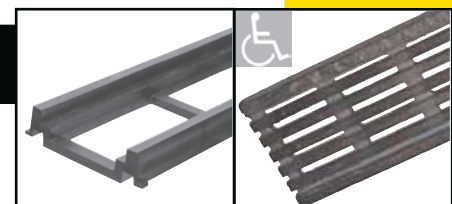
### DURAGUARD® Frame w/ Ductile Longitudinal Slotted Part No. DG0700PE w/ DG0675HD

The DURAGUARD® Frame and Ductile Iron Slotted Grate, Part No. DG0675HD, provide increased strength and durability for general to moderately heavy use applications. Offers exceptional corrosion resistance and low maintenance. Grating hold-down device Part No. DA0642BH (not shown) **must be used and maintained secure**. Moderate frequency forklift traffic, low speed. Moderate duty.

ADA Compliant

Open Area: 32 in<sup>2</sup>/Linear Foot (26%)  
Dimensions: 5-1/4" x 24"  
Weight (grate plus frame): 16 lbs.  
ASTM A536 Class 65-45-12  
Grate In-Flow: See chart pg. 29

**NOTE: Grates & locking devices must be in place and secure prior to concrete placement.**



DG0700PE

DG0675HD



**NOTE:** ADA Code—4.5.4 gratings. If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2" (13mm) wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominate direction of travel.

## 500 Series Frames and Grates

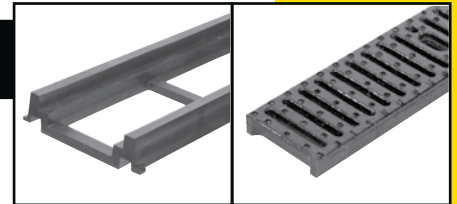
### DURAGUARD® Frame w/ Ductile Iron Slotted

### Part No. DG0700PE w/ DG0641D

The DURAGUARD® Frame and Ductile Iron Slotted Grate, Part No. DG0641D, provide increased strength and durability for general to moderately heavy use applications. Offers exceptional corrosion resistance and low maintenance. Grating hold-down device Part No. DA0542BH (not shown) **must be used and maintained secure**. Moderate frequency forklift traffic, low speed. Moderate duty.

Open Area: 20.9 in<sup>2</sup>/Linear Foot  
Dimensions: 6-1/4" x 24"  
Weight (grate plus frame): 16 lbs.  
ASTM A536 Class 65-45-12

**NOTE: Grates & locking devices must be in place and secure prior to concrete placement.**



DG0700PE

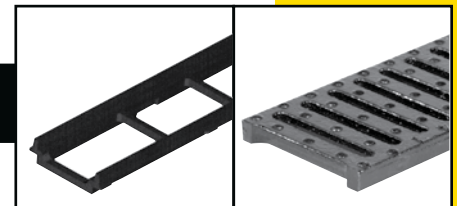
DG0641D

### HARDNOSE Iron Frame w/Gray Iron Slotted

### Part No. DG0700AA w/DG0641

DG0700 Series Frame and Part No. DG0641 grates used in areas exposed to heavy traffic and solid tire vehicles. Grating hold-down device DA0542BH must be maintained secure. Offers exceptional impact resistance. High frequency forklift traffic, low speed. Heavy duty.

Open Area: 19.8 in<sup>2</sup>/Linear Foot  
Dimensions: 6-1/4" x 24"  
Weight (grate plus frame): 30 lbs.  
Black Finish



DG0700AA

DG0641



**Application  
Load Class F  
(pg. 57)**

### HARDNOSE Iron Frame w/ Ductile Longitudinal Slotted

### Part No. DG0700AA w/ DG0675HD

DG0700 Series Frame and Part No. DG0675HD grates used in areas exposed to heavy traffic and solid tire vehicles. Grating hold-down device DA0642BH must be maintained secure. Offers exceptional impact resistance. High frequency forklift traffic, low speed. Heavy duty

Open Area: 32 in<sup>2</sup>/Linear Foot (26%)  
Dimensions: 5-1/4" x 24"  
Weight (grate plus frame): 30 lbs.  
ASTM A536 Class 65-45-12  
Black Finish  
Grate In-Flow: See chart pg. 29

ADA Compliant.



DG0700AA

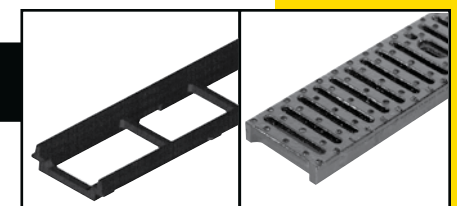
DG0675HD

### HARDNOSE Iron Frame w/Ductile Iron Slotted

### Part No. DG0700AA w/DG0641D

DG0700 Series Frame and Part No. DG0641D grates used in areas exposed to heavy traffic and solid tire vehicles. Grating hold-down device DA0542BH must be maintained secure. Offers exceptional impact resistance. High frequency forklift traffic and/or speeds above 15 mph. Extra heavy duty.

Open Area: 19.8 in<sup>2</sup>/Linear Foot  
Dimensions: 6-1/4" x 24"  
Weight (grate plus frame): 30 lbs.  
ASTM A536 Class 65-45-12  
Black Finish



DG0700AA

DG0641D



**NOTE:** ADA Code—4.5.4 gratings. If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2" (13mm) wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominate direction of travel.



## Channel Installation Alignment Chair

**Installation Rates of 60'- 90' Per Hour Are Easily Attainable With a 2-Person Crew.**

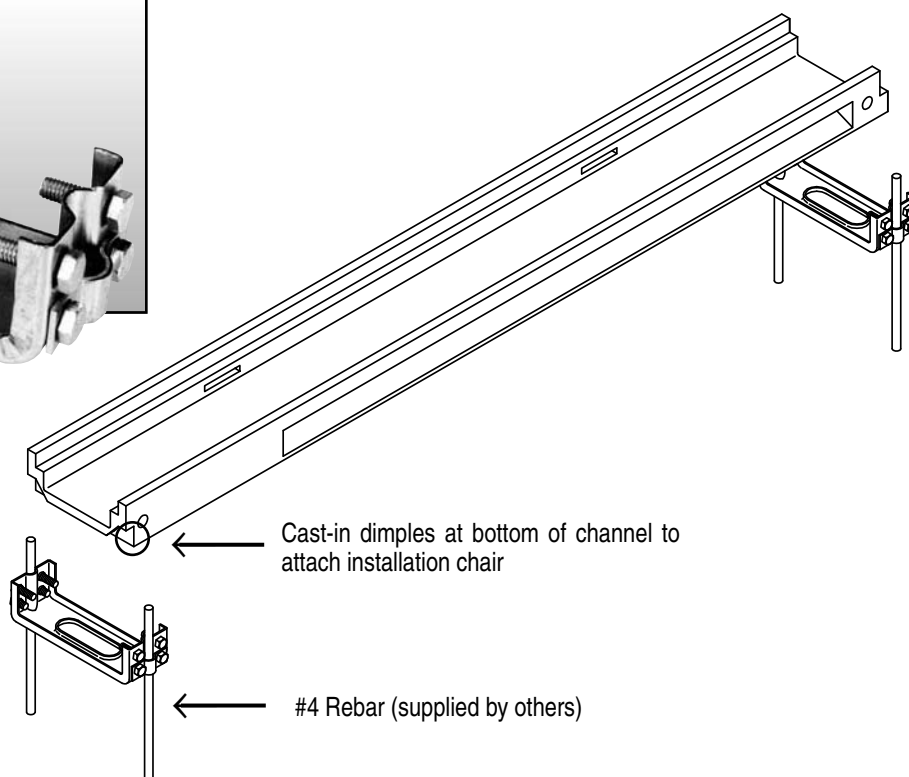
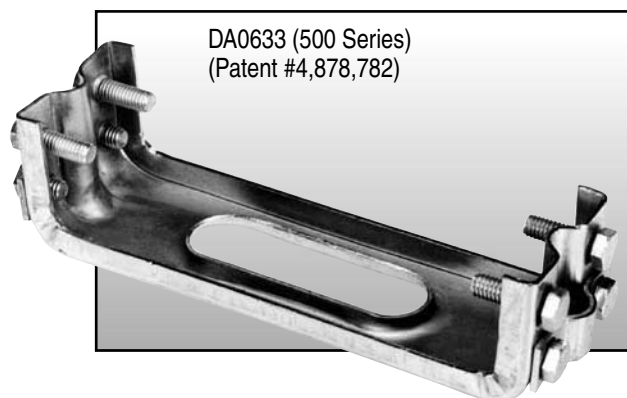


The POLYCAST® Installation Chair is the most efficient and economical means of setting a precast trench system. The installation chair supports the ends of the channels, aligns and locks the joint rigidly together and prevents the channels from floating. Adjusting channel elevation is easy with the POLYCAST® Installation Chair.

The installation chair is attached by tightening the alignment bolts into the channel "dimples". Two pieces of rebar are set every 4' to correspond with the channel joints, placed through the connecting clamp on the installation chair and driven into the sub-base. The channels are then aligned and adjusted to achieve the proper elevation.

**One chair per joint required.**

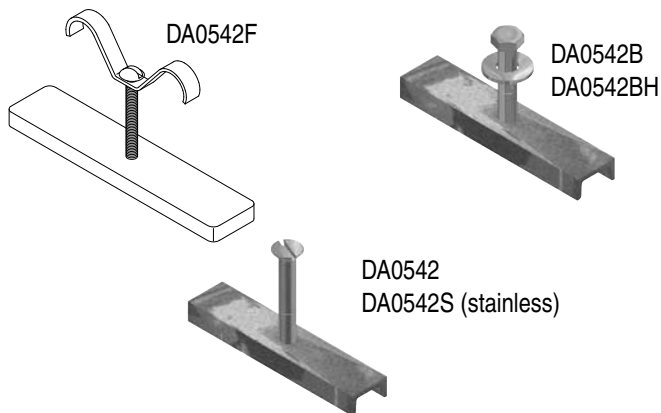
NOTE: For use with 500 Series Channels.



- Rapid, accurate installation
- Aligns channels
- Sets elevation
- Tightens joint
- Reduces leakage during concrete placement
- Prevents channels from floating during concreting

## Accessories

### LOCKING DEVICES

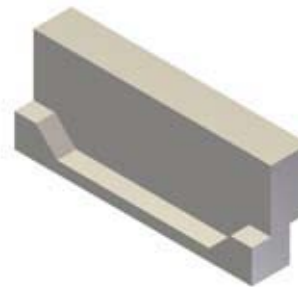


*Locking Devices are to be used with all grating systems where wheel traffic occurs. This is necessary to provide system integrity.*

### END CAPS

POLYCAST® end caps are used to enclose or provide piping transitions to the female and male ends of the channels where catch basins are not being used. They fit all channels ending in five (5), zero (0), neutrals (N) and halves (H).

#### Closed End Cap

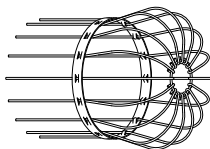


DP0500C

### DEBRIS STRAINER

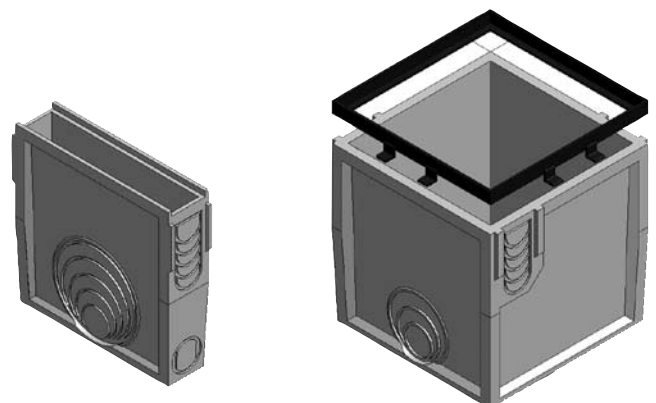
Debris Outlet strainers are ideal for outdoor environments where debris can clog outlets.

#### Debris Outlet Strainer



*For use with 4" Pipe, Channel and End Cap Outlets.*

### CATCH BASIN



Information about Catch Basins can be found on Page 50.