500 SERIES



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. The POLYCAST 500 Series is available in either polyester or Vinyl Ester polymer concrete. The polyester polymer concrete is 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 and full traffic applications, the 700 Series HARDNOSE frame can be added. Grate hold-down device DA0542 is recommended.

500 Series Deck Drain



500 Series Grates

Galvanized Steel Slotted

An economical alternative, the galvanized Open Area: 10.2 in²/Linear Foot grate is appropriate for many general use conditions. For use with Grate hold-down device Part No. DA0542.

Stainless Steel Slotted

Application for use where sanitary conditions are essential. For use with Grate hold-down device Part No. DA0542S.

Galvanized Steel Perforated

Designed for use in pedestrian areas to minimize heel hazards and prevent entrance of large objects. For use with Grate hold-down device Part No. DA0542.

ADA Compliant.

Part No. DG0640

Dimensions: 5-1/4" x 24" or 48" Weight: 4 lbs. or 8 lbs. Slot Size: 0.28" x 3.00"

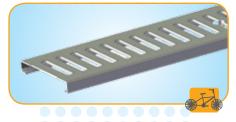
Part No. DG0647

Open Area: 10.2 in²/Linear Foot Dimensions: 5-1/4" x 24" or 48" Weight: 4 lbs. or 8 lbs. Slot Size: 0.28" x 3.00"

Part No. DG0646

Open Area: 8.5 in²/Linear Foot Dimensions: 5-1/4" x 24" or 48" Weight: 4 lbs. or 8 lbs. Slot Size: 1/4" dia







500 SERIES

Stainless Steel Perforated

Designed for use where sanitary conditions are essential, as well as the need for heel-resistant gratings. For use with Grate hold-down device Part No. DA0542S.

ADA Compliant.

Galvanized Steel Solid

Designed for pipe runs, e.g., secondary containment, or cable runs. Removable cover allows full access. For use with Grate hold-down device Part No. DA0542.

ADA Compliant.

Stainless Steel Solid

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. For use with Grate hold-down device Part No. DA0542S.

ADA Compliant.



Fiberglass

Designed for use with POLYCAST[®] Vinyl Ester trench in areas requiring extreme chemical resistance. The clear opening between the bars is 5/8". For use with Grate hold-down device Part No. DA0542F.

Part No. DG0657

Open Area: 8.5 in²/Linear Foot Dimensions: 5-1/4" x 24" or 48" Weight: 4 lbs. or 8 lbs. Slot Size: 1/4" dia.

Part No. DG0645

Open Area: N/A Dimensions: 5-1/4" x 24" or 48" Weight: 4 lbs. or 8 lbs. Slot Size: N/A

Part No. DG0667

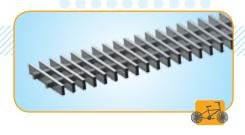
Open Area: N/A Dimensions: 5-1/4" x 24" or 48" Weight: 4 lbs. or 8 lbs. Slot Size: N/A

Part No. DG0644

Open Area: 29.6 in²/Linear Foot Dimensions: 5-1/4" x 24" or 48" Weight: 2-1/2 lbs. or 5 lbs. Slot Size: 0.63"







500 SERIES GRATES



Gray Iron Slotted

The gray iron grate is appropriate for many general use conditions. For use with Grate hold-down device Part No. DA0542B.

Fiberglass

Designed for use with POLYCAST[®] Vinyl Ester trench in areas requiring extreme chemical resistance. For use with Grate hold-down device Part No. DA0542F.



Ductile Iron Longitudinal Slotted

Designed for general use and pedestrian traffic applications, as well as heavy vehicular traffic applications. For use with Grate hold-down device Part No. DA0542BH.

Ductile Iron Slotted

Designed for general use and pedestrian traffic applications. This heavy duty grate is also suitable for frequent traffic applications. Exceeds AASHTO H-20 and FAA requirements. For use with Grate hold-down device Part No. DA0542BH.



Gray Iron Solid

Designed for pipe raceway, e.g., secondary containment, and cable runs. Removable cover allows full access. For use with Grate hold-down device Part No. DA0542BH.

Part No. DG0641

Open Area: 19.8 in²/Linear Foot Dimensions: 5-1/4" x 24" Weight: 15 lbs. Slot Size: 0.50" x 4.19"

Part No. DG0644SP

Open Area: 25.5 in²/Linear Foot Dimensions: 5-1/4" x 24" or 48" Weight: 3 lbs. or 6 lbs. Slot Size: 0.38

NOTE: 500 Series Class E grates require a frame. When used without a frame, DIN E-F grates are suitable for DIN D applications.

Part No. DG0675HD

Open Area: 32 in²/Linear Foot Dimensions: 5-1/4" x 24" Weight: 16 lbs. Slot Size: 0.32" wide

Part No. DG0641D

Open Area: 19.8 in²/Linear Foot Dimension: 5-1/4" x 24" Weight: 15 lbs. Slot Size: 0.50" x 4.19"

NOTE: 500 Series Class F grates require a frame. When used without a frame, DIN E-F grates are suitable for DIN D applications.

Part No. DG0641S

Open Area: N/A Dimensions: 5-1/4" x 24" Weight: 18 lbs. Slot Size: N/A







500 SERIES

500 SERIES GRATES

POLYCAST® Decorative Grates



Montage

An *ADA* compliant grate design of various geometric shapes with the feel of a Navajo quilt.

Part No. DG0691

Open Area: 11.5 in² / linear foot Weight: 15 lbs. Dimensions: 5.25" X 24" Slot Size: Varies

Abbott

This design is inspired by early gothic architecture and resembles crosses overlaid with rose patterns.

Part No. DG0693

Open Area: 15.5 in² / linear foot Weight: 18 lbs. Dimensions: 5.25" X 24" Slot Size: Varies



Patriot

Stars and stripes offering the perfect feel for fire houses, government buildings, and any installation with a patriotic flare.

Part No. DG0692

Open Area: 13 in² / linear foot Weight: 16 lbs. Dimensions: 5.25" X 24"

Slot Size: Varies

POLYCAST® Decorative Grates

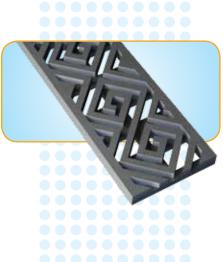


SPIRAL

Interlocked square spirals make this unique grate stand out as a border or edging.

Part No. DG0694

Open Area: 20.5 in² / linear foot Weight: 15.5 lbs. Dimensions: 5.25" X 24" Slot Size: .38" wide



Part No. DG0695

Weight: 16 lbs.

Slot Size: Varies

Open Area: 5 in² / linear foot

Dimensions: 5.25" X 24"

COBBLESTONE

A pattern of stones and slots that resembles the cobblestone streets of early cities.

500 Series

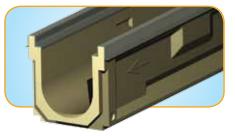
500 SERIES FRAMES

500 Series Frames

POLYGUARD®

POLYGUARD is a formed steel edge rail available in both galvanized and stainless steel. This provides an outstanding visual finish to any trench drain application. POLYGUARD is recommended for DIN class C - D applications.

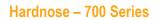
- · Moderate speed traffic
- Lightweight
- Provides unobstructed channel access for easy cleanout



Duraguard[®]

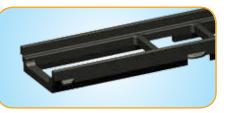
The DURAGUARD[®] series frame is an innovative design that improves heavy load impact performance. Utilizing a high density polyethylene composite, the DURAGUARD[®] channel frame reinforces the channel edge to dramatically improve the load performance and impact resistance of standard 500 Series and 600 Series channels. DURAGUARD[®] frames are recommended for DIN class C - E applications.

- Moderate speed traffic
- Exceptional chemical resistance
- Lightweight
- · Impact resistant
- · Cost effective



HARDNOSE - 700 Series frames are designed for the most harsh vehicle applications, including heavy aircraft traffic, hard wheel forklifts, industrial equipment, and construction equipment. These gray iron frames are inlaid on the top of conventional 500 Series and 600 Series channels. HARDNOSE[®] frames are recommended for DIN class D - F applications.

- High speed traffic
- · Solid wheel traffic
- Aircraft
- Industrial facilities



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 subbase. The channels are then aligned and adjusted to achieve the proper elevation.

One chair per joint required.

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

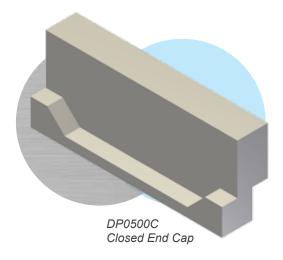
Cast-in dimples at bottom of channel to attach installation chair

#4 Rebar (supplied by others)

DA0633 (500 Series)

500 SERIES ACCESSORIES





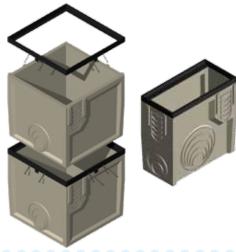
POLYCAST[®] end caps are used to enclose or provide piping transitions to the female and male ends of the channels where catch basins are not being used.

Catch Basin

POLYCAST catch basins are designed to be used as collection points, drain run transitions, and interceptors to collect solid debris.

Information about catch basins can be found on Page 40.







HDPE: Although plastic is a low cost channel material, its poor thermal properties can lead to buckling and cracking. A 100ft long plastic drain's length can change up to 4.3in.