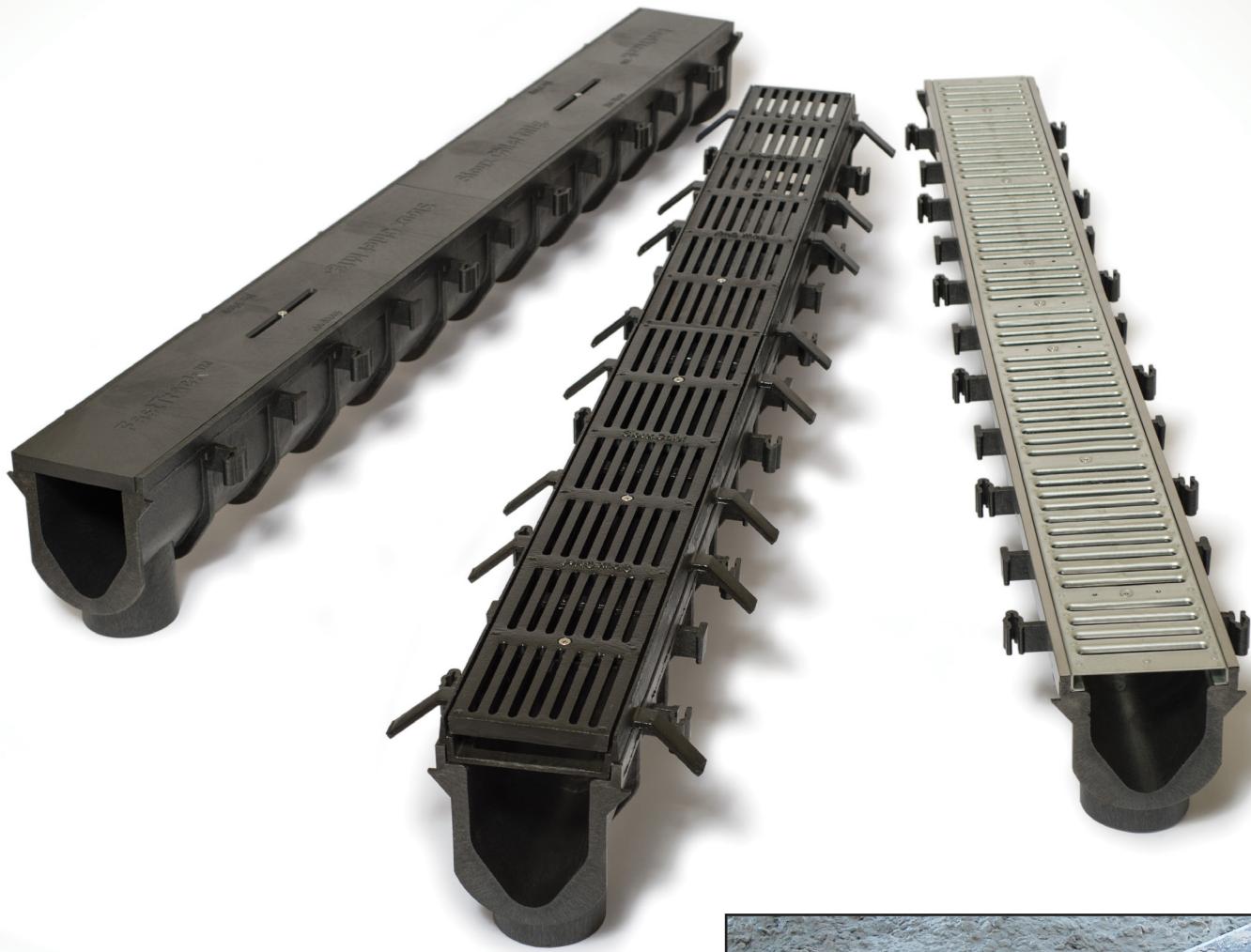


# FastTrack™

## » Pre-sloped Trench Drain System



### Fast

Construction covers included to protect channels during rough-in. Longer channels for fewer joints. Solid connections for better alignment.

### Versatile

Sloped and neutral channels made from tough, lightweight, HDPE material.

A variety of grating options for all types of traffic applications. Integral bottom outlets



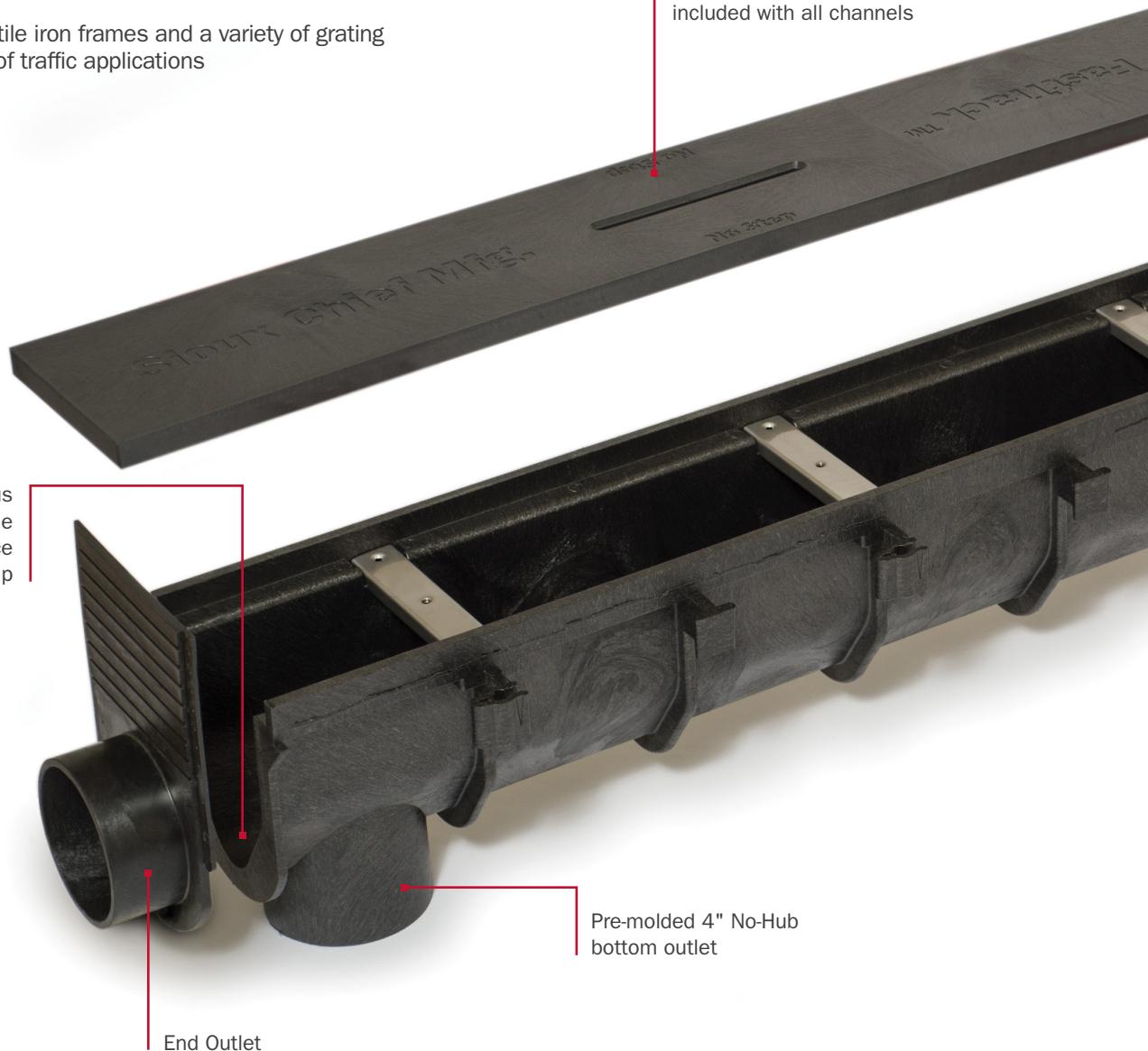
# Fast Track™

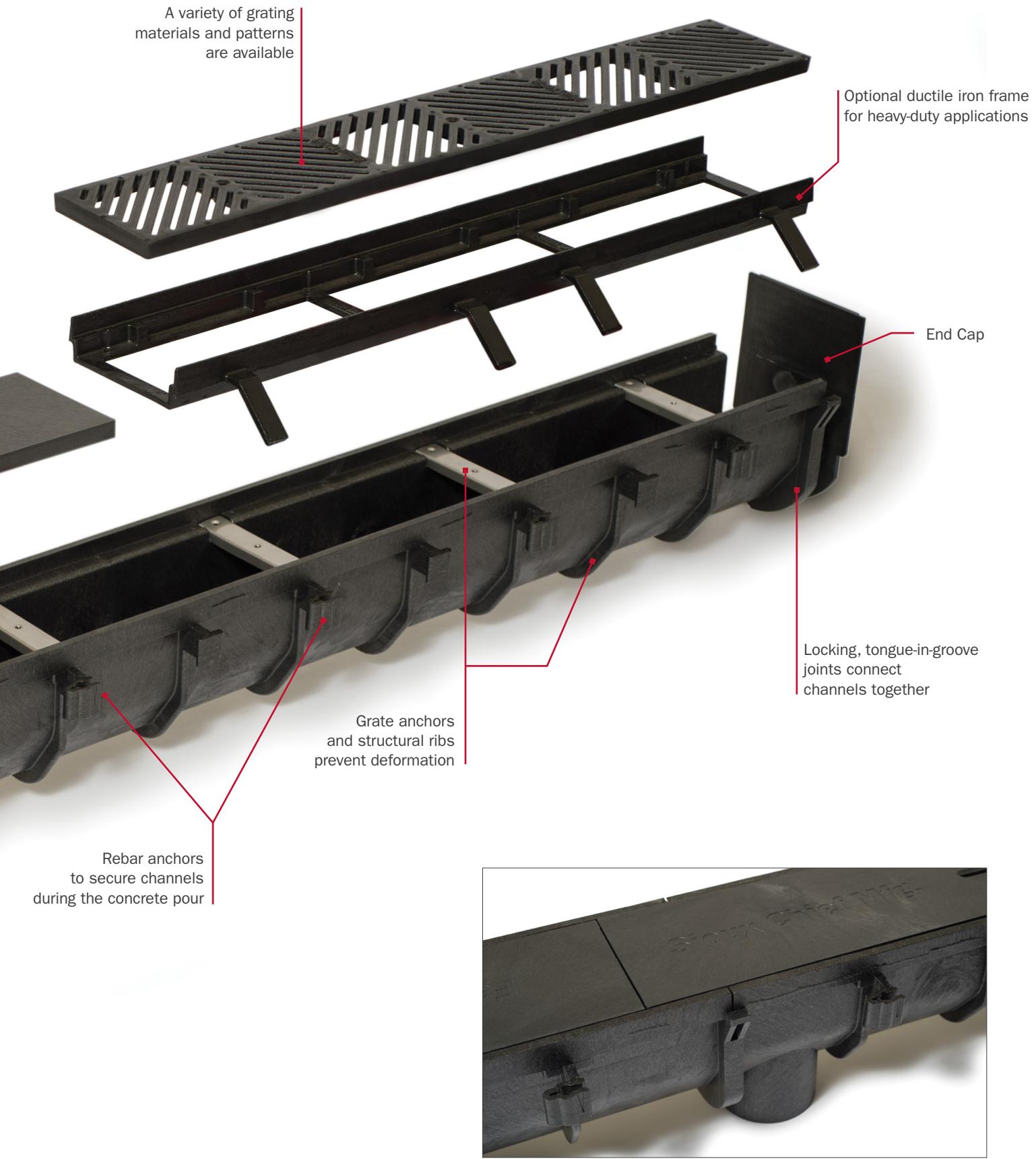
## » System Features

- Durable construction covers protect channels during rough-in. Keeps concrete and debris out of the drain line
- Channels molded from tough, lightweight, high-density polyethylene are U.V. and chemical resistant
- Longer (72") channels mean fewer joints are needed for the same run length
- Solid channel joints that don't require fasteners
- Grate anchors and structural ribs prevent deformation during the concrete pour
- Convenient, integral bottom outlet included on all channels. End caps and end outlets are also available
- Optional ductile iron frames and a variety of grating for all types of traffic applications

Construction covers (2) are included with all channels

Engineered bottom radius helps increase low-volume flow rate and reduce sediment buildup





Construction covers can slide across joints to help keep the run straight

# Installation Guide

Always consult local codes for specific requirements regarding trench drain installation in your area before beginning.

Always wear protective gear and observe safety precautions when installing the FastTrack™ system.

## Plan/Excavate

Excavate a trench for the FastTrack, considering both load class and slab thickness. All channels (and catch basin, if installed) must be encased with concrete on three sides. See *Installation Diagram* (pg 9) for dimensions. The engineer should determine slab thickness based on application and traffic rating.

Concrete encasement is required regardless of surface type (concrete, asphalt, pavers, etc.).

Expansion joints will be needed on each side of the trench, according to specifications. Do Not use the FastTrack as an expansion joint.

Set a string line in the trench at level of final slab elevation to use as a guide.



## Layout Channels

Lay out the channels, in order, alongside the excavated trench, starting with the deepest point (catch basin or outlet point) and working 'upstream'. Be sure flow arrows point towards the outlet end.

For Catch Basin: Set catch basin in position (checking for elevation, level, and alignment), and anchor securely in place with rebar.

For End Outlet: Open the end outlet fitting using a hole saw. Attach the end outlet with screws to the deep end and the end cap on the shallow end. Be sure to allow for sufficient slab thickness above the outlet and pipe.

For Bottom Outlet: Using a hole saw, open the bottom outlet in the deep end and install end caps on channel ends.



## Assemble Channels

Beginning at the outlet end, connect the channels together in order. Silicone sealant can be used in the groove/joint if desired.

If Using Iron Grate Frames or SS Edge Guards: Remove the construction covers and install grate frames or edge guards. Reinstall the construction covers in the frames or guards.

Slide the construction covers (downstream) such that they overlap the joint - this will help prevent misalignment at the joints.



## Anchor with Rebar

Beginning at the outlet end, install rebar into the anchor clips on either side of the channel and drive rebar into the ground. Adjust channel, checking for elevation, level, and alignment using the string line as a guide. The top of the channel should be set  $\sim 3/16"$  below finish slab level.

When the channel is in proper position, secure the rebar into the anchor clips using screws or tie-wire to lock in place.

Continue the installation with upstream sections, setting with rebar, checking for elevation, level, and alignment until all channel sections are set.



## Set with Concrete

Confirm all channels are in final position and anchored with rebar and screws (wire) in ALL available anchor clips to keep the run as secure as possible. Be Sure:

- Channels will be encased in concrete (4" min.)
- Expansion joints will be installed on each side
- Channel is recessed  $\sim 3/16"$  below the finish slab

Connect drain piping to the catch basin or channel outlet according to plans. Use a No-Hub coupling to connect to channel outlet, or a connection adapter for the catch basin.

Set concrete "pads" around rebar, under and on sides of the basin/channels to prevent movement or misalignment.

Pour the concrete slab around the installation and vibrate to eliminate voids in the pour.



## Final Inspection

After the concrete takes final set (24 hrs. min), remove the construction covers. Inspect the installation to be sure channels and drain piping are free of debris.

Set appropriate grating in place and secure the grates into the grate anchors using screws.



# Grate Options



## Slotted Ductile Iron

Enamel-coated ductile iron material. Heavy duty applications, forklift and commercial vehicle traffic at less than 15 mph. \*Load class D when installed in iron frame only

## Cross-Slot Ductile Iron

Enamel-coated ductile iron material with cross-slot pattern. Parking areas and truck traffic at less than 15 mph.

## Diagonal-Slot Ductile Iron

Enamel-coated ductile iron material with decorative, diagonal pattern. Parking areas and truck traffic at less than 15 mph.



## Slotted Polymer

Corrosion-proof, U.V. protected material is tough, durable and chemical-resistant. For light duty areas, pedestrian traffic, walkways, pool areas, etc.

## Slotted Stainless / Galvanized

Corrosion-resistant, 304 stainless steel or G90 galvanized material. For pedestrian, bicycle, and two-wheeled hand carts.

## Reinforced Slotted Stainless / Galvanized

Corrosion-resistant, 304 stainless steel or G90 galvanized material. Includes reinforcing rib for parking areas and light vehicle traffic at less than 15 mph.



## Perforated Stainless / Galvanized

Corrosion-resistant, 304 stainless steel or G90 galvanized material. For pedestrian traffic, kitchen and food-prep areas.

## Stainless Steel Brickslot

Designed for use with brick or paver surfaces. The slot blends perfectly with surrounding surface, and reduces water 'cross-over'.

## Diagonal-Slot Stainless Steel

Corrosion-resistant, 304 stainless steel with Decorative, pattern. For pedestrian, bicycle, and hand-cart traffic, kitchen and food-prep areas..

## » Grate Load Classifications

Trench drain grates are tested according to the DIN EN 1433 standard.

Grates are subjected to test loads, which are applied with a 3" x 10" platen.

### Class A

Loads up to 3,372 LBS

Pedestrian traffic. Walking areas, bicycles, light, two-wheeled hand carts

### Class B

Loads up to 28,101 LBS

Small/private parking areas. Car and light vehicle traffic at less than 15 mph.

### Class C

Loads up to 56,202 LBS

Trucks and commercial parking areas. Vehicle traffic at less than 15 mph.

### Class D

Loads up to 89,924 LBS

Heavy-duty, forklift and commercial vehicle traffic at less than 15 mph.

# Accessories



## Catch Basin

In-line catch basin connects seamlessly to channels on one or both ends. Works with any FastTrack channel, and all grate options. Rugged, HDPE basin is available with a removable, heavy-duty, galvanized basket to keep debris out of the drain line. Side cut-out is designed for use with outlet adapters for easy connection to 4" or 6" drain pipe. Includes stainless steel grate anchors (3) and construction cover.

*Use 865-CB4 outlet adapter for 4" pipe, or 865-CB6 for 6" pipe (see Buying Info, back page)*



## End Cap / End Outlet

HDPE end cap or 4" No-Hub outlet connection (open outlet with hole saw). Installs easily with screws, use sealant if desired. Trim excess off top; flush with construction cover prior to slab pour.

*When using end outlet, be sure to allow for sufficient slab thickness above the outlet and pipe.*



## Decorative Edge Guards

Corrosion-resistant, 304 stainless steel edge guards cover channel edges for a more finished look. Works with all grate styles/materials - does not affect load capacity of grate. Edge guards slide over top edge of the channel. Fasten with screws if desired.\*

*\* Edge guards must be installed before concrete is poured.*



## Ductile Iron Frame

Enamel-coated ductile iron material. Prevents wear/impact damage to channel edges. Transfers traffic load into the surrounding concrete. Works with all grate styles/materials. Must be used with iron grates for Class D load requirements. Iron frames attach easily to the channel with screws.\*

*\* Frames must be installed before concrete is poured.*



## Construction Cover

*All channels ship with two construction covers installed as standard.*

Durable, U.V. protected cover installs in the channel during rough-in and slab pour. Construction cover protects channels from damage and debris. Covers slide to overlap joints and help maintain alignment. Use with or without iron frame. Replace with grate after slab cures.



## Dome Bottom Strainer

Stainless steel perforated strainer installs above bottom outlet to prevent trash, leaves, and other debris from entering the drain pipe. Spring-tabs insert into the outlet and hold strainer in place. Removes easily for cleaning.

# Typical Configurations

## »» Sloping

- FastTrack channels are available pre-sloped (0.75%) or neutral.
- Systems can be designed using all sloped, all neutral, or can combine both types
- Neutral channels can be used where the ground itself slopes or where excavation depth must be minimized

### All Sloped - One Direction 54 ft



### Sloped & Neutral - One Direction 78 ft



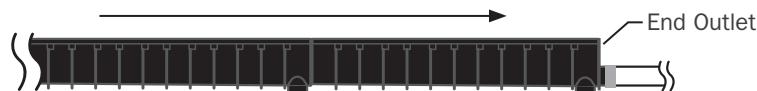
### Neutral / No Slope



## »» Outlet Type

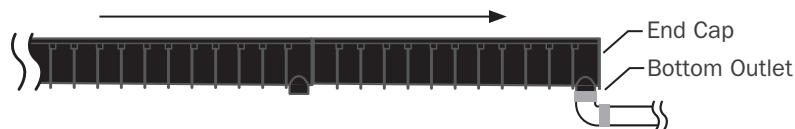
- FastTrack channels are designed with an integral bottom outlet or attach an end outlet for pipe connection
- Bottom and end outlet size is 4" no-hub - make connection to the pipe with standard no-hub couplings

### End Outlet:



**Note:** When using end outlets, be sure to allow sufficient slab depth above outlet and drain pipe to prevent cracking.

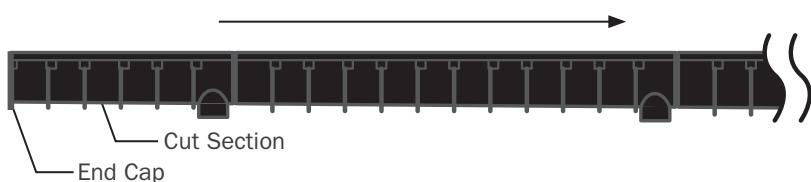
### Bottom Outlet:



## »» Cutting

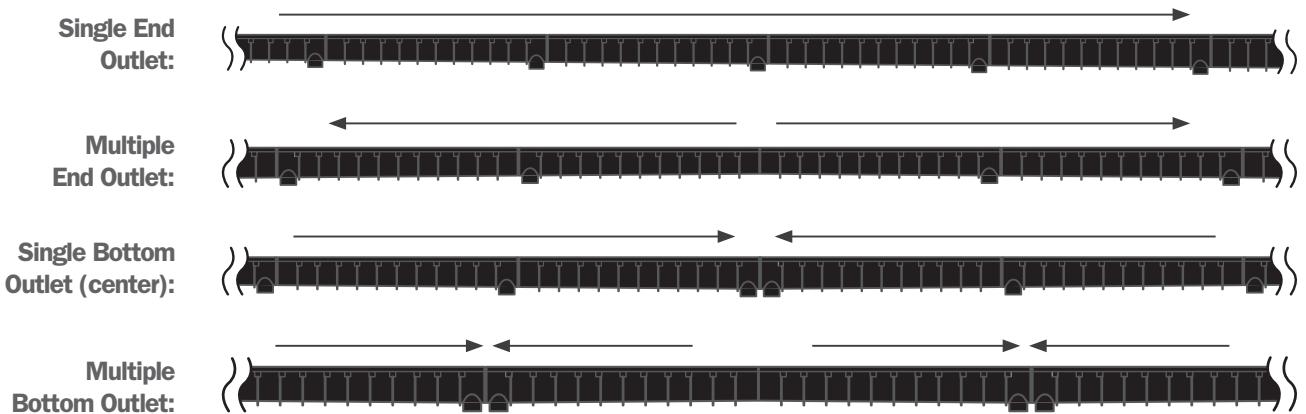
- FastTrack channels and grates can be cut to length with a handsaw or reciprocating saw
- Ribs on the channels are spaced at 6" intervals for quick measurements and allow for easy attachment of the end cap. Always cut end(s) opposite the outlet

### Cut Section:



## » Outlet Location

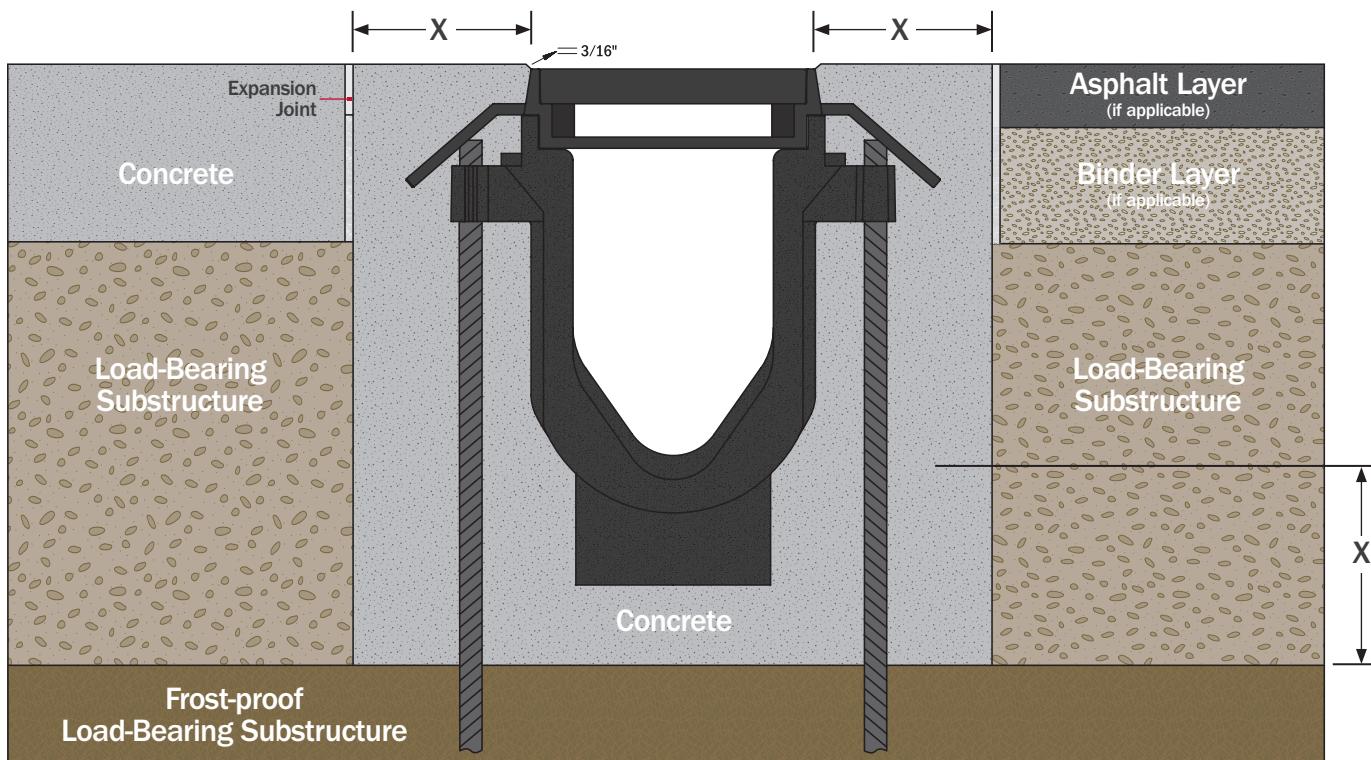
- Connect drain pipe to the FastTrack on the bottom of the channel or to the end
- Systems can be designed to slope to one end, to the center, to both ends or to multiple bottom outlets



## Installation Diagram

- Installation diagram below should be used as a guide only. Always consult local codes for specific requirements regarding trench drain installation in your area before beginning.
- FastTrack systems require full concrete encasement on three sides, regardless of surface material/finish – see table (right) for dimensions.
- Install expansion joints on both sides of, and parallel to the channel, per specifications
- Ductile iron grate frame (shown below) is required for Load Class D. Frame is optional for Load Class A-C

| Encasement Dimensions<br>(According to Calculation) |                    |
|---|--------------------|
| LOAD CLASS  | DIMENSION X        |
| Class A   | 4" (MIN 4,000 PSI) |
| Class B   | 6" (MIN 4,000 PSI) |
| Class C   | 6" (MIN 4,000 PSI) |
| Class D   | 8" (MIN 4,000 PSI) |



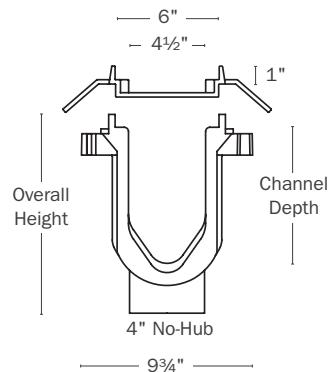
# Chemical Resistance Guide

The following should be used for reference only. Many factors affect the chemical resistance of a product. A test under specific conditions should confirm the FastTrack is fully compatible with the application before installation.



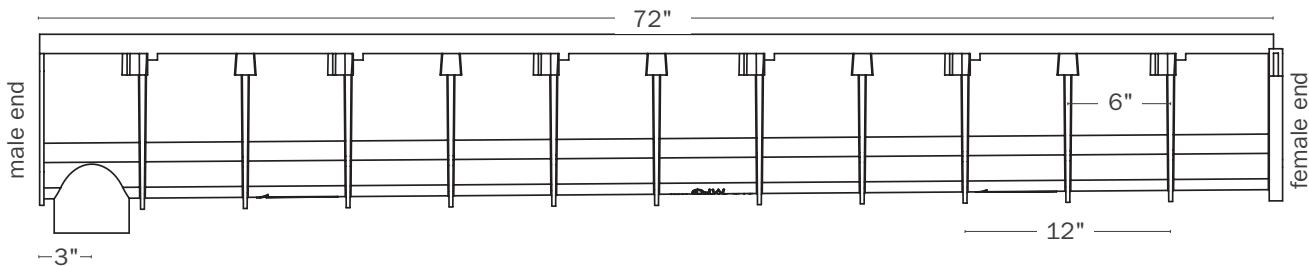
| Chemical                | Max. Temp | Chemical               | Max. Temp | Chemical                   | Max. Temp |
|-------------------------|-----------|------------------------|-----------|----------------------------|-----------|
| Acetic Acid, 60%        | 70° F     | Ethyl Acetate, 100%    | NR        | Nicotinic Acid             | 140° F    |
| Acetone                 | 140° F    | Ethyl Alcohol          | 140° F    | Nitric Acid, 70%           | 70° F     |
| Alcohol                 | 140° F    | Ethylene Glycol        | 140° F    | Nitrobenzene               | NR        |
| Aluminum Chloride       | 140° F    | Ethylene Dichloride    | NR        | Olive Oil                  | 140° F    |
| Ammonia                 | 70° F     | Fluosilicic Acid       | 140° F    | Oxalic Acid                | 140° F    |
| Ammonium Hydroxide      | NR        | Formaldehyde, 30%      | 140° F    | Paraffin Oil               | 70° F     |
| Battery Acid            | 140° F    | Fructose               | 140° F    | Phenol                     | 140° F    |
| Beer                    | 140° F    | Fuel Oil               | 140° F    | Phosphoric Acid, 90%       | 140° F    |
| Benzene                 | NR        | Gallic Acid            | 140° F    | Pine Oil                   | NR        |
| Borax                   | 140° F    | Gasoline               | 70° F     | Potassium Bromide          | 140° F    |
| Boric Acid              | 140° F    | Glucose                | 140° F    | Potassium Nitrate          | 140° F    |
| Brake Fluid             | 140° F    | Glycerin               | 140° F    | Potassium Perchlorate, 10% | 140° F    |
| Brine                   | 140° F    | Glycolic Acid, 30%     | 140° F    | Potassium Sulfate          | 140° F    |
| Bromic Acid, 10%        | 140° F    | Heptane                | NR        | Propyl Alcohol             | 140° F    |
| Calcium Carbide         | 140° F    | Hexane                 | NR        | Propylene Glycol           | 140° F    |
| Calcium Chloride        | 140° F    | Hydraulic Fluid        | 70° F     | Salicylic Acid             | 140° F    |
| Calcium Hypochlorite    | 140° F    | Hydrobromic Acid, 50%  | 140° F    | Sodium Carbonate           | 140° F    |
| Carbon Tetrachloride    | NR        | Hydrochloric Acid, 35% | 140° F    | Sodium Hydroxide           | 140° F    |
| Carbonic Acid           | 140° F    | Hydrofluoric Acid, 75% | 140° F    | Sodium Hypochlorite        | 140° F    |
| Castor Oil              | 140° F    | Hydrogen Peroxide, 30% | 70° F     | Sodium Nitrate, 50%        | 140° F    |
| Caustic Soda            | 70° F     | Isobutyl Alcohol       | 140° F    | Soybean Oil                | 140° F    |
| Chlorine Liquid         | NR        | Isopropyl Alcohol      | 140° F    | Sulfuric Acid, 50%         | 140° F    |
| Chlorobenzene           | NR        | Jet Fuel               | 140° F    | Sulfuric Acid, 70%         | 70° F     |
| Chloroform              | NR        | Kerosene               | 70° F     | Tannic Acid, 10%           | 140° F    |
| Citrus Juices           | 140° F    | Lactic Acid, 90%       | 140° F    | Toluene                    | NR        |
| Coffee                  | 140° F    | Lard                   | 140       | Transformer Oil            | 70° F     |
| Corn Oil                | 140° F    | Lemon Oil              | NR        | Trichloroethylene          | NR        |
| Cotton Seed Oil         | 140° F    | Machine Oil            | 70° F     | Turpentine                 | NR        |
| Detergents (synthetic)  | 140° F    | Methyl Ethyl Ketone    | NR        | Urine                      | 140° F    |
| Dibutyl Ether           | NR        | Methanol               | 70° F     | Vinegar                    | 140° F    |
| Dichloroethane          | NR        | Methyl Alcohol         | 70° F     | Water, Distilled           | 140° F    |
| Diethylene Glycol       | 140° F    | Milk                   | 140° F    | Whiskey / Wine             | 140° F    |
| Disodium Phosphate      | 140° F    | Mineral Oils           | 140° F    | Xylene                     | NR        |
| Emulsions, Photographic | 140° F    | Naphtha                | NR        | Zinc Oxide                 | 140° F    |
| Ethanol, 96%            | 140° F    | Naphthalene            | 70° F     | Zinc Sulfate               | 140° F    |

# System Specs



## » System Notes

- The FastTrack system is designed for on-grade installations only
- Using neutral channels will affect the overall slope of the system and the estimated flow rate
- Always install expansion joints on both sides of, and parallel to the channel, per specifications
- Finished grate level should be ~3/16" below finished slab level and slab should be sloped toward the channel on both sides to promote proper drainage



| Channel | Channel Depth |          | Overall Height <sup>1</sup> | Slope Type     | Weight <sup>2</sup> Lbs. | Est. Flow Rate <sup>3</sup> |      |
|---------|---------------|----------|-----------------------------|----------------|--------------------------|-----------------------------|------|
|         | Shallow End   | Deep End |                             |                |                          | GPM                         | CFS  |
| 865-S1  | 3.62"         | 4.16"    | 7.28"                       | Sloped (0.75%) | 15.4                     | 91.23                       | 0.20 |
| 865-S2  | 4.16"         | 4.70"    | 7.82"                       | Sloped (0.75%) | 16.4                     | 119.13                      | 0.27 |
| 865-N3  | 4.70"         | 4.70"    | 7.82"                       | Neutral        | 16.9                     | —                           | —    |
| 865-S3  | 4.70"         | 5.24"    | 8.35"                       | Sloped (0.75%) | 17.4                     | 147.79                      | 0.33 |
| 865-S4  | 5.24"         | 5.78"    | 8.90"                       | Sloped (0.75%) | 18.4                     | 176.97                      | 0.39 |
| 865-N5  | 5.78"         | 5.78"    | 8.90"                       | Neutral        | 18.9                     | —                           | —    |
| 865-S5  | 5.78"         | 6.32"    | 9.44"                       | Sloped (0.75%) | 19.4                     | 206.55                      | 0.46 |
| 865-S6  | 6.32"         | 6.86"    | 9.98"                       | Sloped (0.75%) | 20.4                     | 236.42                      | 0.53 |
| 865-N7  | 6.86"         | 6.86"    | 9.98"                       | Neutral        | 20.9                     | —                           | —    |
| 865-S7  | 6.86"         | 7.40"    | 10.52"                      | Sloped (0.75%) | 21.4                     | 266.52                      | 0.59 |
| 865-S8  | 7.40"         | 7.94"    | 11.06"                      | Sloped (0.75%) | 21.4                     | 296.81                      | 0.66 |
| 865-N9  | 7.94"         | 7.94"    | 11.06"                      | Neutral        | 21.9                     | —                           | —    |
| 865-S9  | 7.94"         | 8.48"    | 11.60"                      | Sloped (0.75%) | 22.4                     | 327.23                      | 0.73 |

**1** Add 1" to overall height when using iron frame

**2** Weight includes grate anchors and construction covers

**3** Estimated flow rate is for the single channel only (open ends, no grate), and is based on calculation using Manning's equation



865-S1



865-GiS



865-F



865-FC

## »» Buying Information

| ITEM NO.           | DESCRIPTION  | MIN. QTY. | CASE QTY. |
|--------------------|--|-----------|-----------|
| <b>CHANNELS</b>    |  |           |           |
| 865-S1             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-S2             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-N3             | Neutral Channel Section with Construction Cover - 72" Long                                   | 1         | 1         |
| 865-S3             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-S4             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-N5             | Neutral Channel Section with Construction Cover - 72" Long                                   | 1         | 1         |
| 865-S5             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-S6             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-N7             | Neutral Channel Section with Construction Cover - 72" Long                                   | 1         | 1         |
| 865-S7             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-S8             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| 865-N9             | Neutral Channel Section with Construction Cover - 72" Long                                   | 1         | 1         |
| 865-S9             | Sloped Channel Section with Construction Cover - 72" Long                                    | 1         | 1         |
| <b>GRATES</b>      |  |           |           |
| 865-GiS            | Slotted Ductile Iron Grate with Screws - 36" Long - Class D <sup>1</sup>                     | 1         | 1         |
| 865-GiC            | Cross-Slot Ductile Iron Grate with Screws - 36" Long - Class C                               | 1         | 1         |
| 865-GiD            | Diagonal-Slot Ductile Iron Grate with Screws - 36" Long - Class C                            | 1         | 1         |
| 865-GHS            | Slotted HDPE Grate with Screws - 36" Long - Class A  | 1         | 1         |
| 865-GHC            | Cross-Slot GF Polopro Grate with Screws - 36" Long - Class A                                 | 1         | 1         |
| 865-GSA            | Angle-Slot Stainless Steel Grate with Screws - 36" Long - Class A                            | 1         | 1         |
| 865-GSB            | Stainless Steel Brick Slot Grate with Screws - 36" Long - Class C                            | 1         | 1         |
| 865-GSBC           | Stainless Steel Brick Slot Access Section (for use with 865-GSB) - 12" Long - Class C        | 1         | 1         |
| 865-GSD            | Perforated Stainless Steel Grate with Screws - 36" Long - Class A                            | 1         | 1         |
| 865-GSS            | Slotted Stainless Steel Grate with Screws - 36" Long - Class A                               | 1         | 1         |
| 865-GSSR           | Reinforced Slotted Stainless Steel Grate with Screws - 36" Long - Class C                    | 1         | 1         |
| 865-GGD            | Perforated Galvanized Steel Grate with Screws - 36" Long - Class A                           | 1         | 1         |
| 865-GGS            | Slotted Galvanized Steel Grate with Screws - 36" Long - Class A                              | 1         | 1         |
| 865-GGSR           | Reinforced Slotted Galvanized Steel Grate with Screws - 36" Long - Class C                   | 1         | 1         |
| <b>ACCESSORIES</b> |  |           |           |
| 865-A              | Grate Anchor - Stainless steel - Fits All Channels   | 1         | 20        |
| 865-C              | Construction Cover - HDPE 36" Long - Fits All Channels                                       | 1         | 1         |
| 865-CB4            | 4" Outlet Adapter for Catch Basin - Fits 3" & 4" Sch. 40, 4" SDR35 Pipe                      | 1         | 1         |
| 865-CB6            | 6" Outlet Adapter for Catch Basin - Fits 6" SDR35 Pipe                                       | 1         | 1         |
| 865-D              | Dome Strainer for Channel Bottom Outle - Stainless steel - Fits All Channels                 | 1         | 1         |
| 865-EC             | End Cap - HDPE Flat Cap - Fits All Channels  | 1         | 50        |
| 865-EG             | Edge Guards - Stainless steel - 36" Long - Pair with Screws - Fits All Channels <sup>3</sup> | 1         | 1         |
| 865-E0             | End Outlet - HDPE with 4" No-Hub Connection <sup>2</sup> - Fits All Channels                 | 1         | 25        |
| 865-F              | Ductile Iron Grate Frame - 36" Long with Screws - Fits All Channels                          | 1         | 1         |
| 865-FB             | Debris Basket for Catch Basin - Galvanized Steel with Handle                                 | 1         | 1         |
| 865-FC             | In-Line Catch Basin - 36" Long with Construction Cover - Fits All Channels                   | 1         | 1         |
| 865-FCB            | In-Line Catch Basin - 36" Long with Debris Basket & Construction Cover - Fits All Channels   | 1         | 1         |
| 865-S15            | Screws for FastTrack Grates - 1/4-20 x 1-1/2" - Bag of 3                                     | 1         | 100       |

<sup>1</sup> Class D load rating requires use of 865-F grate frame | <sup>2</sup> Be sure to allow for sufficient slab thickness above the outlet and pipe | <sup>3</sup> Not for use with 865-F grate frame