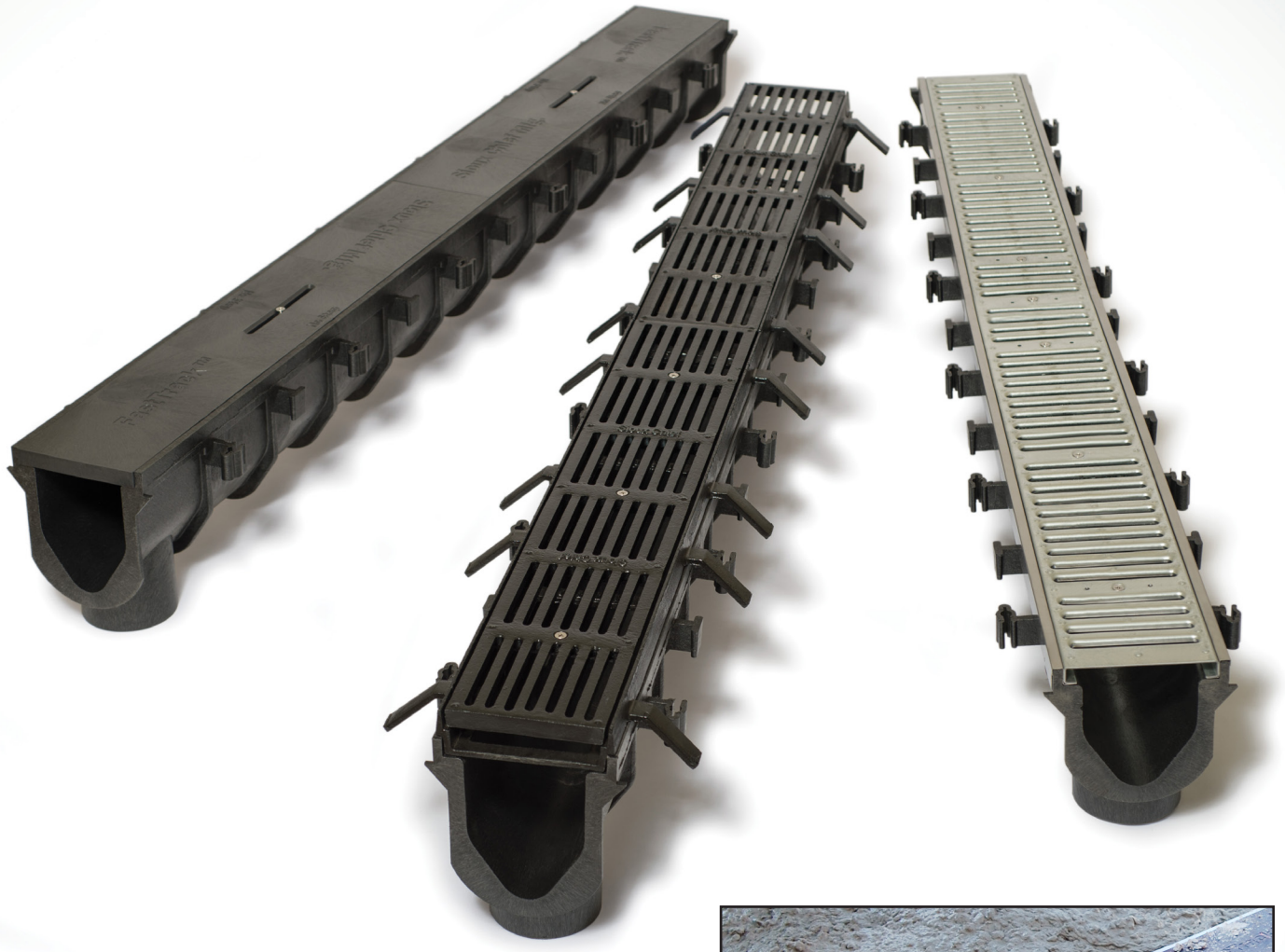
FastTrack™

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

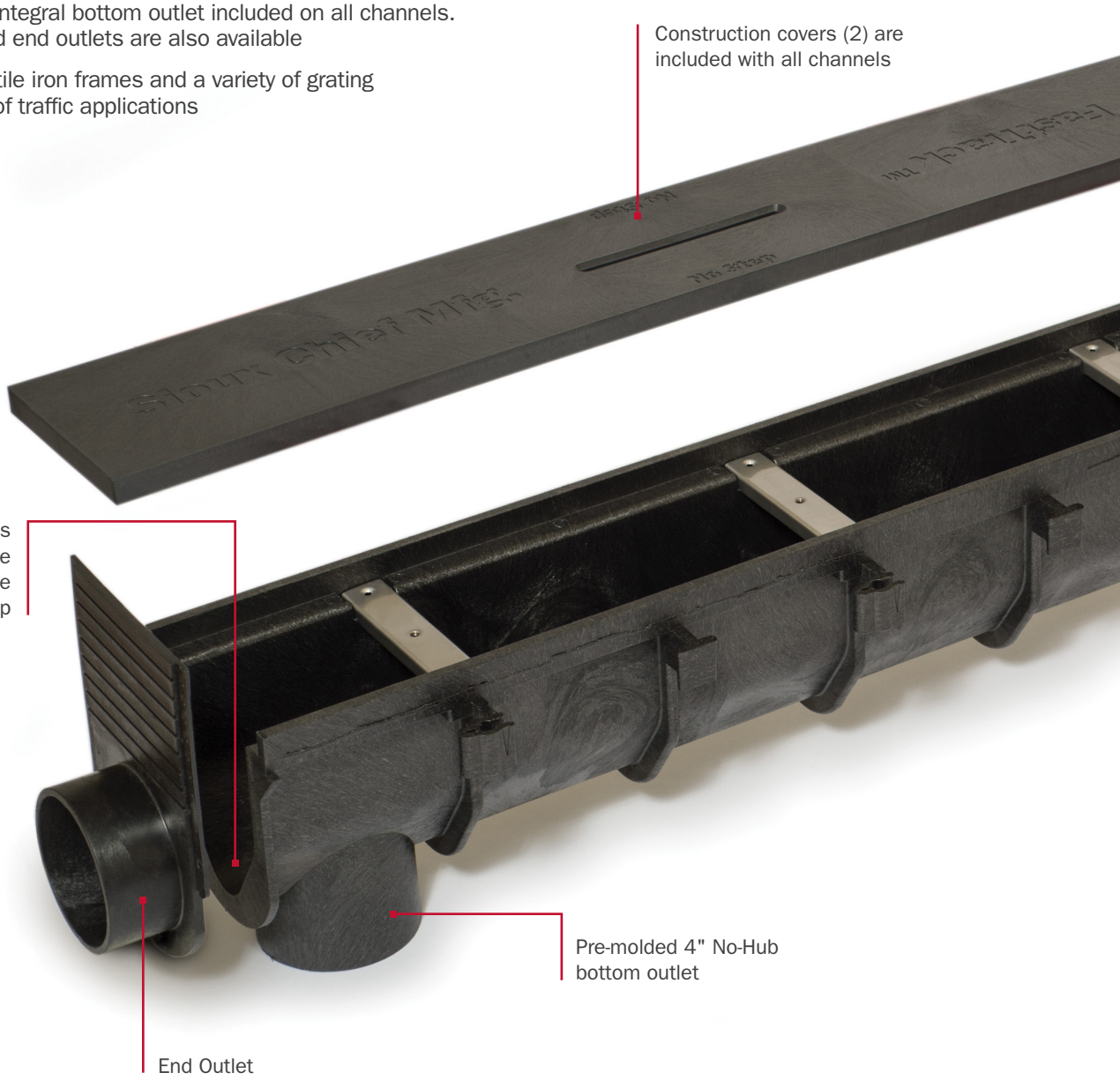
Sloped and neutral channels made from tough, lightweight, HDPE material.

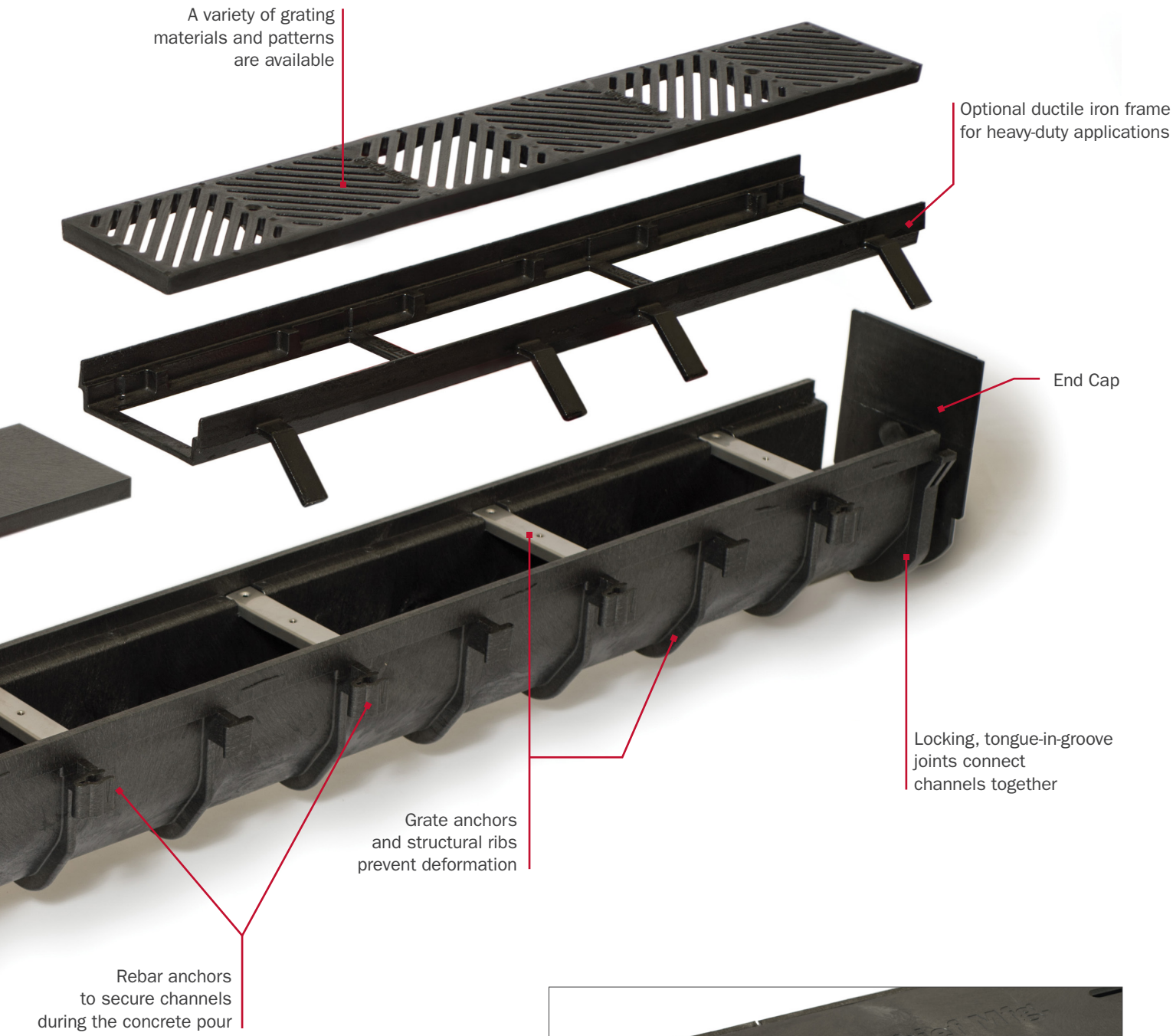
A variety of grating options for all types of traffic applications. Integral bottom outlets

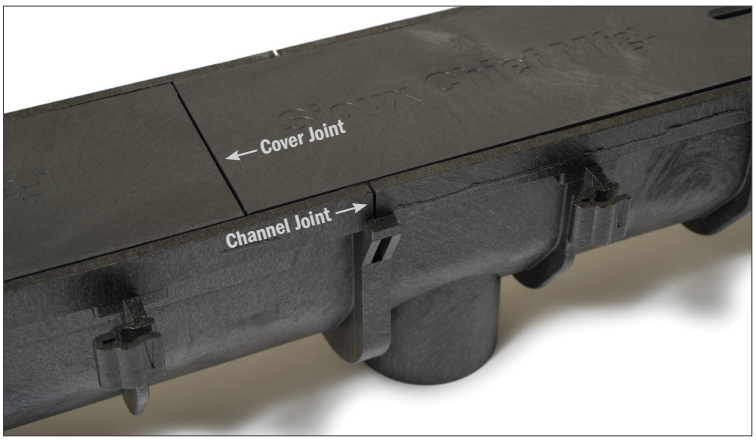
FastTrack™

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 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.

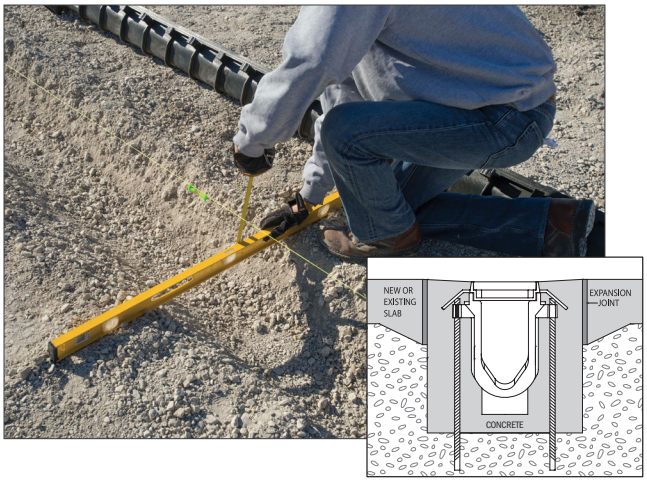
Plan/Excavate

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 ~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 ~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.

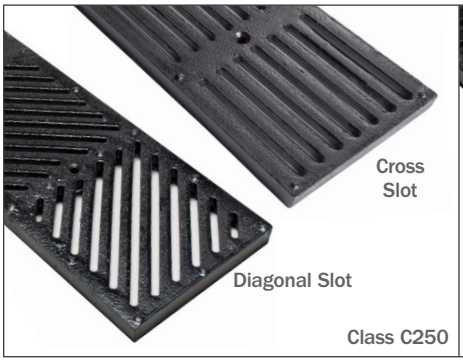
Pour the concrete slab around the installation and vibrate to eliminate voids in the pour.

Final Inspection

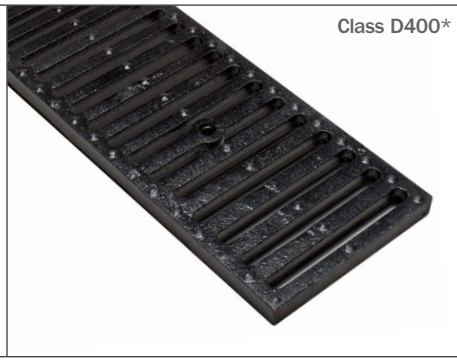
After the concrete takes final set (24 hrs. min), remove the construction covers. Inspect the installation to be sure channels and drain piping are free of debris.

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

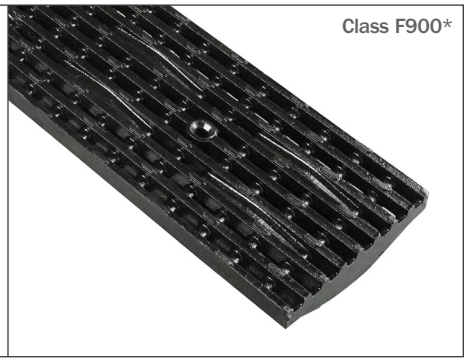
Grate Options



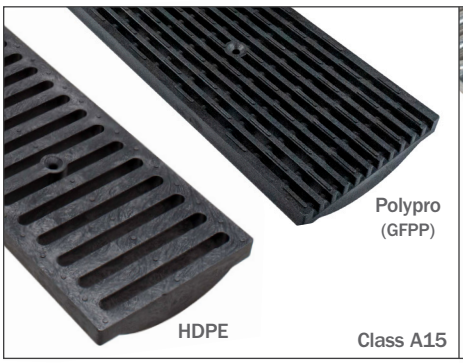
Slotted Ductile Iron
Enamel-coated ductile iron material with cross-slot or decorative, diagonal slot pattern. Parking areas and truck traffic at less than 15 mph.



Slotted Ductile Iron
Enamel-coated ductile iron material. Heavy duty applications, forklift and commercial vehicle traffic at less than 15 mph. **Class D400 when installed in iron frame only*



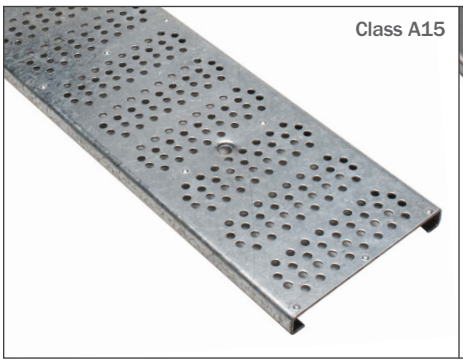
Slotted Ductile Iron
Enamel-coated ductile iron material. Airport and dock surfaces or other extreme wheel loads with traffic at less than 15 mph. **Class F900 when installed in iron frame only*



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

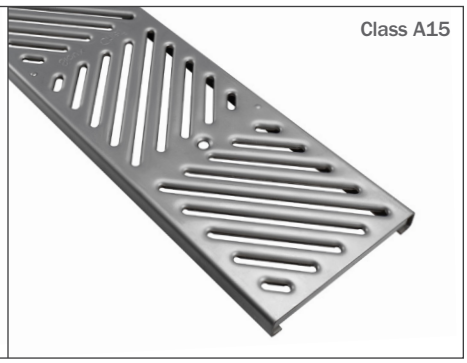
Slotted Stainless / Galvanized
Corrosion-resistant, 304 stainless steel or G90 galvanized material. For pedestrian, bicycle, and two-wheeled hand carts.

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

Grates are tested in accordance with the DIN EN 1433 standard

Class A15	Class B125	Class C250	Class D400	Class E600	Class F900
Loads up to 3,372 LBS	Loads up to 28,101 LBS	Loads up to 56,202 LBS	Loads up to 89,924 LBS	Loads up to 134,885 LBS	Loads up to 202,328 LBS
Walkways with pedestrian and light, two-wheeled hand cart traffic	Light-vehicle parking areas. Traffic at less than 15 mph.	Commercial vehicle parking areas. Traffic at less than 15 mph.	Heavy-duty, forklift and commercial vehicle.Traffic at less than 15 mph.	Industrial or high wheel load areas. Traffic at less than 15 mph.	Airports, docks or other extreme loads. Traffic at less than 15 mph.

For AASHTO requirement of HS-20/HS-25 we recommend using grates of Class C250 or above

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

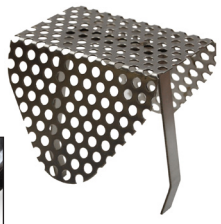
Enamel-coated ductile iron material. Prevents wear/impact damage to channel edges. Transfers traffic load into the surrounding concrete. Works with all grate styles/materials. Must be used with iron grates for Class D400 and F900 load requirements. Iron frames attach easily to the channel with screws.*

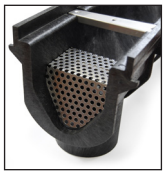
** Frames must be installed before concrete is poured.*

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

865-S1 865-S2 865-S3 865-S4 865-S5 865-S6 865-S7 865-S8 865-S9

Sloped & Neutral - One Direction 78 ft

865-S1 865-S2 865-N3 865-S3 865-S4 865-N5 865-S5 865-S6 865-N7 865-S7 865-S8 865-N9 865-S9

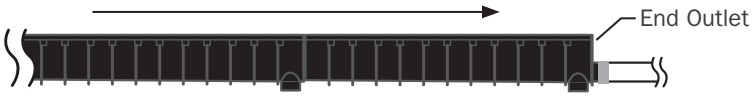
Neutral / No Slope

865-N3 865-N3 865-N3 865-N3 865-N3 865-N3

Outlet Type

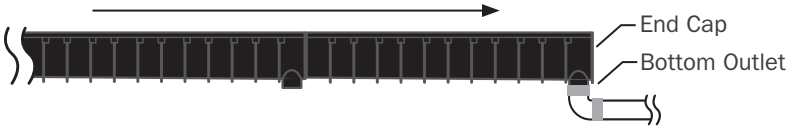
- FastTrack channels are designed with an integral bottom outlet or attach an end outlet for pipe connection
- Bottom and end outlet size is 4" no-hub - make connection to the pipe with standard no-hub couplings

End Outlet:



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

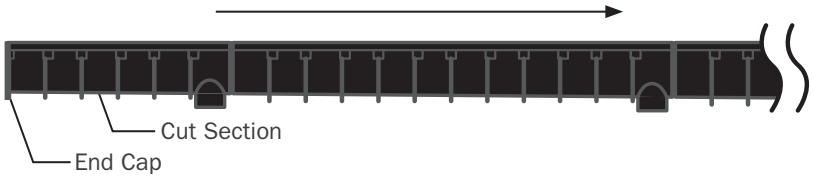
Bottom Outlet:



Cutting

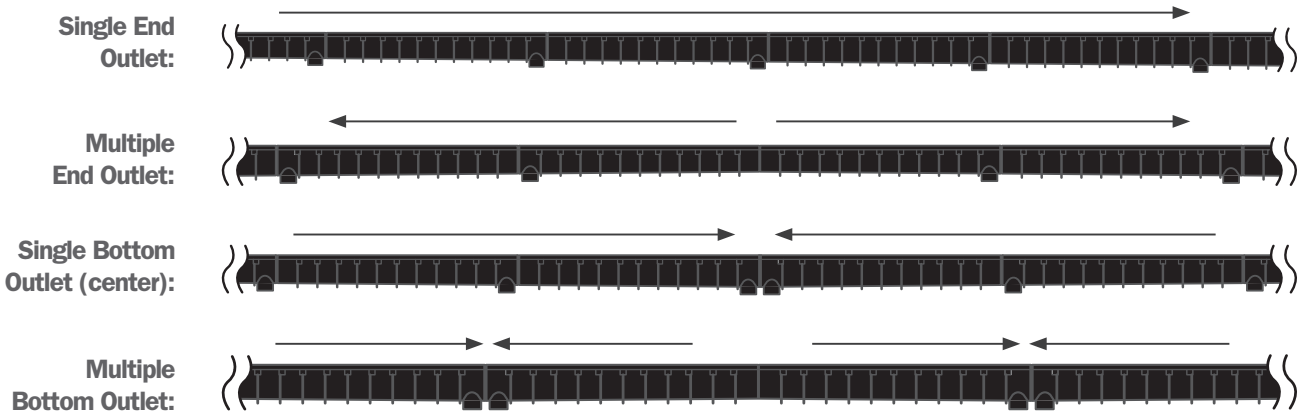
- FastTrack channels and grates can be cut to length with a handsaw or reciprocating saw
- Ribs on the channels are spaced at 6" intervals for quick measurements and allow for easy attachment of the end cap. Always cut end(s) opposite the outlet

Cut Section:



Outlet Location

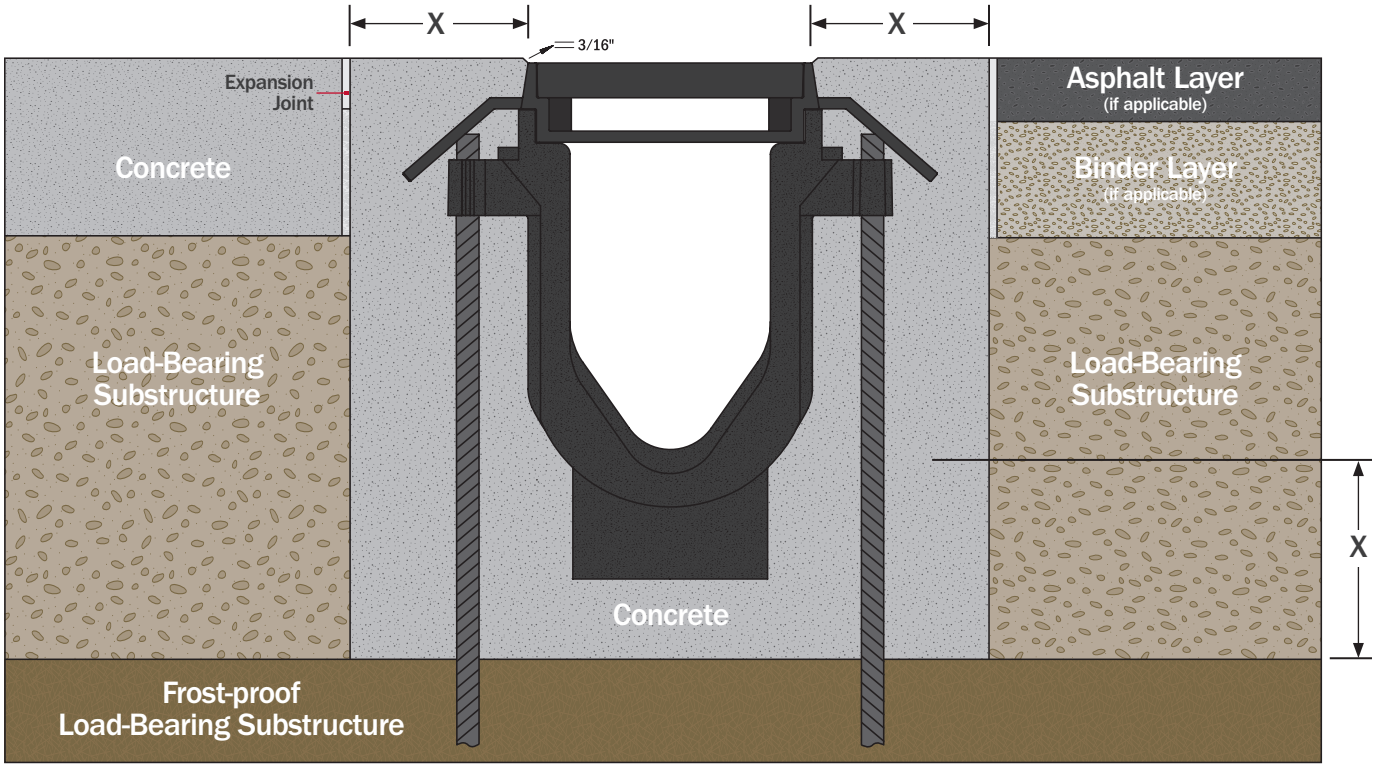
- Connect drain pipe to the FastTrack on the bottom of the channel or to the end
- Systems can be designed to slope to one end, to the center, to both ends or to multiple bottom outlets



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 D400 and F900. Frame is optional for Load Class A15 – C250

Encasement Dimensions (According to Calculation)	
LOAD CLASS	DIMENSION X
Class **A15**	4" (MIN 4,000 PSI)
Class **B125**	6" (MIN 4,000 PSI)
Class **C250**	6" (MIN 4,000 PSI)
Class **D400**	8" (MIN 4,000 PSI)
Class **E600**	10" (MIN 4,000 PSI)
Class **F900**	10" (MIN 4,000 PSI)



Chemical Resistance Guide

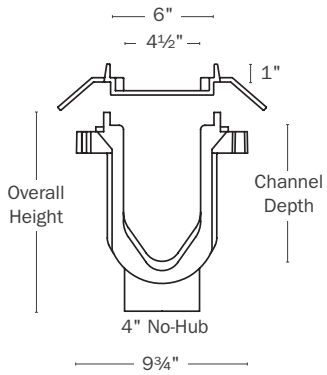
The following should be used for reference only. Many factors affect the chemical resistance of a product. A test under specific conditions should confirm the FastTrack is fully compatible with the application before installation.

Chemical	Max. Temp
Acetic Acid, 60%	70° F
Acetone	140° F
Alcohol	140° F
Aluminum Chloride	140° F
Ammonia	70° F
Ammonium Hydroxide	NR
Battery Acid	140° F
Beer	140° F
Benzene	NR
Borax	140° F
Boric Acid	140° F
Brake Fluid	140° F
Brine	140° F
Bromic Acid, 10%	140° F
Calcium Carbide	140° F
Calcium Chloride	140° F
Calcium Hypochlorite	140° F
Carbon Tetrachloride	NR
Carbonic Acid	140° F
Castor Oil	140° F
Caustic Soda	70° F
Chlorine Liquid	NR
Chlorobenzene	NR
Chloroform	NR
Citrus Juices	140° F
Coffee	140° F
Corn Oil	140° F
Cotton Seed Oil	140° F
Detergents (synthetic)	140° F
Dibutyl Ether	NR
Dichloroethane	NR
Diethylene Glycol	140° F
Disodium Phosphate	140° F
Emulsions, Photographic	140° F
Ethanol, 96%	140° F

Chemical	Max. Temp
Ethyl Acetate, 100%	NR
Ethyl Alcohol	140° F
Ethylene Glycol	140° F
Ethylene Dichloride	NR
Fluosilicic Acid	140° F
Formaldehyde, 30%	140° F
Fructose	140° F
Fuel Oil	140° F
Gallic Acid	140° F
Gasoline	70° F
Glucose	140° F
Glycerin	140° F
Glycolic Acid, 30%	140° F
Heptane	NR
Hexane	NR
Hydraulic Fluid	70° F
Hydrobromic Acid, 50%	140° F
Hydrochloric Acid, 35%	140° F
Hydrofluoric Acid, 75%	140° F
Hydrogen Peroxide, 30%	70° F
Isobutyl Alcohol	140° F
Isopropyl Alcohol	140° F
Jet Fuel	140° F
Kerosene	70° F
Lactic Acid, 90%	140° F
Lard	140
Lemon Oil	NR
Machine Oil	70° F
Methyl Ethyl Ketone	NR
Methanol	70° F
Methyl Alcohol	70° F
Milk	140° F
Mineral Oils	140° F
Naphtha	NR
Naphthalene	70° F

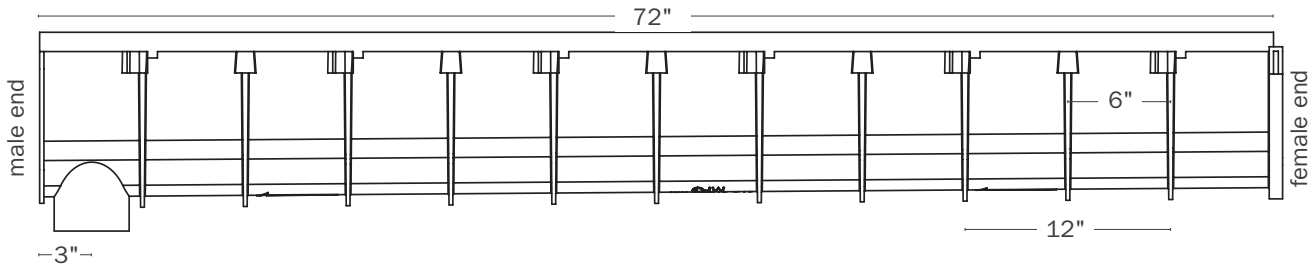
Chemical	Max. Temp
Nicotinic Acid	140° F
Nitric Acid, 70%	70° F
Nitrobenzene	NR
Olive Oil	140° F
Oxalic Acid	140° F
Paraffin Oil	70° F
Phenol	140° F
Phosphoric Acid, 90%	140° F
Pine Oil	NR
Potassium Bromide	140° F
Potassium Nitrate	140° F
Potassium Perchlorate, 10%	140° F
Potassium Sulfate	140° F
Propyl Alcohol	140° F
Propylene Glycol	140° F
Salicylic Acid	140° F
Sodium Carbonate	140° F
Sodium Hydroxide	140° F
Sodium Hypochlorite	140° F
Sodium Nitrate, 50%	140° F
Soybean Oil	140° F
Sulfuric Acid, 50%	140° F
Sulfuric Acid, 70%	70° F
Tannic Acid, 10%	140° F
Toluene	NR
Transformer Oil	70° F
Trichloroethylene	NR
Turpentine	NR
Urine	140° F
Vinegar	140° F
Water, Distilled	140° F
Whiskey / Wine	140° F
Xylene	NR
Zinc Oxide	140° 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[1]	Slope Type	Weight[2] Lbs.	Est. Flow Rate[3]	
	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.
CHANNELS			
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
GRATES			
865-GiS	Slotted Ductile Iron Grate with Screws - 36" Long - Class D400[1]	1	1
865-GiC	Cross-Slot Ductile Iron Grate with Screws - 36" Long - Class C250	1	1
865-GiCF	Cross-Slot Ductile Iron Grate with Screws - 36" Long - Class F900[1]	1	1
865-GiD	Diagonal-Slot Ductile Iron Grate with Screws - 36" Long - Class C250	1	1
865-GHS	Slotted HDPE Grate with Screws - 36" Long - Class A15	1	1
865-GHC	Cross-Slot GF Polypro Grate with Screws - 36" Long - Class A15	1	1
865-GSA	Angle-Slot Stainless Steel Grate with Screws - 36" Long - Class A15	1	1
865-GSB	Stainless Steel Brick Slot Grate with Screws - 36" Long - Class C250	1	1
865-GSBC	Stainless Steel Brick Slot Access Section (for use with 865-GSB) - 12" Long - Class C250	1	1
865-GSD	Perforated Stainless Steel Grate with Screws - 36" Long - Class A15	1	1
865-GSS	Slotted Stainless Steel Grate with Screws - 36" Long - Class A15	1	1
865-GSSR	Reinforced Slotted Stainless Steel Grate with Screws - 36" Long - Class C250	1	1
865-GGD	Perforated Galvanized Steel Grate with Screws - 36" Long - Class A15	1	1
865-GGS	Slotted Galvanized Steel Grate with Screws - 36" Long - Class A15	1	1
865-GGSR	Reinforced Slotted Galvanized Steel Grate with Screws - 36" Long - Class C250	1	1
ACCESSORIES			
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 Outlet - 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[3]	1	1
865-EO	End Outlet - HDPE with 4" No-Hub Connection[2] - 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 with Construction Cover - 36" Long - Fits All Channels	1	1
865-FCB	In-Line Catch Basin with Debris Basket & Construction Cover - 36" Long - Fits All Channels	1	1
865-S15	Screws for FastTrack Grates - 1/4-20 x 1-1/2" - Bag of 3	1	100

1 Class D400 or F900 load rating requires use of 865-F grate frame | 2 Be sure to allow for sufficient slab thickness above the outlet and pipe | 3 Not for use with 865-F grate frame

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