SMITH®
CUSTOMER DRIVEN

YOUR COMPLETE TRENCH DRAIN SOURCE

SOLUTIONS & MATERIALS

CAST IRON
2700 SERIES

POLYPROPYLENE
9900 SERIES

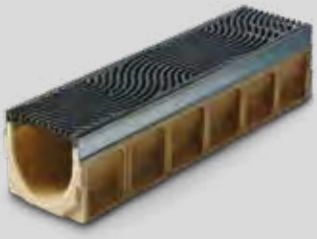
STAINLESS STEEL
9660-9679 SERIES

POLYMER CONCRETE
9800 SERIES

FIBERGLASS
9812-9872 SERIES

INDEX

Your COMPLETE Trench Drain Source



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CAST IRON TRENCH DRAINS

Figure Number 2710

Figure Number 2900

Figure Number 2710 - Heavy Duty Modular Cast Iron Trench Drains
Figure Number 2910 - Cast Iron Trench Grating

- Modular trench drains for loading docks, parking garages, elevated decks
- Heavy duty cast iron construction
- Option: Clamping Collar

CAST IRON

Heavy Duty Modular Cast Iron Trench Drains - Figure 2710

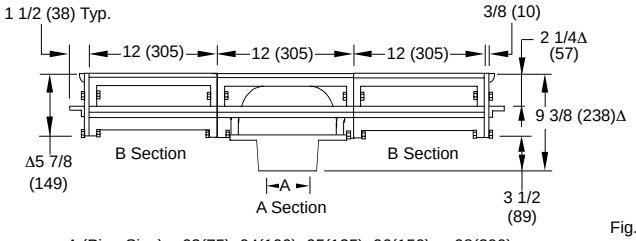
- Heavy duty cast iron construction
- Provides a wide, continuous trench
- Serves as a reservoir for large water runoff
- Available with flange and clamping collar
- Heavy duty grate rating per ASME A112.6.3

APPLICATIONS

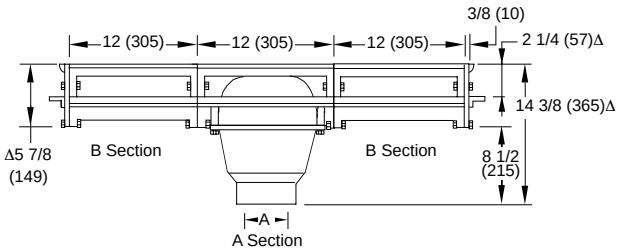
Loading Docks • Parking Decks

FEATURES

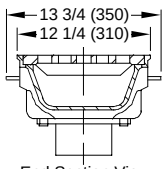
- Duco cast iron flanged body outlet
- Flanged end plate with cast iron anti-shift loose set square hole grate
- 12” (305 mm) width by 12” (305 mm) length grates
- Can also be used individually as an area drain



A (Pipe Size) = 03(75), 04(100), 05(125), 06(150) or 08(200)



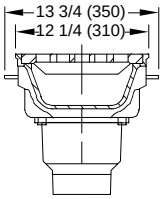
A (Pipe Size) = 03(75), 04(100), 05(125), 06(150) or 08(200)



End Section View

Fig. 2710C..... CAULK OUTLET
Fig. 2710Y..... NO-HUB OUTLET

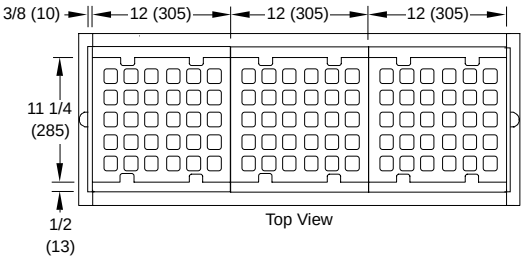
Shallow Hub Body



End Section View

FIG. 2710C (-DH) .....CAULK OUTLET
FIG. 2710Y (-DH) .....NO-HUB OUTLET

Deep Hub Body



Top View

Free Area
39.3 SQ IN
(254)SQ CM
(Each Section)

CAST IRON

Cast Iron Trench Grating
Figure 2900

- Designed for pedestrian traffic
- Frame and grate provide large free drainage area
- Continuous grate sections in overall lengths provide maximum versatility
- Heavy duty grate rating per ASME A112.6.3

APPLICATIONS

Pedestrian Walkways • Outdoor Shopping Centers
Promenade Areas

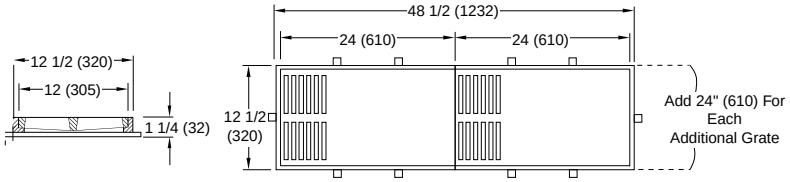


Fig. 2940 . . . 1 Grate Only - 12 (305) x 24 (610)
Fig. 2941 . . . 1 Grate with Frame - 12 1/2 (324) x 24 1/2 (620)
Fig. 2942 . . . 2 Grates with Frame - 12 1/2 (320) x 48 1/2 (1232)

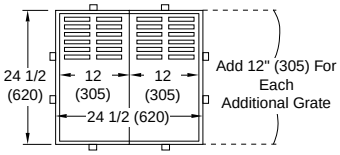


Fig. 2952 . . . 2 Grates with Frame - 24 1/2 (620) x 24 1/2 (620)
Fig. 2953 . . . 3 Grates with Frame - 24 1/2 (620) x 36 1/2 (925)
Fig. 2954 . . . 4 Grates with Frame - 24 1/2 (620) x 48 1/2 (1232)

Figure 2940

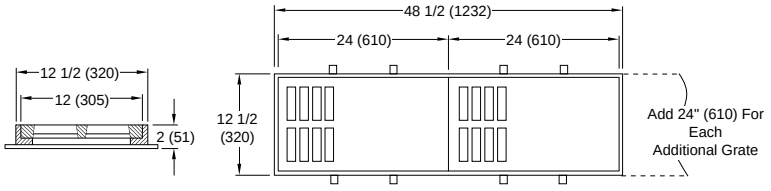


Fig. 2970 . . . 1 Grate Only - 12 (305) x 24 (610)
Fig. 2971 . . . 1 Grate with Frame - 12 1/2 (320) x 24 1/2 (620)
Fig. 2972 . . . 2 Grates with Frame - 12 1/2 (320) x 48 1/2 (1232)

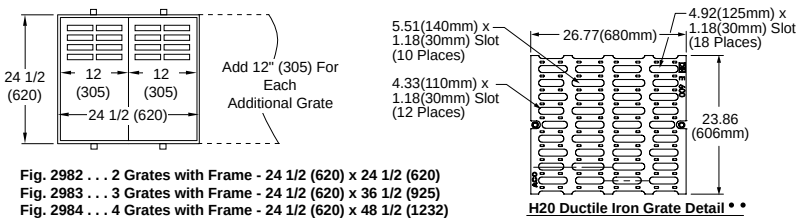


Fig. 2982 . . . 2 Grates with Frame - 24 1/2 (620) x 24 1/2 (620)
Fig. 2983 . . . 3 Grates with Frame - 24 1/2 (620) x 36 1/2 (925)
Fig. 2984 . . . 4 Grates with Frame - 24 1/2 (620) x 48 1/2 (1232)

Figure 2970

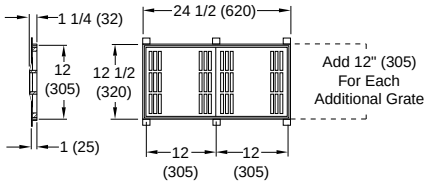
FEATURES

- Duco Cast Iron grate with steel frame
- Grate and frame provide large free drainage area

2910, 2920 - Light duty, designed for pedestrian traffic only

2940, 2950 - Medium duty, designed for pedestrian traffic only

2970, 2980 - Heavy duty, designed for heavy trucks and traffic. 2970-M ductile iron slotted grate is H-20 rated



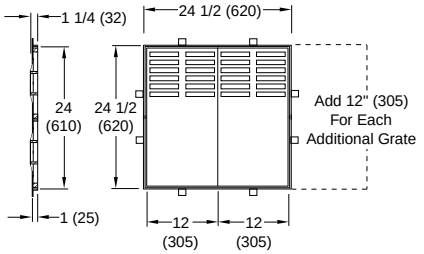


Figure 2910

ENVIRO-FLO® POLYPROPYLENE TRENCH DRAINS

6” AND 12” WIDE - 9930 - 9960 SERIES

6” Zip Trench™
Figure Number 9940
Load class A - E

6” Enviro-Flo® II
Figure Number 9930
Load Class A, B, C

6” Enviro-Flo® II
Figure Number 9931
Load Class A - E

12 “ Zip Trench™
Figure Number 9960
Load class A - E

Figure Number 9930 - 6” Wide Enviro-Flo® II Polypropylene Trench Drains

Figure Number 9931 - 6” Wide Enviro-Flo® II Polypropylene Trench Drains with Steel Frame System for Extra Heavy Duty Applications

Figure Number 9940 - 6” Wide Zip Trench™ Polypropylene Trench Drains

Figure Number 9960 - 12” Wide Zip Trench™ Polypropylene Trench Drains

- Lightweight, interlocking polypropylene channels
- Durable and versatile
- Ideal for heavy duty applications
- Superior chemical and UV resistance

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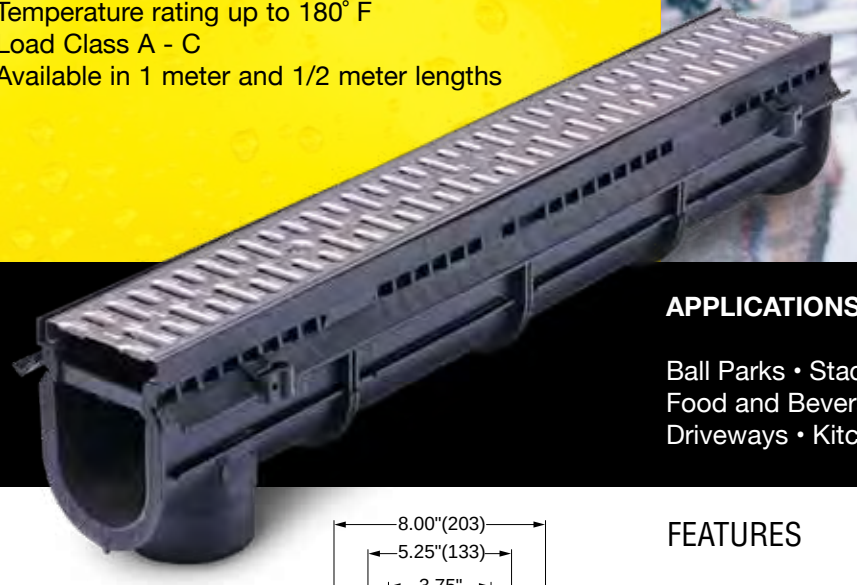
POLYPROPYLENE DRAIN SYSTEM

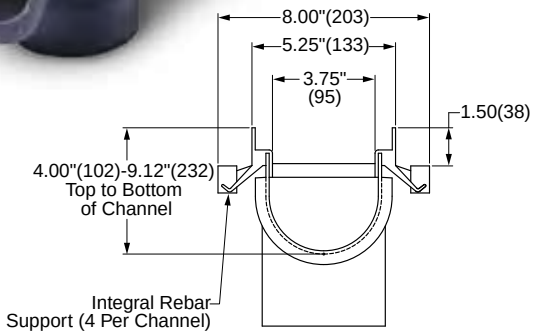
6” Wide Enviro-Flo® II Trench Drains
Figure 9930

- Lightweight, interlocking polypropylene channels are ideal for heavy duty applications
- Excellent chemical resistance
- Superior UV resistance
- Bottom outlet on every section
- Temperature rating up to 180˚ F
- Load Class A - C
- Available in 1 meter and 1/2 meter lengths

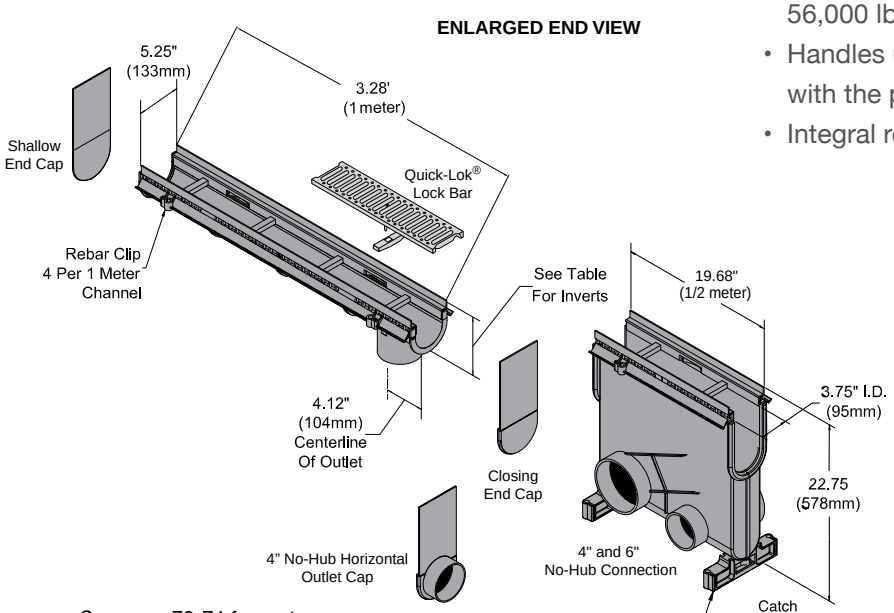


APPLICATIONS

Ball Parks • Stadiums • Chemical Processing Plants
Food and Beverage • Breweries • Swimming Pools
Driveways • Kitchens • Greenhouses



ENLARGED END VIEW



See page 73-74 for grates.

FEATURES

- Utilizes the QuickLok® grate feature that allows the grating to be secured and removed without bolting or screwing to the channel easily
- Built-in slope of 0.6% and radiused bottom
- Load Classes A-C depending on grate selection
- Heavy Duty EN1433 Load Class C: 56,000 lbs - 1,162 psi
- Handles up to Load Class C pneumatic tire with the proper grate selection
- Integral rebar support

Note: The #20 channel section that is 9 1/8” deep mates to the 9935 catch basin

9930 Trench Drains with Catch Basin

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp. Please contact Jay R. Smith Trench Drain team at 800-467-6484 for assistance when flashing flange or flashing are required.

Patent No. 10,047,512

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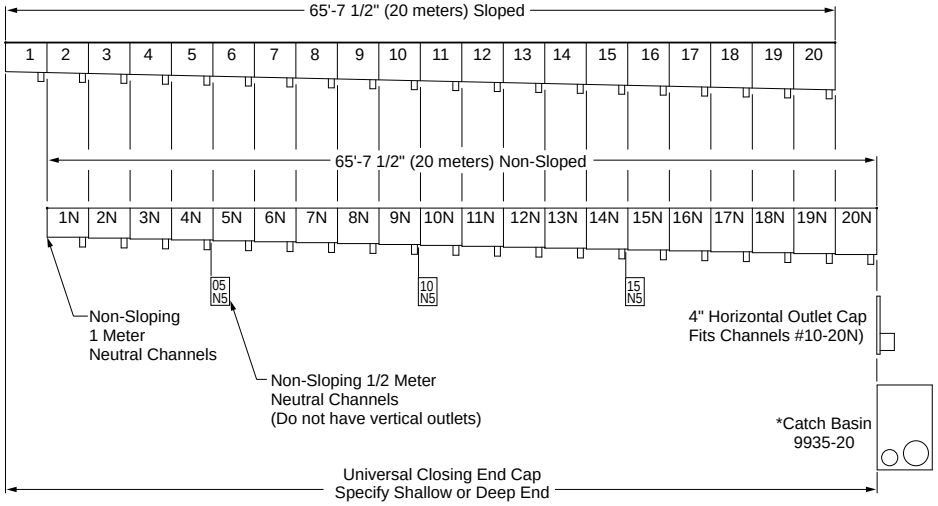
Enviro-Flo® II Polypropylene Trench Drains - Figure 9930



HYDRAULIC CAPACITY AND TRENCH DEPTH 9930 SYSTEM								
Channel Number	Shallow End Depth		Deep End Depth		Slope	Single Channel		Weight Lbs.
	Inch	mm	Inch	mm		Est. CFS	Est. GPM	
9930-1	4.00	102	4.38	111	0.6%	0.29	130	6.50
9930-1N	4.38	111	4.38	111	0.0%	0.29	130	6.50
9930-2	4.38	111	4.62	117	0.6%	0.31	139	6.60
9930-2N	4.62	117	4.62	117	0.0%	0.31	139	6.60
9930-3	4.62	117	4.88	124	0.6%	0.34	153	6.80
9930-3N	4.88	124	4.88	124	0.0%	0.34	153	6.80
9930-4	4.88	124	5.12	130	0.6%	0.36	162	6.90
9930-4N	5.12	130	5.12	130	0.0%	0.36	162	6.90
9930-5	5.12	130	5.38	137	0.6%	0.39	175	7.00
9930-5N	5.38	137	5.38	137	0.0%	0.39	175	7.00
9930-6	5.38	137	5.63	143	0.6%	0.42	189	7.20
9930-6N	5.63	143	5.63	143	0.0%	0.42	189	7.20
9930-7	5.63	143	5.88	149	0.6%	0.45	202	7.40
9930-7N	5.88	149	5.88	149	0.0%	0.45	202	7.40
9930-8	5.88	149	6.12	155	0.6%	0.47	211	7.60
9930-8N	6.12	155	6.12	155	0.0%	0.47	211	7.60
9930-9	6.12	155	6.38	162	0.6%	0.49	220	7.60
9930-9N	6.38	162	6.38	162	0.0%	0.49	220	7.60
9930-10	6.38	162	6.62	168	0.6%	0.53	238	7.80
9930-10N	6.62	168	6.62	168	0.0%	0.53	238	7.80
9930-11	6.62	168	6.68	170	0.6%	0.56	251	8.00
9930-11N	6.68	170	6.68	170	0.0%	0.56	251	8.00
9930-12	6.68	170	7.12	181	0.6%	0.58	261	8.00
9930-12N	7.12	181	7.12	181	0.0%	0.58	261	8.00
9930-13	7.12	181	7.38	187	0.6%	0.62	274	8.40
9930-13N	7.38	187	7.38	187	0.0%	0.62	274	8.40
9930-14	7.38	187	7.62	194	0.6%	0.64	287	8.40
9930-14N	7.62	194	7.62	194	0.0%	0.64	287	8.40
9930-15	7.62	194	7.88	200	0.6%	0.67	301	8.60
9930-15N	7.88	200	7.88	200	0.0%	0.67	301	8.60
9930-16	7.88	200	8.12	206	0.6%	0.7	314	8.80
9930-16N	8.12	206	8.12	206	0.0%	0.7	314	8.80
9930-17	8.12	206	8.38	213	0.6%	0.73	328	8.80
9930-17N	8.38	213	8.38	213	0.0%	0.73	328	8.80
9930-18	8.38	213	8.62	219	0.6%	0.76	341	9.00
9930-18N	8.62	219	8.62	219	0.0%	0.76	341	9.00
9930-19	8.62	219	8.88	226	0.6%	0.79	355	9.20
9930-19N	8.88	226	8.88	226	0.0%	0.79	355	9.20
9930-20	8.88	226	9.12	232	0.6%	0.82	368	9.40
9930-20N	9.12	232	9.12	232	0.0%	0.82	368	9.40

Note: Channel flow rates based on channels less grates and open ended.

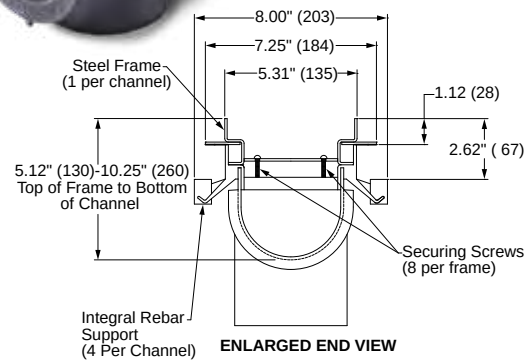
POLYPROPYLENE DRAIN SYSTEM

6” Wide Enviro-Flo® II Trench Drains with Extra Heavy Duty Frame System for Extra Heavy Duty Applications - Figure 9931

- Extra heavy duty to protect against hard wheel traffic
- Lightweight, interlocking polypropylene channels are ideal for heavy duty applications
- Excellent chemical resistance
- Superior UV resistance
- Meets or Exceeds the FAA requirement for castings
- Load Class A - E
- Available in 1 meter and 1/2 meter lengths

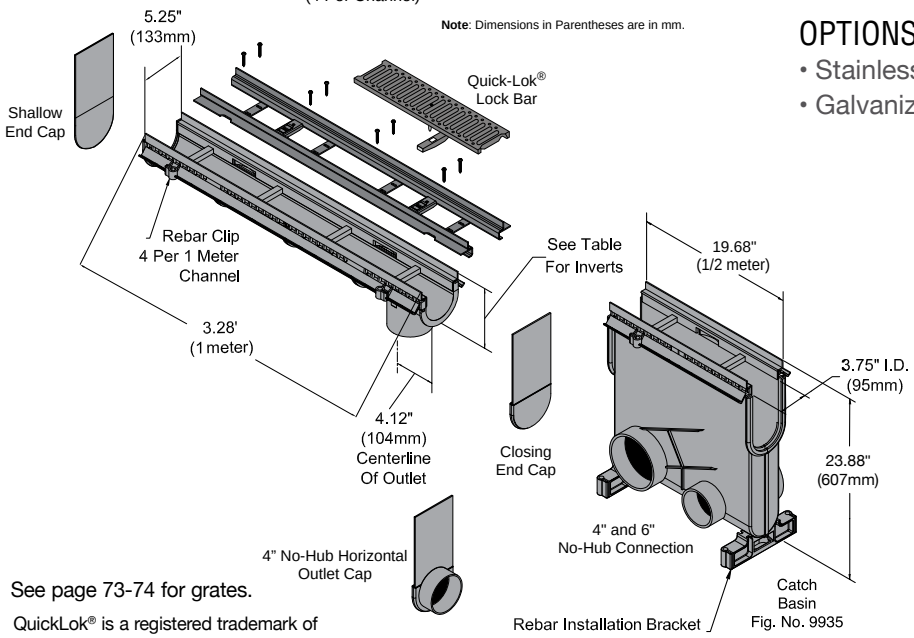
APPLICATIONS

Warehousing • Commercial Buildings • Hospitals
Fire and Police Stations • Hotels • Restaurants
Airports • Greenhouses



ENLARGED END VIEW

Note: Dimensions in Parentheses are in mm.



FEATURES

- Utilizes the QuickLok® grate feature that allows the grating to be secured to the channel easily
- Built-in slope of 0.6% and radiused bottom
- Supplied with secured grate
- Extra Heavy Duty EN1433 Class E: 135,000 - 2,788 psi
- For Commercial hard tire forklifts
- Integral rebar support

OPTIONS:

- Stainless Steel Heavy Duty Frames
- Galvanized and Steel Heavy Duty Frames

Note: The #20 channel section that is 10 1/4” deep mates to the 9936 catch basin

9931-HDF Trench Drains with Catch Basin

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp. Please contact Jay R. Smith Trench Drain team at 800-467-6484 for assistance when flashing flange or flashing are required.

If a waterproof membrane is required please contact Jay R. Smith Mfg. Co. for details or an alternative.

See page 73-74 for grates.

Patent No. 10,047,512

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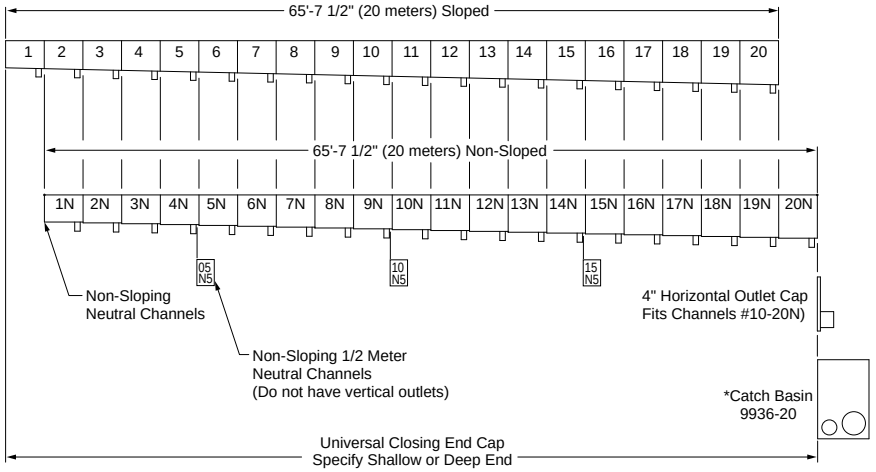
6” Wide Enviro-Flo® II Polypropylene Trench Drains with Extra Heavy Duty Frame System - Figure 9931



HYDRAULIC CAPACITY AND DEEP END DEPTHS 9931-HDF SYSTEM								
Channel Number	Shallow End Invert		Deep End Invert		Slope	Single Channel		Weight Lbs.
	Inch	mm	Inch	mm		Est. CFS	Est. GPM	
9931-1	5.12	130	5.50	140	0.6%	0.29	130	23.02
9931-1N	5.50	140	5.50	140	0.0%	0.29	130	23.02
9931-2	5.50	140	5.75	146	0.6%	0.31	139	23.12
9931-2N	5.75	146	5.75	146	0.0%	0.31	139	23.12
9931-3	5.75	146	6.00	152	0.6%	0.34	153	23.32
9931-3N	6.00	152	6.00	152	0.0%	0.34	153	23.32
9931-4	6.00	152	6.25	159	0.6%	0.36	162	23.42
9931-4N	6.25	159	6.25	159	0.0%	0.36	162	23.42
9931-5	6.25	159	6.50	165	0.6%	0.39	175	23.52
9931-5N	6.50	165	6.50	165	0.0%	0.39	175	23.52
9931-6	6.50	165	6.75	171	0.6%	0.42	189	23.72
9931-6N	6.75	171	6.75	171	0.0%	0.42	189	23.72
9931-7	6.75	171	7.00	178	0.6%	0.45	202	23.92
9931-7N	7.00	178	7.00	178	0.0%	0.45	202	23.92
9931-8	7.00	178	7.25	184	0.6%	0.47	211	24.32
9931-8N	7.25	184	7.25	184	0.0%	0.47	211	24.32
9931-9	7.25	184	7.50	191	0.6%	0.49	220	24.32
9931-9N	7.50	191	7.50	191	0.0%	0.49	220	24.32
9931-10	7.50	191	7.75	197	0.6%	0.53	238	24.32
9931-10N	7.75	197	7.75	197	0.0%	0.53	238	24.32
9931-11	7.75	197	8.00	203	0.6%	0.56	251	24.52
9931-11N	8.00	203	8.00	203	0.0%	0.56	251	24.52
9931-12	8.00	203	8.25	210	0.6%	0.58	261	24.52
9931-12N	8.25	210	8.25	210	0.0%	0.58	261	24.52
9931-13	8.25	210	8.50	216	0.6%	0.62	274	24.92
9931-13N	8.50	216	8.50	216	0.0%	0.62	274	24.92
9931-14	8.50	216	8.75	222	0.6%	0.64	287	24.92
9931-14N	8.75	222	8.75	222	0.0%	0.64	287	24.92
9931-15	8.75	222	9.00	229	0.6%	0.67	301	25.12
9931-15N	9.00	229	9.00	229	0.0%	0.67	301	25.12
9931-16	9.00	229	9.25	235	0.6%	0.7	314	25.32
9931-16N	9.25	235	9.25	235	0.0%	0.7	314	25.32
9931-17	9.25	235	9.50	241	0.6%	0.73	328	25.32
9931-17N	9.50	241	9.50	241	0.0%	0.73	328	25.32
9931-18	9.50	241	9.75	248	0.6%	0.76	341	25.52
9931-18N	9.75	248	9.75	248	0.0%	0.76	341	25.52
9931-19	9.75	248	10.00	254	0.6%	0.79	355	25.72
9931-19N	10.00	254	10.00	254	0.0%	0.79	355	25.72
9931-20	10.00	254	10.25	260	0.6%	0.82	368	25.92
9931-20N	10.25	260	10.25	260	0.0%	0.82	368	25.92

Note: Channel flow rates based on channels less grates and open ended.

Enviro-Flo® II – The Contractor Friendly System that Replaces Cast-in-Place Trench Drains

System Features

- Each section has a 4” molded no-hub bottom outlet connection
- Each channel is identified with flow arrow and sequence numbers
- Each channel has angular full length anchoring ribs
- Each channel is shipped with a removable factory insert board constructed from post-industrial recycled material that functions as a stabilizer and debris guard
- Horizontal outlet cap available
- Mechanical interlocking end caps

Integral Rebar Mount

Lightweight–Easy to Handle

- 98% recycled polypropylene with 2% carbon black
- Reduces installation costs in every aspect
- Easy field modification: cut, drill, machine, weld
- Superior chemical resistance
- Durable—non-breakable
- Handles up to 180˚ F

Enviro-Loc®

- Mechanical interlocking joint
- Alignment integrity maintained
- With proper sealant, provides a watertight connection

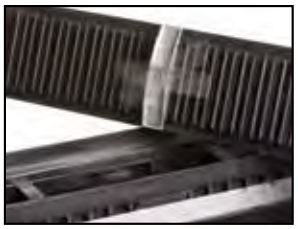
Vertical Outlet

The vertical outlet attaches to the Enviro-Flo® II accessory rail to create an outlet anywhere on the channel.

Enviro-Flo® II Trench Drains
Features and Benefits
Figure Number 9930 and 9931

Locking Grates

- Complete selection to meet all requirements
- Positive lockdown function means grates won't wobble
- No frames required to meet Load Class C Heavy Duty EN1433 up to 56,000 lbs. 1,162 psi
- Ease of Maintenance



Features for Enviro-Flo® II

- 20 sloping and 20 neutral channels
- Mounting System: Integral rebar clips or the Rante Arrow offer flexible installation options
- Secure Tongue & Groove Connections: Tongue and groove connectors retain more sealant for a more uniform joint
- Flexible Installation: Choose outlet location, create miter and tee connections with adapters, and shorten channels in the field

Numbered
The sequence number is molded on the hub

Flow Direction Arrow

Presloped Channels

- 1 meter (3.28 feet) channel sections speed installation
- Presloped (.6%) radius channels
- Smooth, uniform interior delivers best hydraulic performance

Rante Arrow Mount
Provides vertical and horizontal adjustments for quick and easy elevation set.

Patent No. 10,047,512

MADE IN USA

ENVIRO-FLO® II INSTALLATION TIPS

Integral Rebar Mounting System

1. If 9935 catch basin is required, insert channel on one end as shown above.

2. Align male and female ends of the channels.

3. Slide channels together. Ensure that channels are securely connected and correctly aligned.

4. Secure channel into the ground with rebar using integral rebar clips.

The Jay R. Smith Mfg. Co.® Enviro-Flo® II Systems with Enviro-Loc® joints are easy to install using the Integral Rebar Clips or Rante Arrow.

Always begin install at the outlet end.

See structural drawings for reinforcing of the concrete and location of expansion joints

For rebar installation, simply align male and female ends of channels and slide together as illustrated in photos 2 and 3.

After making the Enviro-Loc® connection, ensure that the channels are securely connected and aligned correctly, then insert rebar into the integral rebar clips and secure into the ground.

After securing the channel with rebar, span the channel joint with the factory furnished recycled board insert to protect channel grate recess, prevent debris from entering channel section and maintain proper channel and grate alignment.

ENVIRO-FLO® II INSTALLAT'ON TIPS
Rante Arrow™ Mounting System
Figure Number 9849NS

1. Align male and female ends of the channels.

2. Slide channels together.

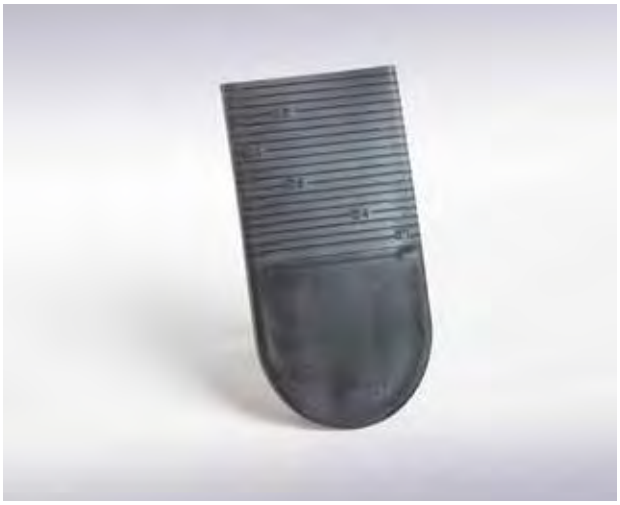
3. Ensure that channels are securely connected and properly seated in the Rante Arrow™ - Figure Number 9849NS.

4. Check for level to ensure that channels are installed properly.

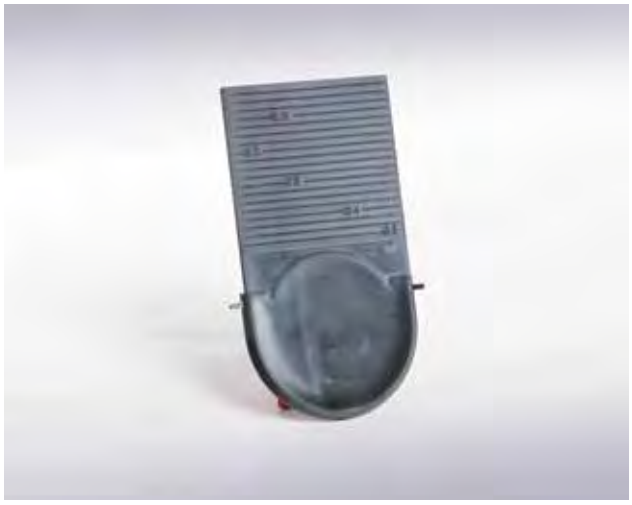
For Rante Arrow™ installation, simply align male and female ends of channels and slide together as illustrated in photos 1 and 2.

After making the Enviro-Loc® connection, span the channel joint with the factory furnished recycled board insert (photo 3) to protect channel grate recess, prevent debris from entering channel section and to maintain proper channel and grate alignment.

Enviro-Flo® II Accessories



Shallow End-Cap
Shallow end caps accommodate the shallow end of the channel and feature a cutting guide for a perfect fit.



Deep End-Cap
Deep end caps accommodate the deep end of the channel and feature a cutting guide for a perfect fit.

Horizontal Outlet Cap
This end cap fits channels #10-20N and creates a horizontal outlet.

No-Hub Outlet
The vertical outlet attaches to the Enviro-Flo II accessory rail to create an outlet anywhere on the channel.

9854 Strainer
Designed to fit a 4" diameter channel outlet hole, the strainer prevents debris from entering underground piping systems.

Chem-Calk 915 Sealant
Used to seal end caps and between channel sections. Can also be used as a sealant for custom miter or tee fabrications on the job site.

9931-EF Series Closing End Frame
The 9931 Frame attaches to the 9930 Enviro-Flo channel for Extra Heavy Duty Load Class E loads.

Available in Extra Heavy Duty Steel Frame (Painted Black), Extra Heavy Duty Stainless Steel, Extra Heavy Duty Galvanized Frame.
Utilizes QuickLok®. See page 63.

9853 Shovel Head
Shaped to match the inside diameter of all 4" I.D. channels, the 9853 Shovel Head is a convenient tool for channel cleaning.

9930-SSR Stainless Steel Rail
For aesthetic purposes only.
1 meter, 1/2 meter lengths. (Load Class "A" Grates)
When Load Class C or E are required, specify SSRHD.

9849NS Rante-Arrow

The 9849NS Rante-Arrow is designed for use with the 9930 and 9931 systems. The 9849NS Rante-Arrow firmly anchors the channel system in most sub-base conditions, eliminating flotation and allowing for a monolithic pour. Provides vertical and horizontal adjustments for quick and accurate elevation set.

Enviro-Flo® II Systems Customizations

Male Coupling

The male coupling allows two male channel ends to be joined together, offering contractors greater flexibility to make adjustments in the field.

Allows for a design that incorporates the high point in the middle of run.

Tee Connection

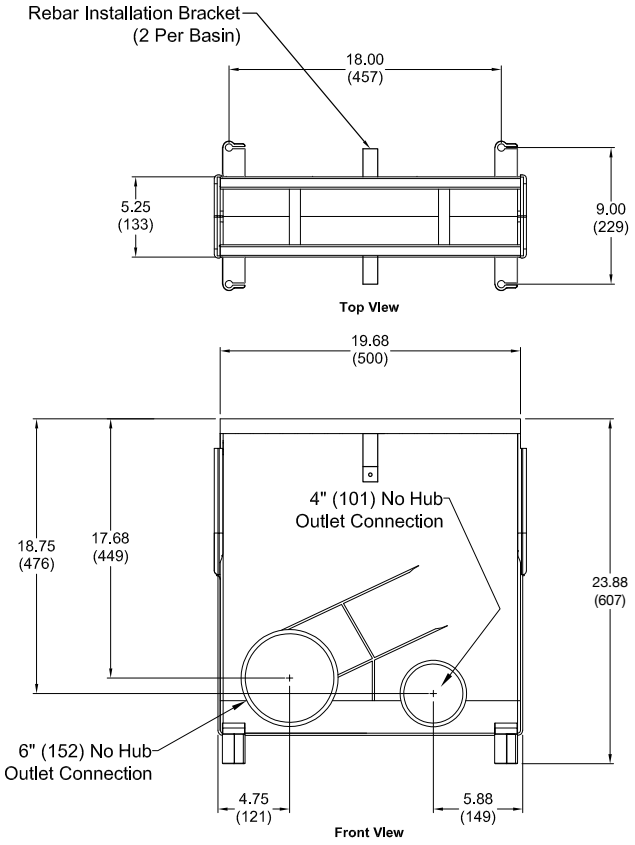
The tee connection allows contractors to make quick and easy tee connections in the field.

Custom Factory Fabrications

Factory fabrications are available upon request and are designed and manufactured to meet your specific requirements.

9935/9936 Catch Basins with Trash Bucket

The 9935 and 9936 Series Catch Basins are the same width as the 9930 or 9931 Channels. They can be used with any style 9930 or 9931 frame and grate options. Trash bucket in plastic material is available for easy removal of debris. Reference pages 73 and 74 for complete grate information.



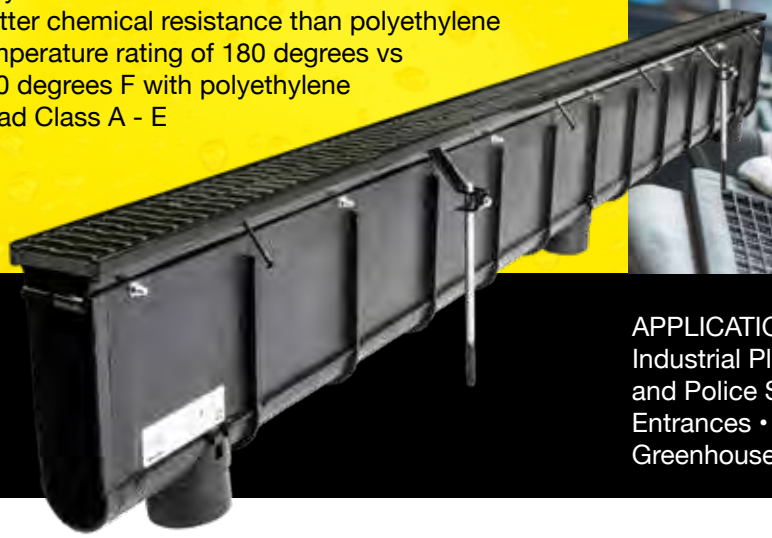
When 9936 is specified, add 1.12” (28) to overall height of catch basin shown

POLYPROPYLENE DRAIN SYSTEM

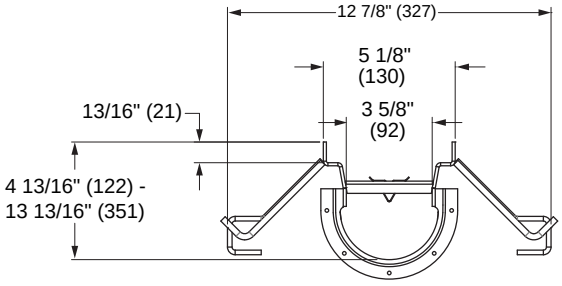
ZIP TRENCH™

6” Wide Trench with Drains Extra Heavy Duty Frame- Figure 9940

- 0-60 feet in 6 sections
- Lighter weight and faster to install than polymer concrete
- Better chemical resistance than polyethylene
- Temperature rating of 180 degrees vs 140 degrees F with polyethylene
- Load Class A - E



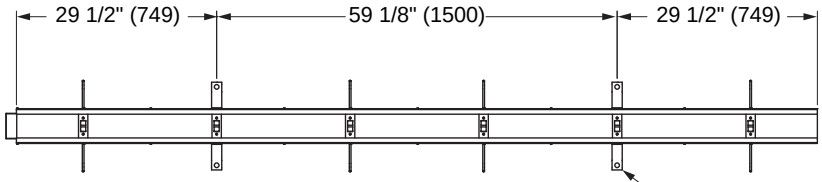
APPLICATIONS
Industrial Plants • Warehousing • Pedestrian Walkways Fire and Police Stations • Commercial and Industrial Driveway Entrances • Petrochemical Processing Plants Greenhouses



ENLARGED END VIEW

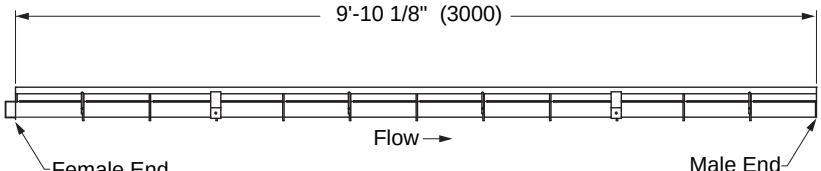
ZIP TRENCH™ FEATURES:

- **Fast, long, pre-assembled runs shipped from factory**: 9’-10” (3 meter) long channels
- 18 Channels - 12 sloping channels and 6 neutral channels from a depth of 4.81” to 13.81”
- Built-in slope .6%
- See grates on pages 73-74



TOP VIEW

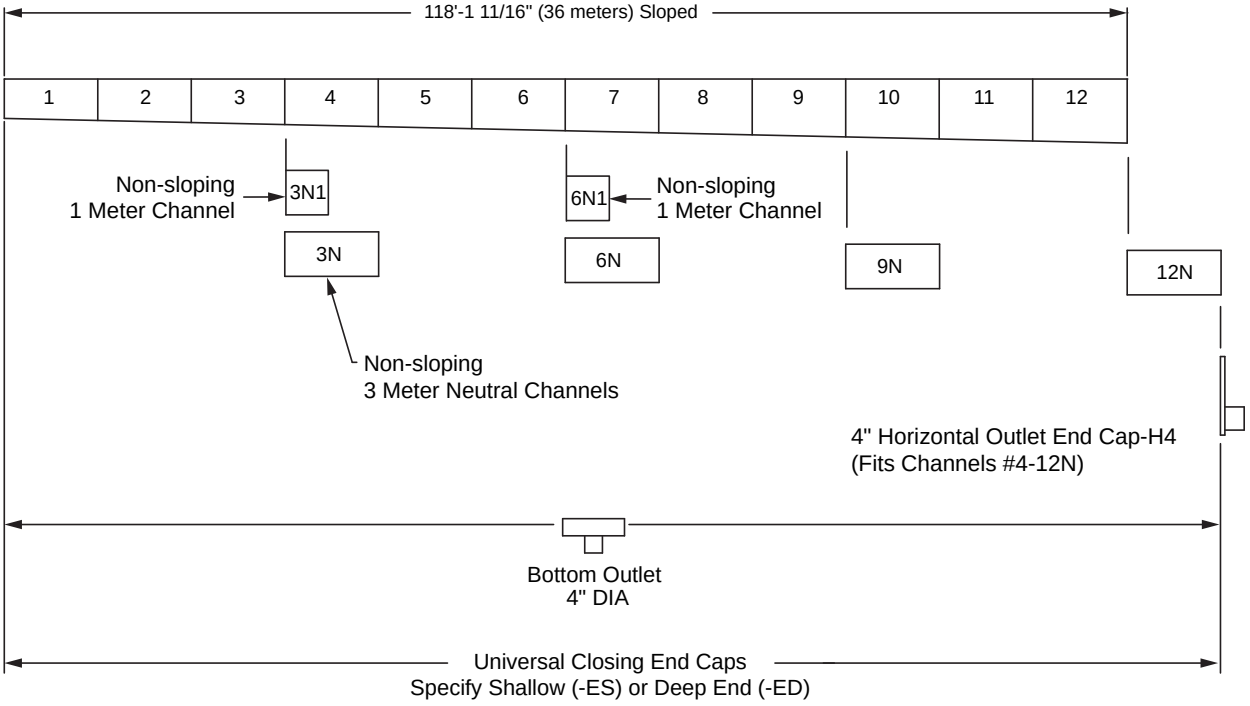
Welded Installation Device
For Rebar Support
(4 Per Frame)
(Rebar Posts By Others)



SIDE VIEW

ZIP TRENCH™

6” Wide Trench Drain System
Figure 9940



Channel Number	Shallow End Invert		Deep End Invert		Slope	Single Channel		Weight Lbs.
	Inch	mm	Inch	mm		Est. CFS	Est. GPM	Frame + Channel
9940-1	4.81	122	5.56	141	0.6%	.29	130	38.00
9940-2	5.56	141	6.31	160	0.6%	.31	139	39.00
9940-3	6.31	160	7.06	179	0.6%	.34	153	40.00
9940-3N1	7.06	179	7.06	179	0.0%			13.00
9940-3N	7.06	179	7.06	179	0.0%			40.00
9940-4	7.06	179	7.81	198	0.6%	.36	162	41.00
9940-5	7.81	198	8.56	267	0.6%	.39	175	42.00
9940-6	8.56	267	9.31	236	0.6%	.42	189	44.00
9940-6N1	9.31	236	9.31	236	0.0%			15.00
9940-6N	9.31	236	9.31	236	0.0%			44.00
9940-7	9.31	236	10.06	256	0.6%	.45	202	45.00
9940-8	10.06	256	10.81	275	0.6%	.47	211	47.00
9940-9	10.81	275	11.56	294	0.6%	.49	220	49.00
9940-9N	11.56	294	11.56	294	0.0%			51.00
9940-10	11.56	294	12.31	313	0.6%	.53	238	51.50
9940-11	12.31	313	13.06	332	0.6%	.56	251	51.00
9940-12	13.06	332	13.81	351	0.6%	.58	261	51.00
9940-12N	13.81	351	13.81	351	0.0%			51.00

Note: Channel flow rates based on channels less grates and open ended.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp. Please contact Jay R. Smith Trench Drain team at 800-467-6484 for assistance when flashing flange or flashing are required.

If a waterproof membrane is required please contact Jay R. Smith Mfg. Co. for details or an alternative.

ZIP TRENCH™

Figure 9940 Features and Benefits

Polypropylene Material:

- Max temp of 180°F vs. 140°F for polyethylene
- Lighter weight and faster to install than cast-in-place.
- Better chemical resistance than polyethylene.
- Includes UV inhibitors.

Weight:

- Average weight—channel and frame without grates is 45 lbs.
- Grate weight is listed on pages 73-74.

Frames:

- One piece - 9.84' (3 meters) long.
- Ships assembled to channel
- 11 gauge
- *Extra heavy-duty painted steel frame is standard; also available in galvanized or stainless steel.*
- Channels have features that transfer the traffic load to encasement concrete, including:
  - Extra heavy-duty frames
  - 5 3/4" (3/8" diameter) anchoring lugs (8 per frame)
  - Welded-on rebar mounts

ZIP TRENCH™

Figure 9940 Features and Benefits

Outlets

- Snap on 4" no-hub vertical outlet can be located virtually anywhere on the channel
- End outlets and end caps available. (see page 22)

Other Views:

Grate types:

Class A - Stainless steel perforated and slotted
- Galvanized steel perforated and slotted
- Black polypropylene slotted and ADA

Class B - Stainless steel mesh

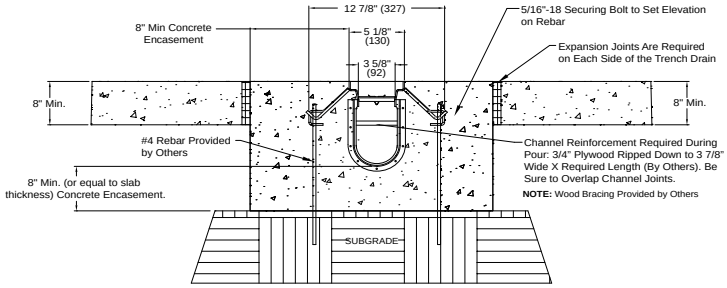
Class C - Stainless steel perforated, mesh and slotted
- Galvanized steel perforated, mesh, slotted and brickslot
- Ductile iron mosaic and decorative
- Plastic resin slotted

Class E - Stainless steel slotted
- Galvanized steel slotted
- Ductile iron slotted and AD

See page 73-74 for grates.

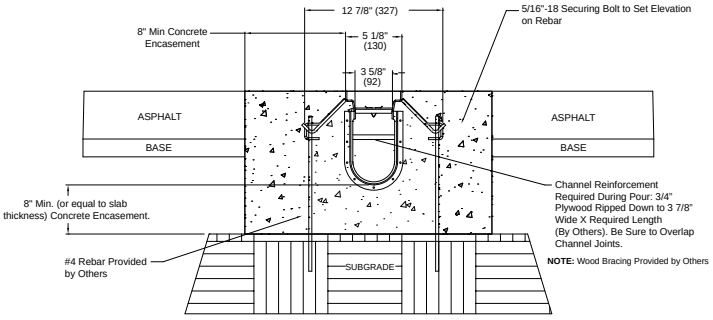
ZIP-TRENCH® INSTALLATION TIPS

LOAD CLASS E **9940**



INSTALLATION IN CONCRETE

LOAD CLASS E **9940**



INSTALLATION IN ASPHALT

The ZIP Trench® Drain System must have an excavation with a minimum of 4 inches of bedding concrete on ALL sides. The bedding concrete should be equal to slab thickness. Deeper and wider excavations will be needed for catch basins.

Each channel displays a number on the outside identifying its sequential location in the system. Arrows on both sides of the channel indicate flow direction. Channels should be laid out in numerical order alongside the completed excavation.

For full installation details, please reference the 9940/9960 ZIP Trench™ Technical Installation Guide in the Resources section of our website, www.jrsmith.com

Figure 9940 Accessories and Catch Basin

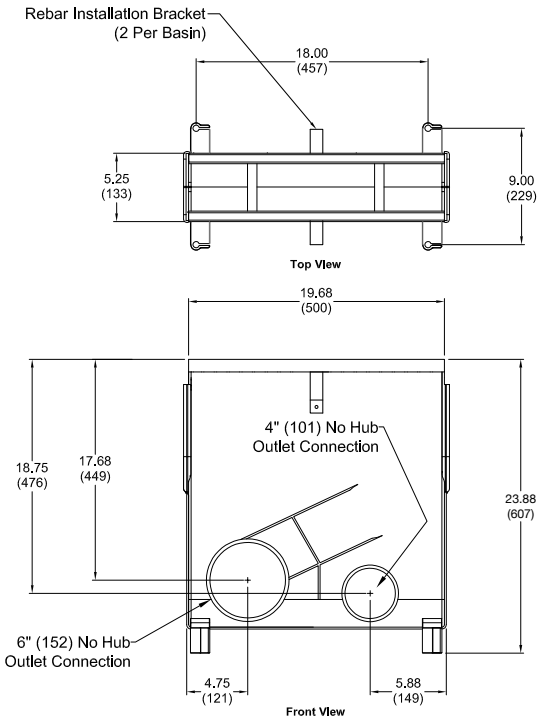
9940 SERIES ACCESSORIES

Horizontal Cap

End Cap

4" No-Hub Vertical Outlet Fitting (Snaps on anywhere on the channel)

9940-CB Catch Basin:



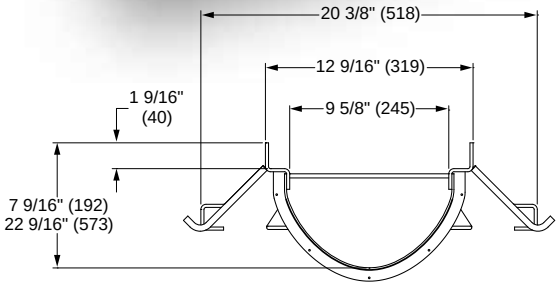
POLYPROPYLENE DRAIN SYSTEM

ZIP TRENCH™

12” Wide Trench Drains - Figure 9960

- 0-60 feet in 6 sections
- Lighter weight and faster to install than polymer concrete
- Better chemical resistance than polyethylene
- Temperature rating of 180 degrees vs 140 degrees F with polyethylene
- Load Class E

APPLICATIONS
Industrial Plants • Warehousing • Pedestrian Walkways Fire and Police Stations • Hangars • Airports
Commercial and Industrial Driveway Entrances
Petrochemical Processing Plants • Greenhouses



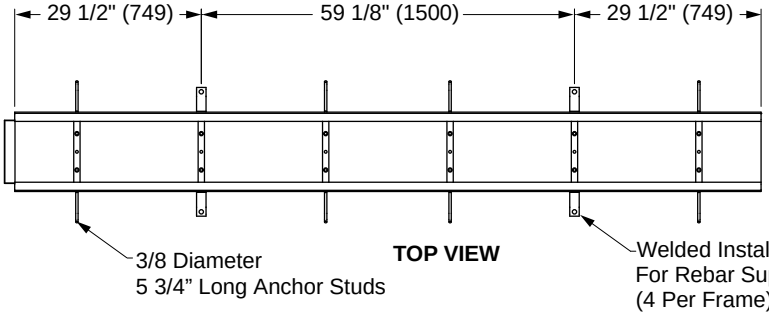
ENLARGED END VIEW

ZIP TRENCH™ FEATURES:

- Fast, long, pre-assembled runs: 9’-10” (3 meter) long channels
- 18 channels—12 sloping and 6 neutral from a depth of 7-9/16 “- 22-9/16”
- Built-in slope 1.07%
- 4 grate types:

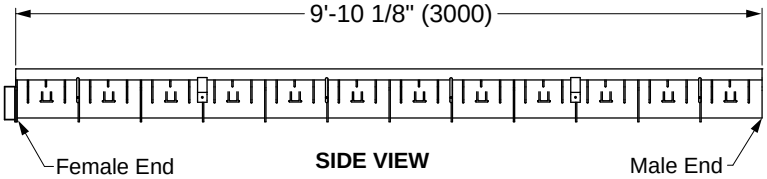
Class C - Stainless steel perforated and mesh
- Galvanized steel perforated and mesh

Class E - Ductile Iron ADA
- Ductile Iron Slotted



TOP VIEW

FRONT & SIDE VIEWS:

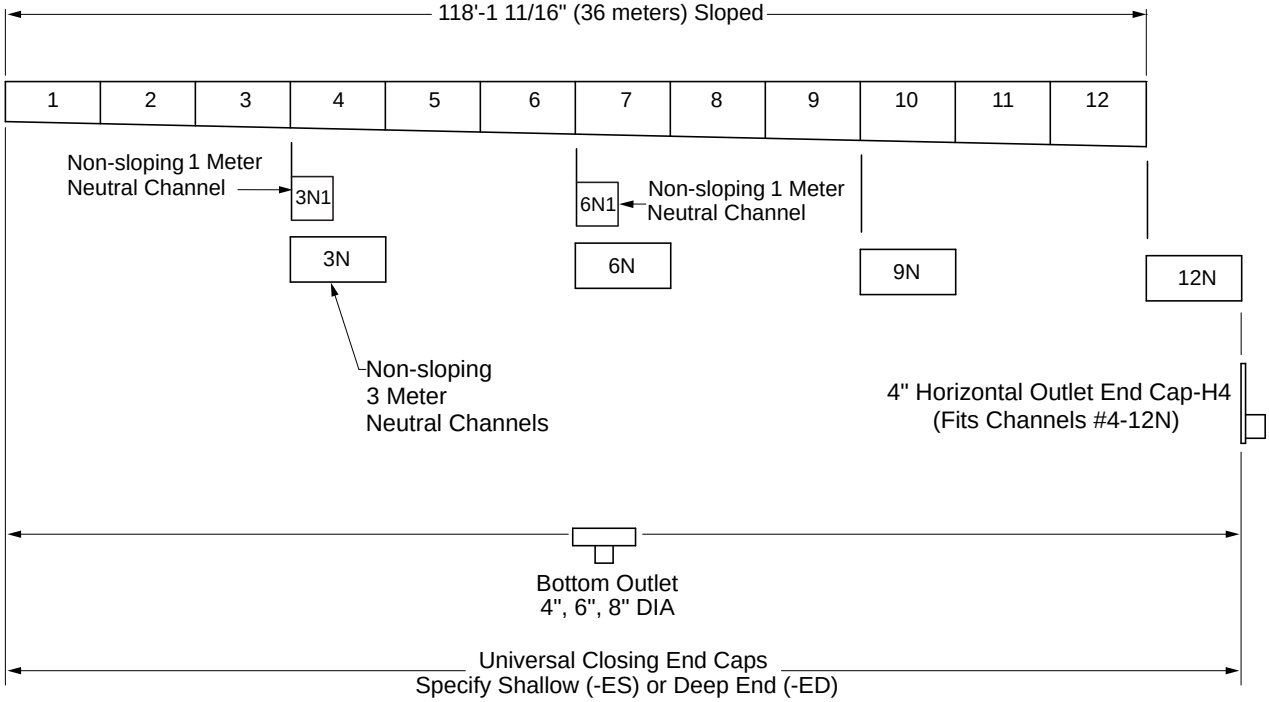


SIDE VIEW

MADE IN USA

ZIP TRENCH™

12” Wide Trench Drain System
Figure 9960



HYDRAULIC CAPACITY AND DEEP END DEPTHS 9960 SYSTEM									
Channel Number	Shallow End Invert Inch	mm	Slope	Deep End Invert Inch	mm	Slope	Single Channel Est. CFS	Est. GPM	Weight Lbs.
9660-1	7.56	192	1.07%	8.81	224	1.07%	1.85	830	76.00
9660-2	8.81	224	1.07%	10.06	256	1.07%	2.68	1205	79.00
9660-3	10.06	256	1.07%	11.31	287	1.07%	3.13	1407	81.00
9660-3N1	11.31	287	0.0%	11.31	287	0.0%	1.04	469	30.00
9660-3N	11.31	287	0.0%	11.31	287	0.0%	3.13	1407	81.00
9660-4	11.31	287	1.07%	12.56	319	1.07%	3.92	1760	83.00
9660-5	12.56	319	1.07%	13.81	351	1.07%	4.43	1990	86.00
9660-6	13.81	351	1.07%	15.06	383	1.07%	4.94	2220	89.00
9660-6N1	15.06	383	0.0%	15.06	383	0.0%	1.65	740	31.00
9660-6N	15.06	383	0.0%	15.06	383	0.0%	4.94	2220	89.00
9660-7	15.06	383	1.07%	16.31	414	1.07%	5.46	2450	92.00
9660-8	16.31	414	1.07%	17.56	446	1.07%	5.97	2680	94.00
9660-9	17.56	446	1.07%	18.81	478	1.07%	6.48	2910	97.00
9660-9N	18.81	478	0.0%	18.81	478	0.0%	6.48	2910	97.00
9660-10	18.81	478	1.07%	20.06	510	1.07%	7.00	3140	99.00
9660-11	20.06	510	1.07%	21.31	541	1.07%	7.51	3370	103.00
9660-12	21.31	541	1.07%	22.56	573	1.07%	8.00	3600	106.00
9660-12N	22.56	573	0.0%	22.56	573	0.0%	8.00	3600	106.00

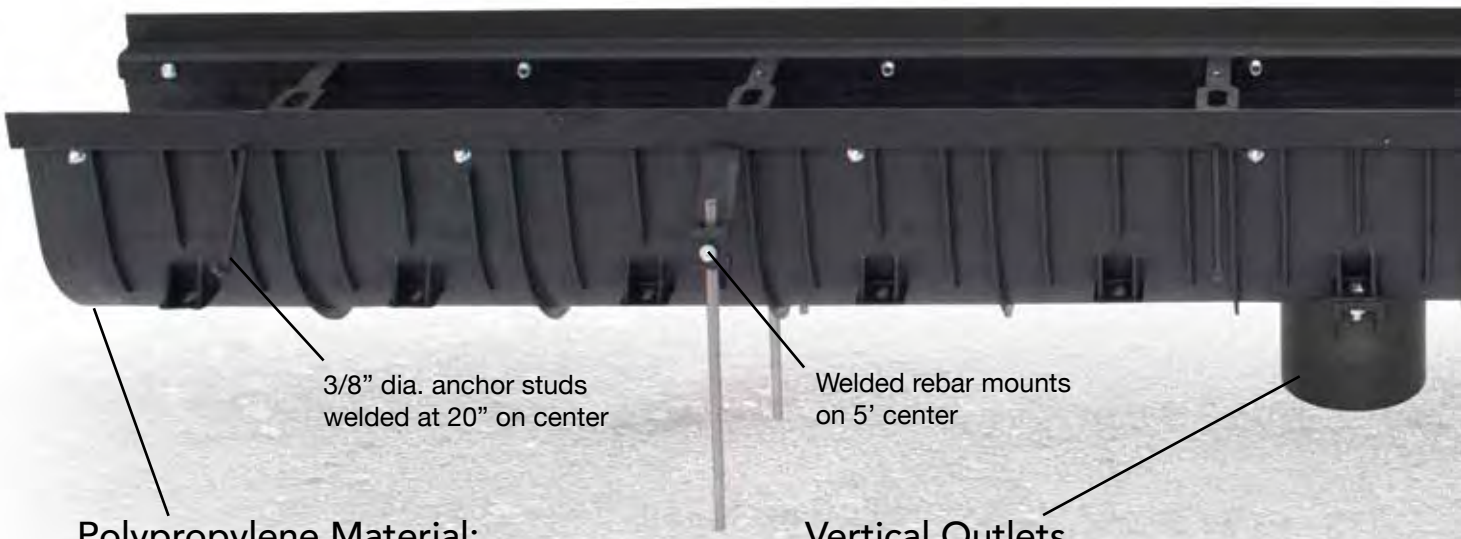
Note: Channel flow rates based on channels less grates and open ended.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

If a waterproof membrane is required please contact Jay R. Smith Mfg. Co. for details or an alternative.

ZIP TRENCH™

Figure 9960 Features and Benefits



Polypropylene Material:

- Max temp of 180°F vs. 140°F for polyethylene
- Lighter weight and faster to install than cast-in-place
- Better chemical resistance than polyethylene
- Includes UV inhibitors

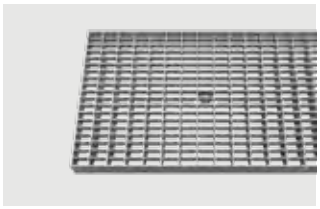
Vertical Outlets

- 4”, 6”, and 8” no-hub vertical outlets
- Mounting lugs on every 9-13/16” centers
- End outlets and end caps available

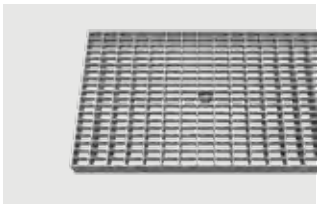
ZIP TRENCH™ GRATES

Heavy Duty

EN1433 **Load Class C**: 56,000 lbs - 1,162 psi. For commercial pneumatic tire traffic patterns, HS20 rated and tractor trailers.



Stainless Steel Mesh Grate -SSM
Lengths: 1 meter, ½ meter



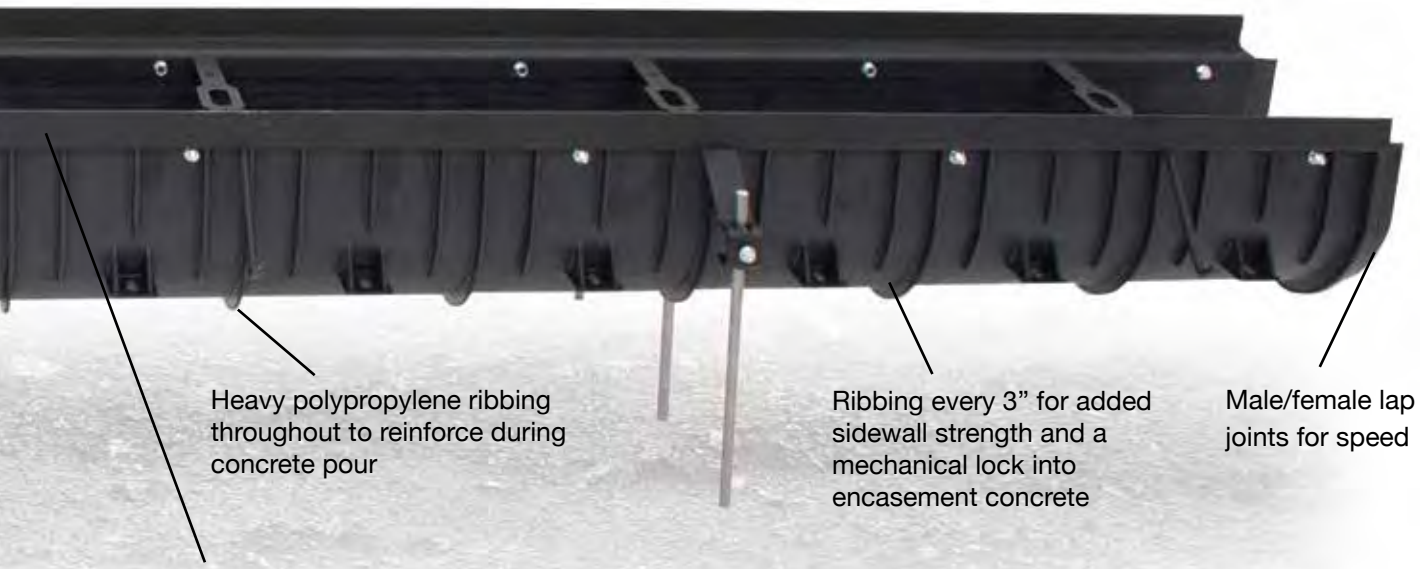
Galvanized Steel Mesh grate -GM
Lengths: 1 meter, ½ meter

Perforated Galv. Steel Grate -GP
Lengths: 1 meter, ½ meter

Perforated Stainless Steel Grate - SSP
Lengths: 1 meter, ½ meter

ZIP TRENCH™

Figure 9960 Features and Benefits



Frames:

- One piece - 9’-10” (3 meters) long. Frame Ships assembled to channel
- 7 gauge
- Extra heavy-duty painted steel frame is standard
- Transfers traffic load to surrounding concrete
- Optional Galvanized or Stainless Steel Frames

Weight:

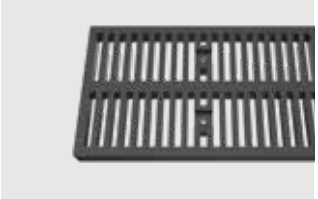
- Average weight—channel and frame without grates is 91 lbs

Extra Heavy Duty

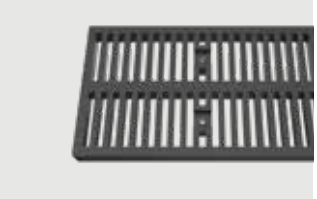
EN1433 **Class E**: 135,000 lbs - 2,788 psi. For commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels.

Ductile Iron ADA Grate -MADA
Length: ½ meter

Ductile Iron ADA Grate -MADAC
Length: ½ meter



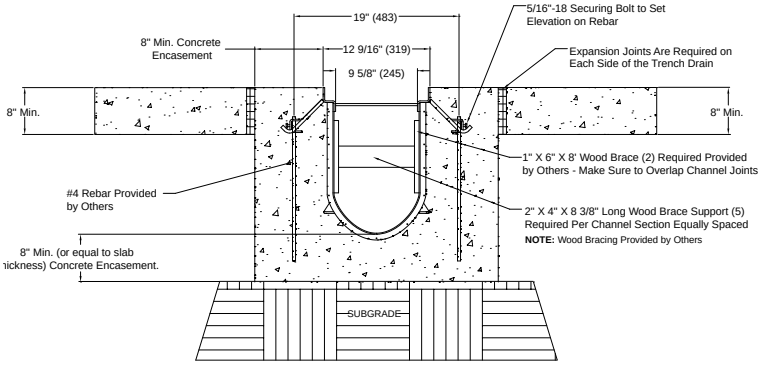
Ductile Iron Slotted Grate -M
Length: ½ meter



Ductile Iron Slotted Grate -MC
Length: ½ meter

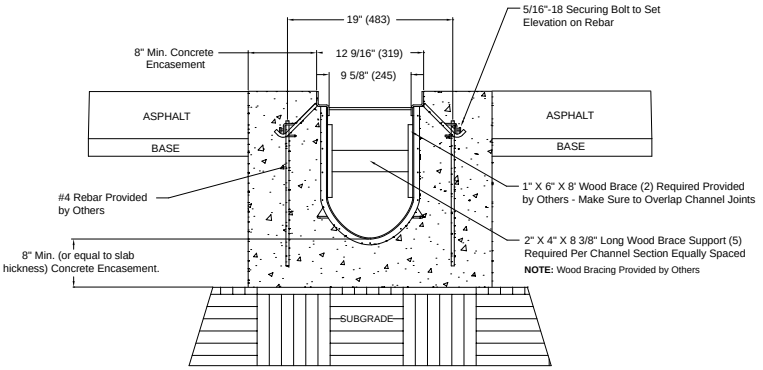
ZIP-TRENCH® INSTALLATION TIPS

LOAD CLASS C **9960**



INSTALLATION IN CONCRETE

LOAD CLASS C **9960**



INSTALLATION IN ASPHALT

The ZIP Trench® Drain System must have an excavation with a minimum of 4 inches of bedding concrete on ALL sides. The bedding concrete should be equal to slab thickness. Deeper and wider excavations will be needed for catch basins.

Each channel displays a number on the outside identifying its sequential location in the system. Arrows on both sides of the channel indicate flow direction. Channels should be laid out in numerical order alongside the completed excavation.

For full installation details, please reference the 9940/9960 ZIP Trench™ Technical Installation Guide in the Resources section of our website, www.jrsmith.com

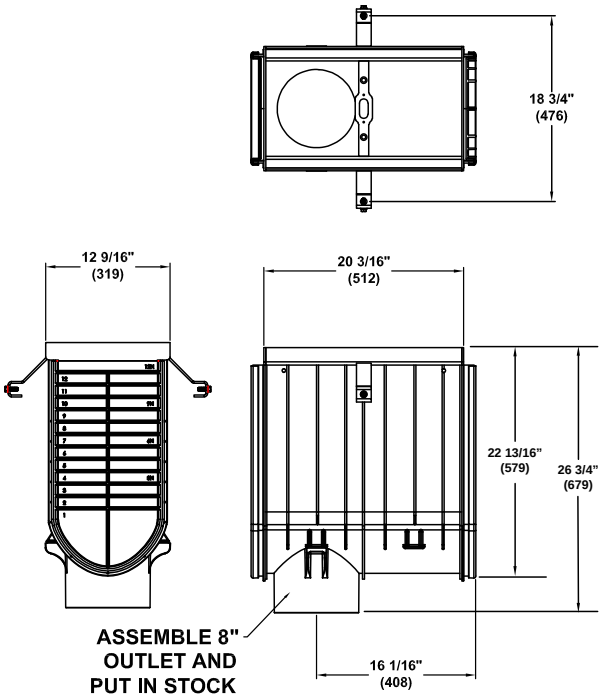
Zip Trench™ Accessories

4", 6" and 8 Universal Horizontal Cap

End Cap

4", 6", and 8" No-Hub Vertical Outlet Fitting

9960-CB Catch Basin:



STAINLESS STEEL TRENCH DRAINS

MODULAR • SLOPED • NON-SLOPING • SHALLOW
SHOWER TROUGH • THRESHOLD • SLOT


9660 with flashing clamp/clamping collar


Figure Number 9660


Figure Number 9660-10N


Figure Number 9665


Figure Number 9666

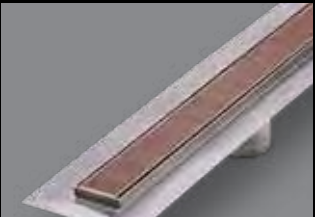


Figure Number 9667


Figure Number 9675

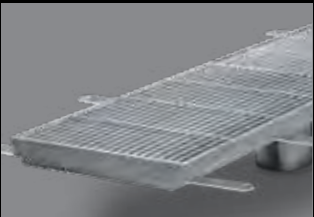


Figure Number 9679

Figure Number 9660-10N - 6” Wide Stainless Steel Neutral Modular Trench Drains
Figure Number 9660 - 6” Wide Stainless Steel Modular Trench Drains
Figure Number 9665 - 6” Wide Shallow Stainless Steel Modular Trench Drains
Figure Number 9666 - 2” Wide Stainless Steel ADA Shower Drain with Flashing Flange, Clamp and Slope
Figure Number 9667 - 2” Fine-Line® Stainless Steel ADA Shower Drains
Figure Number 9675 - Trough/Kettle Stainless Steel Drains
Figure Number 9679 - Threshold Stainless Steel Drains

- All drains constructed from type 304 Stainless Steel, type 316 Stainless Steel is optional
- Sanitary Food Service, Pharmaceutical Plants, Food and Beverage, Breweries ,Chemical Resistance, Aesthetics
- Pre-engineered with a .6% built in slope
- 1 meter lengths (39.36”), flanged bolt together ends with gaskets or sealant


Figure Number 9671
Slot Trench Drain

Figure Number-9671 Slot Trench Drain

See our 9671 ‘Slot’ Stainless Steel Trench Drain on our website!

REGULARLY FURNISHED:
- 16 Ga, type 304 Stainless Steel
- ¾” wide slot and 2 5/8” wide throat with 1% slope
- Channels available with inverts ranging from 4” to 16 ½”

MADE IN USA

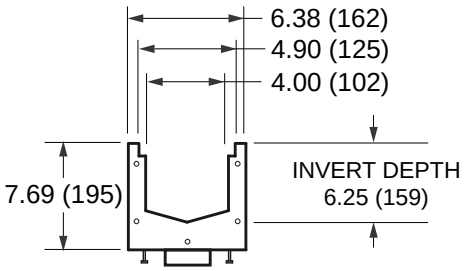
STAINLESS STEEL DRAINS

6” Wide Neutral Modular Trench Drains
Figure 9660-10N-Y

- Ideal for use in kitchens and other areas where trough drains are required
- Excellent for sanitation purposes
- “Best In Class” heavy duty type 304 stainless steel construction
- Corrosion and vandal-resistant
- Modular trench drain body sections
- Load Class A - E

APPLICATIONS

Commercial Kitchens • Bars • Hotels • Restaurants
Pharmaceutical Cleanrooms • Chemical Plants
Chemical Storage Areas • Double Containment



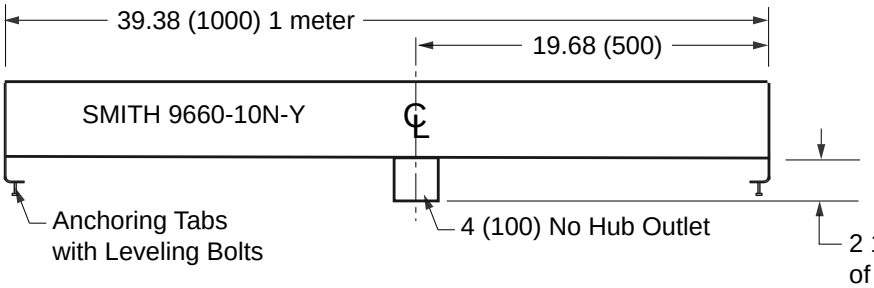
END VIEW OF CHANNEL

FEATURES:

- Stainless steel trench drain is 39.38” long (1m), 6.38” wide and has a 4” wide throat with bolting end plates
- Complete with dome bottom strainer, leveling studs and stainless steel 9870-466-SBG bar grate
- Available with 4” center outlet for trough drain configuration

OPTIONS:

- Grating Load Classes A-E
- 316 Stainless Steel
- Flashing Flange and Collar



SIDE VIEW OF CHANNEL

See page 69-70 for grates.

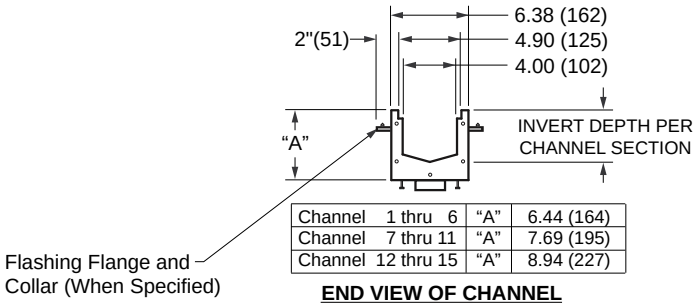
STAINLESS STEEL DRAINS

6” Wide Modular Trench Drains
Figure 9660

- “Best In Class” heavy duty type 304 stainless steel construction
- Corrosion and vandal-resistant
- Pre-sloped modular trench drain body sections
- Option: 316 Stainless Steel
- Load Class A - E

APPLICATIONS

Food Processing • Bottling Plants • Hospitals
Commercial Kitchens • Pharmaceutical cleanrooms
Chemical Plants • Chemical Storage Areas
Double Containment



Channel	1 thru 6	“A”	6.44 (164)
Channel	7 thru 11	“A”	7.69 (195)
Channel	12 thru 15	“A”	8.94 (227)

END VIEW OF CHANNEL

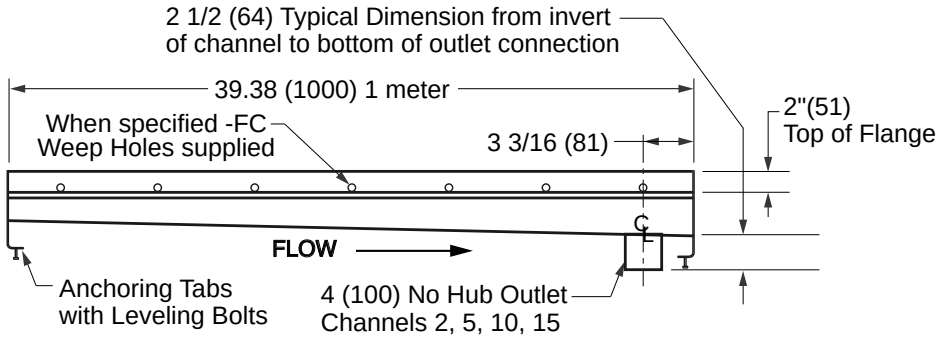
FEATURES

- Stainless steel trench drain channels are 39.38” long (1m), 6.38” wide, and have a 4” wide throat with bolting end plates
- Ideal for facilities where hygiene, corrosion resistance, and visibility are imperative
- Available with inverts ranging from 3.75” to 7.50”
- There are 15, 1-meter long sloping, 4, 1-meter non-sloping and 2, 1/2-meter non-sloping channels and catch basins available
- Supplied with secured stainless steel 9870-450-SS slotted grate

OPTIONS:

- Grating Load Classes A-E
- 316 Stainless Steel
- Flashing Flange and Collar

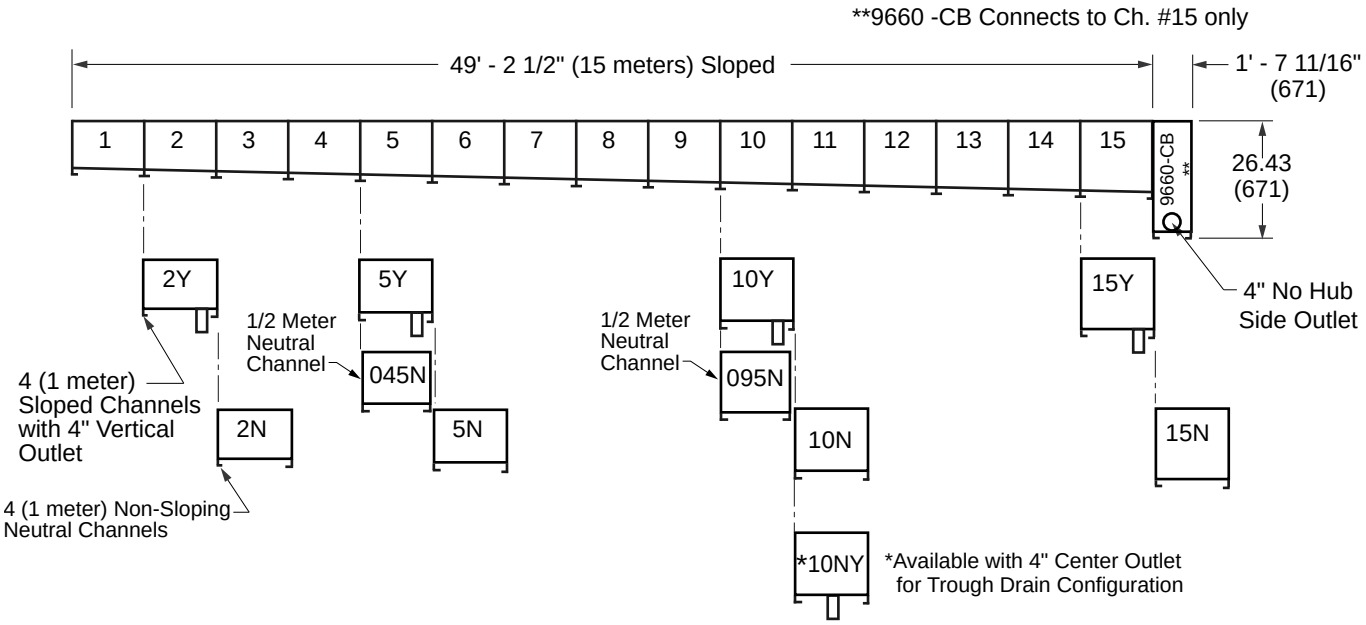
See page 73-74 for grates.



SIDE VIEW OF CHANNEL

MADE IN USA

6” Wide Modular Stainless Steel Trench Drains - Figure 9660



STAINLESS STEEL TRENCH DRAIN - AVAILABLE SECTIONS							
Channel Number	**Shallow Invert Depth**	**Deep Invert Depth**	**“A” Body Height Deep End**	**Bottom Outlet Size Avail.**	**End Outlet Size Avail.**	**Max Flow Rate***	
						GPM	**CFS**
9660-1	3.75 (95)	4.00 (102)	6.44 (164)	–		102	.23
9660-2	4.00 (102)	4.25 (108)	6.44 (164)	–	2”	115	.26
9660-2 Outlet -Y	4.00 (102)	4.25 (108)	6.44 (164)	4”		115	.26
9660-2 Neutral	4.25 (108)	4.25 (108)	6.44 (164)	–	2”	115	.26
9660-3	4.25 (108)	4.50 (114)	6.44 (164)	–		128	.29
9660-4	4.50 (114)	4.75 (121)	6.44 (164)	–		141	.31
9660-045 1/2 Neutral	4.75 (121)	4.75 (121)	6.44 (164)	–		141	.31
9660-5	4.75 (121)	5.00 (127)	6.44 (164)	–	2”, 3”	154	.34
9660-5 Outlet -Y	4.75 (121)	5.00 (127)	6.44 (164)	4”		154	.34
9660-5 Neutral	5.00 (127)	5.00 (127)	6.44 (164)	–	2”, 3”	154	.34
9660-6	5.00 (127)	5.25 (133)	6.44 (164)	–	2”, 3”	167	.37
9660-7	5.25 (133)	5.50 (140)	7.69 (195)	–		183	.41
9660-8	5.50 (140)	5.75 (146)	7.69 (195)	–		196	.44
9660-9	5.75 (146)	6.00 (152)	7.69 (195)	–		209	.47
9660-095 1/2 Neutral	6.00 (152)	6.00 (152)	7.69 (195)	–		209	.47
9660-10	6.00 (152)	6.25 (159)	7.69 (195)	–	2”, 3”, 4”	222	.50
9660-10 Outlet -Y	6.00 (152)	6.25 (159)	7.69 (195)	4”		222	.50
9660-10 Neutral	6.25 (159)	6.25 (159)	7.69 (195)	–	2”, 3”, 4”	222	.50
9660-10 N-Outlet -Y	6.25 (159)	6.25 (159)	7.69 (195)	4”		222	.50
9660-11	6.25 (159)	6.50 (165)	7.69 (195)	–		235	.52
9660-12	6.50 (165)	6.75 (171)	8.94 (227)	–		248	.55
9660-13	6.75 (171)	7.00 (178)	8.94 (227)	–		261	.58
9660-14	7.00 (178)	7.25 (184)	8.94 (227)	–		274	.61
9660-15	7.25 (184)	7.50 (190)	8.94 (227)	–	2”, 3”, 4”	287	.64
9660-15 Outlet -Y	7.25 (184)	7.50 (190)	8.94 (227)	4”		287	.64
9660-15 Neutral	7.50 (190)	7.50 (190)	8.94 (227)	–	2”, 3”, 4”	287	.64

*Based on open-ended channel less grate with no outlet cap

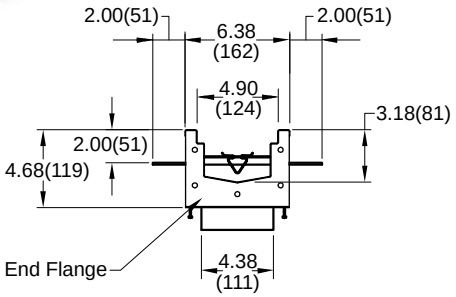
STAINLESS STEEL TRENCH DRAINS

6” Wide Shallow Modular Trench Drains Figure 9665

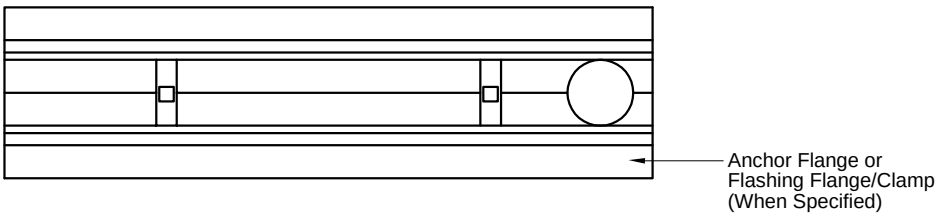
- “Best In Class” heavy duty type 304 stainless steel construction
- Corrosion and vandal-resistant
- Non-sloped modular trench drain body sections
- Load Class A - E

APPLICATIONS

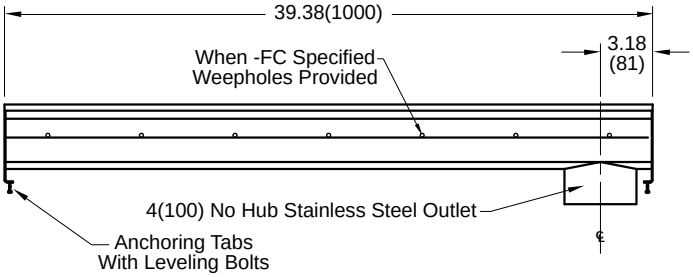
Bottling Plants • Hotels • Restaurants • Chemical Plants
Chemical Storage Areas • Double Containment



End View of Channel



Top View of Channel



Side View of Channel

NOTE: Dimensions shown in parentheses are in millimeters.

FEATURES

- Stainless steel trench drain channels are 39.38” long (1m), 6.38” wide, and have a 4” wide throat with bolting end plates
- Channel invert 3.18”
- Regularly furnished with secured light duty 9870-450-SS slotted stainless steel grate

OPTIONS:

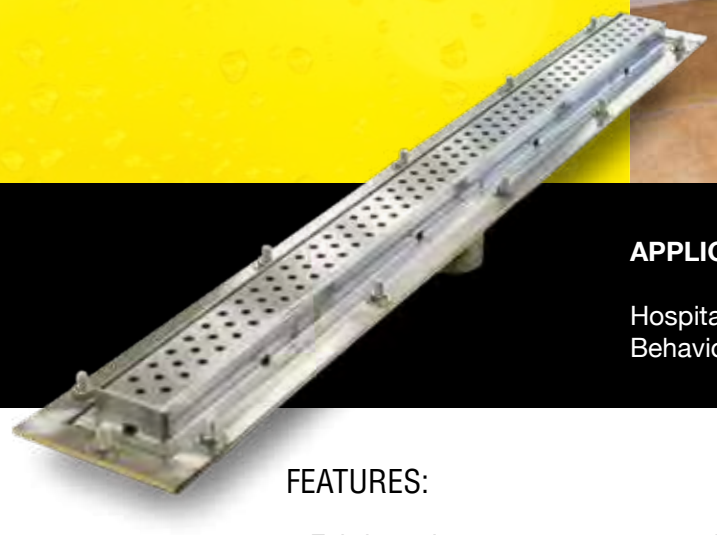
- Grating Load Classes A-E
- 316 Stainless Steel
- Flashing Flange and Collar

See page 69-70 for grates.

STAINLESS STEEL SHOWER DRAINS

2” Wide ADA Shower Drains with Flashing Flange, Clamp and Slope Figure 9666

- Durable stainless drain construction
- Vandal-proof
- ADA compliant perforated grating
- Engineered System



APPLICATIONS

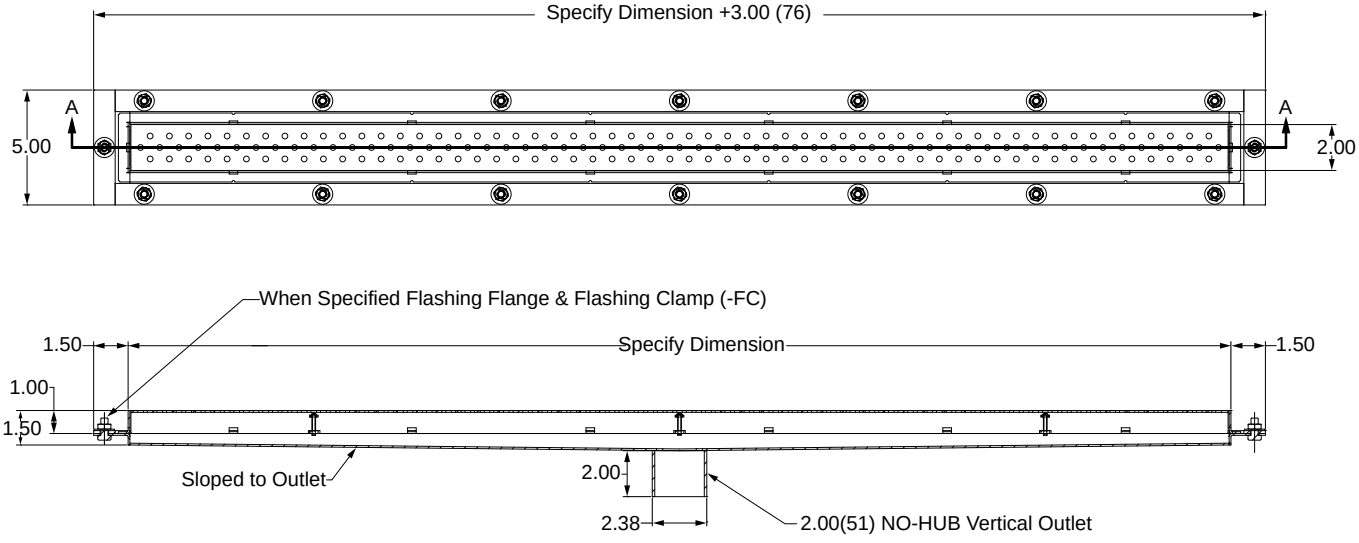
Hospitals • Rehabilitation Facilities
Behavioral Healthcare • Nursing Homes

FEATURES:

- Fabricated 14-gauge type 304 stainless steel body
- Vandal-resistant stainless steel perforated grate
- 2” No-Hub bottom outlet
- Standard grate has .25” diameter perforations
- Optional decorative grating available: tile inlay, slotted, wave and solid rim flow
  See submittal for details

OPTIONS:

- Vandal-resistant
- 316 Stainless Steel



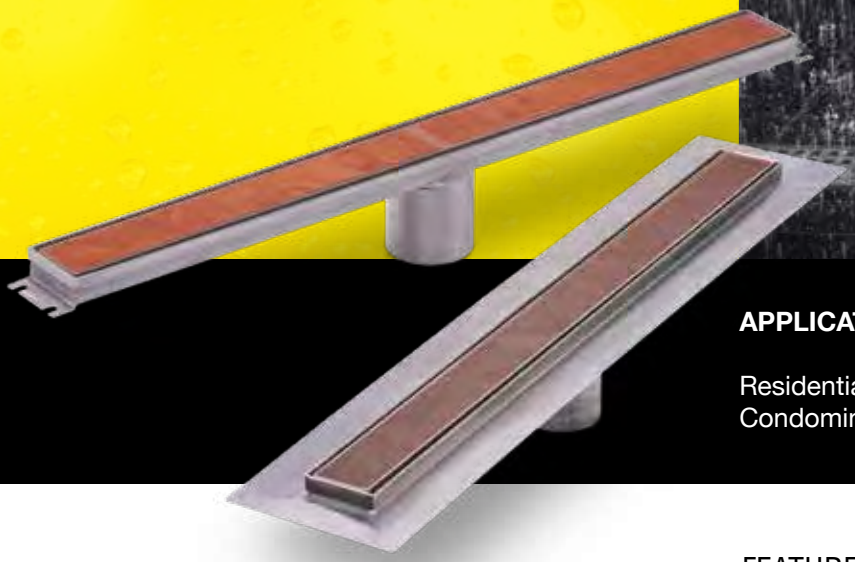
SECTION A-A

MADE IN USA

STAINLESS STEEL SHOWER DRAINS

2” Fine-Line® ADA Shower Drains Figure 9667

- Add artful design to your shower stall
- Pairs perfectly with natural stone, marble, ceramic tile, porcelain and solid surface
- ADA compliant



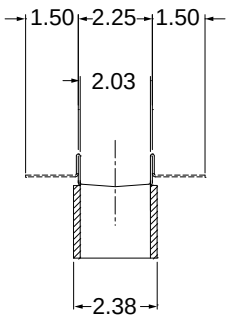
APPLICATIONS

Residential Designer Showers • Homes • Apartments
Condominiums • Luxury Hotels • Country Clubs

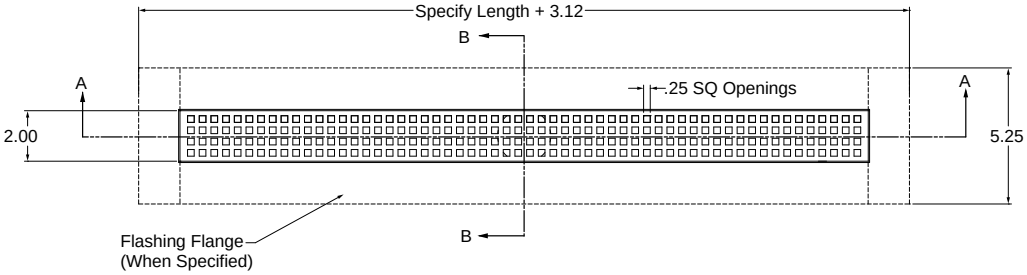
Fine® Line | Linear Shower Drains

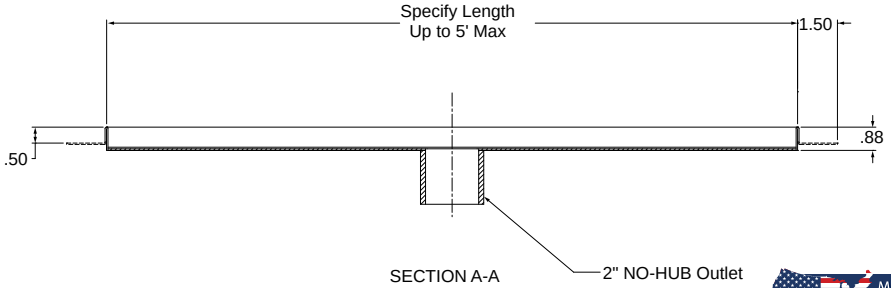
FEATURES:

- Stainless steel drain body with satin finish grates
- Customize your drain with designer grate options for a soothing, artistic, or clean and elegant look



SECTION B-B

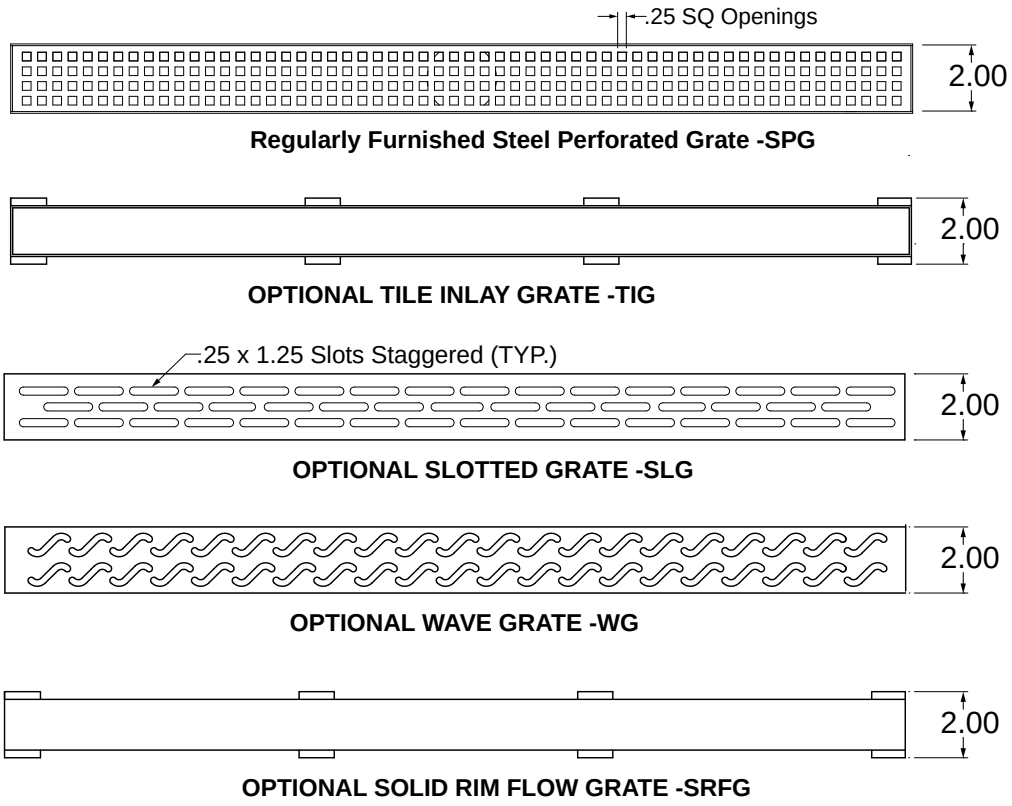




SECTION A-A

MADE IN USA

2” Fine-Line® Stainless Steel ADA Shower Drains - Figure 9667



Fine® Line | Linear Shower Drains

OPTIONS

- Type 316 stainless steel
- Vandal-Proof grates
- Custom lengths/Multiple outlets
- Flashing Flange

Fine-Line® Grates


Tile Inlay Grate -TIG


Slotted Grate -SLG


Wave Grate -WG


Solid Rim Flow Grate -SRFG


Regularly Furnished SS Perforated Grate -SPG

STAINLESS STEEL DRAINS

‘Trough/Kettle’ Drains
Figure 9675

- Ideal for large commercial kitchens
- Durable and versatile
- Used as kettle drains, floor drains or trough drains
- Load Class A and B

APPLICATIONS

Commercial Kitchens • Food Processing Areas

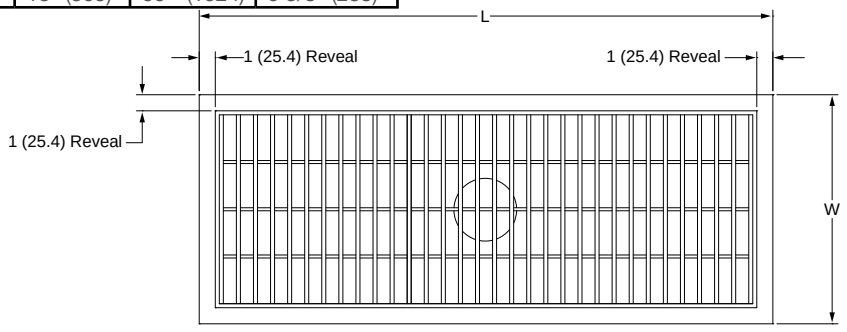
AVAILABLE SIZES	W	L	H
9675-1224	12” (305)	24” (610)	9 1/8” (232)
9675-1236	12” (305)	36” (914)	9 3/16” (233)
9675-1248	12” (305)	48” (1219)	9 1/4” (235)
9675-1260	12” (305)	60” (1524)	9 3/8” (238)
9675-1824	18” (305)	24” (1524)	9 1/8” (232)
9675-1836	18” (305)	36” (1524)	9 3/16” (233)
9675-1848	18” (305)	48” (1524)	9 1/4” (235)
9675-1860	18” (305)	60” (1524)	9 3/8” (238)

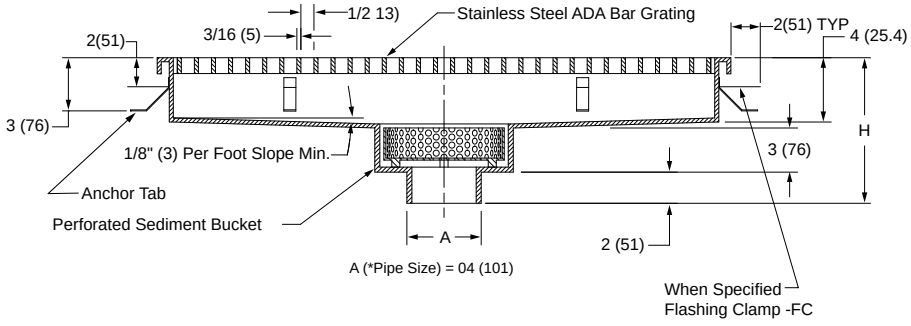
FEATURES:

- Fabricated 14-gauge type 304 stainless steel body
- Sediment bucket
- 4” No-Hub bottom outlet
- Anchor tabs and stainless steel light duty bar grating
- Subway style grate

OPTIONS:

- 316 Stainless Steel
- Custom Grating
- Flashing Flange and Collar



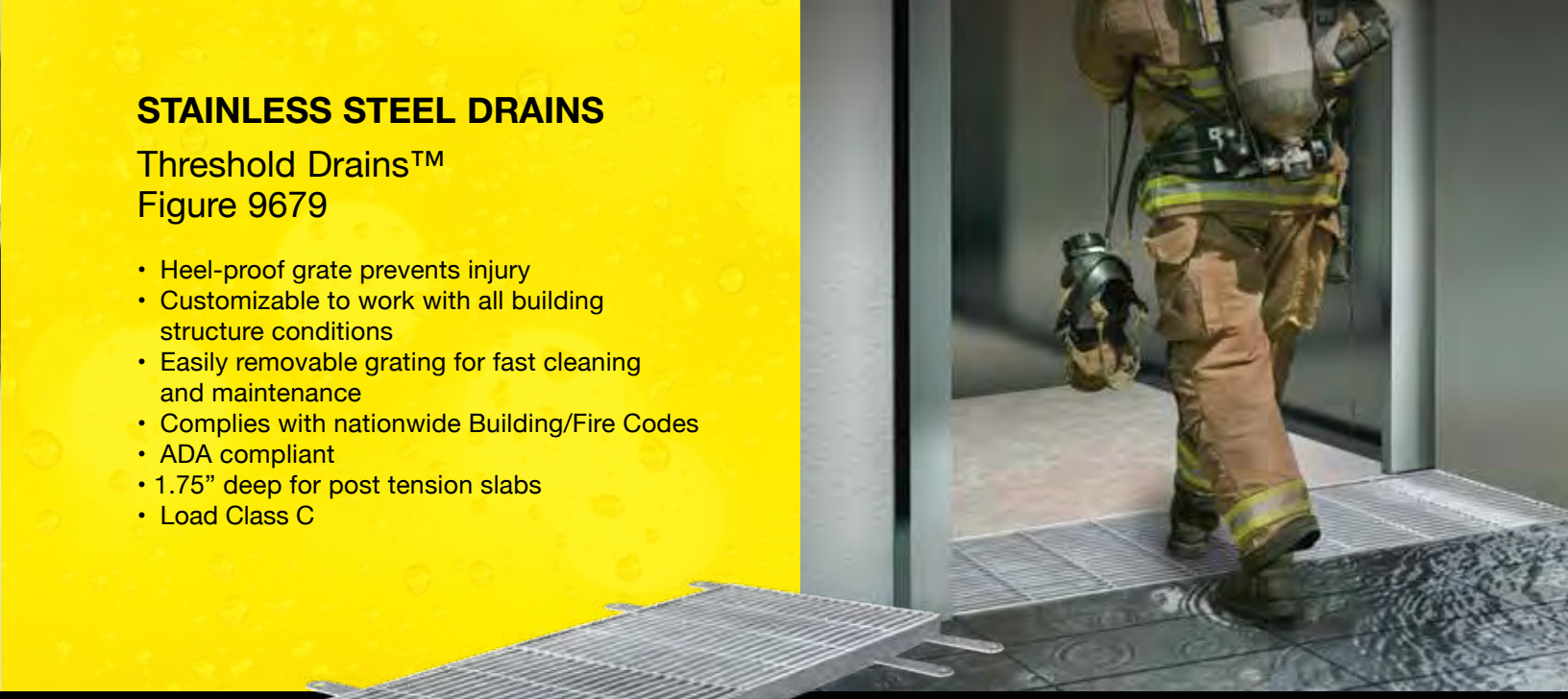


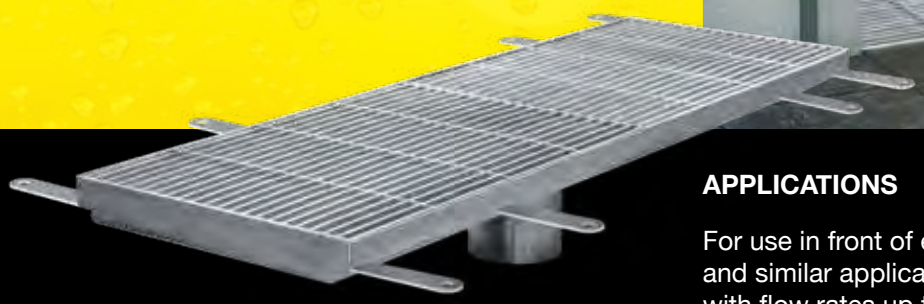
MADE IN USA

STAINLESS STEEL DRAINS

Threshold Drains™
Figure 9679

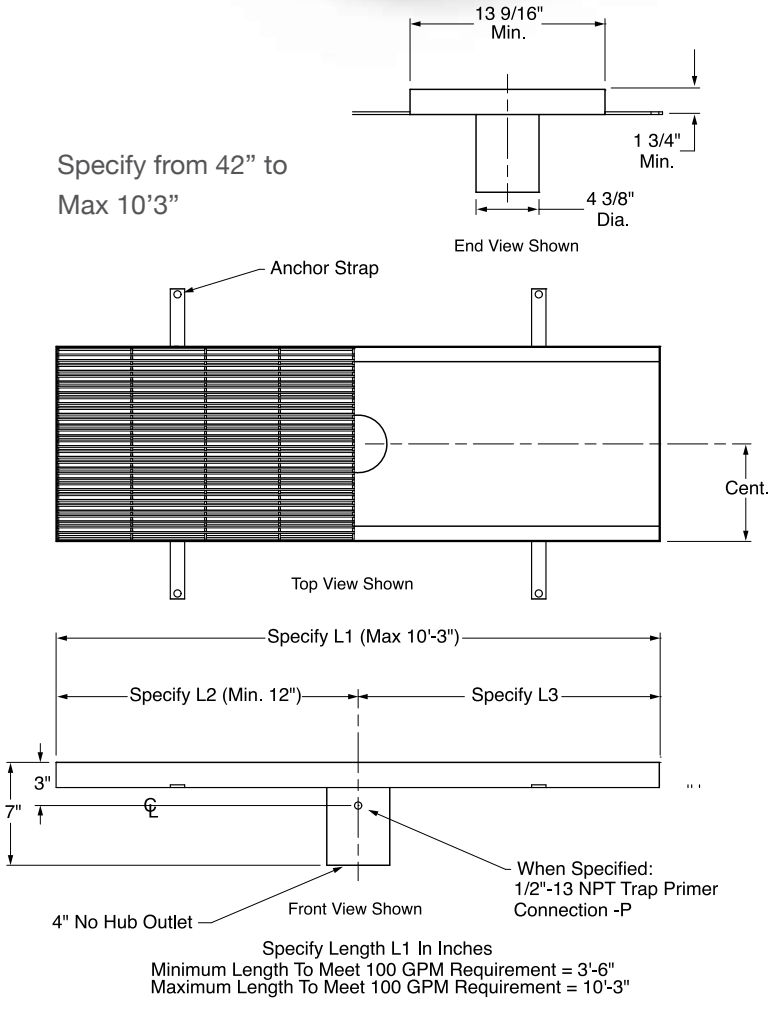
- Heel-proof grate prevents injury
- Customizable to work with all building structure conditions
- Easily removable grating for fast cleaning and maintenance
- Complies with nationwide Building/Fire Codes
- ADA compliant
- 1.75” deep for post tension slabs
- Load Class C





APPLICATIONS

For use in front of elevators, doorways, stairways and similar applications to receive and drain water with flow rates up to 100 GPM with no bypass.



FEATURES:

- Complies with 2013 California Building Code 403.6.1, 403.6.2, 3007.4, 3008.4
- Complies with San Francisco Fire Code, Section 511.1.4
- IBC Code 3007.3 Water protection. The occupant evacuation elevator hoistway and associated elevator landings shall be designed by an approved method to prevent water from infiltrating into the shaft enclosure
- For use in front of elevator doors and similar applications
- Third party certified to 100 gpm flow rate with no bypass
- ADA compliant
- Heel-proof
- 1 3/4” deep; does not disturb post-tension slabs
- 304 Stainless Steel
- Removable grating

OPTIONS

- 316 Stainless Steel
- Tile Inlay Grate
- Anchor Straps
- Trap Primer Connection

MADE IN USA

Patent #10,167,621

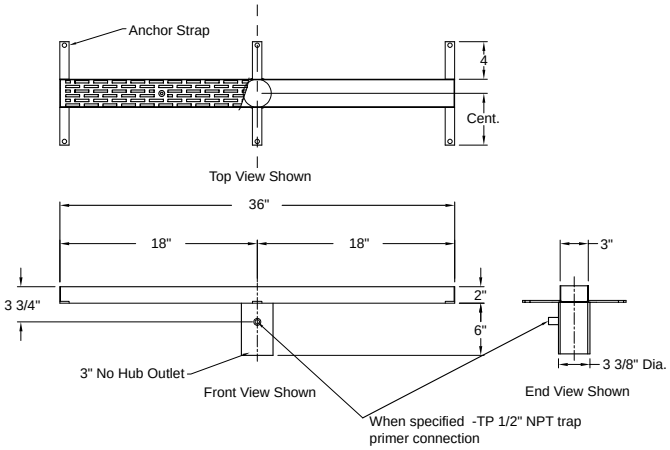
STAINLESS STEEL DRAINS

Threshold Drains™ Figures 9678-25, 9678-50, 9678-75, and 9678-100

- Heel-proof grate prevents injury
- Customizable to work with all building structure conditions
- Easily removable grating for fast cleaning and maintenance
- Light duty, vandal-proof, stainless steel slotted grate
- ADA compliant

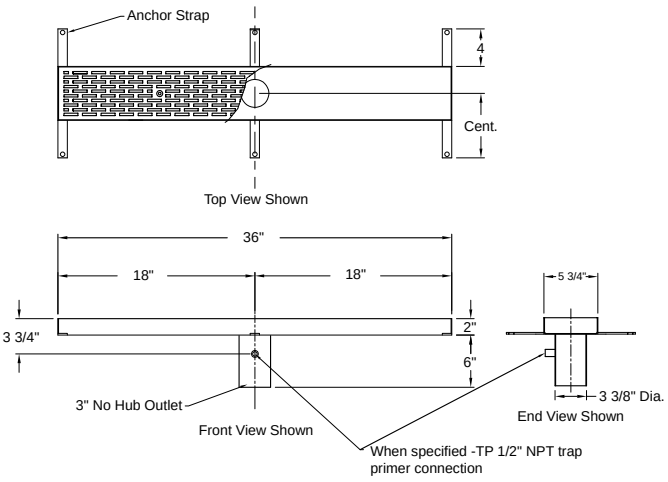
9678-25 FEATURES:

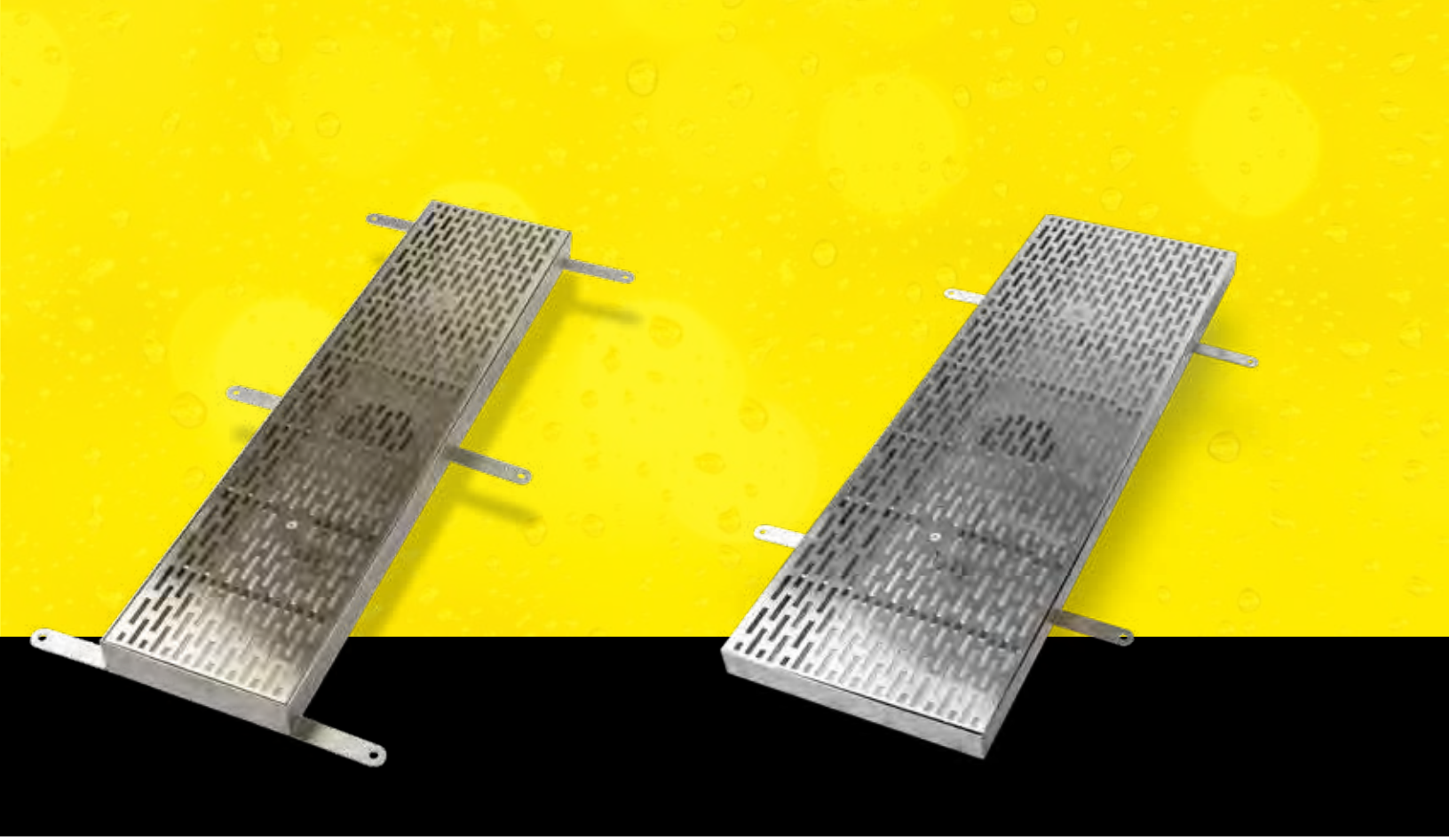
- 25 gpm flow rate
- Customizable to work with all building structure conditions
- Easily removable grating for fast cleaning and maintenance
- Light duty, vandal-proof, stainless steel slotted grate
- ADA compliant



9678-50 FEATURES:

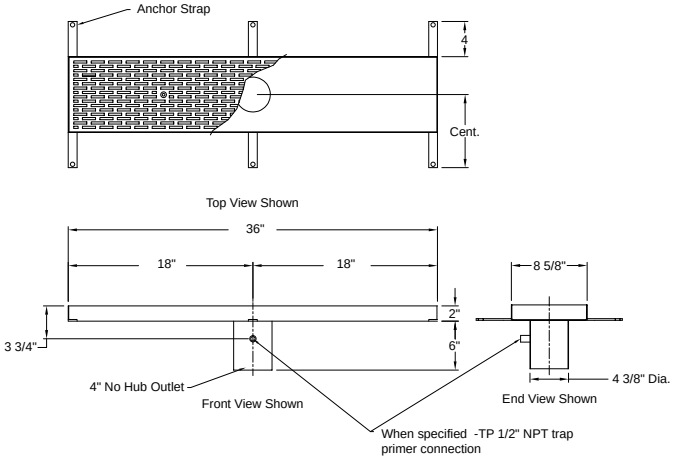
- 50 gpm flow rate
- 5 3/4" wide, 2" deep
- 14 gage, type 304 stainless steel
- 3" no hub vertical outlet
- Grate has an open area of 28.00 sq in. per linear foot with ¼" wide slot openings.





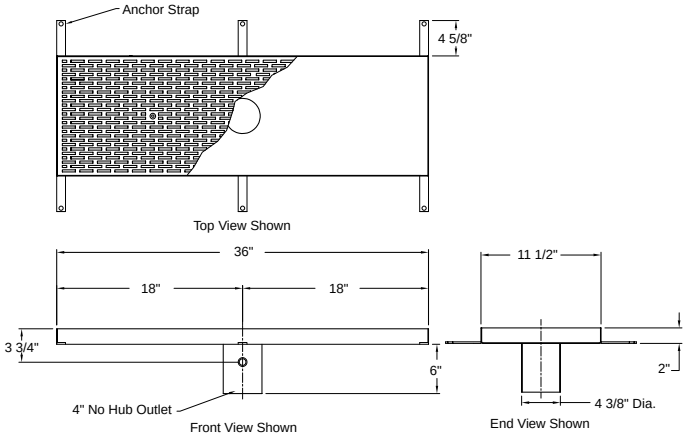
9678-75 FEATURES:

- 75 gpm flow rate
- 8 5/8” wide, 2” deep
- 14 gage, type 304 stainless steel
- 4” no hub vertical outlet
- Grate has an open area of 42.00 sq in. per linear foot with ¼” slot openings



9678-100 FEATURES:

- 100 GPM flow rate
- 11 1/2” wide, 2” deep
- 14 gage, type 304 stainless steel
- 4” no hub vertical outlet
- Grate has open area of 46.30 sq in. per linear foot with 1/4” wide slots
- Complies with 2013 California Building Code 403.6.1, 403.6.2, 3007.4, 3008.4
- Complies with 2013 San Francisco Fire Code, Section 511.1.4



POLYMER CONCRETE TRENCH DRAINS

3” TO 14” WIDE - 9800 SERIES

Figure Number 9895 - 6” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Integral Metal Rail - KlassikDrain®

Figure Number 9877 - 6” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications- PowerDrain®

Figure Number 9832 - 6” Wide ‘Non-Sloped’ ‘Shallow’ Polymer Concrete Trench Drains

Figure Number 9805 - 6” Wide ‘Non-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications PowerDrain®

Figure Number 9878 - 10” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications PowerDrain®

Figure Number 9806 - 10” Wide ‘Non-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications

Figure Number 9898 - 10” Wide ‘Shallow’ Polymer Concrete Trench Drains with Integral Metal Rail - SlabDrain®

Figure Number 9896 - 10” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Integral Metal Rail - KlassikDrain®

Figure Number 9807 - 14” Wide ‘Shallow’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - PowerDrain®

Figure Number 9899 - 14” Wide ‘Non-Sloped’ Polymer Concrete Trench Drains with Integral Metal Rail - SlabDrain®

Figure Number 9879 - 14” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - PowerLok®

Figure Number 9897 - 14” Wide Polymer Concrete Trench Drains with Integral Metal Rail - KlassikDrain®

Figure Number 9836 - 6” Wide ‘Non-Sloped’ Polymer Concrete Shallow Trench Drains with Integral Galvanized Edge Rail

Figure Number 9833 - 3” Wide ‘No Grade’ ‘Narrow’ Polymer Concrete Trench Drains

SMITH ACO Trench Drain Series

POLYMER CONCRETE TRENCH DRAINS

3” WIDE • 6” WIDE •10” WIDE • 14” WIDE
SHALLOW DEPTH • NARROW WIDTH • SLOPED • NON SLOPING


Figure Number 9895


Figure Number 9877


Figure Number 9832


Figure Number 9805


Figure Number 9878

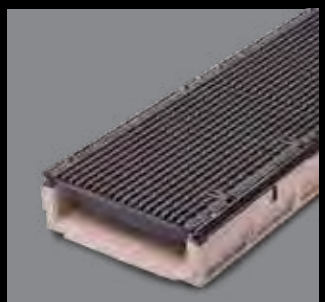


Figure Number 9806


Figure Number 9898

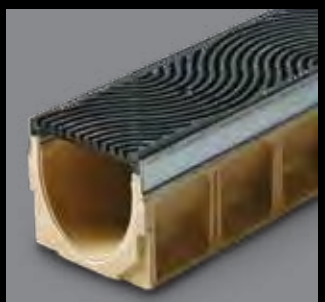


Figure Number 9896


Figure Number 9807


Figure Number 9899


Figure Number 9879

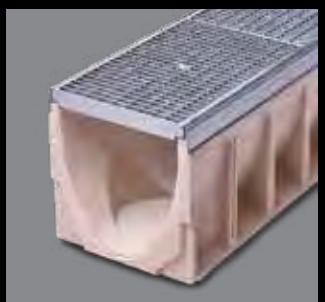


Figure Number 9897


Figure Number 9836


Figure Number 9833

- Varying widths and depths to meet all application needs.
- Integral cast-in metal rail edge, ductile iron frame and grate, large variety of grates, shallow, narrow, brickslot, non-sloped—this category has it all.

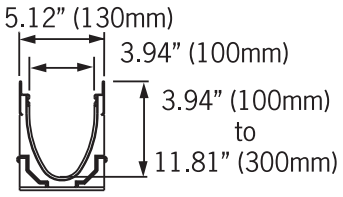
6” WIDE POLYMER CONCRETE DRAINS

6” Wide ‘Pre-Sloped’ Trench Drains with Integral Metal Rail - KlassikDrain® Figure 9895

- Integral galvanized steel rails allow for heavy duty hard wheel traffic
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Available in pre-sloped and non-sloped channels
- Forklift traffic
- Load Class A - E depending on grate selection

APPLICATIONS

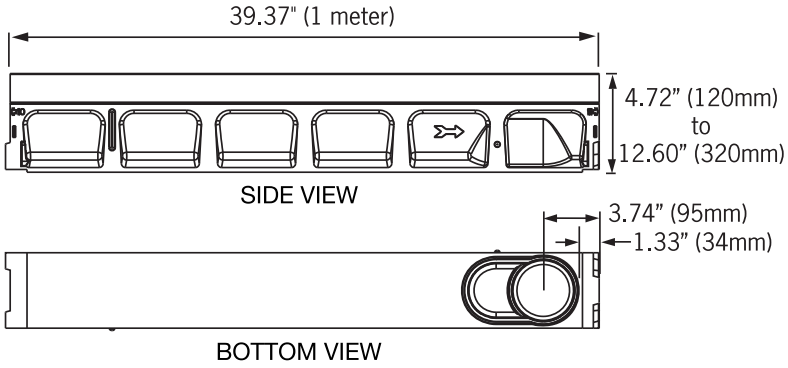
Food Service • Sidewalks • Fire Stations • Gas Stations
Parking Lots • Shopping Malls • Fountains
Industrial and Manufacturing Plants



END VIEW

FEATURES

- Integral galvanized steel rail
- Optional stainless steel rail
- .5% pre-sloped and neutral channels (see chart next page for invert depths)
- Load ratings up to and including E (135,000 lbs.)
- Concrete finisher friendly with straight edge
- QuickLok® feature - no bolts to remove when cleaning out trench drain
- Built-in knockouts for outlets every 5 channel sections (see diagram next page)



Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

Catch Basins

9895-901
In-Line Catch Basin

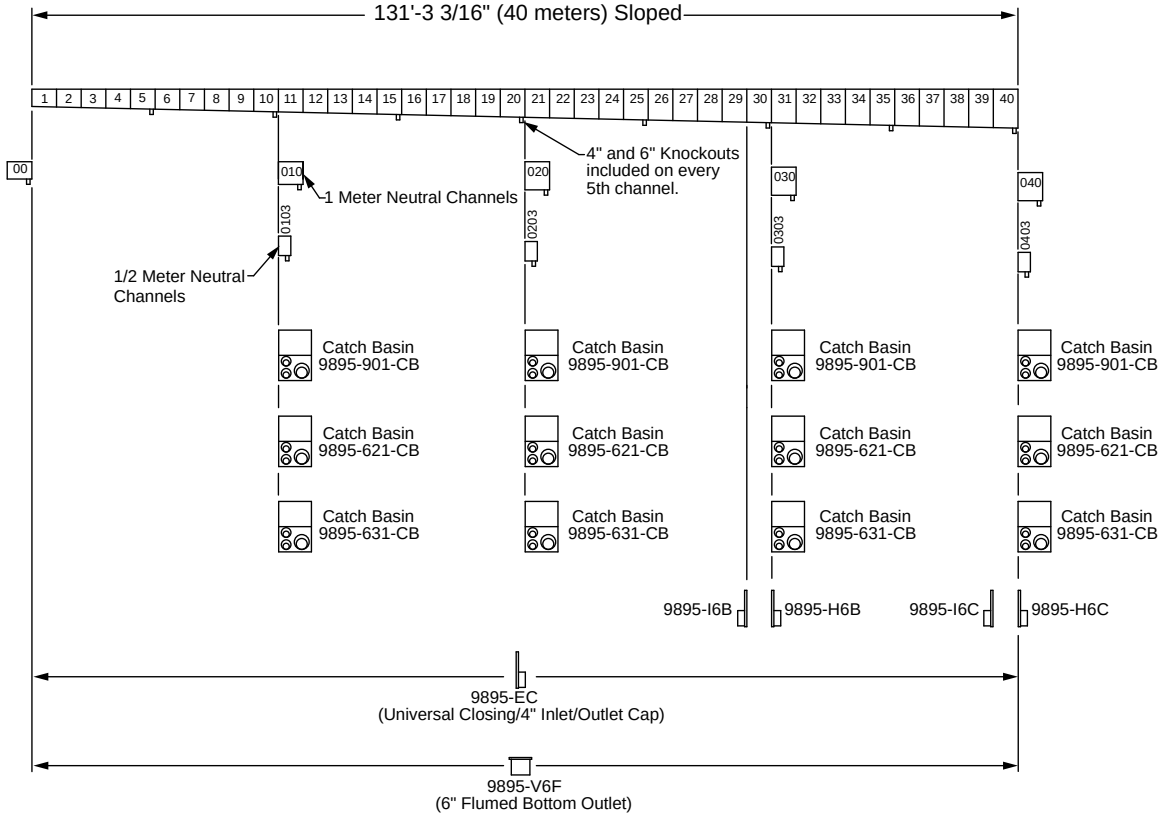
9895-621 Catch Basin (9895-631 shown with optional riser)

SMITH ACO Trench Drain Series

JAY R. SMITH MFG. CO. 334.277.8520 www.jrsmith.com

See page 65-66 for grates.

6” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Integral Metal Rail KlassikDrain® - Figure 9895



TRENCH DEPTH 9895 SYSTEM						
Channel Number	Shallow End Invert		Deep End Invert		Slope	Weight Lbs.
	Inch	mm	Inch	mm		
9895-00	3.94	100	3.94	100	0.0%	28.1
9895-1	3.94	100	4.13	105	0.5%	28.1
9895-2	4.13	105	4.33	110	0.5%	28.9
9895-3	4.33	110	4.53	115	0.5%	29.7
9895-4	4.53	115	4.72	120	0.5%	30.5
9895-5	4.72	120	4.92	125	0.5%	31.3
9895-6	4.92	125	5.12	130	0.5%	32.1
9895-7	5.12	130	5.31	135	0.5%	32.9
9895-8	5.31	135	5.51	140	0.5%	33.7
9895-9	5.51	140	5.71	145	0.5%	34.5
9895-10	5.71	145	5.91	150	0.5%	35.3
9895-010	5.91	150	5.91	150	0.0%	35.3
9895-103	5.91	150	5.91	1150	0.0%	17.0
9895-11	5.91	150	6.10	155	0.5%	36.1
9895-12	6.10	155	6.30	160	0.5%	36.9
9895-13	6.30	160	6.50	165	0.5%	37.7
9895-14	6.50	165	6.69	170	0.5%	38.5
9895-15	6.69	170	6.89	175	0.5%	39.3
9895-16	6.89	175	7.09	180	0.5%	40.1
9895-17	7.09	180	7.28	185	0.5%	40.9
9895-18	7.28	185	7.48	190	0.5%	41.7
9895-19	7.48	190	7.68	195	0.5%	42.5
9895-20	7.68	195	7.88	200	0.5%	43.4
9895-020	7.88	200	7.88	200	0.0%	43.4
9895-203	7.88	200	7.88	200	0.0%	20.5

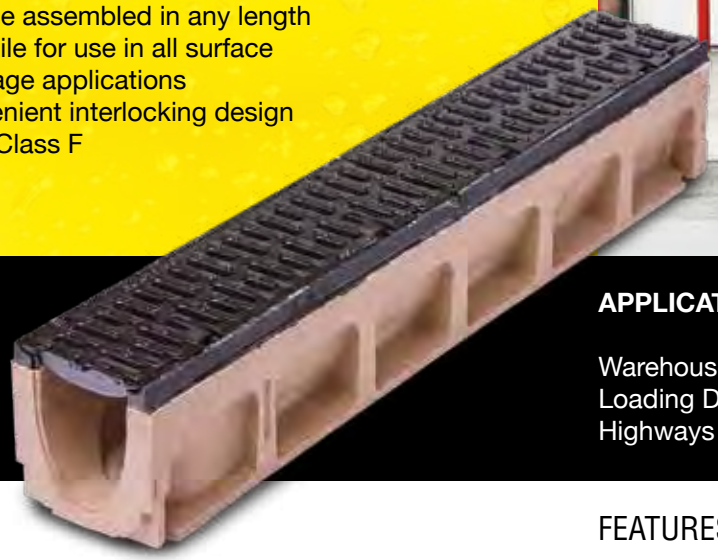
TRENCH DEPTH 9895 SYSTEM						
Channel Number	Shallow End Invert		Deep End Invert		Slope	Weight Lbs.
	Inch	mm	Inch	mm		
9895-21	7.88	200	8.07	205	0.5%	44.2
9895-22	8.07	205	8.27	210	0.5%	45.0
9895-23	8.27	210	8.46	215	0.5%	45.8
9895-24	8.46	215	8.66	220	0.5%	46.8
9895-25	8.66	220	8.86	225	0.5%	47.4
9895-26	8.86	225	9.06	230	0.5%	48.2
9895-27	9.06	230	9.25	235	0.5%	49.0
9895-28	9.25	235	9.45	240	0.5%	49.8
9895-29	9.45	240	9.65	245	0.5%	50.6
9895-30	9.65	245	9.84	250	0.5%	51.4
9895-030	9.84	250	9.84	250	0.0%	51.4
9895-303	9.84	250	9.84	250	0.0%	24.0
9895-31	9.84	250	10.04	266	0.5%	52.2
9895-32	10.04	255	10.24	260	0.5%	53.0
9895-33	10.24	260	10.43	265	0.5%	53.8
9895-34	10.43	265	10.63	270	0.5%	54.6
9895-35	10.63	270	10.83	275	0.5%	55.4
9895-36	10.83	275	11.02	280	0.5%	56.2
9895-37	11.02	280	11.22	285	0.5%	57.0
9895-38	11.22	285	11.42	290	0.5%	57.9
9895-39	11.42	290	11.61	295	0.5%	58.7
9895-40	11.61	295	11.81	300	0.5%	59.5
9895-040	11.81	300	11.81	300	0.0%	59.5
9895-403	11.81	300	11.81	300	0.0%	27.5

Note: For overall depth of channel add .80” to invert depth shown.

6” WIDE POLYMER CONCRETE DRAINS

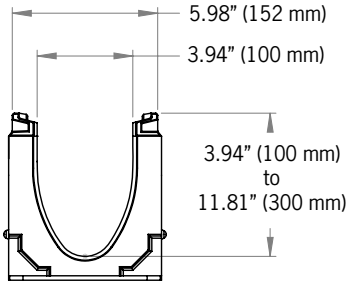
6” Wide ‘Pre-Sloped’ Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - PowerDrain® Figure 9877

- Extra heavy duty integral ductile iron rails allow for heavy duty hard wheel traffic
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Convenient interlocking design
- Load Class F

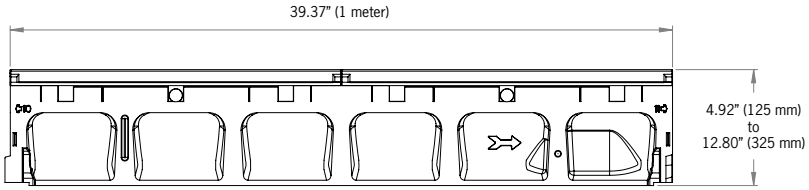


APPLICATIONS

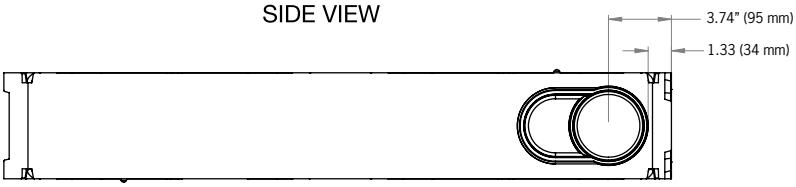
Warehousing • Bottling Plants • Industrial Plants
Loading Docks • Fire Stations • Military Bases
Highways • Airports • Hangars • Frequent Traffic Areas



END VIEW



SIDE VIEW



BOTTOM VIEW

FEATURES

- The 9877 is the extra heavy duty version of the 9895
- .5% pre-sloped channels and non-sloping channels
- Includes ductile iron frame and grate
- Grating options include ADA and bicycle safe
- Frame and grate designed to prevent longitudinal and lateral movement
- End frames terminate the ends of each run for superior structural integrity

Regularly furnished with boltless PowerLok® securing device.

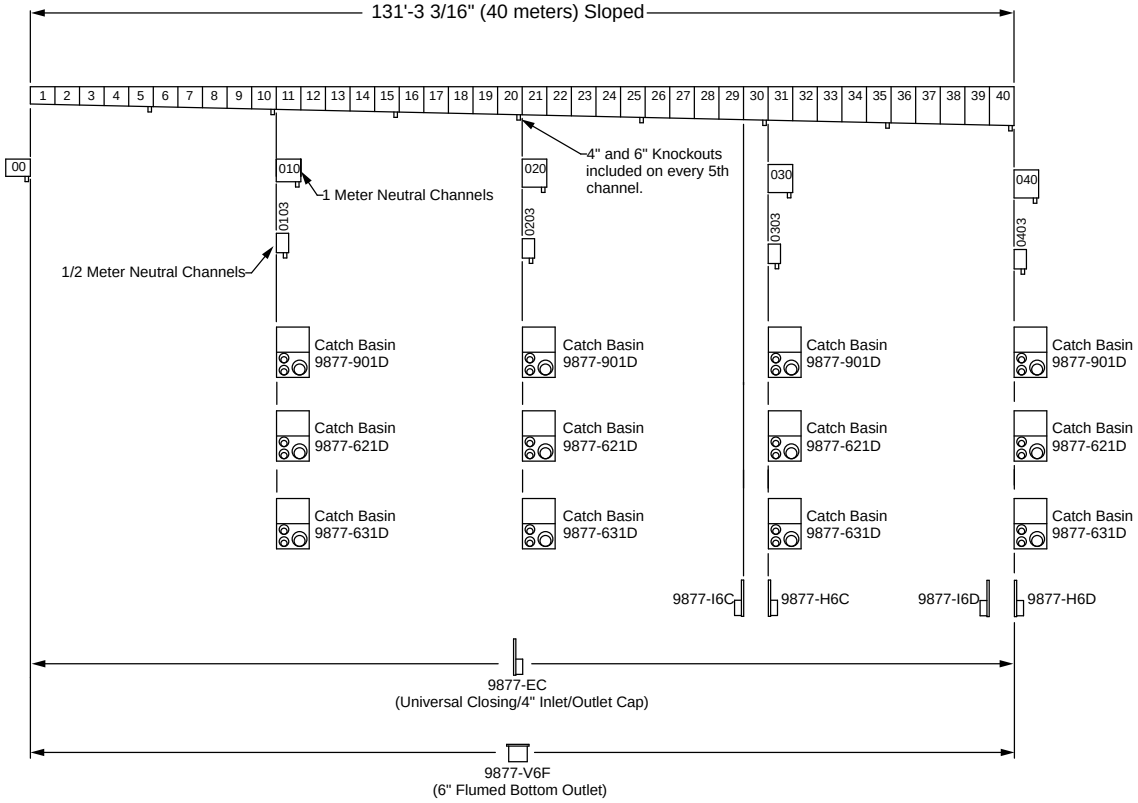
Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

Catch Basins

9877-902D
In-Line Catch
Basin

9877-621D Catch Basin
(9877-631D shown with
optional riser)

6” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail PowerDrain® - Figure 9877



TRENCH DEPTH 9877 SYSTEM							
Channel Number	Shallow End Invert		Deep End Invert		Slope	Slotted Weight Lbs.	ADA Weight Lbs.
	Inch	mm	Inch	mm			
9877-00	3.94	100	3.94	100	0.0%	74.1	76.7
9877-1	3.94	100	4.13	105	0.5%	74.1	76.7
9877-2	4.13	105	4.33	110	0.5%	75.1	77.7
9877-3	4.33	110	4.53	115	0.5%	76.1	78.7
9877-4	4.53	115	4.72	120	0.5%	77.1	79.7
9877-5	4.72	120	4.92	125	0.5%	78.1	80.7
9877-6	4.92	125	5.12	130	0.5%	79.1	81.7
9877-7	5.12	130	5.31	135	0.5%	80.1	82.7
9877-8	5.31	135	5.51	140	0.5%	81.1	83.7
9877-9	5.51	140	5.71	145	0.5%	82.1	84.7
9877-10	5.71	145	5.91	150	0.5%	83.1	85.7
9877-010	5.91	150	5.91	150	0.0%	83.1	85.7
9877-103	5.91	150	5.91	1150	0.0%	42.4	43.7
9877-11	5.91	150	6.10	155	0.5%	84.1	86.7
9877-12	6.10	155	6.30	160	0.5%	85.1	87.7
9877-13	6.30	160	6.50	165	0.5%	86.1	88.7
9877-14	6.50	165	6.69	170	0.5%	87.1	89.7
9877-15	6.69	170	6.89	175	0.5%	88.1	90.7
9877-16	6.89	175	7.09	180	0.5%	89.1	91.7
9877-17	7.09	180	7.28	185	0.5%	90.1	92.7
9877-18	7.28	185	7.48	190	0.5%	91.1	93.7
9877-19	7.48	190	7.68	195	0.5%	92.1	94.7
9877-20	7.68	195	7.88	200	0.5%	93.1	95.7
9877-020	7.88	200	7.88	200	0.0%	93.1	96.7
9877-203	7.88	200	7.88	200	0.0%	46.9	48.2

TRENCH DEPTH 9877 SYSTEM							
Channel Number	Shallow End Invert		Deep End Invert		Slope	Slotted Weight Lbs.	ADA Weight Lbs.
	Inch	mm	Inch	mm			
9877-21	7.88	200	8.07	205	0.5%	94.1	96.7
9877-22	8.07	205	8.27	210	0.5%	95.1	45.0
9877-23	8.27	210	8.46	215	0.5%	96.0	98.6
9877-24	8.46	215	8.66	220	0.5%	97.0	99.6
9877-25	8.66	220	8.86	225	0.5%	98.0	100.6
9877-26	8.86	225	9.06	230	0.5%	99.0	101.6
9877-27	9.06	230	9.25	235	0.5%	100.0	102.6
9877-28	9.25	235	9.45	240	0.5%	101.0	103.6
9877-29	9.45	240	9.65	245	0.5%	102.0	104.6
9877-30	9.65	245	9.84	250	0.5%	103.0	105.6
9877-030	9.84	250	9.84	250	0.0%	103.0	105.6
9877-303	9.84	250	9.84	250	0.0%	51.4	52.7
9877-31	9.84	250	10.04	255	0.5%	104.0	106.6
9877-32	10.04	255	10.24	260	0.5%	105.0	107.6
9877-33	10.24	260	10.43	265	0.5%	106.0	108.6
9877-34	10.43	265	10.63	270	0.5%	107.0	109.6
9877-35	10.63	270	10.83	275	0.5%	108.0	110.4
9877-36	10.83	275	11.02	280	0.5%	109.0	111.2
9877-37	11.02	280	11.22	285	0.5%	110.0	112.6
9877-38	11.22	285	11.42	290	0.5%	111.0	113.6
9877-39	11.42	290	11.61	295	0.5%	112.0	114.6
9877-40	11.61	295	11.81	300	0.5%	113.0	115.6
9877-040	11.81	300	11.81	300	0.0%	113.0	115.6
9877-403	11.81	300	11.81	300	0.0%	56.0	57.3

Note: For overall depth of channel add 1.00” to invert depth shown.

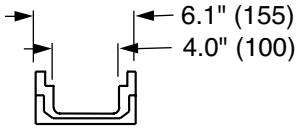
6” SHALLOW DEPTH POLYMER CONCRETE DRAINS

6” Wide ‘Non-Sloped’ Shallow Trench Drains - Figure 9832

- Reduce installation time and cost with interlocking tongue and groove ends
- Ideal for restricted installation depths
- May be assembled in any length
- Load Rated from A - C

APPLICATIONS

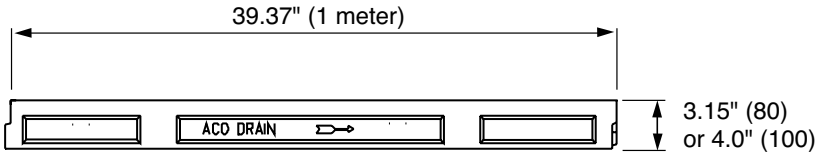
Shopping Malls • Pedestrian Areas
Commercial Areas



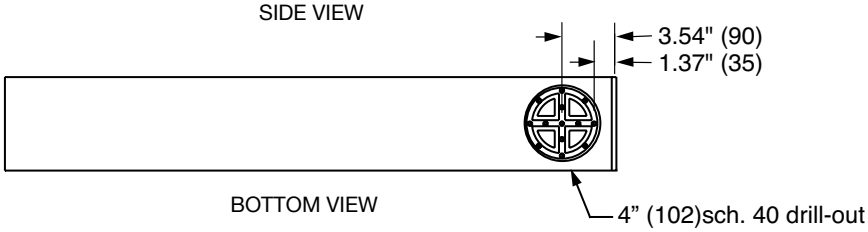
END VIEW

FEATURES:

- 1 meter (3.28’) precast polyester polymer concrete construction
- High-strength, lightweight channels feature interlocking design
- Groove profile for ease of installation and alignment
- Non-sloping bottom
- Supplied with secured grate per specification
- *Designed for on-grade applications only; no provisions for flashing flange or clamp*



SIDE VIEW



BOTTOM VIEW

QuickLok® is a registered trademark of ACO Polymer Products, Inc.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

See page 69-70 for grates.

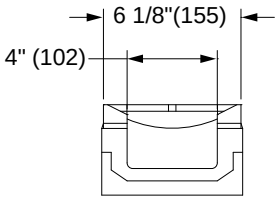
6” WIDE POLYMER CONCRETE DRAINS

6” Wide ‘Non-Sloped’ Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - PowerDrains® Figure 9805

- Heavy duty integral ductile iron rails
- Versatile use in all surface drainage applications
- Shallow, non-sloping channels allow for heavy hard wheel traffic
- Load Rated F

APPLICATIONS

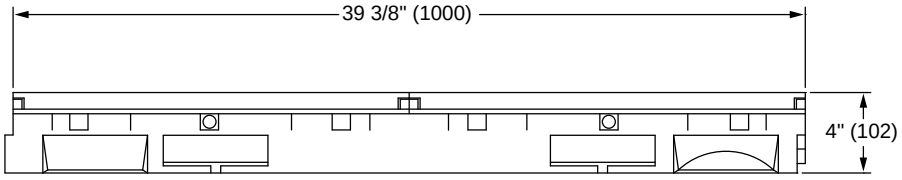
Docks & Ports • Taxiways • Gate Areas • Hangars
Heavy Fork Trucks • Heavy Wheel Loads
Frequent Traffic Areas



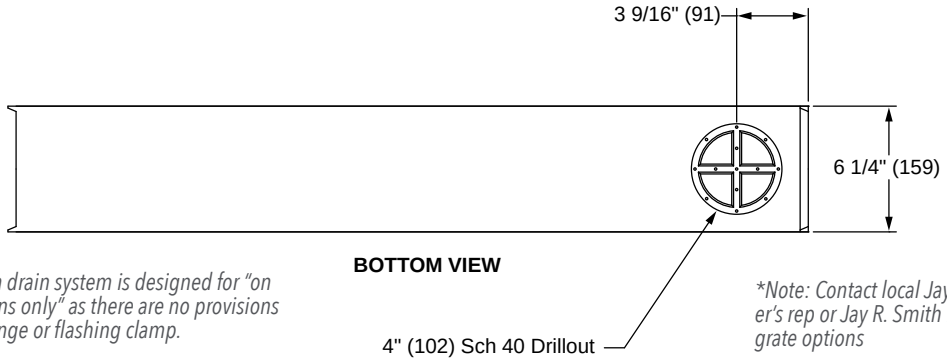
END VIEW

FEATURES:

- 1 meter (3.28’) precast polyester concrete channel construction
- Interlocking design with no slope
- Integral ductile iron edge rail
- 4” internal width, supplied with secured ductile iron slotted or ADA grates *See note
- *Designed for on-grade applications only; no provisions for flashing flange or clamp*



SIDE VIEW



BOTTOM VIEW

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

Regularly furnished with boltless Power-Lok® securing device.

**Note: Contact local Jay R. Smith Mfg. Co. manufacturer’s rep or Jay R. Smith Mfg. Co. Trench Drain Team for grate options*

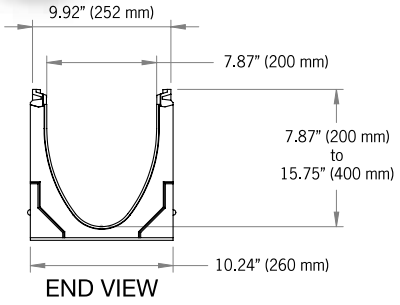
10” WIDE POLYMER CONCRETE DRAINS

10” Wide ‘Pre-Sloped’ Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - PowerDrain® Figure 9878

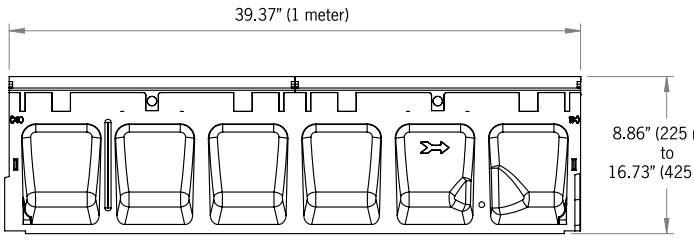
- Extra heavy duty integral ductile iron rails allow for heavy duty traffic
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Convenient interlocking design
- Load Class F

APPLICATIONS

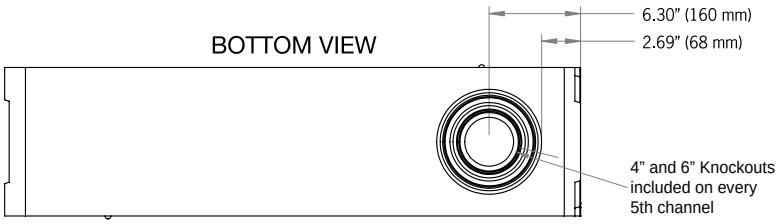
Airports • Highways • Docks & Ports • Military Bases
Truck Stops • Maintenance Shops • Hangars
Frequent Traffic Areas



END VIEW



SIDE VIEW



FEATURES

- Up to 40 (1 meter) sloped channel sections and (1 meter and 1/2 meter) non-sloped channel sections
- Integral cast-in extra heavy duty ductile iron edge rail
- Grates are secured with patented PowerLok® boltless locking system
- Three catch basin options—9878-902D, 9878-621D or 9878-631D
- Built-in slope of .5%
- ADA compliant

Catch Basins

9878-902D
In-Line Catch Basin

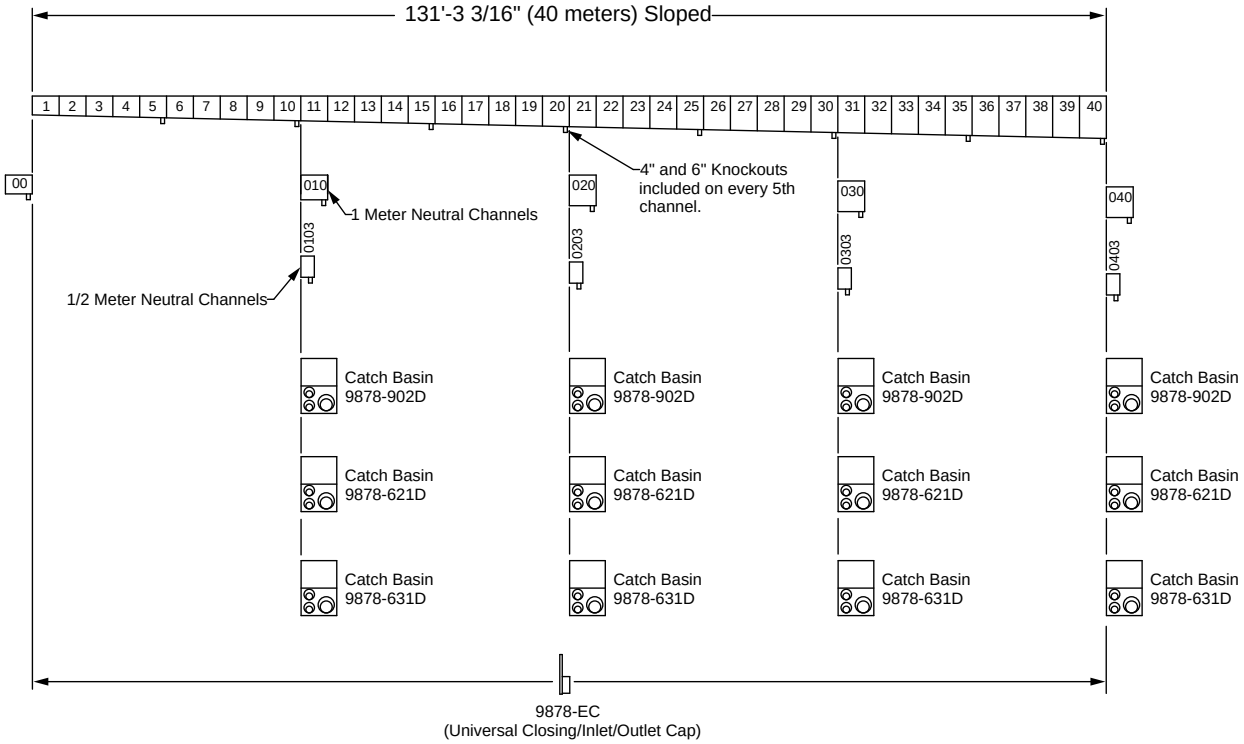
631 Riser

9878-621D Catch Basin
(9878-631D shown with optional riser)

Regularly furnished with boltless PowerLok® securing device.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

10” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail - PowerDrain® - Figure 9878



TRENCH DEPTH 9878 SYSTEM							
Channel Number	Shallow End Invert		Deep End Invert		Slope	Slotted Weight Lbs.	ADA Weight Lbs.
	Inch	mm	Inch	mm			
9878-00	7.87	200	7.87	200	0.0%	141.2	133.7
9878-1	7.87	200	8.07	205	0.5%	141.2	133.7
9878-2	8.07	205	8.27	210	0.5%	142.3	134.8
9878-3	8.27	210	8.46	215	0.5%	143.4	135.9
9878-4	8.46	215	8.66	220	0.5%	144.5	137.0
9878-5	8.66	220	8.86	225	0.5%	145.6	138.1
9878-6	8.86	225	9.06	230	0.5%	146.7	139.2
9878-7	9.06	230	9.25	235	0.5%	147.8	140.3
9878-8	9.25	235	9.45	240	0.5%	148.9	141.4
9878-9	9.45	240	9.65	245	0.5%	150.0	142.5
9878-10	9.65	245	9.84	250	0.5%	151.1	143.6
9878-010	9.84	250	9.84	250	0.0%	151.2	143.7
9878-103	9.84	250	9.84	250	0.0%	89.2	85.45
9878-11	9.84	250	10.04	255	0.5%	152.2	144.7
9878-12	10.04	255	10.24	260	0.5%	153.3	145.8
9878-13	10.24	260	10.43	265	0.5%	154.4	146.9
9878-14	10.43	265	10.63	270	0.5%	155.6	148.1
9878-16	10.63	270	10.83	275	0.5%	156.7	149.2
9878-16	10.83	275	11.02	280	0.5%	157.8	150.3
9878-17	11.02	280	11.22	285	0.5%	158.9	151.4
9878-18	11.22	285	11.42	290	0.5%	160.0	152.5
9878-19	11.42	290	11.61	295	0.5%	161.1	153.6
9878-20	11.61	295	11.81	300	0.5%	162.2	154.7
9878-020	11.81	300	11.81	300	0.0%	162.2	154.7
9878-203	11.81	300	11.81	300	0.0%	96.8	93.05
9878-21	11.81	300	12.01	305	0.5%	163.3	155.8

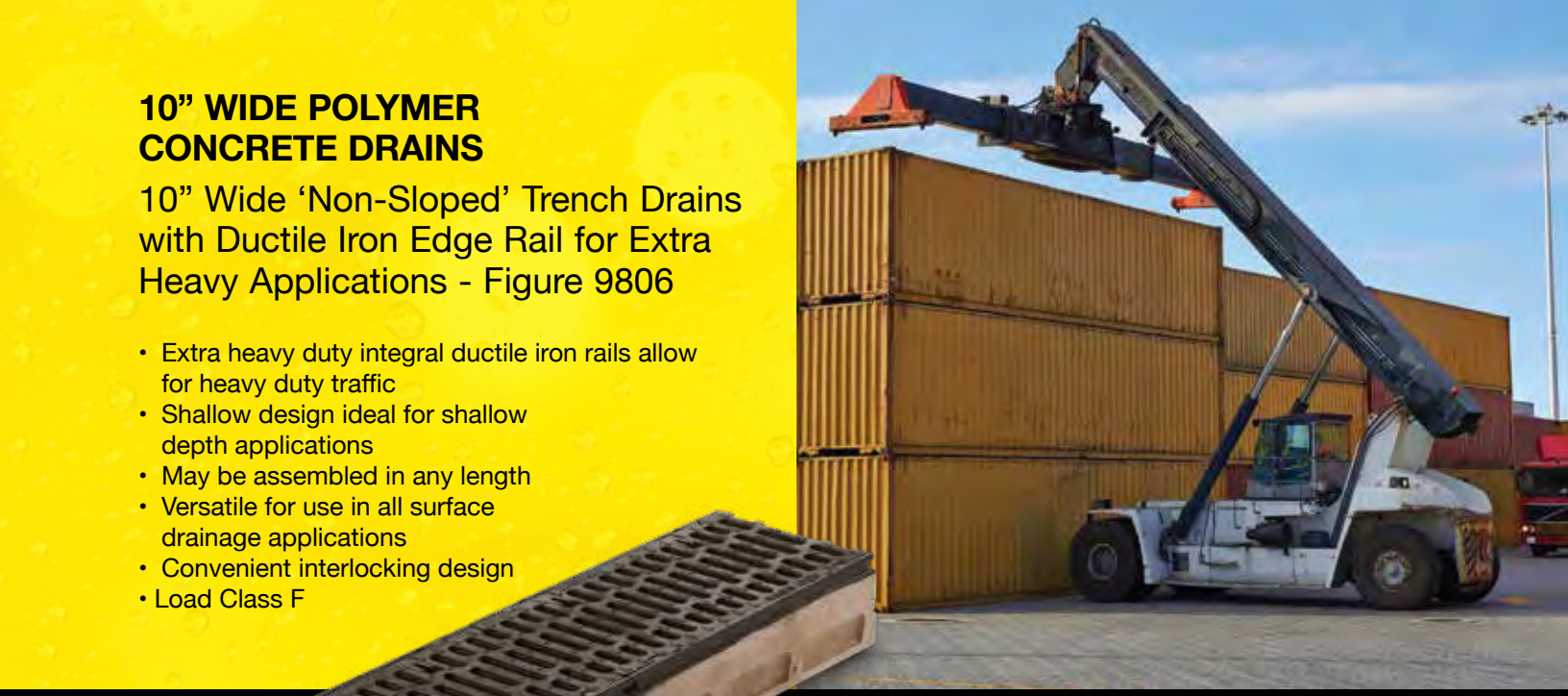
TRENCH DEPTH 9878 SYSTEM							
Channel Number	Shallow End Invert		Deep End Invert		Slope	Slotted Weight Lbs.	ADA Weight Lbs.
	Inch	mm	Inch	mm			
9878-22	12.01	305	12.20	310	0.5%	164.4	156.9
9878-23	12.20	310	12.40	315	0.5%	165.5	158.0
9878-24	12.40	315	12.60	320	0.5%	166.6	159.1
9878-25	12.60	320	12.80	325	0.5%	167.7	160.2
9878-26	12.80	325	12.99	330	0.5%	168.8	161.3
9878-27	12.99	330	13.19	335	0.5%	169.9	162.4
9878-28	13.19	335	13.39	340	0.5%	171.0	163.5
9878-29	13.39	340	13.58	345	0.5%	172.1	164.6
9878-30	13.58	345	13.78	350	0.5%	173.2	165.7
9878-030	13.78	350	13.78	350	0.0%	173.2	165.7
9878-303	13.78	350	13.78	350	0.0%	101.3	97.55
9878-31	13.78	350	13.98	355	0.5%	174.4	166.9
9878-32	13.98	355	14.17	360	0.5%	175.5	168.0
9878-33	14.17	360	14.37	365	0.5%	176.6	169.1
9878-34	14.37	365	14.57	370	0.5%	177.7	170.2
9878-35	14.57	370	14.76	375	0.5%	178.8	171.3
9878-36	14.76	375	14.96	380	0.5%	179.9	172.4
9878-37	14.96	380	15.16	385	0.5%	181.0	173.5
9878-38	15.16	385	15.35	390	0.5%	182.1	174.6
9878-39	15.35	390	15.55	395	0.5%	183.2	175.7
9878-40	15.55	395	15.75	400	0.5%	184.3	176.8
9878-040	15.75	400	15.75	400	0.0%	184.3	176.8
9878-403	15.75	400	15.75	400	0.0%	110.1	106.4

Note: For overall depth of channel add 1.00” to invert depth shown.

10” WIDE POLYMER CONCRETE DRAINS

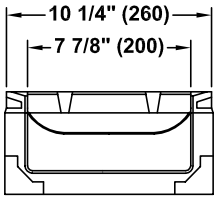
10” Wide ‘Non-Sloped’ Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - Figure 9806

- Extra heavy duty integral ductile iron rails allow for heavy duty traffic
- Shallow design ideal for shallow depth applications
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Convenient interlocking design
- Load Class F



APPLICATIONS

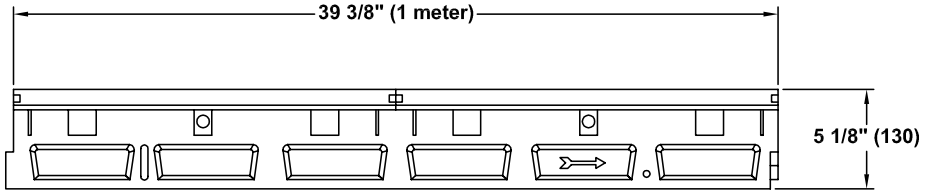
Airports • Highways • Docks & Ports • Military Bases
Truck Stop • Maintenance Shops • Hangars
Frequent Traffic Areas



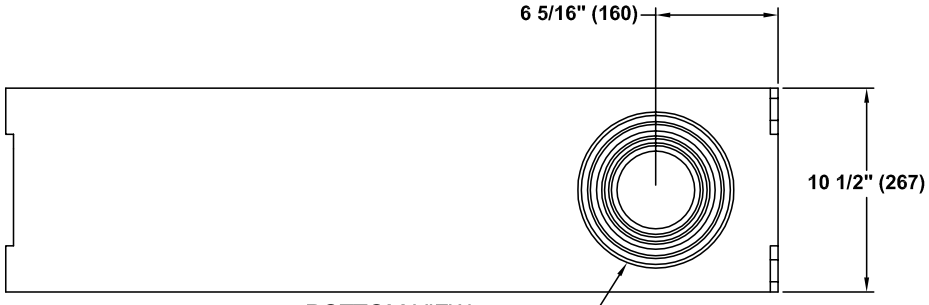
END VIEW

FEATURES

- 3.94” shallow invert depth
- 8” inside width
- Integral cast-in extra heavy duty ductile iron edge rail
- Grates are secured with patented PowerLok® boltless locking system
- Cast in sealant groove



SIDE VIEW



BOTTOM VIEW

Regularly furnished with boltless PowerLok® securing device.

4" (102) and 6" (152) Sch 40 Knockout/Drillout

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

10” WIDE POLYMER CONCRETE DRAINS

Figure 9898 - 10” Wide ‘Shallow’ Trench Drains with Integral Metal Rail - SlabDrain®

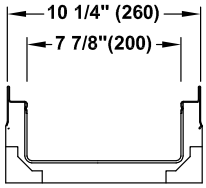
- Integral galvanized steel rails allow for heavy duty hard wheel traffic
- Shallow non-sloping channels may be assembled in any length
- Versatile for use in all surface drainage applications
- Convenient interlocking design
- Load Class A - E

APPLICATIONS

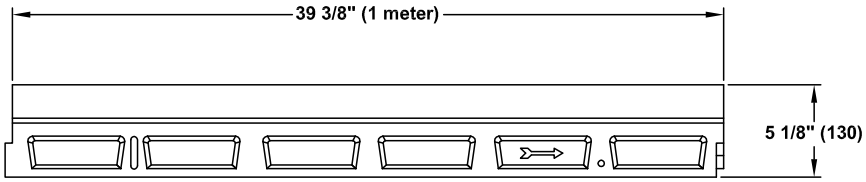
Decks • Slabs • Retrofit Projects
Threshold Applications

FEATURES

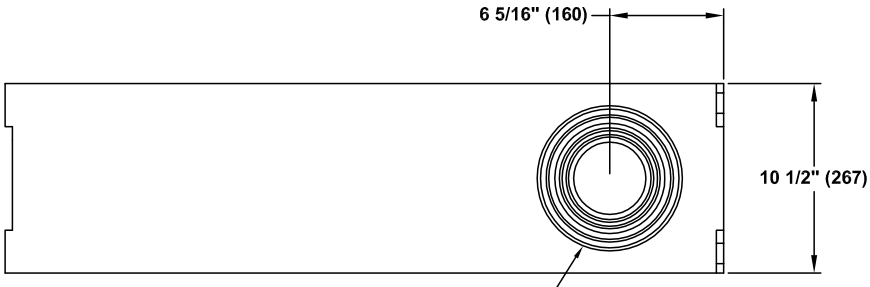
- 3.94” invert depth for applications in shallow areas
- 8” inside width
- 4” and 6” bottom knockouts on each channel section
- Grates are secured with patented QuickLok® boltless locking system
- Galvanized edge rail regularly furnished; stainless steel rail option available



END VIEW



SIDE VIEW



BOTTOM VIEW

4" (100) and 6" (152) Sch 40 Knockout/Drillout

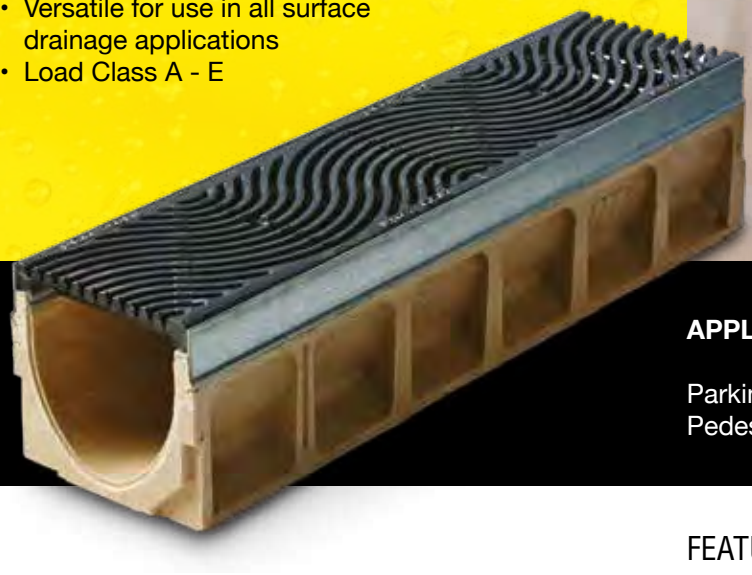
Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

See page 71-72 for grates.

10” WIDE POLYMER CONCRETE DRAINS

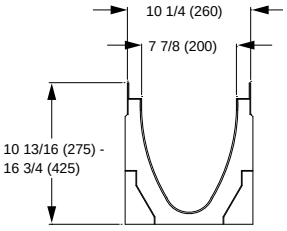
10” Wide ‘Pre-Sloped’ Trench Drains with Integral Metal Rail - KlassikDrain® Figure 9896

- Integral galvanized metal rails allow for heavy duty hard wheel traffic
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Load Class A - E

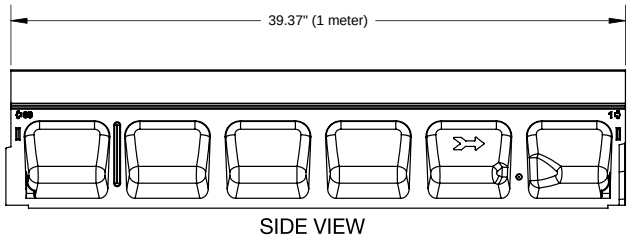


APPLICATIONS

Parking Lots and Garages • Shopping Malls
Pedestrian Areas • Commercial Areas



END VIEW



SIDE VIEW

BOTTOM VIEW

4" SCH40 knock-out
6" SCH40 knock-out
On every 5th channel

Note: This trench drain system is designed for "on grade applications only" as there are no provisions for a flashing flange or flashing clamp.

FEATURES

- Up to 40 (1 meter) sloped channel sections and (1 meter and 1/2 meter) non-sloped channel sections
- 8” inside width—wider flow area for higher discharge rates
- Grates are secured with patented QuickLok® boltless locking system
- Galvanized edge rail regularly furnished; stainless steel rail option available
- Three catch basin options—9896-902, 9896-621 or 9896-631
- Built-in slope of .5%

Catch Basins

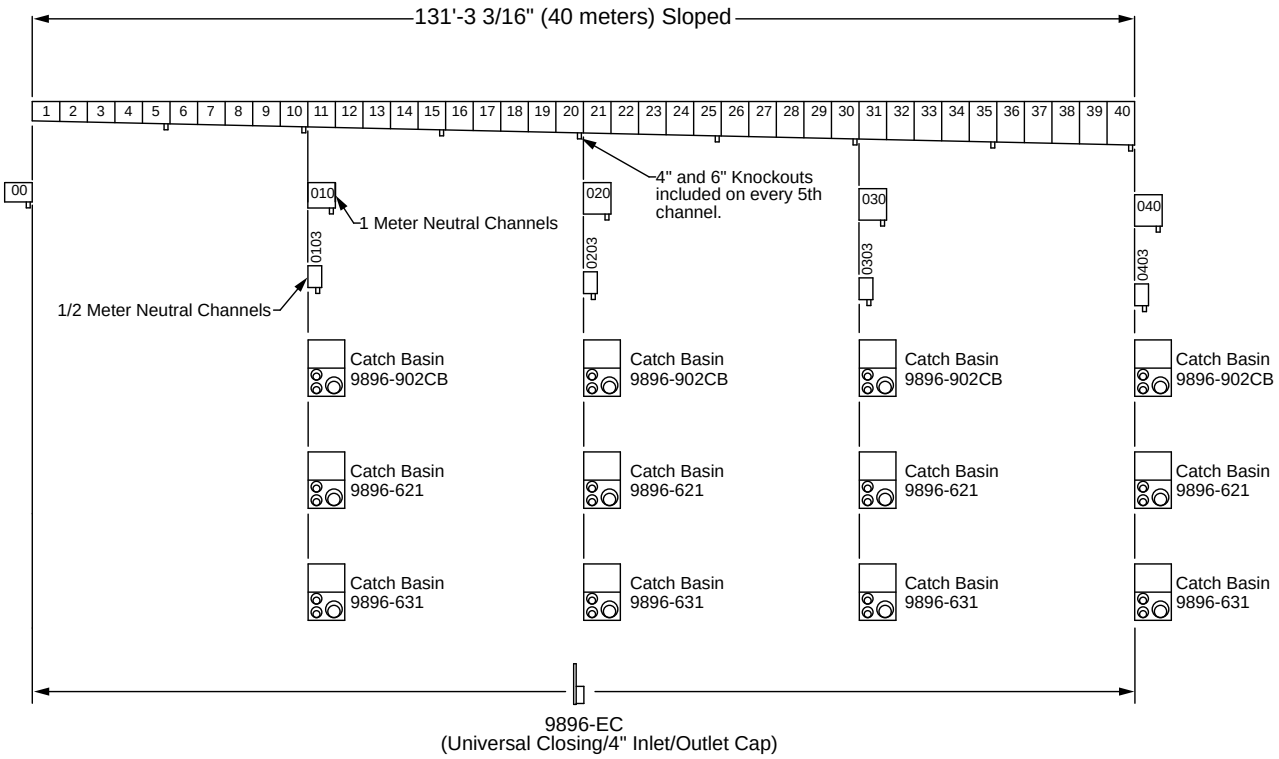
9896-902
In-Line Catch Basin

631 Riser

9896-621 Catch Basin
(9896-631 shown with optional riser)

See page 71-72 for grates.

10” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Integral Metal Rail - KlassikDrain® - Figure 9896



TRENCH DEPTH 9896 SYSTEM						
Channel Number	Shallow End Invert Inch	Shallow End Invert mm	Deep End Invert Inch	Deep End Invert mm	Slope	Weight Lbs.
9896-00	7.87	200	7.87	200	0.0%	83.6
9896-1	7.87	200	8.07	205	0.5%	83.6
9896-2	8.07	205	8.27	210	0.5%	84.7
9896-3	8.27	210	8.46	215	0.5%	85.8
9896-4	8.46	215	8.66	220	0.5%	86.9
9896-5	8.66	220	8.86	225	0.5%	88.0
9896-6	8.86	225	9.06	230	0.5%	89.1
9896-7	9.06	230	9.25	235	0.5%	90.2
9896-8	9.25	235	9.45	240	0.5%	91.3
9896-9	9.45	240	9.65	245	0.5%	92.4
9896-10	9.65	245	9.84	250	0.5%	93.5
9896-010	9.84	250	9.84	250	0.0%	93.5
9896-103	9.84	250	9.84	250	0.0%	56.0
9896-11	9.84	250	10.04	255	0.5%	94.6
9896-12	10.04	255	10.24	260	0.5%	95.7
9896-13	10.24	260	10.43	265	0.5%	96.8
9896-14	10.43	265	10.63	270	0.5%	97.9
9896-16	10.63	270	10.83	275	0.5%	99.0
9896-16	10.83	275	11.02	280	0.5%	100.1
9896-17	11.02	280	11.22	285	0.5%	101.2
9896-18	11.22	285	11.42	290	0.5%	102.3
9896-19	11.42	290	11.61	295	0.5%	103.4
9896-20	11.61	295	11.81	300	0.5%	104.5
9896-020	11.81	300	11.81	300	0.0%	104.5
9896-203	11.81	300	11.81	300	0.0%	105.6

TRENCH DEPTH 9896 SYSTEM						
Channel Number	Shallow End Invert Inch	Shallow End Invert mm	Deep End Invert Inch	Deep End Invert mm	Slope	Weight Lbs.
9896-21	11.81	300	12.01	305	0.5%	106.7
9896-22	12.01	305	12.20	310	0.5%	107.8
9896-23	12.20	310	12.40	315	0.5%	107.8
9896-24	12.40	315	12.60	320	0.5%	108.9
9896-25	12.60	320	12.80	325	0.5%	110.0
9896-26	12.80	325	12.99	330	0.5%	111.1
9896-27	12.99	330	13.19	335	0.5%	112.2
9896-28	13.19	335	13.39	340	0.5%	113.3
9896-29	13.39	340	13.58	345	0.5%	114.4
9896-30	13.58	345	13.78	350	0.5%	115.5
9896-030	13.78	350	13.78	350	0.0%	115.5
9896-303	13.78	350	13.78	350	0.0%	68.0
9896-31	13.78	350	13.98	355	0.5%	116.6
9896-32	13.98	355	14.17	360	0.5%	117.7
9896-33	14.17	360	14.37	365	0.5%	118.8
9896-34	14.37	365	14.57	370	0.5%	119.9
9896-35	14.57	370	14.76	375	0.5%	121.0
9896-36	14.76	375	14.96	380	0.5%	122.1
9896-37	14.96	380	15.16	385	0.5%	123.2
9896-38	15.16	385	15.35	390	0.5%	124.3
9896-39	15.35	390	15.55	395	0.5%	125.4
9896-40	15.55	395	15.75	400	0.5%	126.5
9896-040	15.75	400	15.75	400	0.0%	126.5
9896-403	15.75	400	15.75	400	0.0%	77.00

Note: For overall depth of channel add 1.00” to invert depth shown.

14” WIDE POLYMER CONCRETE DRAINS

14” Wide ‘Shallow’ Trench Drains with Ductile Iron Edge Rail for Extra Heavy Applications - PowerDrain® - Figure 9807

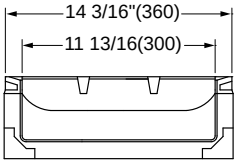
- Extra heavy duty integral ductile iron rails allow for heavy duty traffic
- Shallow non-slope design ideal for shallow depth applications
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Convenient interlocking design
- Load Class F

APPLICATIONS

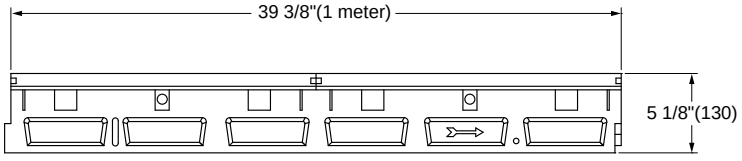
Airports • Docks & Ports • Military Bases
Truck Stops • Maintenance Shops • Hangars
Frequent Traffic Areas

FEATURES

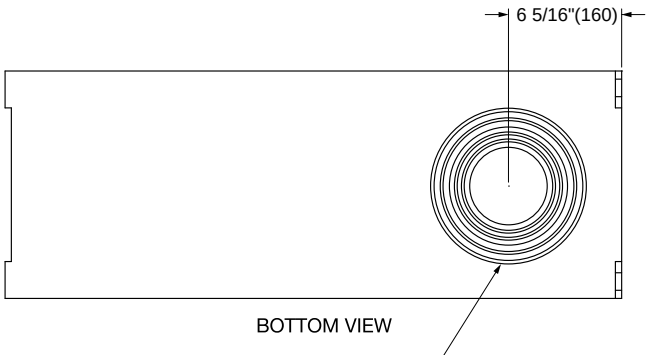
- 14” wide, polyester polymer concrete construction
- Shallow, non-sloping channels
- 1 meter channels can be assembled in any length
- Integral ductile iron rails allow for extra heavy duty applications.
- Supplied with secured ductile iron slotted grates



END VIEW



SIDE VIEW



BOTTOM VIEW

6"(152) and 8"(203) Sch 40 Knockout/Drillout

Regularly furnished with boltless PowerLok® securing device.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

14” WIDE POLYMER CONCRETE DRAINS

14” Wide Non-Sloped Trench Drains with Integral Metal Rail - SlabDrain® Figure 9899

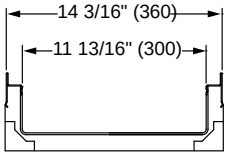
- Integral galvanized steel rails allow for heavy duty hard wheel traffic
- Shallow non-sloping channels may be assembled in any length
- Versatile for use in all surface drainage applications
- Convenient interlocking design
- Load Class A - E

APPLICATIONS

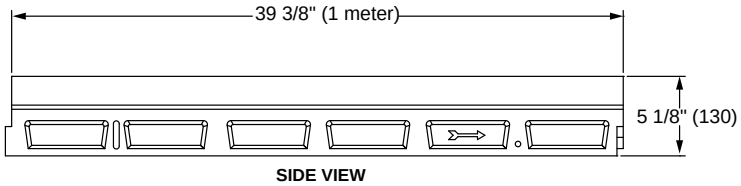
Airports • Docks & Ports • Military Bases
Truck Stops

FEATURES

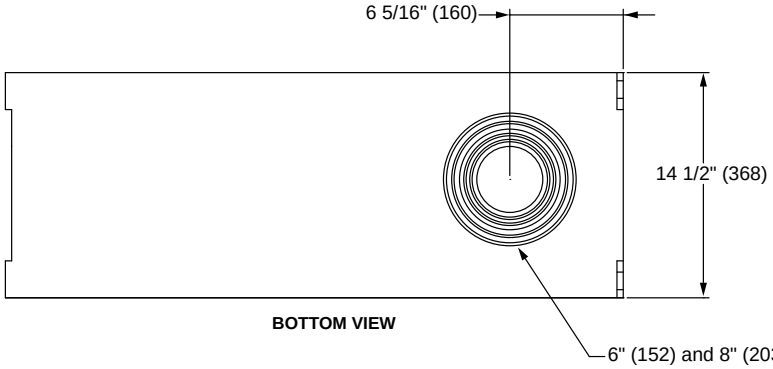
- Shallow, non-sloping channels can be assembled in any length
- 1 meter (3.28’) channel length
- Polyester polymer concrete construction
- Interlocking design
- Integral galvanized steel rail for extra heavy duty applications
- 12” internal width
- A variety of grates are available to suit the application, from light to extra heavy duty
- Grates are secured with patented QuickLok® boltless locking system



END VIEW



SIDE VIEW



BOTTOM VIEW

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

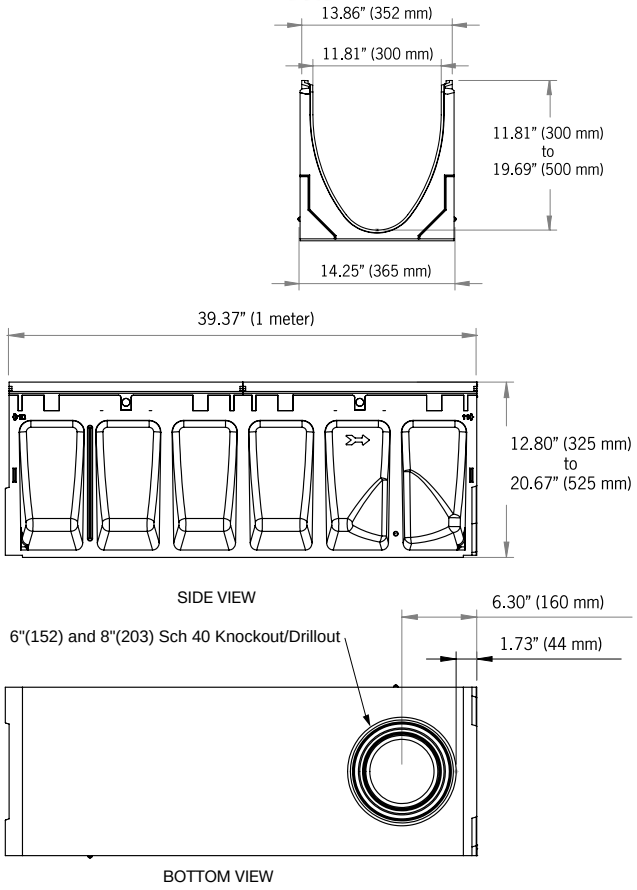
14” WIDE POLYMER CONCRETE DRAINS

14” Wide ‘Pre-Sloped’ Trench Drains with Ductile Iron Edge Rail for Extra Heavy Duty Applications - PowerLok® Figure 9879

- High capacity, extra heavy duty integral ductile iron rails allow for heavy duty traffic
- May be assembled in any length
- Convenient interlocking design
- Load Class F

APPLICATIONS

Airports • Hangars • Fire Stations • Military Bases
Warehouses • Gas Stations • Highways
Frequent Traffic Areas



Regularly furnished with boltless PowerLok® securing device.

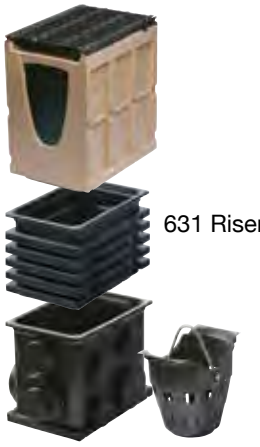
Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

FEATURES

- A high capacity version of our 9877
- EN1433 Class F rated for 202,320 pound loads
- .5% Pre-sloped and non-sloping neutral sections (see diagram on next page for beginning and ending inverts)
- The grate is secured with a PowerLok® boltless locking device
- Integral shunts built into the ductile frame and grate to prevent lateral movement
- Built-in vertical outlet sections
- ADA Grate

Catch Basins

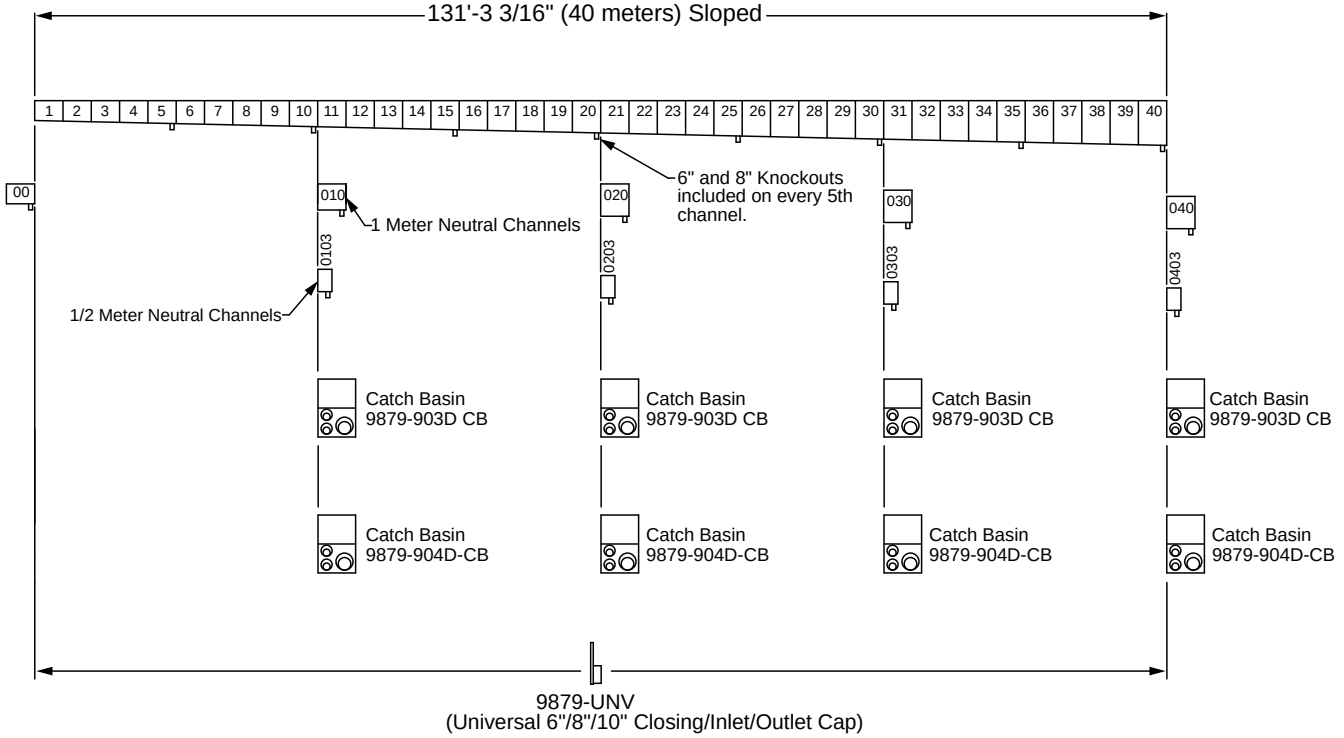
9879-903D
In-Line Catch Basin



631 Riser

9879-904D Catch Basin
(9879-631D shown with optional riser)

14” Wide ‘Pre-Sloped’ Polymer Concrete Trench Drains with Ductile Iron Edge Rail PowerLok® - Figure 9879



TRENCH DEPTH 9879 SYSTEM							
Channel Number	Shallow End Invert		Deep End Invert		Slope	Slotted Weight Lbs.	ADA Weight Lbs.
	Inch	mm	Inch	mm			
9879-00	11.81	300	11.81	300	0.0%	230.2	258.2
9879-1	11.81	300	12.01	305	0.5%	230.2	258.2
9879-2	12.01	305	12.20	310	0.5%	231.4	259.4
9879-3	12.20	310	12.40	315	0.5%	232.7	260.7
9879-4	12.40	315	12.60	320	0.5%	233.9	261.9
9879-5	12.60	320	12.80	325	0.5%	235.1	263.1
9879-6	12.80	325	12.99	330	0.5%	236.4	264.4
9879-7	12.99	330	13.19	335	0.5%	237.6	265.6
9879-8	13.19	335	13.39	340	0.5%	238.8	266.8
9879-9	13.39	340	13.58	345	0.5%	240.0	268.0
9879-10	13.58	345	13.78	350	0.5%	241.3	269.3
9879-010	13.78	350	13.78	350	0.0%	241.3	269.3
9879-103	13.78	350	13.78	350	0.0%	127.9	141.9
9879-11	13.78	350	13.98	355	0.5%	242.5	270.5
9879-12	13.98	355	14.17	360	0.5%	243.7	271.7
9879-13	14.17	360	14.37	365	0.5%	245.0	273.0
9879-14	14.37	365	14.57	370	0.5%	246.2	274.2
9879-15	14.57	370	14.76	375	0.5%	247.4	275.4
9879-16	14.76	375	14.96	380	0.5%	248.7	276.7
9879-17	14.96	380	15.16	385	0.5%	249.9	277.9
9879-18	15.16	385	15.35	390	0.5%	251.1	279.1
9879-19	15.35	390	15.55	395	0.5%	252.4	280.4
9879-20	15.55	395	15.75	400	0.5%	253.6	281.6
9879-020	15.75	400	15.75	400	0.0%	253.6	281.6
9879-203	15.75	400	15.75	400	0.0%	134.9	148.9

TRENCH DEPTH 9879 SYSTEM							
Channel Number	Shallow End Invert		Deep End Invert		Slope	Slotted Weight Lbs.	ADA Weight Lbs.
	Inch	mm	Inch	mm			
9879-21	15.75	400	15.94	405	0.5%	254.8	282.8
9879-22	15.94	405	16.14	410	0.5%	256.1	284.1
9879-23	16.14	410	16.34	415	0.5%	257.3	285.3
9879-24	16.34	415	16.54	420	0.5%	258.5	286.5
9879-25	16.54	420	16.73	425	0.5%	259.7	287.7
9879-26	16.73	425	16.93	430	0.5%	261.0	289.0
9879-27	16.93	430	17.13	435	0.5%	262.2	290.2
9879-28	17.13	435	17.32	440	0.5%	263.4	291.4
9879-29	17.32	440	17.52	445	0.5%	264.7	292.7
9879-30	17.52	445	17.72	450	0.5%	265.9	293.9
9879-030	17.72	450	17.72	450	0.0%	265.9	293.9
9879-303	17.72	450	17.72	450	0.0%	142.1	156.1
9879-31	17.72	450	17.91	455	0.5%	267.1	295.1
9879-32	17.91	455	18.11	460	0.5%	268.4	296.4
9879-33	18.11	460	18.31	465	0.5%	269.6	297.6
9879-34	18.31	465	18.50	470	0.5%	270.8	298.8
9879-35	18.50	470	18.70	475	0.5%	272.1	300.1
9879-36	18.70	475	18.90	480	0.5%	273.3	301.3
9879-37	18.90	480	19.09	485	0.5%	274.5	302.5
9879-38	19.09	485	19.29	490	0.5%	275.7	303.7
9879-39	19.29	490	19.49	495	0.5%	277.0	305.0
9879-40	19.49	495	19.69	500	0.5%	278.2	306.2
9879-040	19.69	500	19.69	500	0.0%	278.2	306.2
9879-403	19.69	500	19.69	500	0.0%	150.3	164.3

Note: For overall depth of channel add 1.00” to invert depth shown.

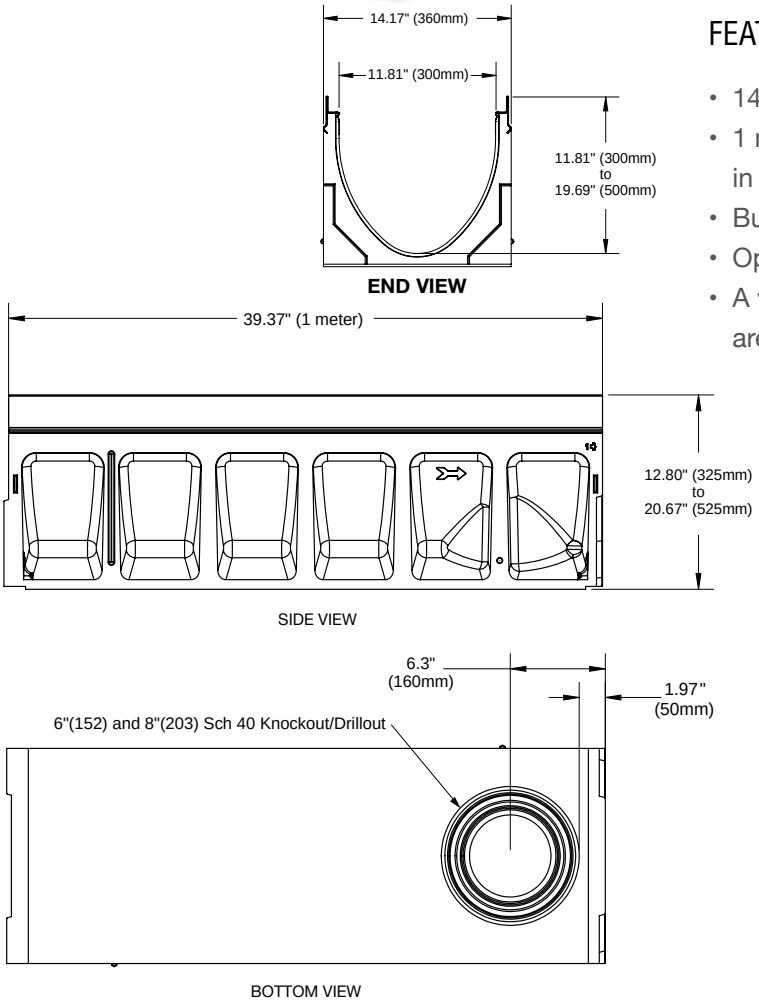
14” WIDE POLYMER CONCRETE DRAINS

14” Wide Trench Drains with Integral Metal Rail - KlassikDrain® - Figure 9897

- Integral galvanized steel rails allow for heavy duty hard wheel traffic
- May be assembled in any length
- Versatile for use in all surface drainage applications
- Load Class A - E

APPLICATIONS

Airports • Hangars • Fire Stations • Military Bases
Warehouses • Gas Stations • Highways



FEATURES

- 14” wide, polyester polymer concrete construction
- 1 meter sloping channels can be assembled in any length
- Built in slope of .5%
- Optional stainless steel rails
- A variety of grates from light to extra heavy duty are available

Catch Basins

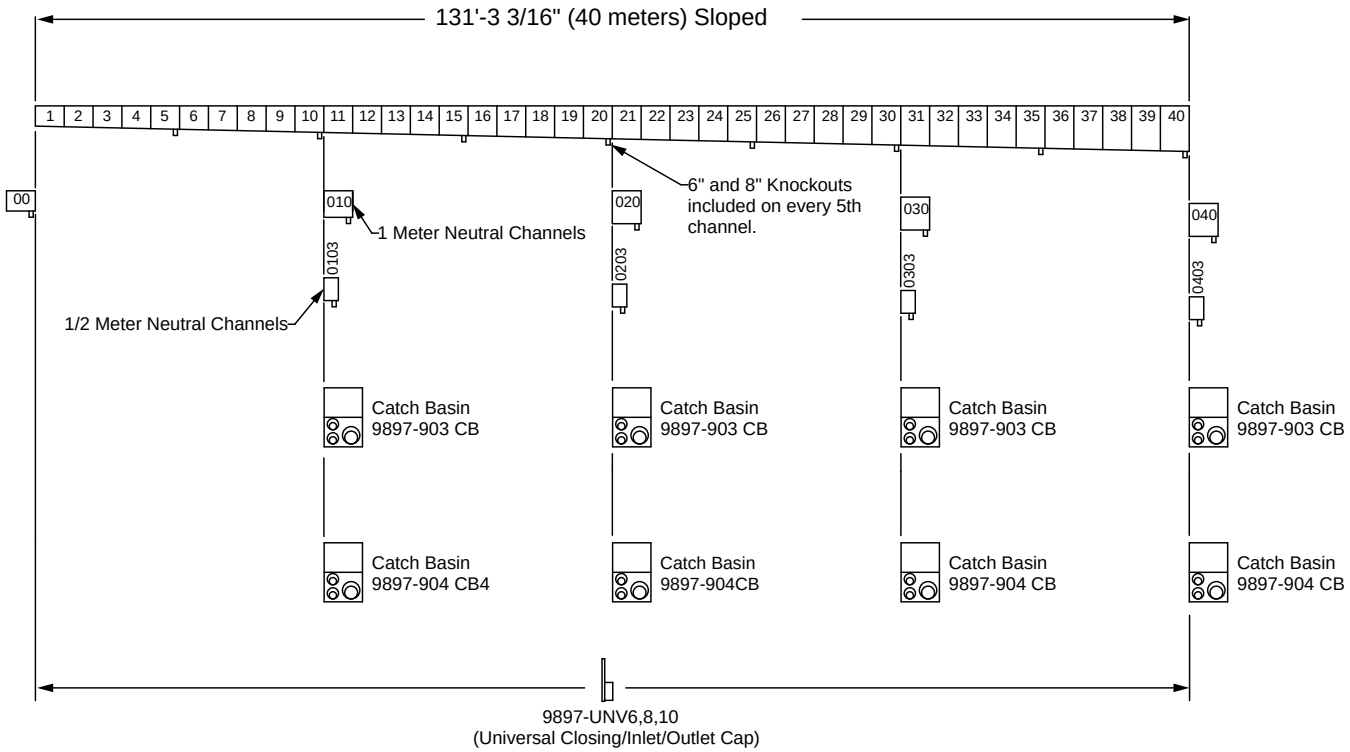
9897-903
In-Line Catch Basin

631 Riser

9897-904 Catch Basin
(9897-631 shown with optional riser)

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

14” Wide Polymer Concrete Trench Drains with Integral Metal Rail KlassikDrain® - Figure 9897



TRENCH DEPTH 9897 SYSTEM						
Channel Number	Shallow End Invert		Deep End Invert		Slope	Weight Lbs.
	Inch	mm	Inch	mm		
9897-00	11.81	300	11.81	300	0.0%	132.6
9897-1	11.81	305	12.01	305	0.5%	132.6
9897-2	12.01	310	12.20	310	0.5%	133.8
9897-3	12.20	315	12.40	315	0.5%	135.0
9897-4	12.40	320	12.60	320	0.5%	136.2
9897-5	12.60	325	12.80	325	0.5%	137.4
9897-6	12.80	330	12.99	330	0.5%	138.6
9897-7	12.99	335	13.19	335	0.5%	139.8
9897-8	13.19	340	13.39	340	0.5%	141.0
9897-9	13.39	345	13.58	345	0.5%	142.2
9897-10	13.58	350	13.78	350	0.5%	143.4
9897-010	13.78	350	13.78	350	0.0%	143.4
9897-103	13.78	350	13.78	350	0.0%	75.3
9897-11	13.78	355	13.98	355	0.5%	144.6
9897-12	13.98	360	14.17	360	0.5%	145.8
9897-13	14.17	365	14.37	365	0.5%	147.0
9897-14	14.37	370	14.57	370	0.5%	148.2
9897-15	14.57	375	14.76	375	0.5%	149.4
9897-16	14.76	380	14.96	380	0.5%	150.6
9897-17	14.96	385	15.16	385	0.5%	151.8
9897-18	15.16	390	15.35	390	0.5%	153.0
9897-19	15.35	395	15.55	395	0.5%	154.2
9897-20	15.55	400	15.75	400	0.5%	155.4
9897-020	15.75	400	15.75	400	0.0%	155.4
9897-203	15.75	400	15.75	400	0.0%	82.3

TRENCH DEPTH 9897 SYSTEM						
Channel Number	Shallow End Invert		Deep End Invert		Slope	Weight Lbs.
	Inch	mm	Inch	mm		
9897-21	15.75	405	15.94	405	0.5%	156.7
9897-22	15.94	410	16.14	410	0.5%	157.9
9897-23	16.14	415	16.34	415	0.5%	159.1
9897-24	16.34	420	16.54	420	0.5%	160.3
9897-25	16.54	425	16.73	425	0.5%	161.5
9897-26	16.73	430	16.93	430	0.5%	162.7
9897-27	16.93	435	17.13	435	0.5%	163.9
9897-28	17.13	440	17.32	440	0.5%	165.1
9897-29	17.32	445	17.52	445	0.5%	166.3
9897-30	17.52	450	17.72	450	0.5%	167.5
9897-030	17.72	450	17.72	450	0.0%	167.5
9897-303	17.72	450	17.72	450	0.0%	89.5
9897-31	17.72	455	17.91	455	0.5%	168.7
9897-32	17.91	460	18.11	460	0.5%	169.9
9897-33	18.11	465	18.31	465	0.5%	171.1
9897-34	18.31	470	18.50	470	0.5%	172.3
9897-35	18.50	475	18.70	475	0.5%	173.5
9897-36	18.70	480	18.90	480	0.5%	174.7
9897-37	18.90	485	19.09	485	0.5%	175.9
9897-38	19.09	490	19.29	490	0.5%	177.1
9897-39	19.29	495	19.49	495	0.5%	178.3
9897-40	19.49	500	19.69	500	0.5%	179.5
9897-040	19.69	500	19.69	500	0.0%	179.5
9897-403	19.69	500	19.69	500	0.0%	97.7

Note: For overall depth of channel add 1.00” to invert depth shown.

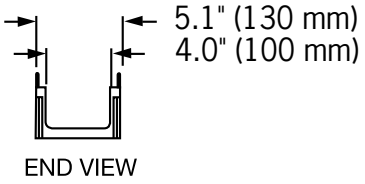
SHALLOW DEPTH POLYMER CONCRETE DRAINS

6” Wide ‘Non-Sloped’ Shallow Trench Drains with Integral Galvanized Edge Rail Figure 9836

- Integrally molded steel edge rail
- Reduce installation time and cost with interlocking tongue and groove ends
- Ideal for restricted installation depths
- May be assembled in any length
- Load Class A - E

APPLICATIONS

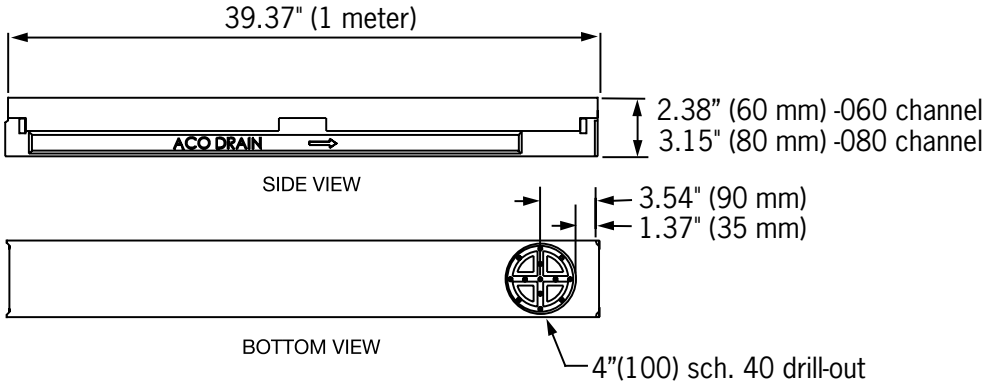
Warehousing • Bottling Plants • Industrial Plants
Fire Stations • Hangars • Restaurants



END VIEW

FEATURES:

- 1 meter (3.28’) precast polyester polymer concrete construction
- High-strength, lightweight channels feature interlocking design
- Groove profile for ease of installation and alignment
- Non-sloping bottom
- Supplied with secured grate per specification



Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

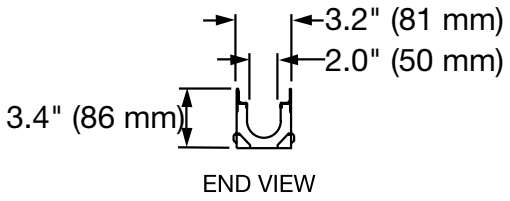
NARROW POLYMER CONCRETE DRAINS

3” Wide ‘No Grade’ ‘Narrow’ Trench Drains - Figure 9833

- High strength polyester polymer conctete construction
- Ease of assembly in any length with interlocking tongue and groove ends
- Reduces installation time and cost
- Load class A - C

APPLICATIONS

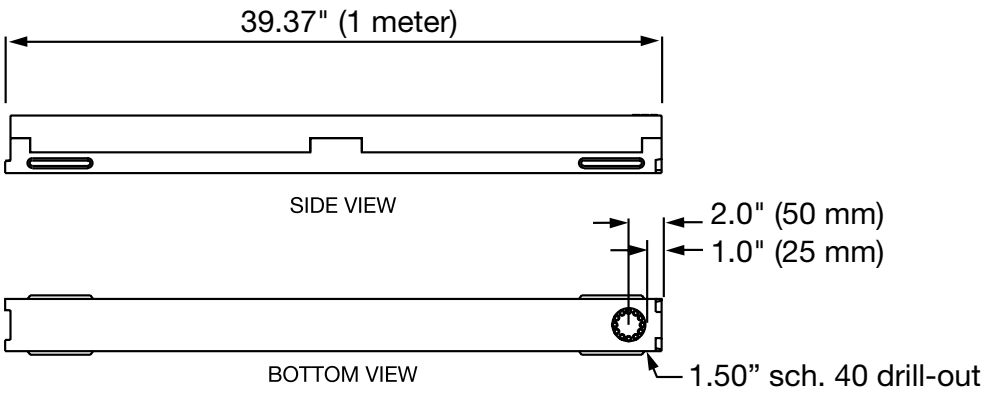
Swimming Pools • Pedestrian Areas • Sidewalks



END VIEW

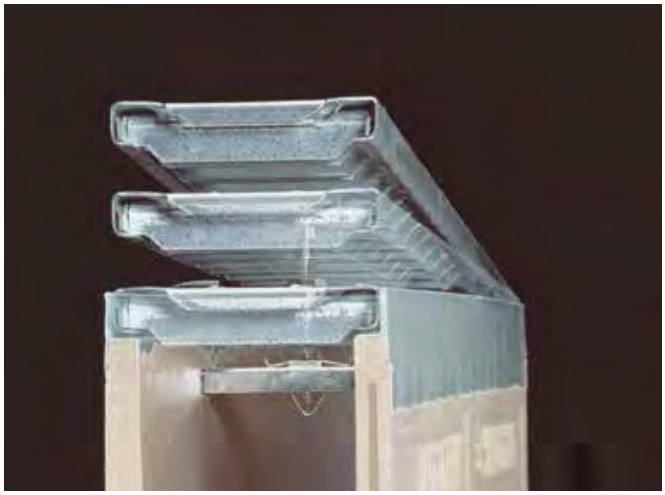
FEATURES:

- 1 meter (3.28’) precast polyester polymer concrete construction
- High-strength, lightweight channels feature interlocking design
- Non-sloping radius bottom channel
- Integrally molded galvanized steel edge rail
- Supplied with grate per specification, see submittal for details



Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

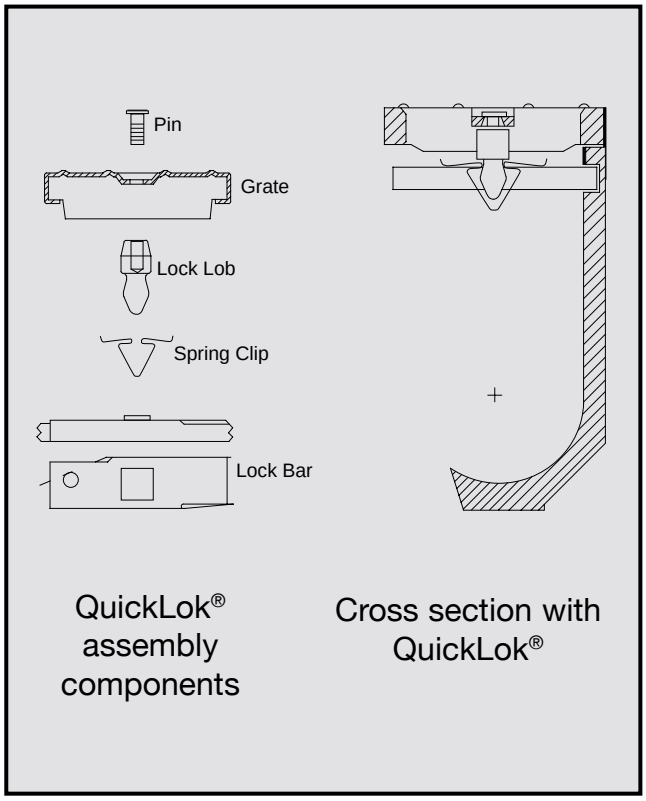
QuickLok®/ PowerLok® Details



The QuickLok® grate locking system is designed to improve access to the trench drain for cleaning and maintenance. With QuickLok®, removing grate lockdown bolts is in the past.

FEATURES

- Preassembled to the grates
- Contractor places QuickLok® locking bar in channel
- Locking bar remains in place by tension side grips
- Optional QuickLok® grate removal tool



QuickLok® is a registered trademark of ACO Polymer Products, Inc.

QuickLok® Boltless Locking System

Insert locking bar into channel's locking pockets and secure by inserting shims on both sides.

The locking force is sufficient to hold grates in place up to load Class E.

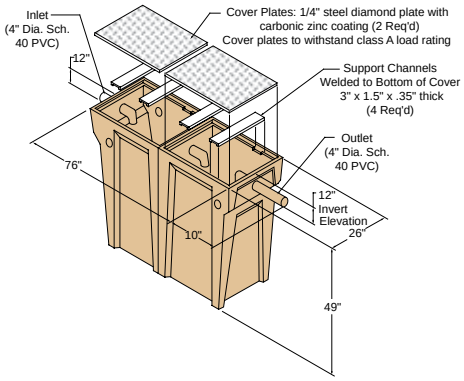
There is no need for tools to fasten the grate into the channel. The grate snaps into place with a quick impact.

Patented PowerLok® Boltless Locking System

To lock grate in place, insert -GRT tool into clip and pull.

To remove grate, place the -GRT tool between the grate clip and the trench rail and rotate clockwise. Clip will release easily.

9857 Oil Separator



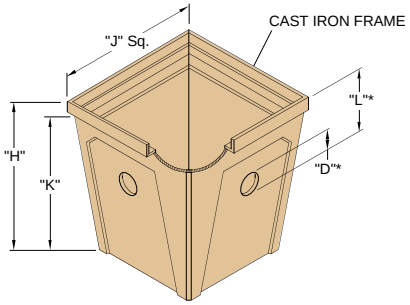
The Jay R. Smith Mfg. Co.® Drainage Systems 9857 Oil Separator effectively helps to separate oils, gases, acids, sand, food remains and sludges from wastewater. It can be utilized in a variety of applications – auto body shops, gas stations, and manufacturing and food processing plants. The 9857 is a manufactured double-basin 220 gallon capacity design from polymer concrete. All PVC 4" piping and cover plates are provided.

Smith Drainage Systems will furnish engineering and installation drawings for your review. Technical assistance is also available for installation, which normally is accomplished in a few hours.

1/4" steel diamond cover plates with carbonic zinc coatings are standard for the 9857. The load rating is Class A, or light Duty, for slow speed pneumatic tire traffic only, gross vehicle weight of 3500 lbs – 70PSI.

Available options include holes for venting and Heavy Duty load class "C" covers.

9846 Sump Boxes



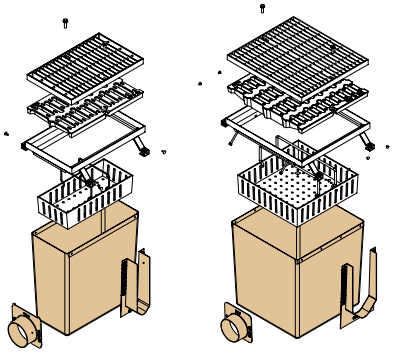
*Specify Inlet and Outlet Diameter and Invert Location

The Jay R. Smith Mfg. Co.® Drainage Systems 9846 Sump Boxes are preassembled modular units which offer solutions to many applications. Well-suited for high capacity flow rates, solids and sludge handling, chemical containment, and pump housing, the sump boxes are available in a range of sizes from 2' x 2' x 2' to 4' x 4'x 4'.

These polymer concrete sump boxes are easily adapted for uses with any of the Channel Slope Precast Polymer Concrete Systems. Upon specification, knockouts can be custom fabricated for pipe connections. Regularly furnished with cast iron frame and loose set cast iron slotted grate. Jay R. Smith Mfg. Co. Drainage Systems' trained staff will assist in specifying the 9846 Sump Box to meet your special needs.

Figure Number	Inside Dimension of Sump Box	Capacity Gallons	Capacity Liters	Weight w/o Cover	"H" w/Frame	"K" w/out Frame	"J" SQ Outside DIM
9846	2' x 2' (610mm x 610mm)	43.3	164	197 (90 kg)	26.75 (680mm)	24.00 (610mm)	27.88 (708mm)
9847	3' x 3' (914mm x 914mm)	161.2	610	467 (212 kg)	38.50 (978mm)	35.75 (909mm)	40.50 (1029mm)
9848	4' x 4' (1219mm x 1219mm)	475	1798	808 (368 kg)	50.38 (1280 mm)	48.75 (1238mm)	51.38 (1305mm)

9812 Catch Basins



9812-660-CB12 9812-880-CB24

The 9812 Series Catch Basins are (9812-660-CB12) 1'-3" x 2' x 2'-3" deep and (9812-880-CB24) 2' x 2'-3" x 2'-4" deep units. These catch basins can be used in conjunction with the 9812 Fiberglass Trench System.

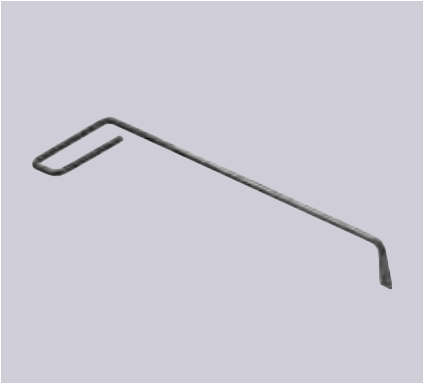
Knockouts to accept trench inlets or plumbing connections are easily fabricated on the job site. All units come standard with a secured, slotted ductile iron grate and coated steel frame, as well as installation brackets.

Polymer Concrete Drainage Systems Accessories

Installation Device Works with 9895, 9896, 9877, 9878, and 9879 SeriesTrench Drains

9853 Shovel Head

Shaped to match the inside diameter of all 4" I.D. channels, the 9853 Shovel Head is a convenient tool for channel cleaning.



9859 Grate Removal Tool

Designed to ease the removal of grates from the trench drainage system.

6" Pipe Outlets

Manufactured with quality, pipe outlets form a rugged connection between channels and underground piping systems. 6" flumed schedule 40 PVC.

ACO Bond - P (Polyester)

Polymer Joint sealant for use with polyester polymer concrete channels. ACO-Bond sealant is available in a 2 1/2 lb. size, enough for 25 joints.

9854 Strainer

Designed to fit a 4" diameter channel outlet hole, the strainer prevents debris from entering underground piping systems.

QuickLok® Boltless Locking Bar Works with 9895, 9896, and 9897 Series

FIBERGLASS TRENCH DRAINS

10” TO 12” WIDE - 9812 - 9872 SERIES

Figure Number 9812

Figure Number 9872

Figure Number 9812 - 10” wide high capacity pre-sloped fiberglass trench drains

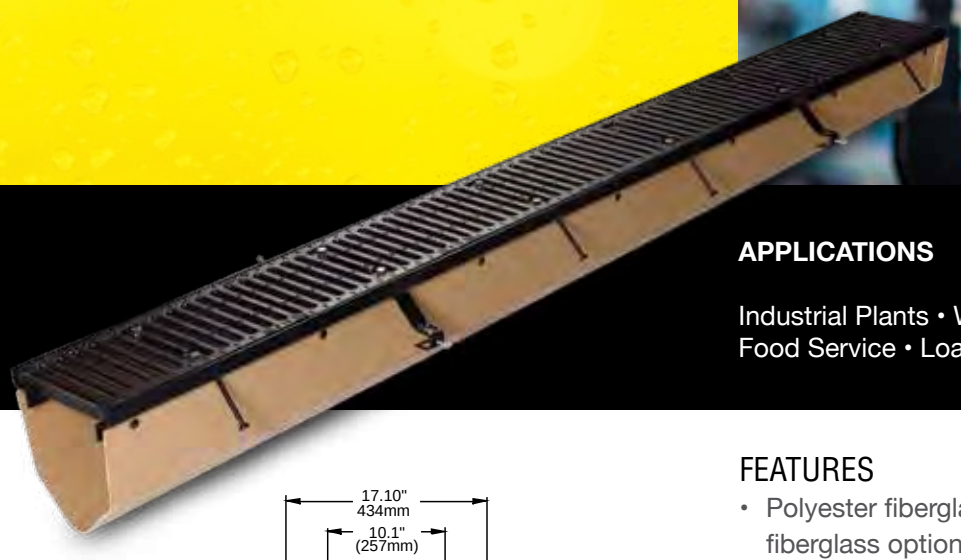
Figure Number 9872 - 12” wide high capacity pre-sloped fiberglass trench drains

- Engineered solutions for high capacity and advanced hydraulic requirements.
- High strength, light weight, and corrosion-resistant.
- Quick evacuation of large volumes of standing or surface liquids (dependent on grate selection).
- 8” internal width and built in slope of 1%.
- 12 sloped channels and 4 neutral channels are each nine feet in length and 4 neutral channels are three feet in length. Channel depth varies from 6.88 to 20.38 inches.
- Ideal for rapid installation.
- Corrosion-resistant polyester fiberglass.

10” WIDE FIBERGLASS

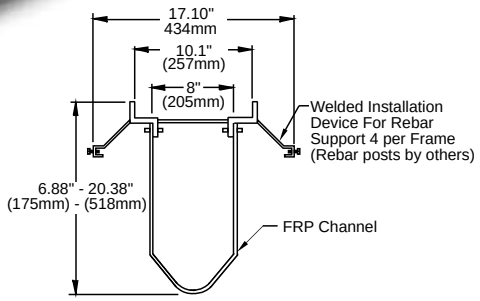
10” Wide High Capacity Pre-Sloped Trench Drains - Figure 9812

- Durable fiberglass construction
- High strength, lightweight and corrosion-resistant
- Convenient pre-sloped and non-sloping channels
- Internal width of 8”
- Grate seat 10” wide
- Load Class C and E

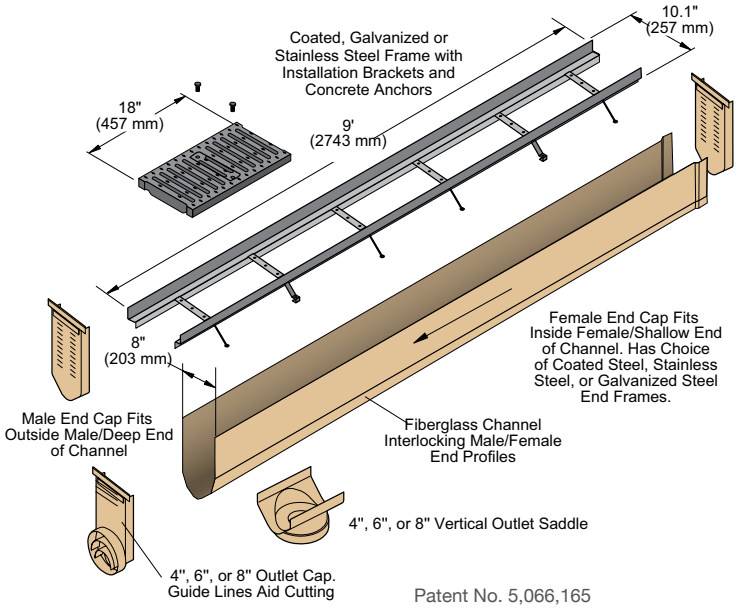


APPLICATIONS

Industrial Plants • Warehousing • Bottling Plants
Food Service • Loading Docks



CROSS SECTION DETAIL



Patent No. 5,066,165

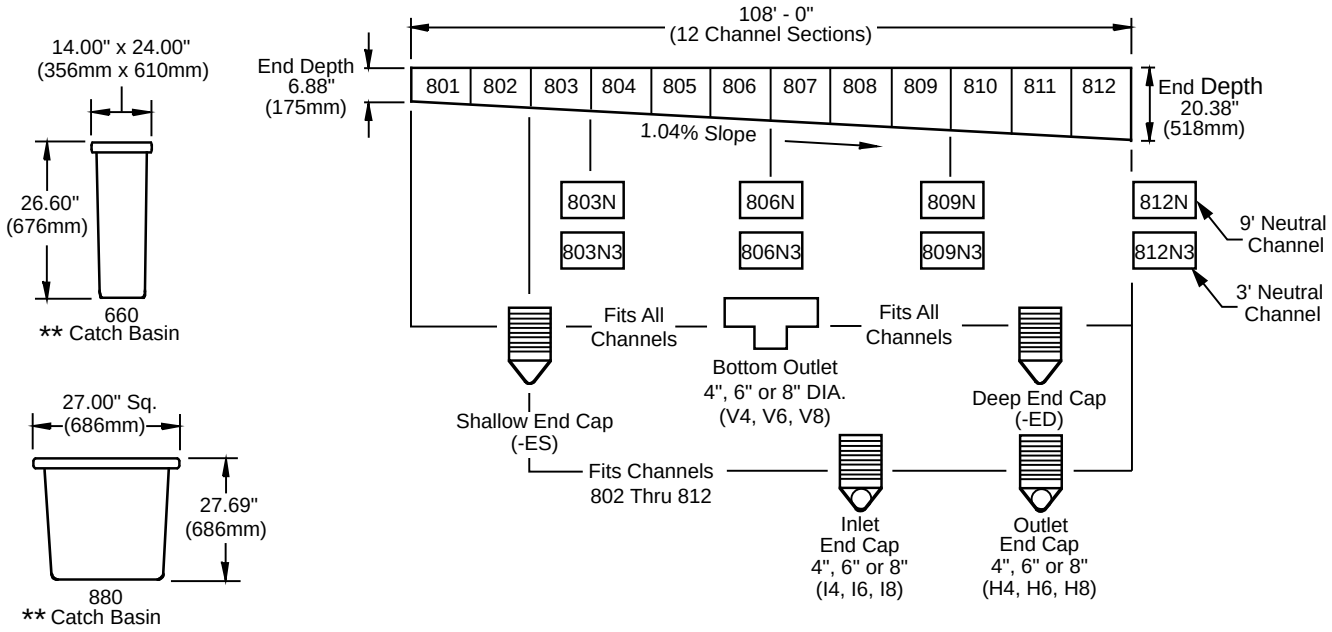
FEATURES

- Polyester fiberglass is standard; vinylester fiberglass optional for additional corrosion resistance
- 9’ in length
- Channel depth from 6.88” to 20.38” (see chart next page)
- Duco coated welded steel frame support system with concrete anchors (one pair every 18 inches)
- Painted, fabricated steel angle in Z pattern
- Rebar/all thread elevation setting option built into frame
- Push fit frame and channel assembly
- Galvanized steel frame optional
- Stainless steel frame optional
- Wide variety of grate options (see page 68)
- Supplied with secured load class “E” ductile iron slotted grate
- Outlets can be located anywhere along bottom of channel

ACCESSORY COMPONENTS INCLUDE:

- Catch basins
- Universal end caps
- Universal outlet caps
- 4”, 6”and 8” bottom outlets to provide a high degree of flexibility when designing the system
- Custom outlets are available upon customer request

10” Wide Fiberglass High Capacity Pre-Sloped Trench Drains Figure 9812



Trench Depth 9812 System					
Channel Number	Shallow End Invert*		Deep End Invert*		Holding Capacity
	in.	mm	in.	mm	(gallons)
9812-801	6.88	175	8.00	203	18.37
9812-802	8.00	203	9.13	232	22.58
9812-803	9.13	232	10.25	260	26.79
** 9812-803N	10.25	260	10.25	260	28.80
*** 9812-803N3	10.25	260	10.25	260	9.60
9812-804	10.25	260	11.38	289	31.00
9812-805	11.38	289	12.50	317	35.21
9812-806	12.50	317	13.63	346	39.42
** 9812-806N	13.63	346	13.63	346	41.50
*** 9812-806N3	13.63	346	13.63	346	13.83
9812-807	13.63	346	14.75	374	43.63
9812-808	14.75	374	15.88	403	47.84
9812-809	15.88	403	17.00	432	52.05
** 9812-809N	17.00	432	17.00	432	54.10
*** 9812-809N3	17.00	432	17.00	432	18.00
9812-810	17.00	432	18.13	460	56.26
9812-811	18.13	460	19.25	489	60.47
9812-812	19.25	489	20.38	517	64.68
** 9812-812N	20.38	517	20.38	517	66.76
*** 9812-812N3	20.38	517	20.38	517	22.25

*The end inverts include grate frame.
** 9’ Long Neutral Channel
*** 3’ Long Neutral Channel

Outlet Cap Flow Rates				
Outlet Size	Channel	Invert Depth	GPM	CFS
4” Vertical	801	7.88 (200)	154	0.34
4” Vertical	812	20.25 (514)	246	0.54
6” Vertical	801	7.88 (200)	346	0.77
6” Vertical	812	20.25 (514)	553	1.23
8” Vertical	801	7.88 (200)	616	1.37
8” Vertical	812	20.25 (514)	982	2.18
4” Horizontal	802	9.00 (229)	145	0.33
4” Horizontal	812	20.25 (514)	233	0.54
6” Horizontal	803	10.13 (257)	330	0.76
6” Horizontal	812	20.25 (514)	510	1.17
8” Horizontal	805	12.38 (314)	635	1.46
8” Horizontal	812	20.25 (514)	880	2.03

Dim’s in ( ) are mm.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

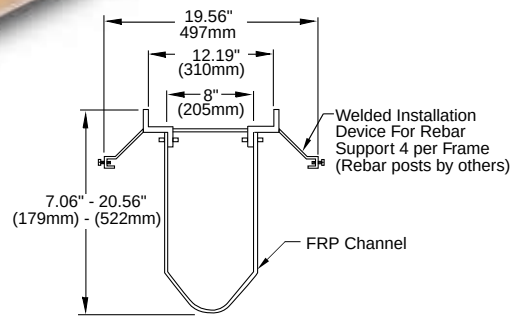
12” WIDE FIBERGLASS

12” Wide High Capacity Pre-Sloped Trench Drains - Figure 9872

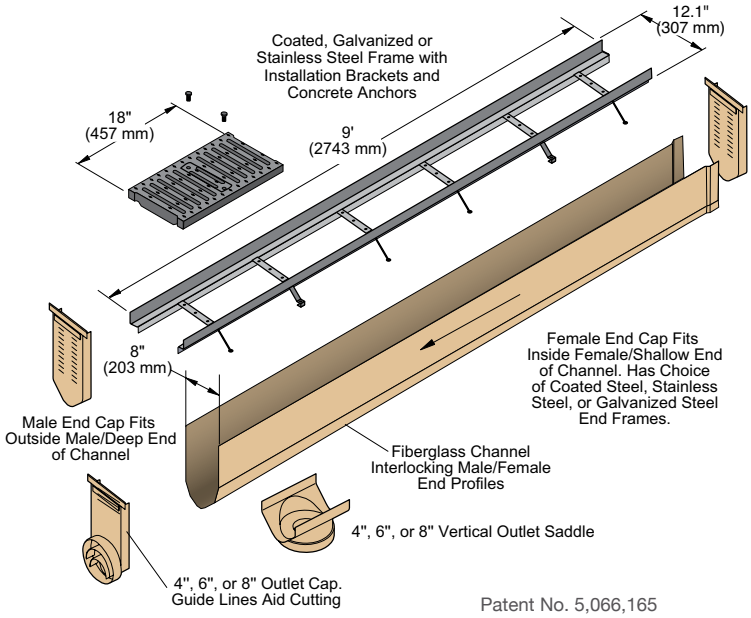
- High capacity channels reduce installation time and labor
- May be assembled in any length utilizing 9-foot channels
- Durable fiberglass construction
- High strength, light weight and corrosion-resistant
- 12” wide grate seat area
- Load Class E

APPLICATIONS

Industrial Plants • Warehousing • Bottling Plants
Food Service • Loading Docks



CROSS SECTION DETAIL



Patent No. 5,066,165

FEATURES

- 9’ long, high-capacity channel
- Polyester fiberglass construction
- Sloped radius bottom surface
- Duco coated welded steel frame support system with concrete anchors (one pair every 18 inches)
- Supplied with secured load class “E” ductile iron slotted grate

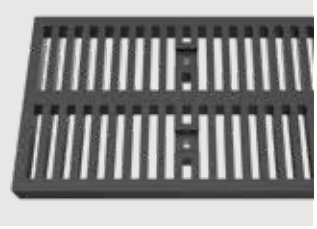
ACCESSORY COMPONENTS INCLUDE:

- Catch basins
- Universal end caps
- Universal outlet caps
- 4”, 6”and 8” bottom outlets to provide a high degree of flexibility when designing the system
- Custom outlets are available upon customer request.

GRATE

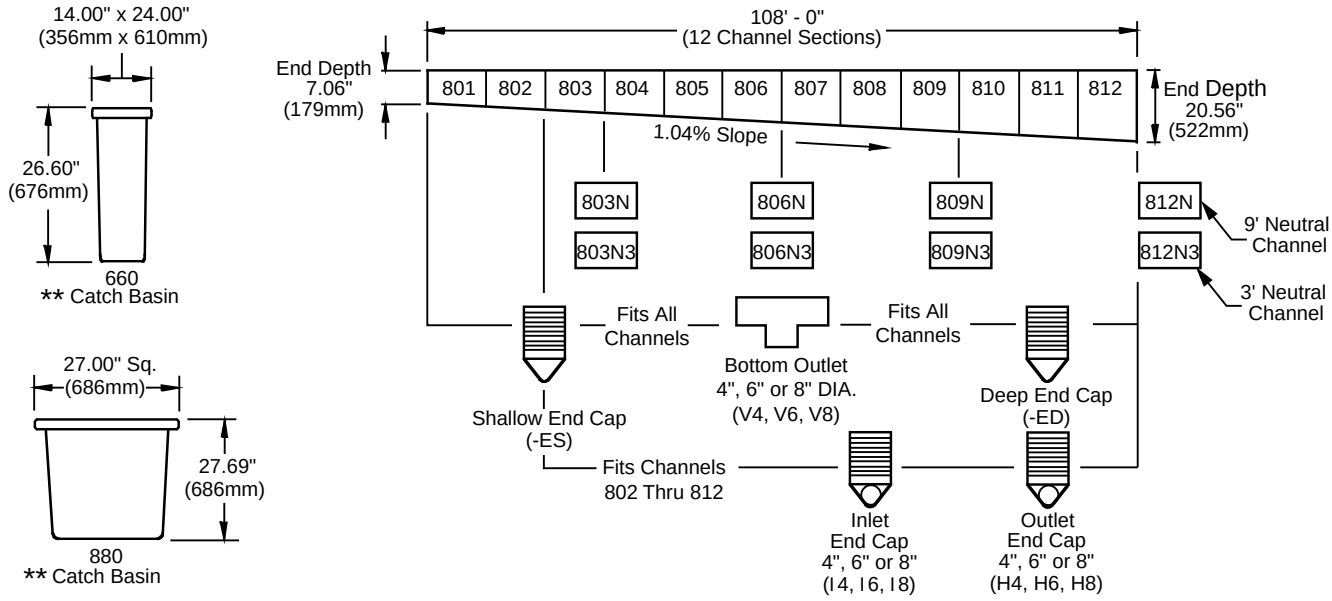
EXTRA HEAVY DUTY

EN1433 Class E: 135,000 lbs - 2,788 psi. For commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels.



Ductile Iron Slotted Grate
Length: 18 inches

12” Wide Fiberglass High Capacity Pre-Sloped Trench Drains
Figure 9872



	Trench Depth 9872 System					
	Channel Number	Shallow End Invert*		Deep End Invert*		Holding Capacity
		in.	mm	in.	mm	(gallons)
	9872-801	7.06	179	8.19	208	18.37
	9872-802	8.19	208	9.31	237	22.58
	9872-803	9.31	237	10.43	265	26.79
**	9872-803N	10.43	265	10.43	265	28.80
***	9872-803N3	10.43	265	10.43	265	9.60
	9872-804	10.43	265	11.56	294	31.00
	9872-805	11.56	294	12.68	322	35.21
	9872-806	12.68	322	13.81	351	39.42
**	9872-806N	13.81	351	13.81	351	41.50
***	9872-806N3	13.81	351	13.81	351	13.83
	9872-807	13.81	351	14.93	379	43.63
	9872-808	14.93	379	16.06	408	47.84
	9872-809	16.06	408	17.18	436	52.05
**	9872-809N	17.18	436	17.18	436	54.10
***	9872-809N3	17.18	436	17.18	436	18.00
	9872-810	17.18	436	18.31	465	56.26
	9872-811	18.31	465	19.43	494	60.47
	9872-812	19.43	494	20.56	522	64.68
**	9872-812N	20.56	522	20.56	522	66.76
***	9872-812N3	20.56	522	20.56	522	22.25

*The end inverts include grate frame.
** 9’ Long Neutral Channel
*** 3’ Long Neutral Channel

Outlet Cap Flow Rates				
Outlet Size	Channel	Invert Depth	GPM	CFS
4” Vertical	801	8.06 (205)	154	0.34
4” Vertical	812	20.43 (519)	246	0.54
6” Vertical	801	8.06 (205)	346	0.77
6” Vertical	812	20.43 (519)	553	1.23
8” Vertical	801	8.06 (205)	616	1.37
8” Vertical	812	20.43 (519)	982	2.18
4” Horizontal	802	9.18 (233)	145	0.33
4” Horizontal	812	20.43 (519)	233	0.54
6” Horizontal	803	10.31 (262)	330	0.76
6” Horizontal	812	20.43 (519)	510	1.17
8” Horizontal	805	12.56 (319)	635	1.46
8” Horizontal	812	20.43 (519)	880	2.03

Dim’s in ( ) are mm.

Note: This trench drain system is designed for “on grade applications only” as there are no provisions for a flashing flange or flashing clamp.

GRATES FOR 6”, 10”, AND 14” TRENCH DRAINS

Load Rating and Application Guidelines

Load Class A: Light Duty

Light Duty, EN1433 Class A - 3,500 lbs - 70 psi for pedestrian, wheelchair and bicycle traffic.

Load Class B: Light Duty

Light Duty, EN1433 Class B - 28,000 lbs - 580 psi for pedestrian, wheelchair, bicycle traffic and cars.

Load Class C: Heavy Duty

Heavy Duty, EN1433 Class C - 56,000 lbs. 1,162 psi for commercial pneumatic tire traffic patterns, forklifts, and tractor trailers.

Load Class C HS20 Load traffic - When constant cyclical traffic specify the 9931 frame.

Load Class E: Extra Heavy Duty

Extra Heavy Duty, EN1433 Class E - 135,000 lbs. - 2,788 psi - for commercial solid tire traffic patterns, forklifts, impacts from steel struts or metal wheels, and commercial aircraft.

Load Class F: Special Heavy Duty

Extra Heavy Duty, EN1433/EN 1433 Load Class F: 202,320 lbs - 4182 psi. For aircraft runways, docks, heavy fork trucks, and heavy wheel loads.

See pages 69 - 70 for appropriate grating for load class requirements.

6” Grates for 9870-400 Series
9930, 9931, 9940, 9660, 9665, 9895, 9832, 9836

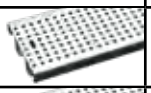
Load Class A: Light Duty - 9930, 9931, 9940, 9660, 9665, 9895, 9832, 9836
Light Duty, EN1433 Class A - 3,500 lbs - 70 psi for pedestrian, wheelchair and bicycle traffic

Grate	Material	Grate Fig. Number	Length	Weight lbs.	Open Area per Sq. In.	Load Class	ADA	Heel-Proof	Bicycle	Slip Resistance	HS20	FAA
	Perforated Galvanized Steel	9870-410-GP	1m	6.3	28.30	A	✓	✓	✓	22.6	X	X
	Perforated Galvanized Steel	9870-410-GP	.5m	3.2	14.10	A	✓	✓	✓	22.6	X	X
	Slotted Galvanized Steel	9870-420-G	1m	5.9	35.20	A	X	X	X	27.4	X	X
	Slotted Galvanized Steel	9870-420-G	.5m	3.0	17.60	A	X	X	X	27.4	X	X
	Slotted Stainless Steel	9870-450-SS	1m	5.9	35.20	A	X	X	X	29.9	X	X
	Slotted Stainless Steel	9870-450-SS	.5m	3.0	17.60	A	X	X	X	29.9	X	X
	Perforated Stainless Steel	9870-451-SSPA	1m	6.3	28.30	A	X	✓	✓	29.6	X	X
	Perforated Stainless Steel	9870-451-SSPA	.5m	6.3	14.10	A	X	✓	✓	29.6	X	X
	Slotted Black Polypropylene	9870-491-HPP	.5m	1.8	17.55	A	X	X	✓	—	X	X
	ADA Black Polypropylene	9870-494-PADAB	.5m	1.8	27.40	A	✓	✓	✓	52.5	X	X

Load Class B: Light Duty - 9930, 9931, 9940, 9660, 9665, 9895, 9832, 9836
Light Duty, EN1433 Class B - 28,000 lbs - 580 psi for pedestrian, wheelchair and bicycle traffic

	Mesh Stainless Steel	9870-447-SSADA	1m	8	93.70	B	✓	✓	✓	51.3	X	X
	Mesh Stainless Steel	9870-447-SSADA	.5m	4	46.9	B	✓	✓	✓	51.3	X	X

Load Class C: Heavy Duty - 9930, 9931, 9940, 9660, 9665, 9895, 9832, 9836
Heavy Duty, EN1433 Class C - 56,000 lbs. 1,162 psi for commercial pneumatic tire traffic patterns, forklifts, and tractor trailers

	Mesh Galvanized Steel	9870-405-GM	1m	7.8	121.00	C	X	X	✓	52.1	✓	X
	Mesh Galvanized Steel	9870-406-GM	.5m	3.9	58.00	C	X	X	✓	52.1	✓	X
	Perforated Galvanized Steel	9870-411-GPHD	1m	11.3	28.30	C	✓	✓	✓	22.6	✓	X
	Perforated Galvanized Steel	9870-411-GPHD	.5m	5.7	14.10	C	✓	✓	✓	22.6	✓	X
	Slotted Galvanized Steel	9870-425-GHD	1m	8.8	35.20	C	X	X	X	27.4	✓	X

QuickLok® securing device regularly furnished unless otherwise requested.

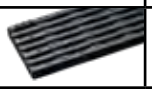
6” Grates for 9870-400 Series
9930, 9931, 9940, 9660, 9665, 9895, 9832, 9836, 9877

	Slotted Galvanized Steel	9870-425-GHD	.5m	4.4	17.60	C	X	X	X	27.4	✓	X

Load Class C: Heavy Duty - 9930, 9931, 9940, 9660, 9665, 9895, 9832, 9836
Heavy Duty, EN1433 Class C - 56,000 lbs. 1,162 psi for commercial pneumatic tire traffic patterns, forklifts, and tractor trailers

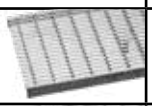
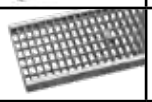
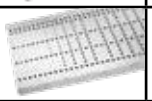
Grate	Material	Grate Fig. Number	Length	Weight lbs.	Open Area per Sq. In.	Load Class	ADA	Heel-Proof	Bicycle	Slip Resistance	HS20	FAA
	Mesh Stainless Steel	9870-430-SSM	1m	7.8	121.00	C	X	X	✓	41.3	✓	X
	Mesh Stainless Steel	9870-430-SSM	.5m	3.9	58.00	C	X	X	✓	41.3	✓	X
	Slotted Stainless Steel	9870-455-SSHD	1m	8.8	35.20	C	X	X	X	29.9	✓	X
	Slotted Stainless Steel	9870-455-SSHD	.5m	4.4	17.60	C	X	X	X	29.9	✓	X
	Slotted Ductile Iron	9870-462-DGC	.5m	10.2	34.10	*C	X	X	X	31.1	✓	✓
	Perforated Stainless Steel	9870-465-SSP	1m	11.3	28.30	C	✓	✓	✓	29.6	✓	X
	Perforated Stainless Steel	9870-465-SSP	.5m	5.7	14.10	C	✓	✓	✓	29.6	✓	X
	Mosaic Ductile Iron	9870-479-MD	.5m	10	13.00	C	X	X	✓	24.6	✓	X
	Decorative Ductile Iron	9870-481-ID	.5m	9	19.00	C	X	X	✓	38.8	✓	X
	ADA Ductile Iron	9870-487-MADC	.5m	12.8	22.50	*C	✓	✓	✓	25.8	✓	✓
	Slotted Plastic Resin	9870-492-RC	.5m	2.2	35.60	C	X	X	X	86.4	✓	X
	Brickslot Galvanized Steel	**9835-Brickslot Grate	1m	18.4	18.60	C	✓	X	✓	N/A	✓	X

Load Class E: Extra Heavy Duty - 9930, 9931, 9940, 9660, 9665, 9877, 9895, 9832, 9836
Extra Heavy Duty, EN1433 Class E - 135,000 lbs. - 2,788 psi for commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels

Grate	Material	Grate Fig. Number	Length	Weight lbs.	Open Area per Sq. In.	Load Class	ADA	Heel-Proof	Bicycle	Slip Resistance	HS20	FAA
	Slotted Galvanized Steel	9870-435-GHDE	1m	13.7	35.20	E	X	X	X	27.4	✓	✓
	Slotted Galvanized Steel	9870-435-GHDE	.5m	6.8	17.60	E	X	X	X	27.4	✓	✓
	Slotted Ductile Iron	9870-461-M	.5m	10.2	34.10	*C	X	X	X	31.1	✓	✓
	ADA Ductile Iron	9870-478-ADA	.5m	12.8	22.50	*C	✓	✓	✓	25.8	✓	✓

**9835 for use with the 9930 and 9895 channels only
*For load class F use PowerLok® device (-PL) (9877 system only)

10” Grates for the 9880-600 Series
9898, 9896

	Slotted Stainless Steel	9870-490-SSHDE	1m	13.7	35.20	E	X	X	X	29.9	✓	✓
	Slotted Stainless Steel	9870-490-SSHDE	.5m	6.80	17.60	E	X	X	X	29.9	✓	✓
Load Class A: Light Duty - 9898, 9896 Light Duty, EN1433 Class A - 3,500 lbs - 70 psi for pedestrian, wheelchair and bicycle traffic												
Grate	**Material**	**Grate Fig. Number**	**Length**	**Weight lbs.**	**Open Area per Sq. In.**	**Load Class**	**ADA**	**Heel-Proof**	**Bicycle**	**Slip Resistance**	**HS20**	**FAA**
	Slotted Bar Stainless Steel	9880-647-SSADA	1m	17.7	171	A	✓	✓	✓	51.3	X	X
	Slotted Bar Stainless Steel	9880-647-SSADA	.5m	9	89.1	A	✓	✓	✓	51.3	X	X
Load Class C: Heavy Duty - 9898, 9896 Heavy Duty, EN1433 Class C - 56,000 lbs. 1,162 psi for commercial pneumatic tire traffic patterns, forklifts, and tractor trailers												
	Slotted Galvanized Steel	9880-605-GM	1m	31.7	256	C	X	X	✓	52.1	✓	X
	Slotted Galvanized Steel	9880-605-GM	.5m	16.1	128	C	X	X	✓	52.1	✓	X
	Perforated Galvanized Steel	9880-611-GPHD	1m	21	44.6	C	✓	✓	✓	22.6	✓	X
	Perforated Galvanized Steel	9880-613-GPHD	.5m	10.5	22.3	C	✓	✓	✓	22.6	✓	X
	Mesh Stainless Steel	9880-630-SSM	1m	31.7	256	C	X	X	✓	41.3	✓	X
	Mesh Stainless Steel	9880-631-SSM	.5m	16.1	128	C	X	X	✓	41.3	✓	X
	Perforated Stainless Steel	9880-665-SSP	1m	21	44.6	C	✓	✓	✓	29.6	✓	X
	Perforated Stainless Steel	9880-666-SSP	.5m	10.5	22.3	C	✓	✓	✓	29.6	✓	X
	Mosaic Ductile Iron	9880-679-MD	.5m	34	38.3	C	✓	✓	✓	24.6	✓	X

QuickLok® securing device regularly furnished unless otherwise requested.

10” Grates for the 9880-600 Series
9878, 9806, 9898, 9896

	Wave Ductile Iron	9880-680-IW	.5m	28	58.1	C	✓	✓	✓	26.6	✓	X
	Decorative Ductile Iron	9880-681-ID	.5m	27	29.1	C	✓	✓	✓	38.8	✓	X

Load Class E: Extra Heavy Duty - 9878, 9806, 9898, 9896
Extra Heavy Duty, EN1433 Class E - 135,000 lbs. - 2,788 psi for commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels

Grate	Material	Grate Fig. Number	Length	Weight lbs.	Open Area per Sq. In.	Load Class	ADA	Heel-Proof	Bicycle	Slip Resistance	HS20	FAA

*For load class F use the PowerLok® device (-PL) (9806 & 9878 systems only)

QuickLok® securing device regularly furnished unless otherwise requested.

10” Grates for the 9890-800 Series
9812

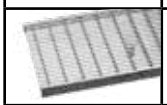
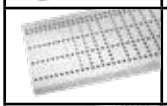
Load Class C: Heavy Duty - 9812
Heavy Duty, EN1433 Class C - 56,000 lbs. 1,162 psi for commercial pneumatic tire traffic patterns, forklifts, and tractor trailers

Grate	Material	Grate Fig. Number	Length	Weight lbs.	Open Area per Sq. In.	Load Class	ADA	Heel-Proof	Bicycle	Slip Resistance	HS20	FAA
	Bar Galvanized Steel	9812-G	1m	35.2	263.50	C	X	X	✓	54.3	✓	X
	Bar Stainless Steel	9812-SS	1m	35.2	263.50	C	X	X	✓	61	✓	X

Load Class E: Extra Heavy Duty - 9812
Extra Heavy Duty, EN1433 Class E - 135,000 lbs. - 2,788 psi for commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels

	Slotted Ductile Iron	9812-M	.5m	25.2	61.25	E	X	X	X	29	✓	X
	ADA Slotted Ductile Iron	9812-MADA	.5m	28.2	42.00	E	✓	✓	✓	31.9	✓	X

14” Grates for the 9890-800 Series
9807, 9899, 9879, 9897

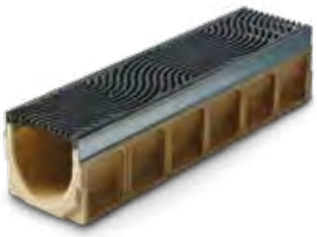
	Slotted Ductile Iron	9880-661-M	.5m	30.8	81.9	*E	X	X	✓	59.9	✓	X
	Wave Ductile Iron	9880-678-MADA	.5m	22	60.6	*E	✓	✓	✓	25.8	✓	X
Load Class A: Light Duty - 9897, 9899 Light Duty, EN1433 Class A - 3,500 lbs - 70 psi for pedestrian, wheelchair and bicycle traffic												
Grate	**Material**	**Grate Fig. Number**	**Length**	**Weight lbs.**	**Open Area per Sq. In.**	**Load Class**	**ADA**	**Heel-Proof**	**Bicycle**	**Slip Resistance**	**HS20**	**FAA**
	Mesh Stainless Steel	9890-847-SSADA	1m	28.6	238.2	A	✓	✓	✓	51.3	X	X
	Mesh Stainless Steel	9890-847-SSADA	.5m	14.5	131.6	A	✓	✓	✓	51.3	X	X
Load Class C: Heavy Duty - 9897, 9899 Heavy Duty, EN1433 Class C - 56,000 lbs. 1,162 psi for commercial pneumatic tire traffic patterns, forklifts, and tractor trailers												
	Mesh Galvanized Steel	9890-805-GM	1m	29.5	192	C	X	X	✓	52.1	✓	X
	Perforated Galvanized Steel	9890-811-GP	1m	30.9	64.8	C	✓	✓	✓	22.6	✓	X
	Perforated Galvanized Steel	9890-813-GP	.5m	15	31.9	C	✓	✓	✓	22.6	✓	X
	Mesh Stainless Steel	9890-830-SSM	.5m	29.5	192	C	X	X	✓	41.3	✓	X
	Perforated Stainless Steel	9890-865-SSP	1m	30.9	64.8	C	✓	✓	✓	29.6	✓	X
	Perforated Stainless Steel	9890-866-SSP	.5m	15	31.9	C	✓	✓	✓	29.6	✓	X
	Mosaic Ductile Iron	9890-879-MD	.5m	47.3	46.97	C	✓	✓	✓	24.6	✓	X
	Wave Ductile Iron	9890-880-IW	.5m	48	77.77	C	✓	✓	✓	26.6	✓	X
	Decorative Ductile Iron	9890-881-ID	.5m	47	54.6	C	✓	✓	✓	38.8	✓	X
Load Class E: Extra Heavy Duty - 9807, 9879, 9897 Extra Heavy Duty, EN1433 Class E - 135,000 lbs. - 2,788 psi for commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels												
	Slotted Ductile Iron	9890-878-MADA	.5m	35	61.85	*E	✓	✓	✓	25.8	✓	X
	Slotted Ductile Iron	9890-861-M	.5m	48	128.71	*E	X	X	✓	50.8	✓	X

*For load class F use the PowerLok® device (-PL) (9879 system only)
QuickLok® securing device regularly furnished unless otherwise requested.

TECHNICAL DATA

Polypropylene Trench Drains

Stainless Steel Trench Drains



Polymer Concrete Trench Drains

Fiberglass Trench Drains

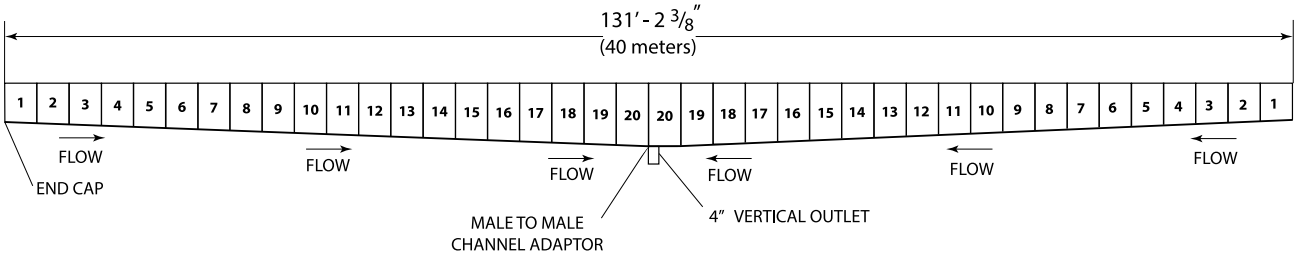
FOLLOW THESE 10 STEPS TO PROPERLY SELECT YOUR DRAINAGE SYSTEM.

To select the proper drainage system:

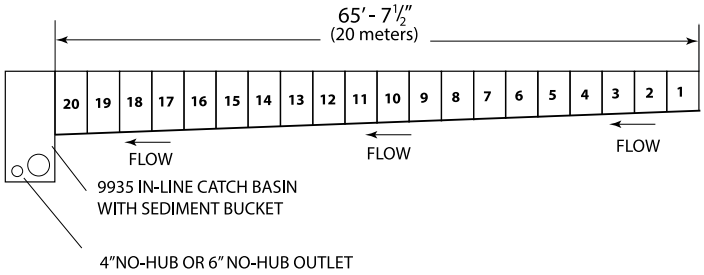
1. Identify the anticipated traffic traveling over the top of the trench drain.
2. Calculate the length and depth of the catchment area.
3. Consider site restrictions, utilities, invert depth of required output.
4. Identify rainfall intensity over the given area. Identify the outlet position, source and flow rate of the liquid to be drained.
5. Determine runoff surface flow characteristics.
6. Calculate required flow rate per section of drainage channel and its distribution (i.e., evenly or unevenly distributed).
7. Select the system with the appropriate capacity for the conditions identified.
8. Determine the number, size and positions of outlets to the drainage system.
9. Determine the concentration of the chemicals to which the system may be exposed. See the Chemical Resistance Chart on our wesite at www.jrsmith.com.
10. Select appropriate load class grate and flow rate from illustrations on page 72.

Contact local Jay R. Smith Mfg. Co. manufacturer's rep or Jay R. Smith Mfg. Co. Trench Drain Team. Shop Drawings are available on request.

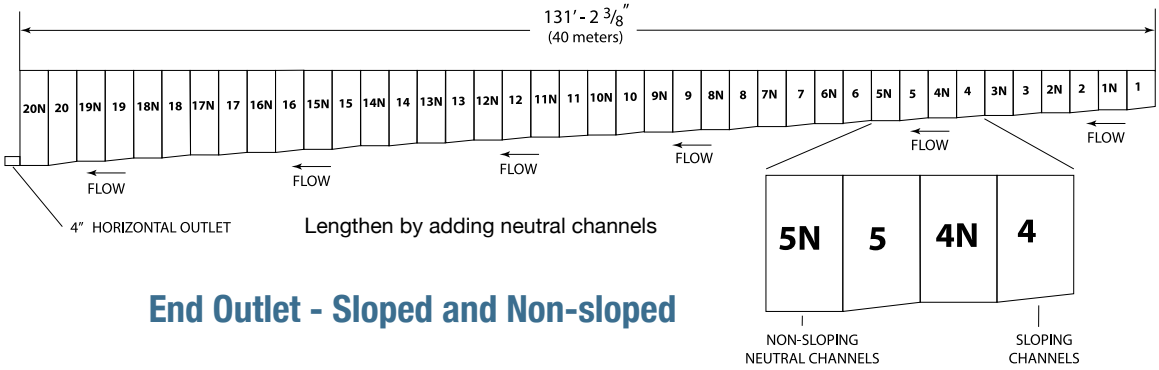
Trench Drain System Configuration



Center Outlet - Sloped



End Outlet with Catch Basin - Sloped



End Outlet - Sloped and Non-sloped

- Channels can be both pre-sloped and neutral.
- Always begin installation with the discharge channel or catch basin and work back to the shallow end.
- Arrows on channels indicate flow direction and numbers indicate sequence of installation.
- Channels and catch basins require a minimum of 4” of concrete or slab thickness, which ever is greater, around and under channel system.
- If field trimming is necessary, always trim channels at shallow end of system.
- Insert board must be maintained in the channel during the final pour.
- Trench drain should be installed 1/8” below finished elevation. This allows for positive flow into channel.
- See structural drawings for reinforcement of encasement concrete and the location of expansion joints.

Total channels based on system type.

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