

ZF812

TAG

12 [305] WIDE REVEAL FIBER REINFORCED POLYMER TRENCH DRAIN SYSTEM WITH STEEL FRAME

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice

SPECIFYING ENGINEER IS
RESPONSIBLE FOR CONCRETE
ENCASEMENT AND REINFORCING
BASED UPON APPLICATION AND
LOCAL CODES.

122½ [3111]
120 [3048]

INVERT B

Note: +Actual Channel length is 122½ [3112] to allow for overlap.

ENGINEERING SPECIFICATION: Zurn ZF812

Channels are 120 [3048] long, 12 [305] wide reveal and have a 9-1/4 [235] throat. Modular channel sections are made of Fiber Reinforced Polymer (FRP), and have a positive mechanical connection between channel sections that will not separate during the installation. Channels weigh less than 5.05 lbs. [2.29 kg] per linear foot, have a smooth, 3 [76] radiused self cleaning bottom with a Manning's coefficient of .009 and 1.04% or neutral 0% built in slope. Channels are provided with standard DGC grates that lock down to frame. Zurn 12 [305] wide reveal Ductile Iron Slotted Grate conforming to ASTM specification A536, Grade 80-55-06. Ductile Iron grate is rated class C per the DIN EN 1433 top load classifications. Supplied in 24 [608] nominal lengths with 13/16 [21] wide slots, and 1-1/2 [38] bearing depth. Grate has an open area of 80.8 sq. in per ft. [171,027 sq. mm per meter]. The #7 gage thick Heavy-Duty Carbon Steel Frame Assembly conforms to ASTM specification A36. Frames shall mechanically lock into the concrete surround at a maximum spacing of every 21 [533], with 14 anchors per 120 [3048]. Frames have rebar attachment brackets as standard to secure trench to its final location. Grate lockdown bars are to be integral to the frame. The frame is supplied with a powder coated finish. All welds must be performed by a certified welder per ASTM standard AWS D1.1. Frames and Channels shall be produced in the U.S.A.

PREFIX OPTIONS (Check/specify appropriate options)

ZF Ten-foot Fiber Reinforced Polymer (FRP)

<u>SUFFIX OPTIONS (Check/specify appropriate options)</u> Outlet Adapters Add/Each

E1	Closed End Cap	U4	4 [102] No-Hub Bottom Outlet
E4	4 [102] No-Hub End Outlet	U6	6 [152] No-Hub Bottom Outlet
E6	6 [152] No-Hub End Outlet	U8	8 [203] No-Hub Bottom Outlet
-F8	8 [203] No-Hub End Outlet		

Frame Options

__ -CWF White Acid Resistant Coated Top Frame

	-DGC	Ductile Iron Slotted Grate - Class C *
	-DGE	Ductile Iron Slotted Grate - Class E
	-DGF	Ductile Iron Slotted Grate - Class F
	-GDC	Galvanized Ductile Slotted Grate - Class C
	-GDE	Galvanized Ductile Slotted Grate - Class E
	-GDF	Galvanized Ductile Slotted Grate - Class F
	-GG	Fiberglass Grate - Class A
	-GHPDE	Galvanized Heel-Proof Ductile Slotted Grate - Class E
	-HPD	Heel-Proof Ductile Slotted Grate - Class C
	-HPDF	Heel-Proof Ductile Slotted Grate - Class F

 -050	neer-Frooi Ductile Slotted Grate - Class C
 -HPDE	Heel-Proof Ductile Slotted Grate - Class E
 -RFGC	Reinforced Slotted Galvanized Grate - Class C
 -RPGC	Reinforced Perforated Galvanized Grate - Class C

-RPGRC Reinforced Perforated Galvanized Reverse Punch Grate - Class C
 -RFSC Reinforced Slotted Stainless Steel Grate - Class C

-RPSC Reinforced Perforated Stainless Steel Grate - Class C
-RPSRC Reinforced Perforated Stainless Steel Reverse Punch Grate - Class C

Trench	'A' Shallow	'B'	Flow		
No.	Inv.	Deep Inv.	(cfs)	(gpm)	(lps)
2002	7.93 [201]	9.18 [233]	2.088	937	59
2002N	9.18 [233]	9.18 [233]	-	-	-
2003	9.18 [233]	10.43 [265]	2.730	1225	77
2004	10.43 [265]	11.68 [297]	3.388	1521	96
2004N	11.68 [297]	11.68 [297]	-	-	-
2005	11.68 [297]	12.93 [328]	4.058	1821	115
2006	12.93 [328]	14.18 [360]	4.736	2125	134
2007	14.18 [360]	15.43 [392]	5.420	2432	153
2008	15.43 [392]	16.68 [424]	6.109	2742	173
2008N	16.68 [424]	16.68 [424]	-	-	-
2009	16.68 [424]	17.93 [455]	6.802	3053	193
2010	17.93 [455]	19.18 [487]	7.498	3365	212

Miscellaneous Options

DB	Bottom Dome Strainer		
JC	Joint Connector		
-VP	Vandal-Proof Lockdown		

Note:

The maximum fluid temperature through the system must not exceed 150°F [66°C] and the range (Max. Temp. to Min. Temp.) must not exceed 100°F [38°C].

MADE in the U.S.A.

ADA-USA	Meets Americans with Disabilities Act	PG	Perforated Galvanized Steel Grate - Class A
	Requirements - Class C	PS	Perforated Stainless Steel Grate - Class A
BG	Galvanized Steel Bar Grate - Class D	RFG	Reinforced Galvanized Slotted Grate - Class B
DGC-USA	Ductile Iron Slotted Grate - Class C	RFS	Reinforced Stainless Steel Slotted Grate - Class B
DGE-USA	Ductile Iron Slotted Grate - Class E	RPG	Reinforced Galvanized Perforated Grate - Class B
FG	Fabricated Galvanized Steel Slotted Grate - Class A	RPS	Reinforced Stainless Steel Perforated Grate -
FS	Fabricated Stainless Steel Slotted Grate - Class A		Class B
GADA-USA	A Galvanized Ductile ADA Slotted Grate - Class C	SBG-L	Stainless Steel Bar Grate - Class C
-GDC-USA	Galvanized Ductile Slotted Grate - Class C		
-GDF-USA	Galvanized Ductile Slotted Grate - Class F	_	

GHPDE-USA Galvanized Ductile Stotled Grate - Class E
 GHPDE-USA Galvanized Heel-Proof Ductile Slotted Grate - Class E
 HPDE-USA Heel-Proof Ductile Slotted Grate - Class E

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. H DATE: 07/10/13 C.N. NO. 129604

PROD./DWG. NO. ZF812