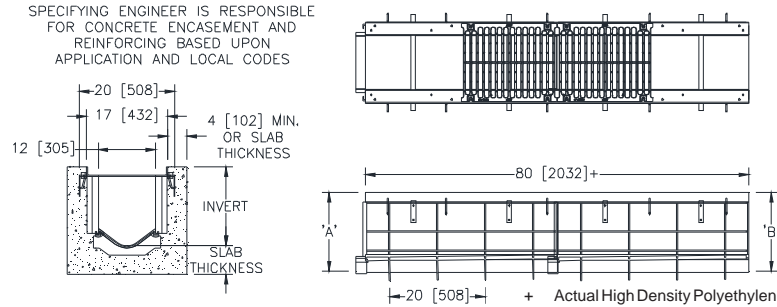




# Z874-12-CBF

## 12 [305] WIDE THROAT TRENCH DRAIN SYSTEM WITH BLACK ACID RESISTANT COATED FRAME

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



**ENGINEERING SPECIFICATION:** Zurn Z874-12

Channels shall be 80" [2032mm] long, 17" [432mm] wide reveal and have a 12" [305mm] wide throat. Modular channel sections shall be made of 0% water absorbent High Density Polyethylene (HDPE). Shall have a positive mechanical connection between channel sections that will not separate during the installation and shall mechanically lock into the concrete surround every 10" [254mm]. Channels shall weigh less than 6.6 lbs. per linear foot [9.8 kg/m], have smooth 3.5" [89mm] radiused self cleaning bottom with a Manning's coefficient of .009 and 1.00% or neutral 0% built-in slope. Channels are available with inverts ranging from 9.25" [235mm] to 34.21" [869mm]. Channel shall have all grates locked down. Channels come with clips attached to the frame to accommodate vertical re-bar for positioning and anchoring purposes. Shall be provided with the standard DGC grate, Zurn 16-1/4" [413mm] wide Ductile Iron Slotted Grate, which locks down to the frame with 4 individual bolt anchors per grate. Ductile Iron conforms to ASTM specification A536-84, Grade 80-55-06. Ductile Iron grate is rated class C per the DIN EN1433 top load classifications. Supplied in 20" [508 mm] nominal lengths with 13/16" [21mm] wide slots, and 1-3/4" [44mm] bearing depth. Grate has an open area of 118 sq. in. per ft. [249779] sq. mm per meter]. The 1/4" [6mm] thick Carbon Steel Frame Assembly conforms to ASTM specification A36 with 10 - 4" [102mm] long concrete anchors per 80" [2032mm]. 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 shall be produced in the USA.

**COATING ENGINEERING SPECIFICATION:** Black acid resisting coating is TGIC polyester powder coat finish with the following characteristics: Film thickness between 2.5-6.0 mills, gloss per ASTM D523: 50+, adhesion, cross hatch per ASTM D3359, Method B: 5B, Mandrel bending test ASTM D522: d" 3mm, Impact test per ASTM D2794, no cracks: 60 in-lbs min., Salt spray resistance 500h ASTM B117: max undercut 1mm, no blistering, Pencil hardness ASTM D3363: H-2H. Product shall be prepared for coating by one of the following methods: 3 to 5 stage iron phosphate pretreatment wash and rinse or equal, or complete sandblasting to remove all oils, grease and to etch metal to accept finish coat.

**PREFIX**

\_\_\_ Z 80 [2032] High Density Polyethylene Channel, Heavy-Duty Frame with Anchor Studs\*

**SUFFIX OPTIONS** (Check/specify appropriate options)

**Adapters**

- \_\_\_ -E1 Closed End Cap
- \_\_\_ -E4 4 [102] No-Hub End Outlet
- \_\_\_ -E6 6 [152] No-Hub End Outlet
- \_\_\_ -E8 8 [203] No-Hub End Outlet
- \_\_\_ -E10 10 [254] No-Hub End Outlet
- \_\_\_ -U4 4 [102] No-Hub Bottom Outlet
- \_\_\_ -U6 6 [152] No-Hub Bottom Outlet
- \_\_\_ -U8 8 [203] No-Hub Bottom Outlet
- \_\_\_ -U12 12 [305] No-Hub Bottom Outlet

**Grate Options (Load Classifications are per DIN EN1433)**

- \_\_\_ -BDC Black Acid Ductile Iron Slotted Grate - Class C
- \_\_\_ -BDF Black Acid Ductile Iron Slotted Grate - Class F
- \_\_\_ -DCC Ductile Iron Solid Cover - Class C
- \_\_\_ -DCF Ductile Iron Solid Cover - Class F
- \_\_\_ -DGC Ductile Iron Slotted Grate - Class C\*
- \_\_\_ -DGF Ductile Iron Slotted Grate - Class F
- \_\_\_ -GDC Galvanized Ductile Iron Grate - Class C
- \_\_\_ -GDF Galvanized Ductile Iron Grate - Class F
- \_\_\_ -GG Fiberglass Grate
- \_\_\_ -GHPD Galvanized Heel-Proof Longitudinal Ductile Iron Grate - Class C
- \_\_\_ -HPD Heel-Proof Longitudinal Ductile Iron Grate - Class C
- \_\_\_ -SBG Stainless Steel Bar Grate - Class C

**MADE in the U.S.A. (Load Classifications are per DIN EN1433)**

- \_\_\_ -ADA-USA Meets Americans with Disabilities Act Requirements - Class C
- \_\_\_ -DGC-USA Ductile Iron Slotted Grate - Class C
- \_\_\_ -DGF-USA Ductile Iron Slotted Grate - Class F
- \_\_\_ -GADA-USA Galvanized Ductile ADA Slotted Grate - Class C
- \_\_\_ -GDC-USA Galvanized Ductile Slotted Grate - Class C
- \_\_\_ -GDF-USA Galvanized Ductile Slotted Grate - Class F

**Miscellaneous Options**

- \_\_\_ -RC Rebar Clips (Set of 2)
- \_\_\_ -VP Vandal-Proof Lockdown

**MADE in the U.S.A. Miscellaneous Options**

- \_\_\_ -DB Bottom Dome Strainer

+ Actual High Density Polyethylene channel length is 82 [2083] to allow for overlap, with frame attached the length is 84-1/2 [2146] with the exception of P.N. 1201P and 1230P.

Trench #	'A' Shallow Inv.	'B' Deep Inv.	Flow		
			(gpm)	(lps)	(cfs)
1201P	9.250 [235]	10.082 [256]	1475	93	3.306
1202P	10.082 [256]	10.914 [277]	1758	111	3.941
1203P	10.914 [277]	11.746 [298]	2048	129	4.589
1204P	11.746 [298]	12.578 [319]	2341	148	5.248
1205P	12.578 [319]	13.410 [341]	2639	166	5.915
1205NP	13.410 [341]	13.410 [341]	-	-	-
1206P	13.410 [341]	14.242 [362]	2939	185	6.589
1207P	14.242 [362]	15.074 [383]	3243	205	7.268
1208P	15.074 [383]	15.906 [404]	3548	224	7.953
1209P	15.906 [404]	16.738 [425]	3855	243	8.641
1210P	16.738 [425]	17.570 [446]	4164	263	9.333
1211P	17.570 [446]	18.402 [467]	4474	282	10.028
1212P	18.402 [467]	19.234 [489]	4785	302	10.726
1213P	19.234 [489]	20.066 [510]	5098	322	11.426
1214P	20.066 [510]	20.898 [531]	5411	341	12.128
1215P	20.898 [531]	21.730 [552]	5725	361	12.832
1215NP	21.730 [552]	21.730 [552]	-	-	-
1216P	21.730 [552]	22.562 [573]	6040	381	13.538
1217P	22.562 [573]	23.394 [594]	6355	401	14.244
1218P	23.394 [594]	24.226 [615]	6671	421	14.953
1219P	24.226 [615]	25.058 [636]	6988	441	15.662
1220P	25.058 [636]	25.890 [658]	7304	461	16.372
1221P	25.890 [658]	26.722 [679]	7622	481	17.084
1222P	26.722 [679]	27.554 [700]	7940	501	17.796
1223P	27.554 [700]	28.386 [721]	8258	521	18.509
1224P	28.386 [721]	29.218 [742]	8576	541	19.223
1225P	29.218 [742]	30.05 [763]	8895	561	19.937
1225NP	30.05 [763]	30.05 [763]	-	-	-
1226P	30.05 [763]	30.882 [784]	9214	581	20.652
1227P	30.882 [784]	31.714 [806]	9533	601	21.367
1228P	31.714 [806]	32.546 [827]	9852	622	22.083
1229P	32.546 [827]	33.378 [848]	10172	642	22.800
1230P	33.378 [848]	34.210 [869]	10492	662	23.517

(Neutral channels available for all section numbers)

\* Regularly furnished unless otherwise specified.