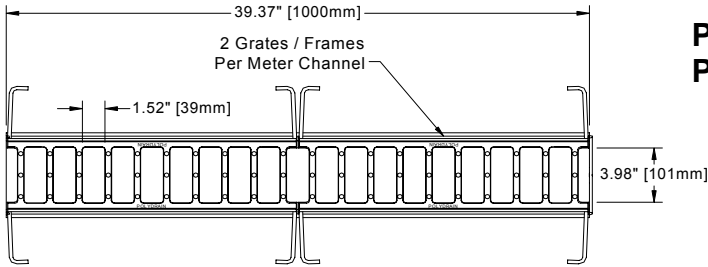
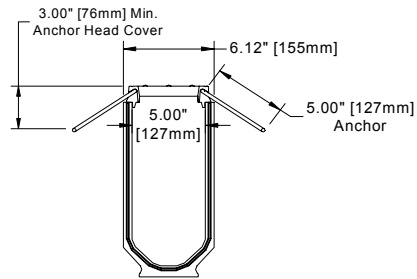
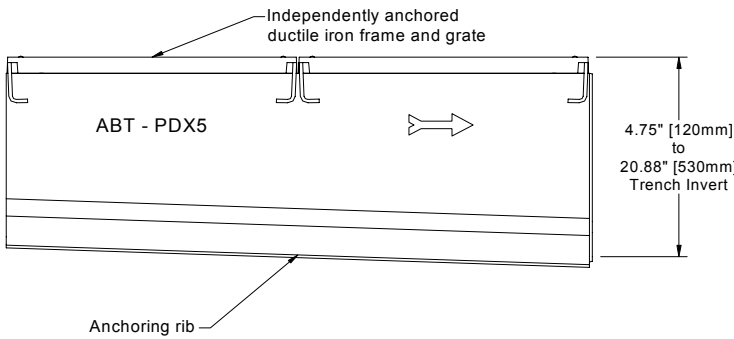


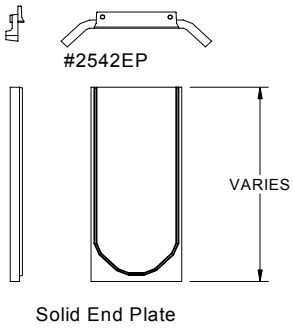
**PDX® 5 CHANNEL W/ INTERCEPTOR® A-67 GRATING**



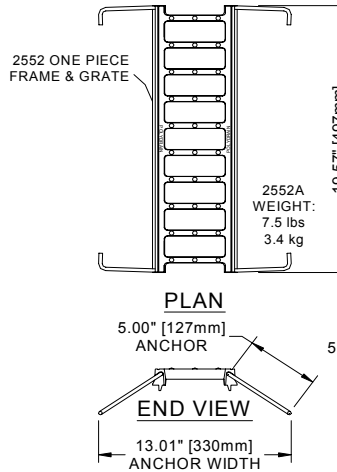
**POLYDRAIN® PDX® 5 VARIABLE SLOPE  
POLYMER CONCRETE CHANNEL SYSTEM**



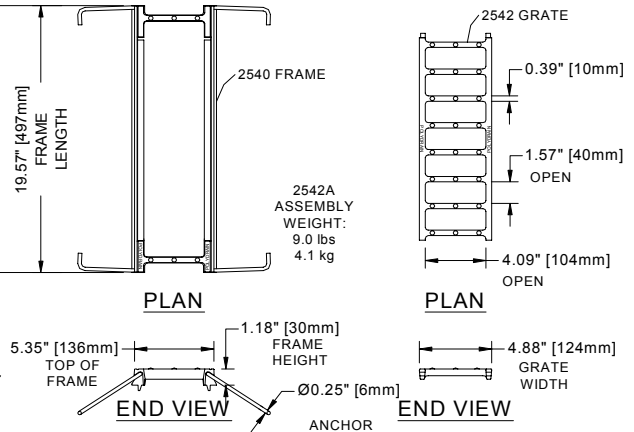
**END ACCESSORIES**



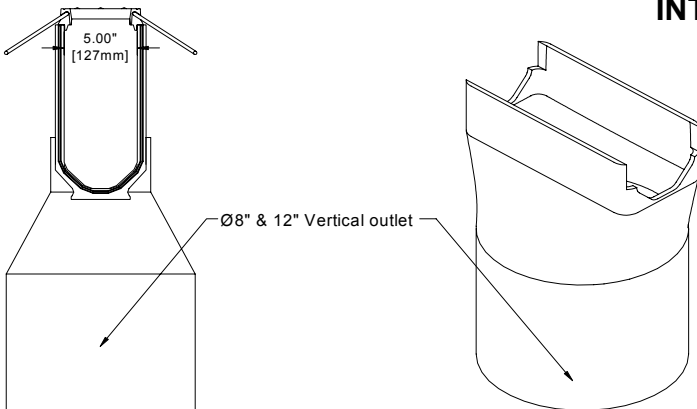
**2552A  
ONE PIECE NON-REMOVABLE**



**2542A  
FRAME / GRATE ASSEMBLY FOR CLEAN OUT**



**INTERCEPTOR® A-67 GRATING**



**8" & 12" OUTLET OPTIONS**

NOTE: ADDITIONAL DETAILS AND THOSE SHOWN ARE AVAILABLE ELECTRONICALLY UPON REQUEST



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## Flat Site Flow Capacity & Velocity for 19.69 Inch [500 mm] Deep Channel

Invert Slope	LPS	CFS	FPS
0.5%	68.24	2.41	3.56
1.0%	96.27	3.40	5.04
1.5%	118.08	4.17	6.17
2.0%	136.20	4.81	7.12
2.5%	152.34	5.38	7.96
4.0%	192.55	6.80	10.10
5.0%	215.20	7.60	11.30
8.0%	271.84	9.60	14.20
10%	305.82	10.80	15.90
20%	430.41	15.20	22.50
40%	608.81	21.50	31.80

## Run Length vs. Slope

Channel Slope	Run Length	
	Ch. or M	Feet
0.0%	∞	∞
0.5%	80	262.5
1.0%	40	131.2
1.5%	27	87.6
2.0%	20	65.6
2.5%	16	52.5
4.0%	10	32.8
5.0%	8	26.2
8.0%	5	16.4
10%	4	13.1
20%	2	6.6
40%	1	3.3

Note: Intermediate slopes in 0.5% increments between those shown above are possible with decreased run lengths. Non-sloped trenches are available in 1 mm depth increments. Contact ABT for availability and additional information.

## Trench Storage Capacity & Cross Section Area

Trench Depth		PDX5 5" I.D.	
mm	Inch	Gal/Ft	Sq In
100	3.94	0.87	16.8
150	5.91	1.4	26.7
200	7.87	1.9	36.6
250	9.84	2.4	46.5
300	11.81	2.9	56.6
350	13.78	3.5	66.6
400	15.75	4.0	76.8
450	17.72	4.5	87.0
500	19.69	5.1	97.3

## Polydrain® PDX®5 w/ Interceptor® A-67 Standard Specification

**Pre-cast Trench Drain** - The pre-cast trench body shall be PolyDrain PDX5; manufactured by ABT, Inc. The pre-cast trench drain body shall be manufactured using polyester polymer concrete consisting of a pre-sloped or non-sloped channel with nominal 6" (155mm) outside width, 5" (127mm) inside width with radius bottom. Channel slope is variable and as shown on plans. Channels shall have tongue and groove joints. Monolithic polymer concrete shall be made from a composition of aggregate and polyester resin or vinylester resin and shall have the following properties when tested as specified below:

Property	ASTM	Value
Compressive Strength	C579	17,000 psi Minimum
Bending Strength	C580	4,000 psi Minimum
Tensile Strength	C307	2,000 psi Minimum
Chemical Resistance	C267	Pass
Freeze/Thaw W/o weight loss	C666	1,600 # of Cycles Minimum

**Grating**- Grates shall conform to AASHTO M 306-04, Drainage Structure Castings. Grate material shall be ASTM A 536 grade 65-45-12 cast ductile iron and need not be galvanized or coated with asphalt paint. Grating shall be made in USA, and shall conform to the FHWA "Buy America" policy 23 CFR 635.410(b) (as amended by enactment of the 1991 ISTEA).

The pre-cast trench drain manufacturer shall provide results from an independent laboratory verifying grates supplied meet AASHTO M 306-04, Section 5 - Proof-Load Testing, modified using a 3in. x 9in. contact area. The grate inflow area shall be a minimum of 0.27 ft<sup>2</sup>/LF (0.083 m<sup>2</sup> per linear meter) with an open area of 67%. The use and location of one-piece frame and grates, removable grates with frame, removable pedestrian safe grates with frame, or a combination of these shall be as shown on the plans. All grates shall be bicycle safe. Removable grates shall be retained in their frame utilizing stainless steel, tamper resistant locking devices. The grate retaining device shall withstand, without maintenance, repetitive cyclic vertical loads of 500 lbs (2.2 KN). The retainers shall also withstand a pullout resistance of 250 lb. per foot (5KN per meter) after completing a 1,000 hours ASTM B117 salt spray test. The grate retaining devices shall not obstruct hydraulic flow in the channel. Frames shall be independently anchored into the adjacent concrete by 0.25in (6.35mm) diameter x 5in (127mm) long stainless steel anchoring rods at all corners of each frame. The channels shall be anchored independently of the frame and grate.

The Manufacturer of the pre-cast trench drain shall furnish the Engineer a Certificate of Compliance in conformance with the provisions of this Standard Specification.

*We can help you solve your drainage problems, let us show you how. "Today's Hydraulic Solutions"*

# ABT, INC.

Advanced Building Technologies

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