

DRAINAGE SOLUTIONS AND WATER TREATMENT /

HDPE DRAINAGE TUBING (BIG O) PRODUCT GUIDE

SINGLE-WALL
CORRUGATED DRAINAGE
TUBING IS IDEAL FOR
AGRICULTURAL AND
RESIDENTIAL APPLICATIONS

Durable
Economical
Wide range of sizes



HDPE DRAINAGE TUBING (BIG O)

Armtec is Canada's leading manufacturer of subdrainage tubing. Big O high density polyethylene (HDPE) tubing is the most cost effective material for subdrainage applications. Big O tubing provides both low initial cost and significant installation savings. It is available in solid, perforated and perforated with filter geotextile sock. Big O drainage tubing is available in black or in white (co-extruded) HDPE in most locations.

Sub-surface drainage systems need to be designed with specific soil types in mind. For fine grained sand and coarse silts, perforated drainage tubing with a knitted or woven filter sock will ensure that soil particles do not enter the pipe and create flow restrictions.

TYPICAL APPLICATIONS

- Subsurface drainage
- Water collection
- Foundation drainage
- Agricultural drainage
- Conduits

PERFORATED



Tubing for all drainage requirements

SOLID



For all applications that do not require drainage

PERFORATED WITH GEOTEXTILE FILTER SOCK



A tough, single piece knitted polyester sleeve that fits over the tubing to prevent clogging

PERFORATION DETAILS - 4 HOLES PER CORRUGATION

Diameter	Type	Perforation Length	Perforation Width	Perforation Per Metre	Open Area
mm		mm	mm	metre	cm ² /m
100	Slots	12	1.3	236	37
150	Slots	12	1.3	236	37
200	Slots	27	2.5	112	76

CUSTOM PERFORATION

In addition to these generic perforation details, there are many different configurations of perforations that meet or exceed the drainage guide available. Contact a local Armtec representative for more information.



BIG O PERFORATED DRAINAGE TUBING SLOTS



BIG O HDPE DRAINAGE TUBING IS EASILY INSTALLED



TRANSPORTATION OF BIG O MAXI COILS TO INSTALLATION SITE

Nominal Sizes Available

Product and Application	50mm (2")	75mm (3")	100mm (4")	150mm (6")	200mm (8")	250mm (10")	300mm (12")	375mm (15")
Orangeline (perforated on bottom only) Foundation drainage; limited use only in municipalities where specified			•					
Perforated All drainage requirements	•	•	•	•	•	•	•	•
Solid (non-perforated) Suitable for all applications that do not require collection through infiltration	•	•	•	•	•	•	•	•
Redline* (with fish tape) Used as a conduit for electrical wires or water lines			•					
Perforated with Geotextile Fiter Sock All drainage applications in fine grained soils; prevents clogging	•	•	•	•	•	•	•	•

* Meets Ontario Hydro One standards

Coil Lengths Available

Single Wall Tubing (AG and BP)

50mm (2")	152.40m (500')
75mm (3")	30.48m (100'), 45.72m (150'), 121.92m (400'), 670.56m (2200'), 1097.28m (3600'), 1584.96m (5200')
100mm (4")	3.05m (10'), 30.48m (100'), 76.20m (250'), 609.60m (2000'), 1066.80m (3500'), 1219.20m (4000')
150mm (6")	30.48m (100'), 152.40m (500'), 304.80m (1000'), 457.20m (1500'), 518.16m (1700')
200mm (8") Walkerton Profile	6.10m (20'), 30.48m (100'), 121.92m (400'), 182.88m (600') 6.10m (20'), 97.54m (320'), 164.59m (540')
250mm (10")	6.10m (20'), 30.48m (100'), 121.92m (400')
300mm (12") Walkerton Profile	6.10m (20'), 30.48m (100'), 106.68m (350') 6.10m (20'), 76.20m (250')
375mm (15")	6.10m (20'), 64m (210')



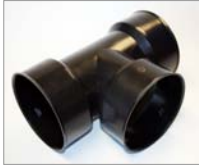
BIG O HDPE DRAINAGE TUBING IS EASILY INSTALLED



SUPPLIED IN COILS

FITTINGS

SNAP TEE



REDUCING TEE



INSERT TEE



TAP TEE



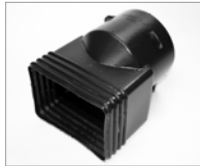
SUMPWELL - CATCHBASIN



SNAP ADAPTER



DOWNSPOUT ADAPTER



INSERT END CAP



45° Y



90° ELBOW



INSERT COUPLER



SPLIT COUPLER



DIMENSIONS

Description	50mm (2")	75mm (3")	100mm (4")	150mm (6")	200mm (8")	250mm (10")	300mm (12")	375mm (15")	625mm (25")
Snap Tee		3 x 3 x 3	4 x 4 x 4	6 x 6 x 4 6 x 6 x 6	8 x 8 x (8 - 6) 8 x 8 x (6 - 4)	10 x 10 x (10 - 4)	12 x 12 x (12 - 4)		
Reducing Tee		3 x 3 x (3 - 2)	4 x 4 x (4 - 3)	6 x 6 x (6 - 4)	8 x 8 x (8 - 6)	10 x 10 x (10 - 8)	12 x 12 x (12 - 10)		
Blind Tee			4 x 4 x 4	6 x 6 x 6					
Insert Tee			4 x 4 x 4						
Tap Tee	2 x 2 x (2 - 4)	3 x 3 x (3 - 6)	4 x 4 x (4 - 6) 4 x 4 x (4 - 12)						
Snap Adapter		•	•	•	•				
Split Adapter						•	•		
Downspout Adapter		• Rectangle	• Rectangle Square						
Insert End Cap	•	•	•	•	•				
Split End Cap						•	•		
Insert Coupler		•	•	•	•				
Split Coupler	•				•	•	•	•	
45° Y			•	•					
90° Elbow			•	•					
Sumpwell - Catchbasin									• Sump Liner Sump Lid

SPECIFICATION

Corrugated High Density Polyethylene Tubing for Subdrainage Applications

1. Scope

This specification covers the requirements of corrugated high density polyethylene tubing used in subdrainage applications.

Nominal sizes include 50, 75, 100, 200, 250, 300 and 375mm diameters. Each size is available in solid, perforated or perforated with geotextile sock filter.

2. Materials

Pipe shall be manufactured from high density polyethylene resin which shall meet or exceed the requirements of ASTM D3350 Cell Class 424420C.

3. Tube Dimensions

The nominal size of the tube is based on the nominal inside diameter of the tube. The tolerance on the specified inside diameter shall be + 3% / - 1.5%.

4. Joints

The pipe shall be joined with external 'insert' or 'split' couplers.

5. Tube Stiffness

The tube has a minimum stiffness of 210 kPa at 5% deflection. Tests shall be conducted in accordance with ASTM D2412.

6. Retest and Rejection

If any failure to conform to these specifications occurs, the pipe or fittings may be retested to establish conformity in accordance with an agreement between the purchaser and the seller.

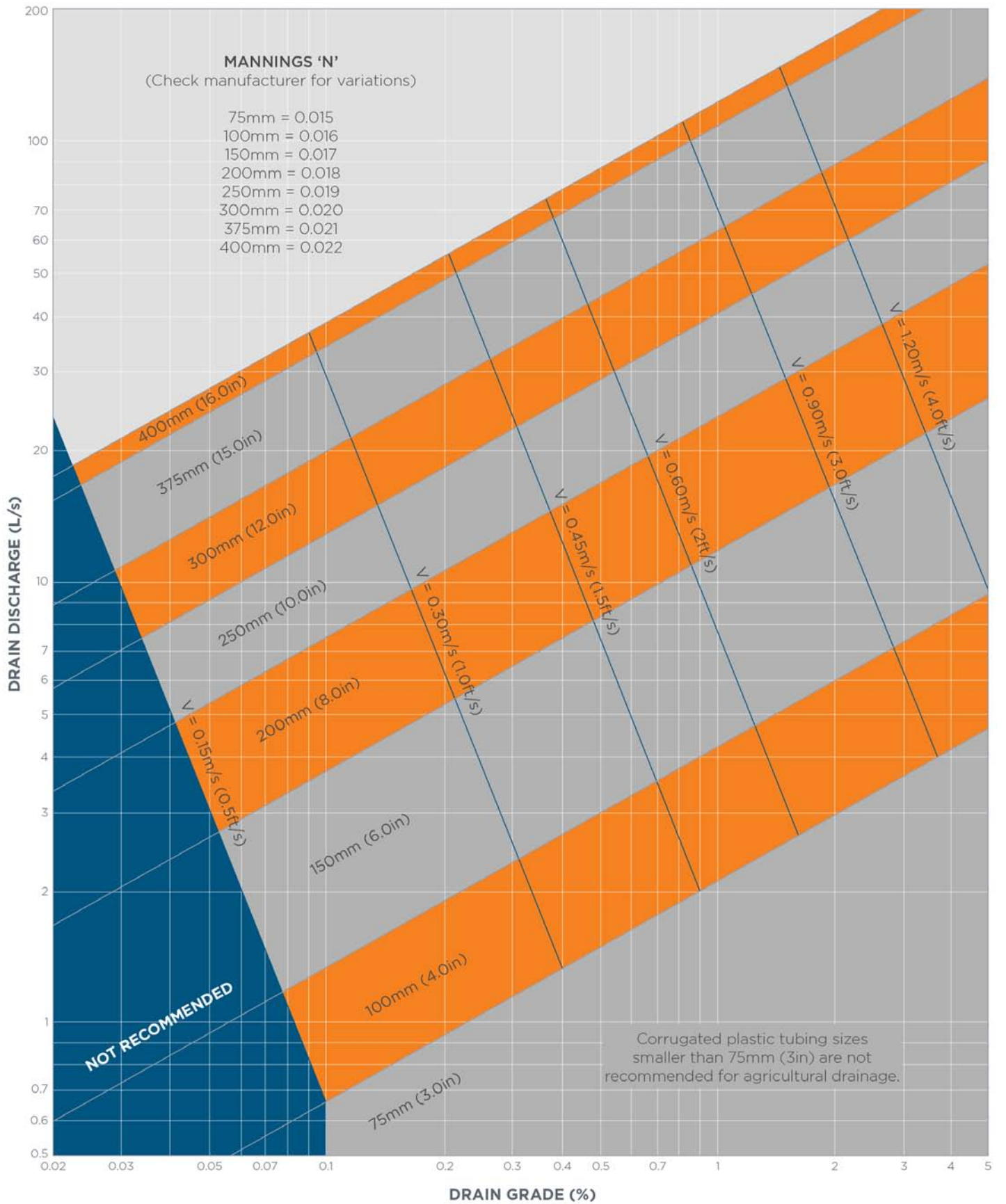
OTHER APPLICABLE STANDARDS

- ASTM F405
- ASTM F667
- AASHTO M252
- AASHTO M294
- OPSS 1840
- OPSD 806.02
- BNQ 3624-115
- BC MoT SS-317

Nominal Diameter (mm)	50, 75, 100, 150, 200, 250, 300, 375
Outside Diameter (mm)	63, 90, 120, 180, 240, 305, 375, 440
Recommended Drainage Depths (mm)	600mm minimum cover, 2000mm maximum cover



DETAIL OF PERFORATED BIG O HDPE DRAINAGE TUBING





Armtec is a leading Canadian infrastructure and construction materials company combining creative engineered solutions, relevant advice, dedicated people, proven products and a national presence with a local focus on exceptional customer service.

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