

ADS CANADA N-12[®] PLAIN END PIPE SPECIFICATION (CSA B182.8)

Scope

This specification describes 100 to 1500 mm (4- through 60-inch) ADS Canada N-12 plain end pipe (per CSA B182.8) for use in gravity-flow drainage applications.

Pipe Requirements

ADS Canada N-12 plain end pipe (per CSA B182.8) shall have a smooth interior and annular exterior corrugations.

- 100 to 1500 mm (4- through 60-inch) shall be certified by an accredited certification body to meet CSA B182.8.
- 100 to 900 mm (4- through 36-inch) shall meet a minimum pipe stiffness of 320 kPa (46.4 psi) or 210 kPa (30.5 psi) where applicable when tested in accordance with ASTM D 2412.
- 1050 to 1500 mm (42- through 60-inch) shall meet a pipe stiffness requirement that is variable based on the diameter when tested in accordance with ASTM D 2412. Minimum requirements are provided within CSA B182.8.
- Manning's "n" value for use in design shall be 0.012.

Joint Performance

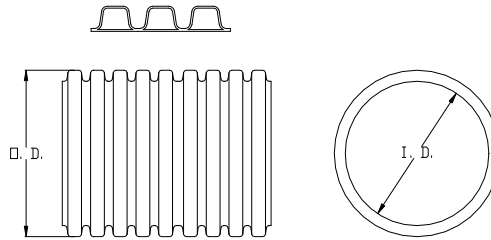
Pipe shall be joined with coupling bands covering at least two full corrugations on each end of the pipe. The joint shall meet or exceed the soil-tight Type 3 requirements of CSA B182.8. Gasketed connections, when applicable, shall incorporate a closed cell synthetic expanded rubber gasket meeting the requirements of ASTM D1056, Grade 2A2. Gaskets, when applicable, shall be installed by the pipe manufacturer.

Material Properties

Virgin material for pipe production shall be high density polyethylene conforming with the minimum requirements of cell classification 435400C for 100 to 1500mm (4- through 60-inch) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The virgin pipe material shall comply with the notched constant ligament stress (NCLS) test as described in clause 8.5 of CSA standard B182.8. The average failure time of the 5 test specimens shall exceed 24 hours with no single test specimen's failure time less than 17 hours.

Installation

Installation shall be in accordance with CSA B182.11 and ADS published installation guidelines with the exception that minimum cover in trafficked areas for 100 to 1200 mm (4- through 48-inch) diameters shall be 0.3 m (1 ft.) and for 1350 and 1500 mm (54- and 60-inch) diameters shall be 0.6 m (2 ft) in single run applications. Backfill for minimum cover situations shall consist of Class 1, Class 2 (minimum 90% SPD), or Class 3 (minimum 95% SPD) material. Maximum fill heights depend upon embedment material and compaction level; please refer to Technical Note 2.01C. Contact your local ADS representative or visit our website at www.ads-pipecanada.com for a copy of the latest installation guidelines.



Pipe Dimensions

	Nominal Diameter, mm (in)														
Pipe I.D. mm (in)	100 (4)	150 (6)	200 (8)	250 (10)	300 (12)	375 (15)	450 (18)	525 (21)	600 (24)	750 (30)	900 (36)	1050 (42)	1200 (48)	1350* (54)	1500 (60)
Pipe O.D.** in (mm)	122 (4.8)	175 (6.9)	231 (9.1)	290 (11.4)	368 (14.5)	457 (18)	559 (22)	622 (24.5)	711 (28)	914 (36)	1067 (42)	1219 (48)	1372 (54)	1549 (61)	1702 (67)
Minimum Pipe Stiffness* kPa (Psi)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	320 (46.4)	140 (20)	125 (18)	110 (16)	95 (14)
							210 (30.5)		210 (30.5)	210 (30.5)					
Perforations	All diameters available with or without perforations.														

*Check with sales representative for availability by region and ordering.

**Pipe O.D. values are provided for reference purposes only, values stated for 300 to 1500 mm are ± 25 mm. Contact a sales representative for exact values.