

N-12[®] HDPE ST IB Pipe

(CSA B182.8 or BNQ 3624-120)

N-12 ST IB pipe is a gravity-flow, silt tight pipe and offers the best silt tight joint in the industry. N-12 ST IB is available in a range of diameters from 100-750 mm (4"-30"). N-12 ST IB pipe is certified to meet CSA B182.8 or BNQ 3624-120 requirements.

N-12 ST IB pipe contains a superior built-in bell-and-spigot joint. The joints are sealed by high-quality, factory-installed gaskets that meet all ASTM F477 requirements.

Applications

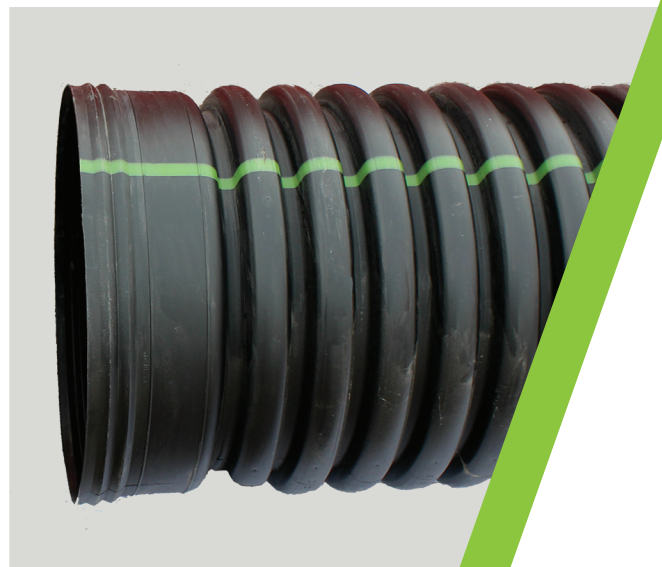
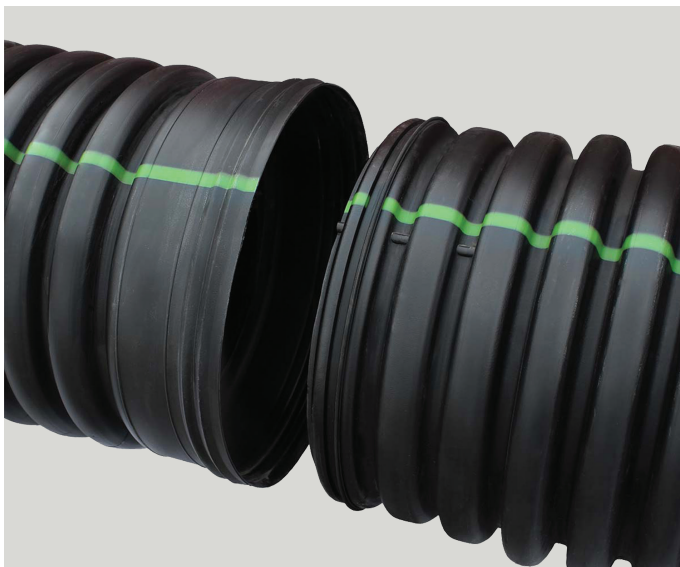
- Storm sewers
- Culverts & cross drains
- Waterways
- Grain aeration
- Golf, turf & recreation
- Ditch enclosures
- Slope & edge drains
- Foundation drains
- Land reclamation
- Mining, forestry & industrial

Features

- Available in 6.1 m (20') lengths, resulting in fewer joints. Custom lengths are available
- 100-750 mm (4"-30") diameters available
- Certified to meet CSA B182.8, Type 2, joint performance or BNQ 3624-120 requirements
- HS-25, HL-93 and CL-625 (highway traffic loads) rated with a minimum of 0.3 m (1') of cover for 100-750 mm (4"-30") diameters.

Benefits

- Bell-spigot joint allows for quick and easy installation
- Easy-to-handle, lightweight pipe requires less labour & equipment for fast installation and reduced costs
- Superior hydraulics - smooth interior wall will ensure no debris or sediment build up
- Provides superior resistance to chemicals, road salts, oil & gasoline - will not rust or deteriorate
- Withstands repeated freeze/thaw cycles & continuous subzero temperatures



N-12 HDPE ST IB Pipe (CSA B182.8 or BNQ 3624-120) Specification

Scope

This specification describes 100 to 750 mm (4"-30") N-12 ST IB pipe for use in gravity-flow drainage applications.

Pipe Requirements

N-12 ST IB pipe shall have a smooth interior and annular exterior corrugations.

- 100 to 750 mm (4"-30") shall be certified by an accredited certification body to meet CSA B182.8 or BNQ 3624-120
- 100 to 750 mm (4"-30") shall meet a minimum pipe stiffness of 320 kPa (46.4 psi) when tested in accordance with ASTM D2412
- Manning's "n" value for use in design shall be 0.012

Joint Performance

100 to 750 mm (4"-30") pipe shall be joined with a bell & spigot joint meeting the silt tight Type 2 requirements of CSA B182.8 or BNQ 3624-120. The joint shall be silt tight and gaskets, when applicable, shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on the gasket and bell during assembly.

Material Properties

Material for pipe production shall be high-density polyethylene conforming with the minimum requirements of cell classification 424400C for 100-250 mm (4"-10") and 435400C for 300 to 750 mm (12"-30") diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. Virgin pipe material shall comply with the notched constant ligament stress (NCLS) test as described in clause 8.5 of CSA B182.8 or clause 7.3.7 of BNQ 3624-120. The average failure time of the five test specimens shall exceed 24 hours with no single test specimen's failure time less than 17 hours. Recycled pipe material shall comply with the un-notched constant ligament stress (UCLS) test as clause 8.7 of CSA B182.8 or clause 7.3.8 of BNQ 3624-120. The average failure time for five specimens shall be greater than or equal to the minimum average failure time based on a weighted design tensile stress of 3.4 MPa at a service temperature of 23° C. None of these five specimens shall have an average failure time below 18 hours and the average failure time of these specimens shall exceed 34 hours.

Installation

Installation shall be in accordance with CSA B182.11 or BNQ 1809-300, and ADS published installation guidelines with the exception that minimum cover in trafficked areas for 100 to 750 mm (4"-30") diameters shall be 0.3 m (1 ft.). Backfill for minimum cover situations shall consist of Class I, Class II (minimum 90% SPD), or Class III (minimum 95% SPD) material. Maximum fill heights depend upon embedment material and compaction level; please refer to Technical Note 2.01C or Technical Note 2.01Q. Contact your local ADS representative or visit our website www.adspipe.ca for a copy of the latest installation guidelines.

Pipe Dimensions*

Pipe I.D. mm (in)	100 (4)	150 (6)	200 (8)	250 (10)	300 (12)	375 (15)	450 (18)	600 (24)	750 (30)
Pipe O.D. mm (in)	122 (4.8)	175 (6.9)	231 (9.1)	290 (11.4)	368 (14.5)	457 (18.0)	559 (22.0)	711 (28.0)	914 (36.0)
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)

*Check with sales representative for availability by region. **Pipe O.D. values are provided for reference purposes only, values stated for 300 to 750 mm (12" through 30") are ±25 mm (1"). Contact a sales representative for exact values.

