

N-12[®] ST IB Pipe (per AASHTO)

N-12 ST IB pipe (per AASHTO) offers significant performance advantages, plus the best soil-tight joint in the industry. The high-density polyethylene material provides abrasion and corrosion resistance.

N-12 ST IB contains a superior built-in bell-and-spigot joint. The joints are sealed by high-quality, factory-installed gaskets that meet all the requirements of ASTM F477. A polyethylene bell minimizes joint distortion. The chipping and cracking that is common to concrete bells is eliminated.

Applications

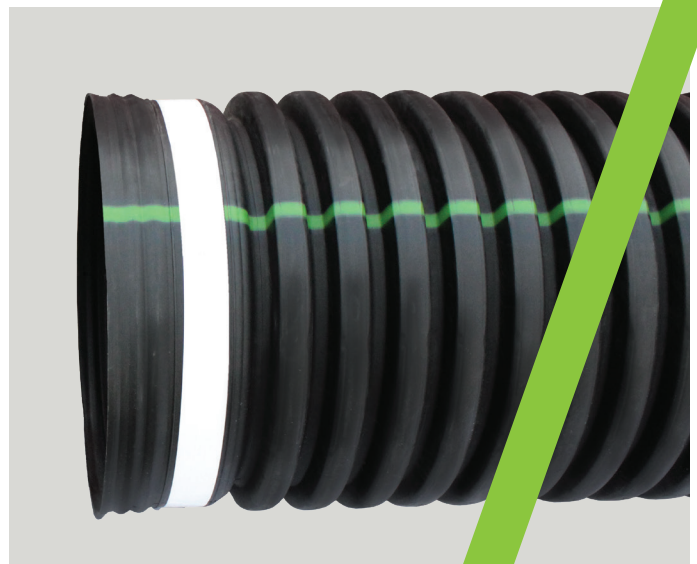
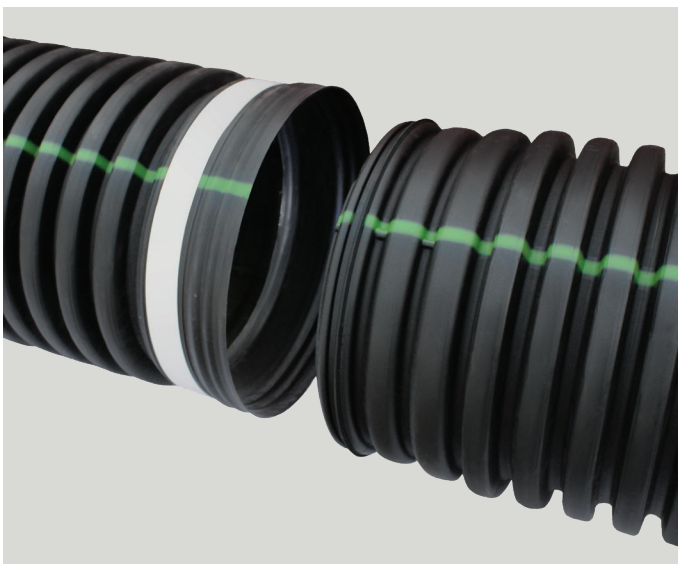
- Storm sewers
- Retention/Detention
- Golf, Turf & Recreation
- Culverts/Cross drains
- Mining/Forestry/Industrial
- Grain aeration
- Waterways
- Ditch enclosures
- Slope/Edge drains
- Foundation drains
- Downspouts/roof drainage
- Land reclamation
- Terracing

Features

- 4"-30" (100-750 mm) diameters available
- Nominal 20' (6 m) and 13' (4 m) lengths available
- In-line bell and spigot joint design
- Exceptional joint strength
- Light weight
- Fast installation times
- Structural strength will support H-25 live loads with 12" (300 mm) minimum cover

Benefits

- Variety of diameters and lengths that will fit any project
- Joint only requires lube for fitting - ends are pushed together for easy field installation
- Pipe requires no additional gasket materials, grout or sealing bands to transport and apply
- Installation cost savings from lower shipping costs, reduced labor and less heavy equipment
- Hydraulic efficiency from smooth interior



N-12 ST IB Pipe (per AASHTO) Specification

Scope

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

Pipe Requirements

ADS N-12 ST IB pipe (per AASHTO) shall have a smooth interior and annular exterior corrugations.

- 4" through 10" (100 to 250 mm) shall meet AASHTO M252, Type S or SP
- 12" through 30" (300 to 750 mm) pipe shall meet AASHTO M294, Type S or SP, or ASTM F2306
- Manning's "n" value for use in design shall be 0.012.

Joint Performance

Pipe shall be joined using a bell & spigot joint meeting AASHTO M252, AASHTO M294 or ASTM F2306.

The joint shall be soil-tight and gaskets for diameters 12" through 30" (300-750 mm), shall meet the requirements of ASTM F477. For diameters 4" through 10" (100-250 mm), the joint shall be soil-tight using an engaging dimple connection. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly.

Fittings

Fittings shall conform to AASHTO M252, AASHTO M294 or ASTM F2306. Bell and spigot connections shall utilize a welded bell and valley or saddle gasket meeting the soil-tight joint performance requirements of AASHTO M252, AASHTO M294 or ASTM F2306.

Material Properties

Material for pipe production shall be high-density polyethylene conforming with the minimum requirements of cell classification 424420C for 4" through 10" (100 to 250 mm) diameters, and 435400C for 12" through 30" (300 to 750 mm) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 60-inch (300 to 1500 mm) pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Sections 9.5 and 5.1 of AASHTO M294 and ASTM F2306, respectively.

Installation

Installation shall be in accordance with ASTM D2321 and ADS' published installation guidelines, with the exception that minimum cover in trafficked areas for 4" through 30" (100 to 750 mm) diameters shall be one foot (0.3 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), Class 2 (minimum 90% SPD) or Class 3 (minimum 95% SPD) material. Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.01. Contact your local ADS representative or visit our website adspipe.com for a copy of the latest installation guidelines.

Pipe Dimensions*

| | | | | | | | | | |
|----------------------|--------------|--------------|--------------|---------------|---------------|-------------|-------------|-------------|-------------|
| Pipe I.D. in (mm) | 4 (100) | 6 (150) | 8(200) | 10 (250) | 12 (300) | 15 (375) | 18 (450) | 24 (600) | 30 (750) |
| Pipe O.D. in (mm) | 4.8 (122) | 6.9 (175) | 9.1 (231) | 11.4 (290) | 14.5 (368) | 18 (457) | 22 (559) | 28 (711) | 36 (914) |

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

