# ADS N-12® ST IB PIPE (per AASHTO) SPECIFICATION

#### Scope

This specification describes 4- through 60-inch (100 to 1500 mm) ADS N-12 ST IB pipe (per AASHTO) for use in gravity-flow drainage applications.

### **Pipe Requirements**

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

- 4- through10-inch (100 to 250 mm) shall meet AASHTO M252, Type S or SP.
- 12- through 60-inch (300 to 1500 mm) 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, 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.

#### **Fittings**

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

#### **Material Properties**

Virgin material for pipe and fitting production shall be high density polyethylene conforming with the minimum requirements of cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, or 435400C for 12- through 60-inch (300 to 1500 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) virgin 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 recommended installation guidelines, with the exception that minimum cover in trafficked areas for 4- through 48-inch (100 to 1200 mm) diameters shall be one foot. (0.3 m) and for 54- and 60-inch (1350 and 1500 mm) diameters, the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1, Class 2 (minimum 90% SPD) or Class 3 (minimum 90%) 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 at <a href="https://www.ads-pipe.com">www.ads-pipe.com</a> for a copy of the latest installation guidelines.

## **Pipe Dimensions**

Nominal Diameter, in (mm)														
Pipe I.D.	4	6	8	10	12	15	18	24	30	36	42	48	54*	60
in (mm)	(100)	(150)	(200)	(250)	(300)	(375)	(450)	(600)	(750)	(900)	(1050)	(1200)	(1350)	(1500)
Pipe O.D.**	4.8	6.9	9.1	11.4	14.5	18	22	28	36	42	48	54	61	67
in (mm)	(122)	(175)	(231)	(290)	(368)	(457)	(559)	(711)	(914)	(1067)	(1219)	(1372)	(1549)	(1702)
Perforations	Perforations All diameters available with or without perforations													

<sup>\*</sup>Check with sales representative for availability by region.

<sup>\*\*</sup>Pipe O.D. values are provided for reference purposes only, values stated for 12- through 60-inch are ± 1 inch. Contact a sales representative for exact values.

# N-12® ST IB (per AASHTO) JOINT SYSTEM

(Joint configuration & availability subject to change without notice. Product detail may differ slightly from actual product appearance.)

