

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 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-inch (100 to 250 mm) pipe shall meet AASHTO M252, Type S or SP.
- 12- through 60-inch (300 to 1500 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 the requirements of AASHTO M252, AASHTO M294, or ASTM F2306. The joint shall be soil-tight and gaskets for diameters 12- through 60-inch, shall meet the requirements of ASTM F477. For diameters 4- through 10-inch, 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 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, and 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) 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 60-inch (1500 mm) diameter the minimum cover shall be 2 ft. (0.6 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 at www.ads-pipe.com for a copy of the latest installation guidelines.

Pipe Dimensions

	Nominal Diameter, in (mm)												
Pipe I.D. in (mm)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)	42 (1050)	48 (1200)	60 (1500)
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)	42 (1067)	48 (1219)	54 (1372)	67 (1702)

*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

**All diameters available with or without perforations.

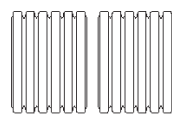
DUAL WALL PIPE

STORM DRAINAGE

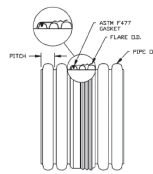
N-12 PLAIN END, N-12 ST IB & N-12 WT IB per AASHTO

12" - 60" DUAL WALL PIPE OFFERINGS

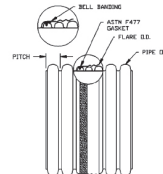
DIAMETER	LENGTHS	STYLE	N-12 PLAIN END	N-12 ST IB	N-12 WT IB
12" (300mm)	13' (4.0m)	solid		12850013IB	12650013IB
	20' (6.1m)	solid	12950020	12850020IB	12650020IB
		perf	12910020	12810020IB	
		sock	12930020	12830020IB	
15" (375mm)	13' (4.0m)	solid		15850013IB	15650013IB
	20' (6.1m)	solid	15950020	15850020IB	15650020IB
		perf	15910020	15810020IB	
		sock	15930020	15830020IB	
18" (450mm)	13' (4.0m)	solid		18850013IB	18650013IB
	20' (6.1m)	solid	18950020	18850020IB	18650020IB
		perf	18910020	18810020IB	
		sock	18930020	18830020IB	
24" (600mm)	13' (4.0m)	solid		24850013IB	24650013IB
	20' (6.1m)	solid	24950020	24850020IB	24650020IB
		perf	24910020	24810020IB	
		sock	24930020	24830020IB	
30" (750mm)	13' (4.0m)	solid		30850013IB	30650013IB
	20' (6.1m)	solid	30950020	30850020IB	30650020IB
		perf	30910020	30810020IB	
		sock	30930020	30830020IB	
36" (900mm)	13' (4.0m)	solid		36850013IB	36650013IB
	20' (6.1m)	solid	36950020	36850020IB	36650020IB
		perf	36910020	36810020IB	
		sock		36830020IB	
42" (1050mm)	13' (4.0m)	solid		42850013IB	42650013IB
	20' (6.1m)	solid	42950020	42850020IB	42650020IB
		perf	42910020	42810020IB	
		sock		42830020IB	
48" (1200mm)	13' (4.0m)	solid		48850013IB	48650013IB
	20' (6.1m)	solid	48950020	48850020IB	48650020IB
		perf	48910020	48810020IB	
		sock		48830020IB	
54"* (1350mm)	12.5' (3.8m)	solid		54850013IBA	54650013IBHA
	20.5' (6.2m)	solid		54850021IBA	54650021IBHA
60" (1500mm)	13' (4.0m)	solid		60850013IB	60650013IB
	20' (6.1m)	solid	60950020	60850020IB	60650020IB
		perf	60910020	60810020IB	
		sock		60830020IB	



12"-60" (300-1500mm)
N-12 PLAIN END



12"-60" (300-1500mm)
N-12 ST IB



12"-60" (300-1500mm)
N-12 WT IB

*LIMITED GEOGRAPHIC AVAILABILITY