

N-12[®] Plain End Pipe (per AASHTO)

N-12 Plain End pipe (per AASHTO) offers significant performance advantages in a gravity-flow pipe, which is available in a range of diameters from 4"-60" (100-1500 mm).

N-12 Plain End pipe delivers superior performance as it is manufactured from high-density polyethylene (HDPE). It provides physical strength, superior value and structural design that cannot be matched by traditional materials.

Applications

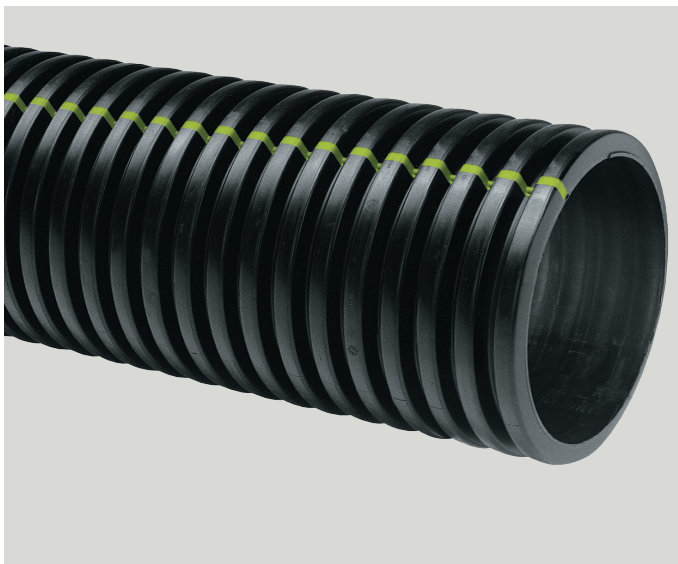
- Culverts/Cross Drains
- Slope/Edge Drains
- Golf, Turf & Recreation
- Foundation Drains
- Retention/Detention Systems
- Grain Aeration
- Parking Lot Drainage
- Mining/Forestry/Industrial

Features

- Available in 20' (6 m) lengths - pipe can be field cut to the desired length
- 4"-60" (100-1500 mm) diameters available
- Certified to meet AASHTO M252, Type S or SP requirements
- Structural strength will support H-25 or HL-93 live loads with 12" (300 mm) minimum cover; 60" (1500 mm) requires 24" (600 mm) cover for H-25 or HL-93 live loads

Benefits

- Easy-to-handle, safe, light weight pipe requires less labor and equipment for faster installation and reduced costs
- Superior hydraulics - smooth interior will ensure no debris or sediment build-up
- Provides superior resistance to chemicals, road salt, motor oil and gasoline - will not rust or deteriorate
- Withstands repeated freeze/thaw cycles and continuous subzero temperature
- Coupling bands are available



ADS N-12 Plain End Pipe (per AASHTO) Specification

Scope

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

Pipe Requirements

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

- 4- through 10-inch (100 to 250 mm) 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 with coupling bands covering at least two full corrugations on each end of the pipe. Standard connections shall meet or exceed the soil-tight requirements of AASHTO M252, AASHTO M294 or ASTM F2306.

Fittings

Fittings shall conform to 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) diameters, the minimum cover shall be two feet (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 adspipe.com for a copy of the latest installation guidelines.

Build America, Buy America (BABA)

ADS N-12 Plain End pipe (per AASHTO), manufactured in accordance with AASHTO M252, AASHTO M294 or ASTM F2306, complies with the requirements in the Build America, Buy America (BABA) Act.

Pipe Dimensions*

Nominal Diameter													
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)

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

