



OMNI INDUSTRIES LTD.

Manufacturer of *Thermoplastic* Products

PRODUCT DATA SHEET HDPE CORRUGATED STORM DRAIN PIPE

Scope

This specification designates the requirements for 4- through 60- inch HDPE storm drain pipe and fittings for use in gravity-flow drainage applications.

Pipe Requirements

HDPE storm drain pipe shall have dual wall - Corrugated exterior with reinforced double-arch corrugations and smooth interior liner and dual layer co-extruded integrated bell. Manning's n value for use in design shall be 0.010

- 4- through 10- inch shall meet AASHTO M252, ASTM F2648 and ASTM F667
- 12- through 60- inch shall meet AASHTO M294, ASTM F2306, ASTM F2648 and ASTM F667

Materials

HDPE storm drain pipe and fittings is manufactured using high-density polyethylene (HDPE) meeting the minimum requirements of cell classification 435420C/E for all pipe sizes as defined and described in ASTM D3350. Carbon black content shall be between 2 and 4%. Materials for 12- through 60- inch pipe sizes shall comply with NCLS test according to sections 9.4 and 5.1 of AASHTO M294 and ASTM F2306 respectively.

Joint Performance

HDPE storm drain pipe shall be joined using a watertight dual wall integrated bell and spigot joint meeting the requirements of AASHTO M252, AASHTO M294, ASTM F2306 and ASTM F2648. The joint shall be watertight according to ASTM D3212. Pre-installed gaskets shall meet the requirements of ASTM F477. A joint lubricant provided by Omni or any other waterbased lubricant shall be used during the joint assembly.

Fittings

Fittings shall meet the requirements of AASHTO M252, AASHTO M294, ASTM F2306 and ASTM F2648.

Installation

Pipe and fittings shall be installed in accordance with ASTM D2321. Minimum cover for trafficked areas shall be 12" (0.3m). Maximum cover height depends on materials used for embedment and haunching.

Dimensions

Nominal ID 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)
OD \pm 1% in (mm)	4.7" (120)	6.9" (176)	9.1" (232)	11.4" (290)	14.1" (359)	17.5" (445)	21.1" (536)	27.9" (709)	34.6" (879)	41.4" (1052)	47.5" (1208)	55.7" (1415)	68.1" (1729)