

## DuroMaxx™ Specification Sheet

### Scope

This specification describes DuroMaxx pipe for use in gravity flow storm drain and culvert applications in 24" (600 mm) through 72" (1800 mm) nominal diameters.

### Description

DuroMaxx is a reinforced polyethylene pipe with a smooth waterway wall and exterior profile that is reinforced with high strength galvanized steel ribs. The continuous reinforcing ribs are completely encased within the polyethylene profile. DuroMaxx is manufactured using a helical winding process that results in a continuously fusion welded lap seam. The pipe profile is manufactured using a high quality stress-rated thermoplastic meeting the requirements of ASTM F2562 "Standard Specification for Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage". For the purpose of hydraulic design, the recommended Manning's "n" value shall be 0.012 for pipe diameters included within this specification.

### Material Properties

Virgin high density polyethylene stress-rated resins are used to manufacture DuroMaxx pipe and complimentary fabricated fittings. Resins shall conform to the minimum requirements of cell classification 345464 C as defined and described in the latest version of ASTM D3350 "Standard Specification for Polyethylene Plastics Pipe and Fittings Materials".

### Joint Performance

Pipe lengths shall be joined on site using bell & spigots especially designed for DuroMaxx pipe. Both the bell and spigot shall be reinforced with steel that is fully encased in stress-rated high density polyethylene meeting the requirements set forth in the above Material Properties paragraph and shall be watertight to an internal water pressure of 15 psi when tested in accordance with ASTM D3212 "Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals".

### Fittings

All fabricated fittings and couplings supplied by the manufacturer shall be constructed to ensure no loss of structural integrity or water tightness at welded seams and joints for watertight applications. Only those fittings supplied by or recommended by the manufacturer shall be used.

### Installation

Installation shall be in accordance with ASTM D2321 "Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications" along with product-specific recommendations contained in Contech Installation Guidelines for DuroMaxx pipe, available from local Contech representatives or from [www.contech-cpi.com](http://www.contech-cpi.com).

## Pipe Dimensions and Cover Limits

Nominal Pipe Size	Minimum Pipe Stiffness	Outside Diameter	Unit Weight	Minimum Waterway Wall Thickness, $t_1$		Minimum Cover	Maximum Cover	
inch	lb/in/in	in. [mm]	lbs./ft	in.	[mm]	ft. [m]	ft.	[m]
24	34	24.9 [632]	11.3	.068	[1.7]	1 [.305]	50	[15.2]
30	28	30.9 [785]	15.5	.082	[2.08]	1 [.305]	50	[15.2]
36	22	37.1 [942]	20.8	.082	[2.08]	1 [.305]	50	[15.2]
42	20	43.2 [1097]	26.5	.082	[2.08]	1 [.305]	50	[15.2]
48	18	49.5 [1257]	29.1	.105	[2.7]	1 [.305]	30	[15.2]
54	16	55.5 [1410]	34.7	.105	[2.7]	1 [.305]	30	[15.2]
60	14	61.4 [1560]	41.6	.105	[2.7]	1 [.305]	30	[15.2]
72	14	74.1 [1882]	-	.170	[4.3]	1.5 [.457]	30	[9.1]
Larger diameters will soon be available								
84	14	85.9 [2182]	-	.170	[4.3]	1.5 [.457]	30	[9.1]
96	12	98.3 [2497]	-	.200	[5.1]	2 [.610]	30	[9.1]
108	10	110.1 [2797]	-	.200	[5.1]	2 [.610]	30	[9.1]
120	9	121.9 [3096]	-	.200	[5.1]	2 [.610]	30	[9.1]

### The CONTECH Environmental Commitment

CONTECH is an environmentally conscious company committed to shaping the future of green building and design. DuroMaxx is CONTECH's newest contribution to our eco-friendly portfolio of civil engineering solutions. Starting with the manufacturing process, DuroMaxx consumes less than 35% of natural resources to produce AASHTO M294 pipe. Not to mention, its strength giving profile ribs made of recycled steel in content levels ranging from 55-80%. Plus, when utilized appropriately, it can contribute to a variety of the U.S. Green Building Council's LEED credits in the categories for sustainable sites, water efficiency and landscaping, and materials and resources.

