DuroMaxx® Qualifies for LEED Credits!

DuroMaxx has the potential to contribute to a variety of the U.S. Green Building Council’s LEED® (Leadership in Energy and Environmental Design) Green Building Rating System™ credits in the categories for sustainable sites, water efficiency and materials and resources. DuroMaxx comes in a range of diameters from 30”-120” and in standard lengths of 14’ and 22’. DuroMaxx offers a high performance (HP) joint that meets or exceeds the requirements of ASTM D3212 and a welded coupler (WC) joint for exceptional watertight joints with a 30 psi rating. The use of DuroMaxx can also help meet EPA Phase II NPDES requirements as a best management practice (BMP).

Materials & Resources Credits 4.1 & 4.2: Recycled Content

Intent: Increase the demand for building products that utilize recycled content materials. It states that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (for Credit 4.1) or 20% (for Credit 4.2) – based on cost – of the total value of the materials in the project.

DuroMaxx pipe uses 35% less polyethylene resin than AASHTO M294 or ASTM F2648 pipe, resulting in significantly less consumption of non-renewable natural gas and oil. The plastic portion of the pipe must meet ASTM specifications and may not utilize recycled content. This portion of the product comprises ~1/3 the total weight of the pipe. The steel content of the pipe is 55% post consumer recycled content and comprises ~2/3 to total weight of the pipe. The total post consumer recycled content for DuroMaxx is 37%.

Materials & Resources Credits 5.1 & 5.2: Regional Materials

Intent: Increase the demand for building materials and products that are extracted and manufactured locally to a job site in order to reduce the environmental impact that would result from transporting these goods. Products manufactured within 500 miles of the project site for a minimum of 10% (for Credit 5.1) or 20% (for Credit 5.2) – based on cost – of the total material value in the project.

With more than 40 manufacturing facilities nationwide, Contech has the means to supply many projects with products manufactured from local resources in order to qualify for MR Credits 5.1 & 5.2. DuroMaxx is manufactured in accordance with ASTM F2562 in Ogden, Utah. The source materials are typically extracted more than 500 miles from Ogden.
Scope
This specification describes DuroMaxx pipe for use in gravity flow sewerage in 24” (600 mm) through 120” (3000 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 coupling bands, bell & spigots or welded coupler (WC) joints 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.

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

Pipe Dimensions and Cover Limits
Contact your local Contech Sales Engineer for technical assistance.