DETAILED SPECIFICATION

UIP® half-shells

1) General

The urethane foam half-shells shall be manufactured using the U.I.P.® insulation process in accordance to ISO 9001-2000 Standards, or approved equal.

2) Insulation

a) Material, rigid polyurethane foam.
b) Thickness: nominal 37 mm (1 1/2 in), or as required.
c) Density: (ASTM D 1622) 35 to 46 kg/m³ (2.2 to 3.0 lbs/ft³).
d) Closed cell content (ASTM D 6226) 90%, minimum.
e) Water absorption: (ASTM C 272) 2.0% by volume.
f) Thermal conductivity: (ASTM C518) 0.020 to 0.026 W/m °C (0.14 to 0.17 Btu • in/ft² • hr • °F).
g) Temperature limitations: -45° to 93° C (-49° to 200° F).

3) Packaging

The product is typically supplied in 1.52 m (5 ft.) lengths bundled and wrapped in a UV protective sheath. Other lengths are available on request.

4) Outer Jacket on Pipe Insulation

The UIP® half shells are provided with a mirror smooth outer urethane 'skin' that allows for greater ease of field installation of the final outer jacket required. For below ground applications the jacket of choice is typically 0.305mm (12 mil) PE hand-roll tape spirally applied with a 50% overlap; refer to Submittal data #257 for more detail on this product.

5) Insulation kits for fittings

Urethane half-shell covers are available for all types of fittings to match the insulation system used on the pipe.

Note: -Physical characteristics are nominal and may vary depending on pipe type and diameter. (Revised June 2011)