



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 2856) 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 Feb. 2010)