

## DETAILED SPECIFICATION

### Field applied insulation with polymer coating for below grade piping

#### 1. GENERAL

The pipes and fittings shall be field insulated using polyisocyanurate or polyurethane foam half shells with a fully bonded polymer protective coating on all exterior and interior surfaces, including ends, as supplied by GF Urecon Ltd. The product shall be manufactured in accordance to ISO 9001 Standards, or approved equal.

#### 2. INSULATION KITS FOR PIPES & FITTINGS

All insulation kits shall be supplied complete with silicone caulking for seams, stainless steel bands and gear clamps.

##### a) Rigid polyisocyanurate or polyurethane foam half shells

1. Density: (ASTM D1622) 32 kg/m<sup>3</sup> (2.0 lbs/ft<sup>3</sup>).
2. Compressive strength: (ASTM D1621) 124 to 186 kPa (18 to 27 lbs/in<sup>2</sup>).
3. Closed cell content: (ASTM D2856) 90%, minimum.
4. Water absorption: (ASTM C272) 2.0% by volume.
5. K factor: (ASTM C518) 0.027 W/m°C (0.19 Btu • in/ft<sup>2</sup> • hr • °F).
6. Thickness: 50.8 mm (2 in), other thicknesses upon request, shall match pipe insulation thickness.

##### b) Polymer coating, GF Urecon BL-70-20EP

1. Two component high density polyurethane coating, black in color.
2. Density: 1170 kg/m<sup>3</sup> (73 lbs/ft<sup>3</sup>).
3. Durometer D scale 60.
4. Tensile strength: 11.10 MPa (1610 lbs/in<sup>2</sup>).
5. Tear strength: 26.5 N/mm (151 lbs/in).
6. Thickness: 1.78 mm (70 mils) outside surfaces, 0.51 mm (20 mils) inside surfaces.

#### 3. ELECTRIC TRACING SYSTEM

The electric tracing system and associated controls shall be as per the manufacturer's recommendations with particular attention being paid to the watt densities applied on plastic pipes. The heat tracing cable shall be fastened to the pipe and fittings with aluminum tape. All tracing cables and related accessories to be CSA approved and comply with CSA heat tracing standard C22.2 No. 130-03. Standard of acceptance is GF Urecon's Thermocable or approved equal. Please contact your GF Urecon representative for further details and design assistance.

*Note: Physical characteristics are nominal and may vary depending on pipe type and diameter.*

#### CANADA

75 boulevard Dupont  
Coteau-du-lac (Québec) J0P 1B0  
Tél: (450) 455-0961 Fax: (450) 455-0350  
E-mail: [urecon.can@georgfischer.com](mailto:urecon.can@georgfischer.com)

5010 – 43<sup>rd</sup> Avenue  
Calmar (Alberta) T0C 0V0  
Tel: (780) 985-3636 Fax: (780) 985-2466  
E-mail: [urecon.can@georgfischer.com](mailto:urecon.can@georgfischer.com)

WEB SITE: [www.urecon.com](http://www.urecon.com)

ISO 9001 Registered Company

#### UNITED STATES

Tel: (321) 638-2364  
E-mail: [urecon.usa@georgfischer.com](mailto:urecon.usa@georgfischer.com)

WEB SITE: [www.urecon.com](http://www.urecon.com)