

FLEXICELL[®] -XLPE



Cross-Linked Closed Cell

Polyolefin Thermal Insulation Foam

with ISO 9705 Rating



AS/NZ 1530.3 TESTED

ISO 9705 TESTED

www.flexicell.co.nz



FlexiCell® Tubes

FlexiCell® XLPE is a closed cell chemically cross linked polyolefin foam used as thermal insulation to protect against heat loss and condensation.

FlexiCell® XLPE is reinforced with a heat bonded aluminium foil and is available with factory applied adhesive liner.

Easy to apply self adhesive rolls and sheets

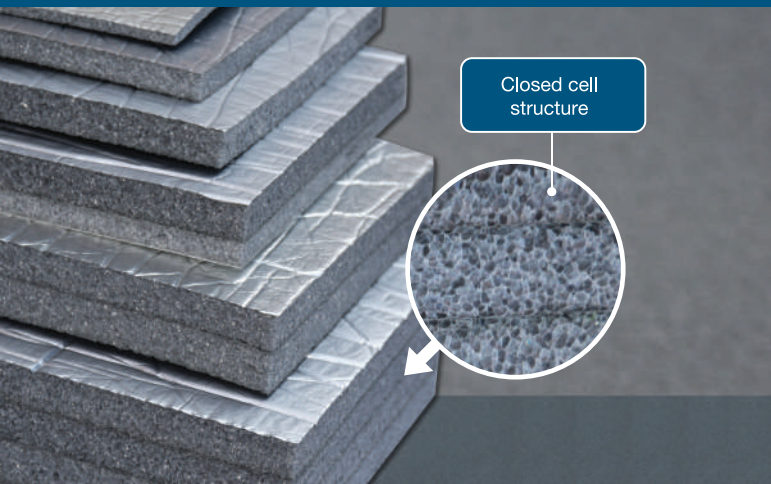
Very low thermal conductivity



FlexiCell® Rolls



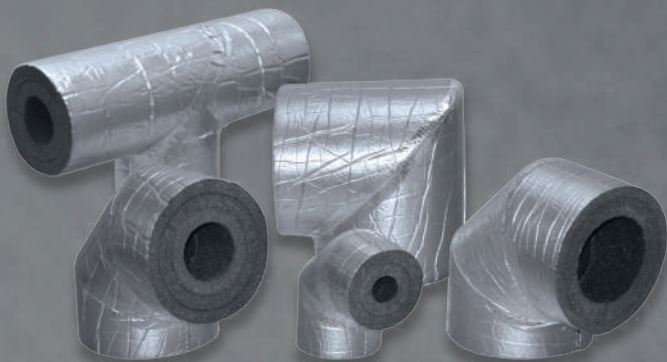
Closed cell structure



FlexiCell® Sheets

FlexiCell® XLPE prefabricated fittings are made in different sizes and shapes such as Elbows, T and Y sections.

Prefabricated fittings are available in a variety of wall thicknesses and inner diameters.



FlexiCell® Prefabricated Fittings

FIRE AND SMOKE PERFORMANCE

FlexiCell® XLPE meets AS/NZ 1530.3, FlexiCell® XLPE is tested and classified in accordance with ISO 9705, Full Scale Room Fire Test and can be used for compliance with the building code of New Zealand.



EXCELLENT THERMAL EFFICIENCY

FlexiCell® XLPE has a very low thermal conductivity, guaranteeing high performance in thermal insulation applications. Further to this, as FlexiCell® XLPE is closed cell, it also provides excellent levels of condensation control.



ENVIRONMENTALLY FRIENDLY

FlexiCell® XLPE is a CFC and HCFC free product. It does not contain, nor use in its production, any substances that contribute to Ozone Depletion Potential (ODP). FlexiCell® XLPE is fibre free and has a very low Volatile Organic Compound (VOC) emission level.



ZERO WATER VAPOUR PERMEABILITY

Condensation control is a key performance aspect of any insulation. FlexiCell® XLPE can be installed without any additional vapour barriers due to its closed cell construction, and watertight aluminium foil barrier. FlexiCell® XLPE's excellent protection against condensation ensures the long term thermal efficiency of the insulation.



QUICK & EASY TO INSTALL

FlexiCell® XLPE is fast and easy to install. It is more flexible than other pipe insulation products, including glasswool, polystyrene and other extruded foams. This results in greatly reduced installation time, thereby affording significantly increased productivity.



FLEXICELL[®] - XLPE

TECHNICAL DATA ISO 9705 RATING

| Properties | Value/ Assessment | Tested to: |
|---|--|--|
| Temperature Range Max. Line Temperature Min. Line Temperature <i>Our Customer Service Centre should be consulted for applications with temperatures below -80 °C</i> | +105 °C (+80 °C with PSA*) -80 °C (-30 °C with PSA*) | DIN EN 14706 ASTM C1427 |
| Thermal Conductivity <i>As per BCA/NZBC. Values are results tested per AS/NZS 4859.1 2018</i> | 6 mm - 15 mm - 0.034 W/m·K 20 mm - 60 mm - 0.035 W/m·K | ASTM C518 |
| Density | 25 ± 3 kg/m ³ (foam core only) | - |
| Color | Grey | - |
| Water Vapour Permeance [perms] | 0 | ASTM E96 |
| Water Absorption | 0.00008 g/cm ² | JIS K6767 |
| Resistance to Corrosion | Excellent | ASTM B117 |
| Compression Set | 35 77% (25mm) | ASTM D3574 |
| Reaction to Fire | Ignitability 0 | AS/NZ 1530.3 |
| | Spread of Flame 0 | |
| | Heat Evolved 0 | |
| | Smoke Developed 0-1 | |
| | Average Smoke Prod.: 0.493 m ² /sec (Group 2s Rating) | ISO 9705 |
| | Class O | BS 476 Part 6 & 7 |
| Smoke Toxicity Levels | Passed | IMO MSC 307(88) Part 2 & 5 |
| Resistance to Fungi | Excellent | ASTM G21 |
| Resistance to Bacteria | Excellent | ISO 22196 |
| Corrosion Risk | No corrosion risk for steel, stainless steel and copper pipes | - |
| Chemical Analysis | Chloride content - 0.0018 w/w% pH - 8.22 | DIN EN 13468 |
| Emission VOC (level) | <4 µg/m ² /hr | ASTM D5116 |
| Environmental Friendly Ozone Resistance Ozone Depletion Potential (ODP) Global Warming Potential (GWP) CFC & HCFC, Dust, Fibres | Excellent 0 <5 Free | Size Availability Tubes thickness 10, 12, 15 mm 20, 25, 30, 32, 35, 40 mm 50, 55, 60, 65 mm Tubes ID 6-125 mm 6-711 mm 12-711 mm Sheets thickness 25, 30, 35, 40, 50 mm Sheets size 1.2 m x 2.4 m Rolls thickness 3, 5, 10, 12, 15, 20, 25 mm Rolls size 1 & 1.2 m x 20 m (various lengths available depending on thickness) Pressure sensitive adhesive coating options available. |
| Storage life: Can be stored for 24 months (12 months with PSA*) from manufacturing date in a dry, clean, dust free room at normal humidity and ambient temperature. <i>Note: All outdoor applications of FlexiCell[®] XLPE need to be protected by FlexiCell[®] approved coating or weather resistant cladding.</i> *PSA - Pressure Sensitive Adhesive | | |

This information, presented by Hira Industries, is accurate to the best of our knowledge at the time of publication. All product data is based on average values and should be used as a general guide only. Due to the unique nature of specific applications, results may vary according to individual circumstances beyond the manufacturers control. As our products are subject to constant research and development, Hira Industries reserves the right to amend, modify and/or update the content of this publication at any time, without prior notice. Visit flexicell.com.au for more information, technical specifications, installation guidelines and product warranty terms and conditions.