# FLEXI*CELL*®–XLPE

Cross Linked Closed Cell

## Polyolefin Thermal Insulation Foam

FlexiCell® Tubes

Easy to apply self adhesive rolls & sheets
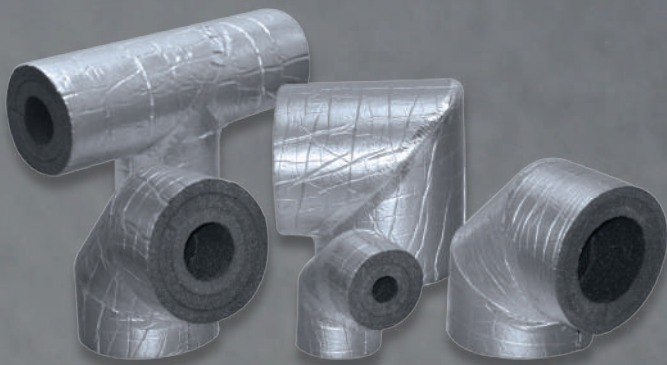
Very low thermal conductivity

FlexiCell® Rolls

FlexiCell® Sheets

FlexiCell® Prefabricated Fittings

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

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

**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.

## FIRE & SMOKE PERFORMANCE

FlexiCell® XLPE is tested as per ASTM E84 and achieved FSI<20 and SDI<50.

## 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 aluminum foil barrier.

FlexiCell® XLPE's excellent protection against condensation ensures long term thermal efficiency of the insulation.

## QUICK & EASY TO INSTALL

FlexiCell® XLPE is fast and easy to install. It is more flexible than the 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

| Properties | Value/ Assessment | Tested to: |
|---|---|---|
| **Temperature range**<br>Max. line temperature<br>Min. line temperature<br>*Our Customer Service Centre should be consulted for applications with temperatures below -50 °C* | 105 °C (80 °C with PSA*)<br>-80 °C (-40 °C with PSA*) | |
| **Thermal conductivity** | 0.032 (W/m·K) at 23 °C | ASTM C518 |
| **Density** | 25 ± 3 kg/m³ (foam core only) | |
| **Water vapour permeance [perms]** | 0 | ASTM E96 |
| **Water absorption** | 0.00008 (g/cm²) | JIS K6767 |
| **Compression set** | 35.77% (25 mm)  32.22% (32 mm) | ASTM D3574 |
| **Reaction to fire** | FSI <20<br>SDI <50 | ASTM E84 |
| **Resistance to fungi** | Excellent | |
| **Resistance to bacteria** | Excellent | |
| **Chemical analysis** | Very Good | ASTM C871 |

| **Environmental friendly** | | **Size availability** | |
|---|---|---|---|
| Ozone Resistance | Excellent | **Tubes** | **Insulation Thickness** |
| Ozone Depletion Potential (ODP) | 0 | 6 mm to 28 mm | 10 mm to 40 mm |
| Global Warming Potential (GWP) | <5 | 32 mm to 125 mm | 10 mm to 50 mm |
| CFC & HCFC, Dust, Fibres | Free | 140 mm to 712 mm | 20 mm to 50 mm |
| | | 25 mm to 115 mm | 51 mm to 75 mm |
| | | 125 mm to 712 mm | 51 mm to 75 mm |

**Storage life:** Can be stored in dry, clean rooms at normal relative humidity and ambient temperature.

**Note:** All outdoor applications of FlexiCell® XLPE need to be protected by FlexiCell® approved paint or weather resistant cladding. It is recommended to use FlexiCell® XLPE N Clad for all outdoor applications.

Self adhesive products should be used within 1 year.

**Rolls**
A range of sizes are available       3 mm to 25 mm

**Sheets**
1.20 x 2.4 m       12 mm to 63 mm

Pressure sensitive adhesive coating options available.

*PSA - Pressure Sensitive Adhesive