

FLEXICELL[®] - NBR



Flexible Closed Cell
Elastomeric Thermal Insulation Foam



AS 1530.3 TESTED

ISO 5660 - GROUP 2

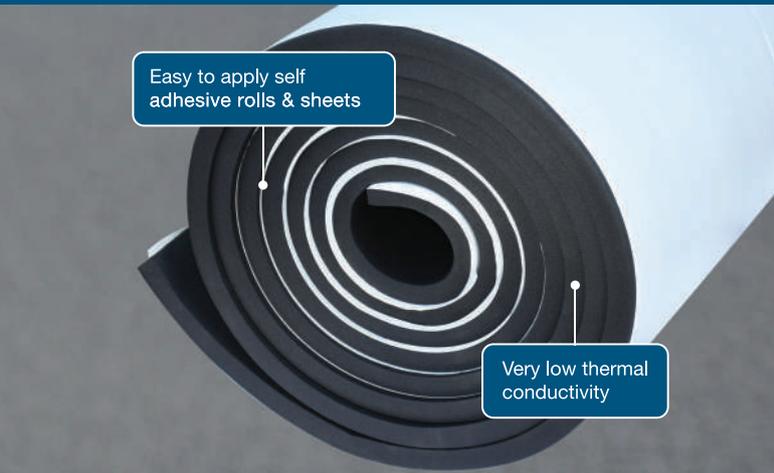
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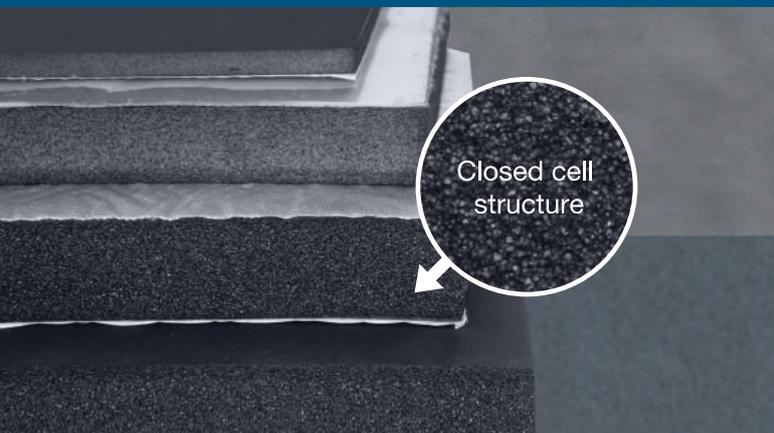
FlexiCell® NBR Tubes

FlexiCell® NBR is a flexible closed cell thermal insulation material for condensation control in air-conditioning, refrigeration and chilled water installations. It is also suitable for reducing thermal losses in heating and other plumbing systems.

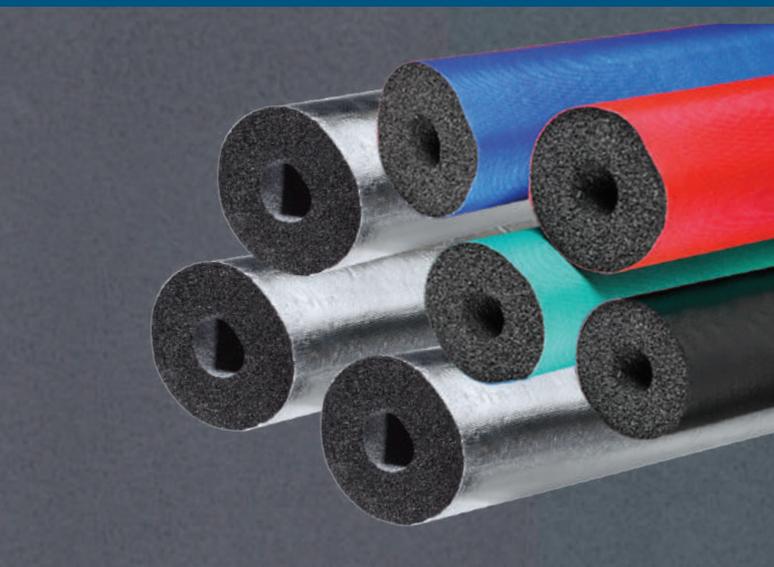
FlexiCell® NBR range covers majority of pipe sizes used in various types of installations.



FlexiCell® NBR Rolls



FlexiCell® NBR Sheets



FlexiCell® NBR with different facings

FlexiCell® NBR with foil facing: Factory applied aluminum foil facing is designed for indoor installations in order to increase the mechanical resistance of elastomeric foam. Available in the form of tubes and sheets.

FlexiCell® NBR with Glass Cloth: Glass cloth is a factory applied facing designed for indoor installations in order to increase the mechanical resistance and to improve the esthetic look of thermal insulation. It is available in the form of tubes, sheets and in different colors - black, blue, green and red.

FIRE & SMOKE PERFORMANCE

FlexiCell® NBR meets AS1530.3 - early fire hazard properties of materials and is tested as per ISO 5660 - Group 2 Rated. Moreover, FlexiCell® NBR is FM approved as per FM 4924.



EXCELLENT THERMAL EFFICIENCY

FlexiCell® NBR has a unique closed cell structure, which has a very low thermal conductivity. This ensures excellent thermal performance. FlexiCell® NBR is closed cell, it also provides excellent levels of condensation control.



ENVIRONMENTALLY FRIENDLY

FlexiCell® NBR is CFC and HCFC free, fibre free dust free and resistant to mould and fungi growth. FlexiCell® has a very low ODP (Ozone Depletion Potential) and GWP (Global Warming Potential).



ZERO WATER VAPOUR PERMEABILITY

FlexiCell® NBR is compounded to achieve high water vapour diffusion resistance through its closed cell structure and dense outer skin. This helps maintain a consistent thermal performance and a long service life.



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

QUICK & EASY TO INSTALL

FlexiCell® NBR is quick and easy to install due to its high flexibility, dimensional stability and smooth surface skin. It can be applied on pipes and ducts.



TECHNICAL DATA

Description: FlexiCell® NBR is a black flexible elastomeric thermal insulation product available in the form of tubes and sheets, unfaced with an aluminum foil facer or with a glass cloth facer.

Property	Value/ Assessment	Test Method															
Thermal conductivity At 23 °C	6 mm - 32 mm - 0.032 W/m·K 40 mm - 50 mm - 0.033 W/m·K <i>As per BCA/NZBC. Values are results tested per AS/NZS 4859.1 2018</i>	ASTM C518															
Temperature range Max. line temperature Min. line temperature <i>FlexiCell® Technical Support should be consulted for applications with temperatures below -40 °C.</i>	+110 °C (+80 °C with PSA*) -80 °C (-30 °C with PSA*)	ASTM C411 ASTM C534															
Density of the foam core	40-70 kg/m ³	ASTM C302															
Water vapor diffusion resistance factor	μ>17,000	BS EN 12086															
Water vapor permeance	1.56 E-09 g/m ² .s.Pa	ASTM E96															
Water absorption	0.06% by volume	ASTM C209															
Reaction to fire	Ignitability Index: 0 Spread of Flame Index: 0 Heat Evolved Index: 0 Smoke Developed Index: 3	AS 1530.3															
	Group 2	ISO 5660															
FM approval	Approved	FM 4924															
Smoke and toxicity	Passed	IMO MSC 61(67)															
Corrosion risk	No corrosion risk for steel, stainless steel and copper pipes (Except austenitic stainless steel)																
Chemical analysis	Chloride content - 0.002 w/w%	DIN 1988															
	pH - 7.3	ASTM C871															
Compression set	31.23% (for 25 mm)	ASTM D3574															
Linear shrinkage	0% at -80 °C, 4% at +104 °C	ASTM C534															
Resistance to fungi	Zero growth	ASTM G21															
Resistance to bacteria	Zero growth	ISO 22196															
Ozone resistance	Excellent	ASTM D1149															
TVOC (emission rate - 24 hours)	<0.5 mg/m ² /hr	ASTM D5116															
RoHS	Comply	RoHS 3 2015/863															
Environment friendly																	
Ozone Depletion Potential	0																
Global Warming Potential	<5																
CFC, HCFC, dust, fibers & asbestos	Free																
Storage Life: <i>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>	Size Availability																
		<table> <tr> <td>Tubes thickness</td> <td>Tubes ID</td> </tr> <tr> <td>6 mm</td> <td>6-42 mm</td> </tr> <tr> <td>9 mm</td> <td>6-79 mm</td> </tr> <tr> <td>13, 19, 25, 32 mm</td> <td>6-114 mm</td> </tr> <tr> <td>Sheets thickness</td> <td>Sheets size</td> </tr> <tr> <td>6, 9, 13, 16, 19, 25, 32, 40, 50 mm</td> <td>1 m x 1 m</td> </tr> <tr> <td>Rolls thickness</td> <td>Rolls size</td> </tr> <tr> <td>6, 9, 13, 16, 19, 25, 32, 40, 50 mm</td> <td>1 m x 4-30 m (depending on thickness)</td> </tr> </table> <p>Please contact Technical Support for detailed sizes with different foil facings.</p>	Tubes thickness	Tubes ID	6 mm	6-42 mm	9 mm	6-79 mm	13, 19, 25, 32 mm	6-114 mm	Sheets thickness	Sheets size	6, 9, 13, 16, 19, 25, 32, 40, 50 mm	1 m x 1 m	Rolls thickness	Rolls size	6, 9, 13, 16, 19, 25, 32, 40, 50 mm
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*PSA - Pressure Sensitive Adhesive

Note: All outdoor applications of FlexiCell® NBR need to be protected by FlexiCell® approved coating or weather resistant cladding.

MANUFACTURING LOCATIONS

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