

FLEXICELL[®] - NBR



Flexible Closed Cell
Elastomeric Thermal Insulation Foam



ASTM E84

AS 1530.3 TESTED

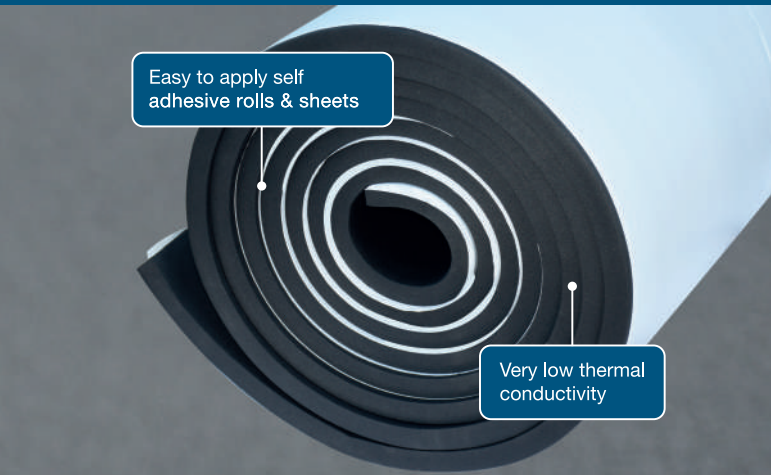
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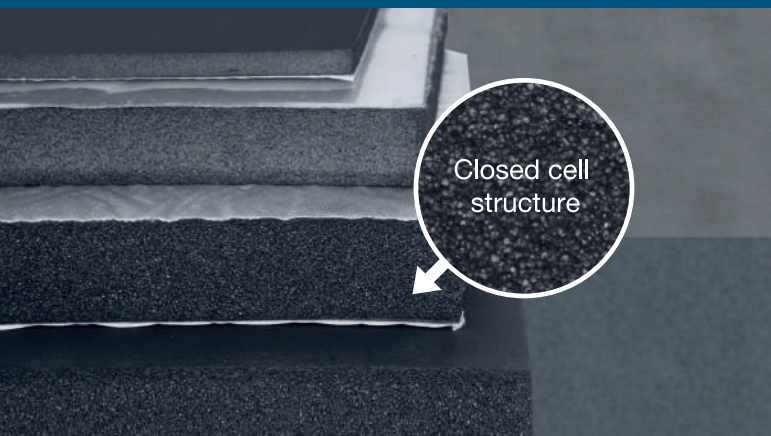
FlexiCell® NBR Tubes

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

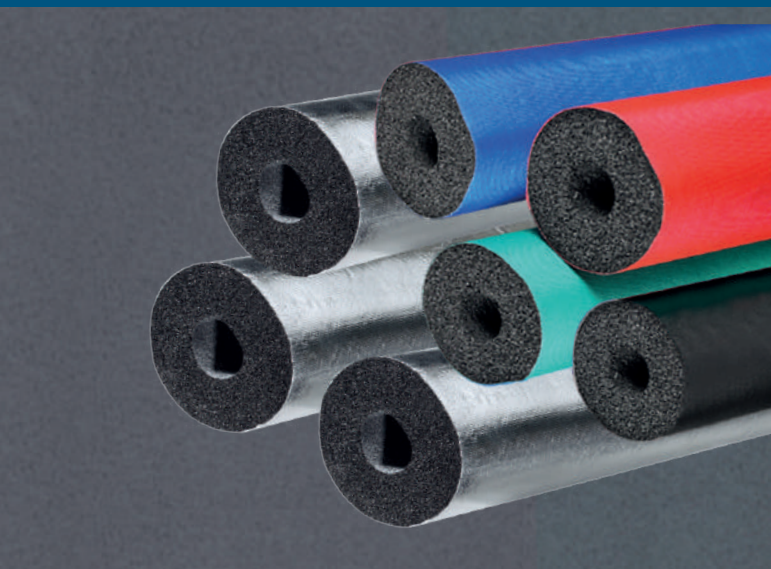


FlexiCell® NBR Sheets



FlexiCell® NBR with 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.



FlexiCell® NBR with different facings

FIRE & SMOKE PERFORMANCE

FlexiCell® NBR is tested as per:

ASTM E84 and achieved FSI<25 and SDI<50

BS 476 part 6 & 7 and is classified as Class 0

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	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	FSI<25 & SDI<50 Class 0	ASTM E84 BS 476 part 6 & 7
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	DIN 1988
Chemical analysis	<0.05% (water soluble chloride ions)	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 Global Warming Potential CFC, HCFC, dust, fibers & asbestos	0 <5 Free	Size availability Tubes ID 6 mm to 42 mm 48 mm to 60 mm 63 mm to 114 mm Thickness 6 mm to 32 mm 9 mm to 32 mm 13 mm to 32 mm Sheets & Rolls Thickness 6 mm to 50 mm Please contact Technical Support for detailed sizes with different foil facings.
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.		

*PSA - Pressure Sensitive Adhesive

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

Disclaimer: This information on Hira Industries products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.

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