

AEROFOAM[®] - NBR

RUBBER INSULATION



**FLEXIBLE CLOSED CELL ELASTOMERIC FOAM SUITABLE FOR
CONDENSATION CONTROL, THERMAL INSULATION AND
SOUND ABSORPTION**

CLASS 0

Hira
INDUSTRIES

MADE IN U.A.E

AEROFOAM®-NBR

RUBBER INSULATION



AEROFOAM® 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 plumbing systems. The combination of its technical properties – a low thermal conductivity and a high resistance to water vapor transmission- and its competitive price makes it a cost-effective energy-saving solution. The AEROFOAM® NBR range covers the majority of pipe sizes used in these types of installations. AEROFOAM® NBR can be used on liquid gases lines in extremely low temperature. Please ask for technical support.



Low thermal Conductivity

AEROFOAM® NBR has an unique closed cell structure, which offers the material a very good and stable thermal performance through a low Lambda (λ) value.



High Water Vapor Difussion Resistance

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



Fire Resistance

AEROFOAM® NBR is rated 25 (FSI) and 30 (SDI) according to ASTM E84. AEROFOAM® NBR is rated Class O as per BS 476 Part 6 & 7 for spread of flame and fire propagation. It does not melt, nor drip and therefore does not cause fire transfer. Low smoke density makes it a safer option.



Environment Friendly

AEROFOAM® NBR is CFC & HCFC free, fiber free, dust free and resistant to mold and fungi growth. It has very low ODP (Ozone Depletion Potential) and GWP (Global Warming Potential).



Ease Of installation

AEROFOAM® NBR is quick and easy to install due to its high flexibility, dimensional stability and smooth surface skin. It can be applied on pipes, ducts and tanks. Due to flexibility it is very easy to install on all types of curves.

AEROFOAM® NBR TUBES

Diameter (inch)	Diameter (mm)	PC / box	6 mm (1/4")	PC / box	9 mm (3/8")	PC / box	13 mm (1/2")	PC / box	19 mm (3/4")	PC / box	25 mm (1")	PC / box	32 mm (1 1/4")
1/4"	6	180	NBRT0606	168	NBRT0906	90	NBRT1306	50	NBRT1906	35	NBRT2506	30	NBRT3206
3/8"	9	170	NBRT0609	130	NBRT0909	80	NBRT1309	40	NBRT1909	25	NBRT2509	25	NBRT3209
1/2"	13	150	NBRT0613	115	NBRT0913	65	NBRT1313	40	NBRT1913	25	NBRT2513	20	NBRT3213
5/8"	16	120	NBRT0616	90	NBRT0916	60	NBRT1316	35	NBRT1916	25	NBRT2516	20	NBRT3216
3/4"	19	100	NBRT0619	76	NBRT0919	45	NBRT1319	30	NBRT1919	20	NBRT2519	15	NBRT3219
7/8"	22	90	NBRT0622	70	NBRT0922	40	NBRT1322	30	NBRT1922	20	NBRT2522	15	NBRT3222
1"	25	80	NBRT0625	55	NBRT0925	40	NBRT1325	25	NBRT1925	20	NBRT2525	15	NBRT3225
1-1/8"	28	70	NBRT0628	55	NBRT0928	36	NBRT1328	25	NBRT1928	18	NBRT2528		
1-1/4"	32	65	NBRT0632	40	NBRT0932	30	NBRT1332	20	NBRT1932	15	NBRT2532		
1-3/8"	35	60	NBRT0635	36	NBRT0935	30	NBRT1335	20	NBRT1935	15	NBRT2535		
1-1/2"	38			36	NBRT0938	25	NBRT1338	17	NBRT1938	12	NBRT2538		
1-5/8"	42			30	NBRT0942	25	NBRT1342	17	NBRT1942	12	NBRT2542		
1-7/8"	48			25	NBRT0948	20	NBRT1348	15	NBRT1948	10	NBRT2548		
2"	51			25	NBRT0951	20	NBRT1351	15	NBRT1951	9	NBRT2551		
2-1/8"	54			25	NBRT0954	20	NBRT1354	15	NBRT1954	9	NBRT2554		
2-3/8"	60			20	NBRT0960	18	NBRT1360	12	NBRT1960	9	NBRT2560		
2-5/8"	67					15	NBRT1367	10	NBRT1967	8	NBRT2567		
2-7/8"	73					15	NBRT1373	10	NBRT1973	6	NBRT2573		
3"	76					12	NBRT1376	10	NBRT1976	6	NBRT2576		
3-1/8"	79					12	NBRT1379	10	NBRT1979	6	NBRT2579		
3-1/2"	89					10	NBRT1389	8	NBRT1989	6	NBRT2589		

Tube length: 1.83 m (6 ft) "

Tolerance: ± 1-1.5 mm (thickness); ± 30mm (length)

AEROFOAM® NBR ROLLS

Thickness (inch)	Thickness (mm)	Width x length (m x m)	Type				
			Plain	Self adhesive (SA)	With aluminum foil (AL)	Self adhesive with aluminum foil (SA-AL)	With CLAD
1/4"	6	1 x 30	NBRR06-1-30	NBRR06-1-30SA	NBRR06-1-30AL	NBRR06-1-30SA-AL	NBRR06-1-30CL
3/8"	9	1 x 20	NBRR09-1-20	NBRR09-1-20SA	NBRR09-1-20AL	NBRR09-1-20SA-AL	NBRR09-1-20CL
1/2"	13	1 x 14	NBRR13-1-14	NBRR13-1-14SA	NBRR13-1-14AL	NBRR13-1-14SA-AL	NBRR13-1-14CL
5/8"	16	1 x 12	NBRR16-1-12	NBRR16-1-12SA	NBRR16-1-12AL	NBRR16-1-12SA-AL	NBRR16-1-12CL
3/4"	19	1 x 10	NBRR19-1-10	NBRR19-1-10SA	NBRR19-1-10AL	NBRR19-1-10SA-AL	NBRR19-1-10CL
1"	25	1 x 8	NBRR25-1-08	NBRR25-1-08SA	NBRR25-1-08AL	NBRR25-1-08SA-AL	NBRR25-1-08CL
1-1/4"	32	1 x 6	NBRR32-1-06	NBRR32-1-06SA	NBRR32-1-06AL	NBRR32-1-06SA-AL	NBRR32-1-06CL
1-1/2"	40	1 x 4	NBRR40-1-04	NBRR40-1-04SA	NBRR40-1-04AL	NBRR40-1-04SA-AL	NBRR40-1-04CL
2"	50	1 x 4	NBRR50-ST	NBRR50-1-04SA	NBRR50-1-04AL		

Tolerance (rolls): ± 1-1.5 mm (thickness); ± 30 mm (length)

Tolerance (sheets): ± 2 mm (thickness); ± 0.01 m (length)

Sheets of 4 ft x 3 ft are available for any thickness.

ACCESSORIES

Name	Unit
NBR tape 3 mm 2" width x 9.1mtr length	roll
PVC tape 60 ft	roll
Aerofoam Glue 2.5 l	litre
Aerofinish UV paint	gallon



TECHNICAL DATA

Brief description:

Highly-flexible, closed-cell insulation material with high water vapor diffusion resistance and low thermal conductivity.

Material: Elastomeric foam based on synthetic rubber with density between 50-70 kg/m³.

Self-adhesive coating: Pressure-sensitive adhesive coating on modified acrylate basis. Covered with polyethylene foil.

Applications: Insulation / hot/cold water pipe lines protection for pipes, air ducts, vessels (incl. elbows, fittings, flanges etc.) of air-conditioning / refrigeration and process equipment to prevent condensation and save energy.

Property	Value / Assessment*	Tested acc. to:
Temperature range Max. line temperature Min. line temperature <i>Please contact our Technical Department for applications with temperatures below -50°C, closed cell content = 98.99%</i>	+ 105° C (flat surface and tape +85° C) - 50° C (-200°C) ≥ 98.99%	DIN EN 14706 : 2005 (E) ASTM C534 Type 1 & 2 ASTM C411
Thermal conductivity λ [W/(m·K)] at 24[°C] at 40[°C]	0.033 0.034	ASTM C518 : 2010 ASTM C518 : 2010
Water vapour diffusion resistance factor μ	> 7300	BS EN 12086 : 1997
Water vapor permeance [perms]	0	ASTM E96
Water Permeability	1* 10 ⁻¹⁰ kg/m/hr/pa	BS EN 12086 : 1997
Water absorption [% by volume]	0.06 (after 24 hours) 1.0 (after 28 days)	ASTM C209 : 1998 BS EN 12087 : 1997
Reaction to fire 1. Building material class** 2. Practical fire behaviour	Class O Low flammability, self-extinguishing, does not drip, does not spread flames; Class 1 FSI - 25 and SDI - 30	BS 476 Part 6 & 7 ASTM E84
Smoke and toxicity	Passed	IMO MSC 61(67)
Acoustic insulation Acoustic Absorption	Reduction of structure-borne sound transmission; Insulation effect up to 28 dB(A) $\alpha_w = 0.40$	ISO 354 ISO 11654
Compression set	31.23% (for 25mm), 29.83% (for 32mm)	ASTM D3574
Resistance to fungi	Excellent	ASTM G21 : 2009
Resistance to bacteria	Excellent	ISO 22196 : 2007
VOC level (Support LEEDs requirements)	< 6 µg/m ² /hr	ASTM D5116
Chemical resistance	Very good	ASTM C871
Environment friendly Ozone resistance Ozone Depletion Potential Global Warming Potential CFC & HCFC, dust, fibres Asbestos	Excellent 0 < 5 Free Free	
Storage life <i>Can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0° C – 35° C)</i>	1 year for self-adhesive sheets/rolls, self-adhesive tapes	

* Further documents such as test certificates or approvals can be requested from the manufacturer.

** The building materials classification is valid on metal or solid, mineral surfaces.

Manufactured by: HIRA INDUSTRIES L.L.C.

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