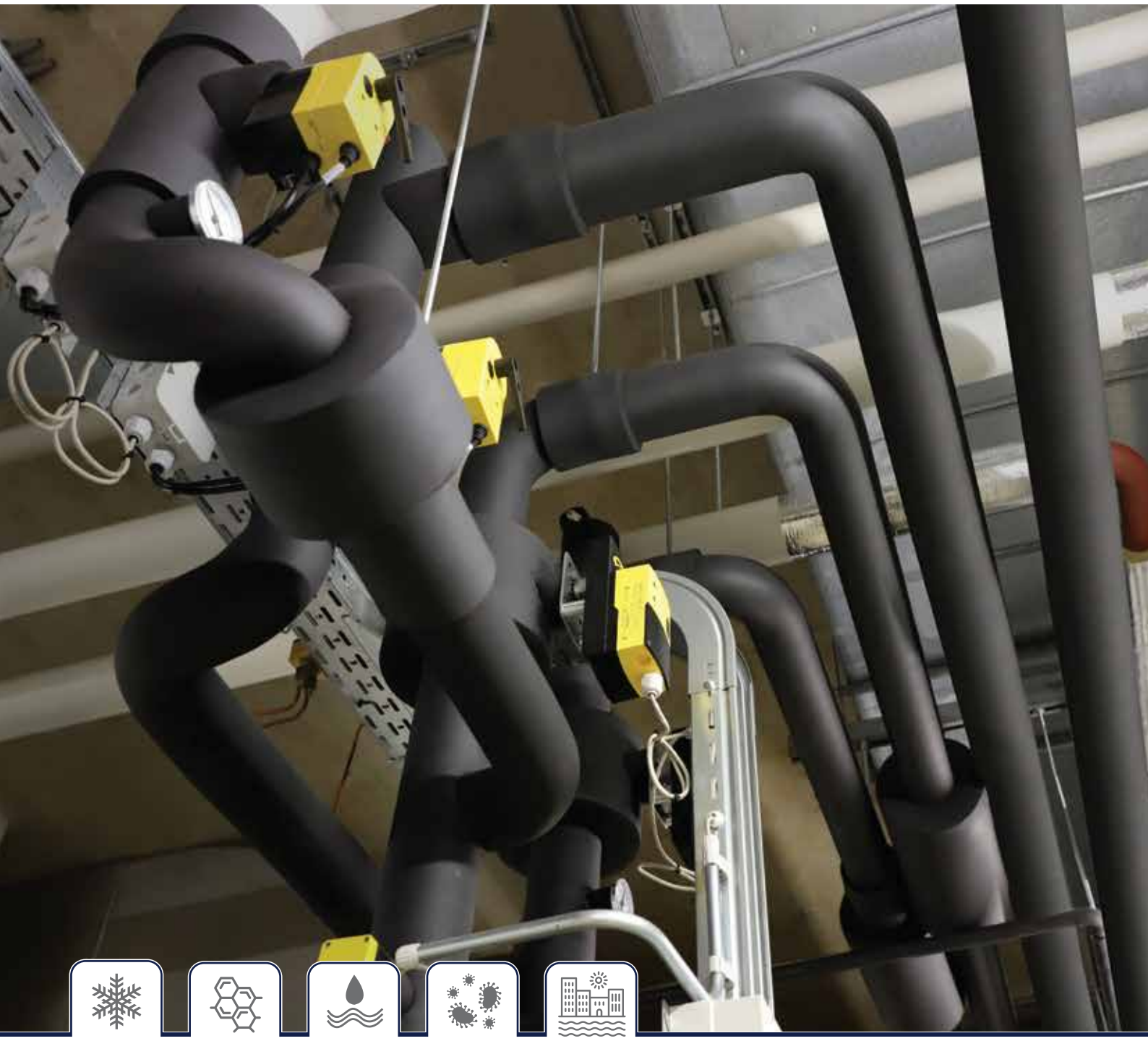
AEROFOAM®-NBR



Flexible Closed Cell
Elastomeric Thermal Insulation Foam

CLASS 0
ASTM E84

FM
APPROVED

c UL us
E484543

PRODUCT CONFORMITY

GREENGUARD

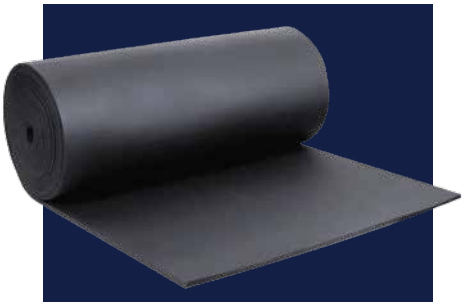
www.aerofoamglobal.com

AEROFOAM® NBR TUBES & ROLLS

Aerofoam® NBR is a flexible closed cell elastomeric thermal insulation foam, with high water vapor diffusion resistance factor and low thermal conductivity. It is suitable for such application like duct and pipe insulation for air conditioning, cold water, chilled water, hot water and refrigeration.

Designed for indoor and outdoor applications, however outdoor application needs additional protection against weather conditions and UV radiation.



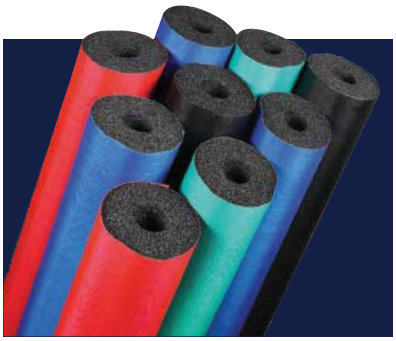


AEROFOAM® NBR WITH DIFFERENT FACINGS



Aerofoam® 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.



Aerofoam® 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.

FEATURES

- Closed cell structure
- Prevent condensation
- Excellent thermal efficiency
- Suitable for low temperature applications
- Suitable for cooling & heating systems
- Resistant to bacteria
- Resistant to mold & mildew growth
- High mechanical strength
- Flexible foam easy to install
- Suitable for coastal area applications
- Environmental friendly foam
- Ozone Resistant

APPLICATIONS











AEROFOAM® NBR TUBES - SIZE RANGE

Insulation Tube Size		6 mm (1/4")		9 mm (3/8")		13 mm (1/2")		19 mm (3/4")		25 mm (1")		32 mm (1 -1/4")	
Inch	mm	Code	Pcs /Box	Code	Pcs /Box	Code	Pcs /Box	Code	Pcs /Box	Code	Pcs /Box	Code	Pcs /Box
1/4"	6	NBRT6x6	180	NBRT9x6	168	NBRT13x6	90	NBRT19x6	50	NBRT25x6	35	NBRT32x6	20
3/8"	9	NBRT6x9	170	NBRT9x9	130	NBRT13x9	80	NBRT19x9	40	NBRT25x9	25	NBRT32x9	20
1/2"	13	NBRT6x13	150	NBRT9x13	115	NBRT13x13	65	NBRT19x13	40	NBRT25x13	25	NBRT32x13	20
5/8"	16	NBRT6x16	120	NBRT9x16	90	NBRT13x16	60	NBRT19x16	35	NBRT25x16	25	NBRT32x16	15
3/4"	19	NBRT6x19	100	NBRT9x19	76	NBRT13x19	45	NBRT19x19	30	NBRT25x19	20	NBRT32x19	15
7/8"	22	NBRT6x22	90	NBRT9x22	70	NBRT13x22	40	NBRT19x22	30	NBRT25x22	20	NBRT32x22	12
1"	25	NBRT6x25	70	NBRT9x25	55	NBRT13x25	40	NBRT19x25	25	NBRT25x25	20	NBRT32x25	12
1- 1/8"	28	NBRT6x28	70	NBRT9x28	55	NBRT13x28	36	NBRT19x28	25	NBRT25x28	18	NBRT32x28	12
1- 1/4"	32	NBRT6x32	65	NBRT9x32	40	NBRT13x32	30	NBRT19x32	20	NBRT25x32	15	NBRT32x32	12
1- 3/8"	35	NBRT6x35	60	NBRT9x35	36	NBRT13x35	30	NBRT19x35	20	NBRT25x35	15	NBRT32x35	12
1- 1/2"	38	NBRT6x38	50	NBRT9x38	36	NBRT13x38	25	NBRT19x38	17	NBRT25x38	12	NBRT32x38	10
1- 5/8"	42	NBRT6x42	40	NBRT9x42	30	NBRT13x42	25	NBRT19x42	17	NBRT25x42	12	NBRT32x42	10
1- 7/8"	48			NBRT9x48	25	NBRT13x48	20	NBRT19x48	15	NBRT25x48	10	NBRT32x48	8
2"	51			NBRT9x51	25	NBRT13x51	20	NBRT19x51	15	NBRT25x51	9	NBRT32x51	8
2- 1/8"	54			NBRT9x54	25	NBRT13x54	20	NBRT19x54	15	NBRT25x54	9	NBRT32x54	8
2- 3/8"	60			NBRT9x60	20	NBRT13x60	18	NBRT19x60	12	NBRT25x60	9	NBRT32x60	6
2- 1/2"	63			NBRT9x63	20	NBRT13x63	18	NBRT19x63	12	NBRT25x63	8	NBRT32x63	6
2- 5/8"	67			NBRT9x67	20	NBRT13x67	15	NBRT19x67	10	NBRT25x67	8	NBRT32x67	5
2- 7/8"	73			NBRT9x73	18	NBRT13x73	15	NBRT19x73	10	NBRT25x73	6	NBRT32x73	4
3"	76			NBRT9x76	15	NBRT13x76	12	NBRT19x76	10	NBRT25x76	6	NBRT32x76	4
3- 1/8"	79			NBRT9x79	15	NBRT13x79	12	NBRT19x79	10	NBRT25x79	6	NBRT32x79	4
3- 1/2"	89					NBRT13x89	10	NBRT19x89	8	NBRT25x89	6	NBRT32x89	4
3- 5/8"	92					NBRT13x92	8	NBRT19x92	6	NBRT25x92	6	NBRT32x92	4
4"	102					NBRT13x102	8	NBRT19x102	6	NBRT25x102	4	NBRT32x102	3
4- 1/8"	105					NBRT13x105	8	NBRT19x105	6	NBRT25x105	4	NBRT32x105	3
4- 1/4"	110					NBRT13x110	8	NBRT19x110	6	NBRT25x110	4	NBRT32x110	3
4- 1/2"	114					NBRT13x114	6	NBRT19x114	6	NBRT25x114	3	NBRT32x114	3

Note: Available length of tubes 1.8 m or 2 m. Please contact Technical Support for detailed sizes with different facings (aluminum foil and glass cloth).

AEROFOAM® NBR SHEETS & ROLLS - SIZE RANGE

Aerofoam® NBR Rolls						Aerofoam® NBR Sheets			
Thickness Inch	Thickness mm	Width x Length m x m	Pcs/ Box	Plain	Plain with self-adhesive (SA)	Width x Length m x m	Pcs/ Box	Plain	Plain with self-adhesive (SA)
1/4"	6	1x30	1	NBRR6x1x30	NBRR6x1x30/SA	1x1	30	NBRS6x1000x1000	NBRS6x1000x1000/SA
3/8"	9	1x20	1	NBRR9x1x20	NBRR9x1x20/SA	1x1	20	NBRS9x1000x1000	NBRS9x1000x1000/SA
1/2"	13	1x14	1	NBRR13x1x14	NBRR13x1x14/SA	1x1	15	NBRS13x1000x1000	NBRS13x1000x1000/SA
5/8"	16	1x12	1	NBRR16x1x12	NBRR16x1x12/SA	1x1	12	NBRS16x1000x1000	NBRS16x1000x1000/SA
3/4"	19	1x10	1	NBRR19x1x10	NBRR19x1x10/SA	1x1	10	NBRS19x1000x1000	NBRS19x1000x1000/SA
1"	25	1x8	1	NBRR25x1x8	NBRR25x1x8/SA	1x1	8	NBRS25x1000x1000	NBRS25x1000x1000/SA
1- 1/4"	32	1x6	1	NBRR32x1x6	NBRR32x1x6/SA	1x1	6	NBRS32x1000x1000	NBRS32x1000x1000/SA
1- 1/2"	40	1x4	1	NBRR40x1x4	NBRR40x1x4/SA	1x1	4	NBRS40x1000x1000	NBRS40x1000x1000/SA
2"	50	1x4	1	NBRR50x1x4	NBRR50x1x4/SA	1x1	4	NBRS50x1000x1000	NBRS50x1000x1000/SA

Note: Other size of sheets 0.915 m x 1.22 m (3 ft x 4 ft) is available upon request. Please contact Technical Support for detailed sizes with different facings (aluminum foil and glass cloth).

Tolerances - Rolls & Sheets			
Thickness	Thickness tolerance	Length tolerance	Width tolerance
6-25 mm	±2 mm	±1.5%	-20 mm +40 mm
32-50 mm	±3 mm		

Tolerances - Tubes (foam core only)		
	Target	Target Tolerance
Internal Diameter (ID)	ID + 1 mm	-1 mm, +4 mm (for ID ≤100 mm)
		-1 mm, +6 mm (for ID >100 mm)
Thickness	≤6 -16 mm: ±1.5 mm	
	19-25 mm : ±2.5 mm	
	≥32 mm ±3 mm	
Length	±1.5%	

ACCESSORIES



Adhesive	Units
Aerofoam® NBR Glue	5 Litres

AEROCALC

AEROCALC software is an excellent tool for calculating the most optimal thicknesses of insulation. Available as **Desktop, iOS** and **Android** applications.

Visit our website: **www.aerofoamglobal.com**



Scan the QR code to download the Desktop app.



TECHNICAL DATA

Description: Aerofoam® 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 10 °C At 23 °C At 35 °C	 0.032 W/m·K 0.033 W/m·K 0.035 W/m·K	 ASTM C518
Temperature range Max. line temperature Min. line temperature *Aerofoam® Technical Support should be consulted for applications with temperatures below -40 °C.*	 +110 °C (+80 °C with PSA*) -80 °C (-30 °C with PSA*)	 ASTM C411 ASTM C534
Density of the foam core	40-70 kg/m³	ASTM C302
Water vapor diffusion resistance factor	μ>17,000	BS EN 12086
Water vapor permeance	1.56 E-09 g/m².s.Pa	ASTM E96
Water absorption	0.06% by volume	ASTM C209
Reaction to fire	FSI<25 and SDI<50	ASTM E84
	Class 0	BS 476 part 6 & part 7
	HF-1, V-0, 5VA	UL 94
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	<0.5 mg/m²/hr UL Greenguard Gold Certified	ASTM D5116 CDPH v1.2/UL 2818
RoHS	Comply	RoHS 3 2015/863
Environment friendly Ozone Depletion Potential Global Warming Potential CFC, HCFC, dust, fibers & asbestos	 0 <5 Free	

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.*

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

*PSA - Pressure Sensitive Adhesive

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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