

## *Flexible Closed Cell Elastomeric Thermal Insulation Foam*

ASTM E84

CLASSO

**UL**  
E496616

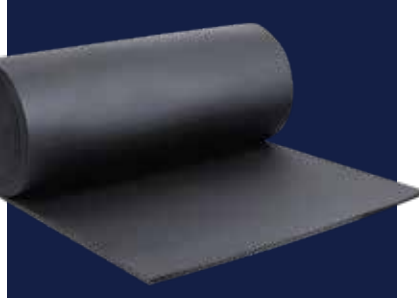
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APPROVED



## 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.

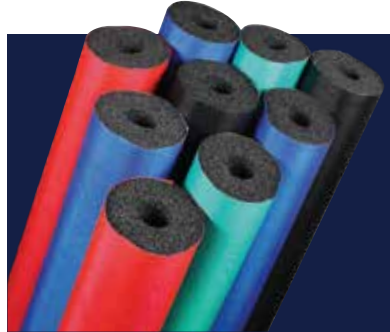
Designed for indoor and outdoor applications, however outdoor application needs additional protection against weather conditions and UV radiation.



## 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.

## APPLICATIONS



## 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

## 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				
3/8"	9	NBRT6x9	170	NBRT9x9	130	NBRT13x9	80	NBRT19x9	40				
1/2"	13	NBRT6x13	150	NBRT9x13	115	NBRT13x13	65	NBRT19x13	40	NBRT25x13	25		
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					NBRT13x63	18	NBRT19x63	12	NBRT25x63	8	NBRT32x63	6
2- 5/8"	67					NBRT13x67	15	NBRT19x67	10	NBRT25x67	8	NBRT32x67	5
2- 7/8"	73					NBRT13x73	15	NBRT19x73	10	NBRT25x73	6	NBRT32x73	4
3"	76					NBRT13x76	12	NBRT19x76	10	NBRT25x76	6	NBRT32x76	4
3- 1/8"	79							NBRT19x79	10	NBRT25x79	6	NBRT32x79	4
3- 1/2"	89							NBRT19x89	8	NBRT25x89	6	NBRT32x89	4
3- 5/8"	92							NBRT19x92	6	NBRT25x92	6	NBRT32x92	4
4"	102							NBRT19x102	6	NBRT25x102	4	NBRT32x102	3
4- 1/8"	105							NBRT19x105	6	NBRT25x105	4	NBRT32x105	3
4- 1/4"	110							NBRT19x110	6	NBRT25x110	4	NBRT32x110	3
4- 1/2"	114							NBRT19x114	6	NBRT25x114	3	NBRT32x114	3

**Note:** Available length of tubes 1.8 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								
Thickness Inch	Thickness mm	Width x Length mtr	Pcs/ Box	Plain	Plain with self-adhesive (SA)	with aluminum foil	with aluminum foil and self-adhesive (SA)	with Glass cloth
1/4"	6	1.2x30	1	NBRR6x1.2x30	NBRR6x1.2x30/SA	NBRR6x1.2x30/AL	NBRR6x1.2x30/AL-SA	NBRR6x1.2x30/GC
3/8"	9	1.2x20	1	NBRR9x1.2x20	NBRR9x1.2x20/SA	NBRR9x1.2x20/AL	NBRR9x1.2x20/AL-SA	NBRR9x1.2x20/GC
1/2"	13	1.2x14	1	NBRR13x1.2x14	NBRR13x1.2x14/SA	NBRR13x1.2x14/AL	NBRR13x1.2x14/AL-SA	NBRR13x1.2x14/GC
5/8"	16	1.2x12	1	NBRR16x1.2x12	NBRR16x1.2x12/SA	NBRR16x1.2x12/AL	NBRR16x1.2x12/AL-SA	NBRR16x1.2x12/GC
3/4"	19	1.2x10	1	NBRR19x1.2x10	NBRR19x1.2x10/SA	NBRR19x1.2x10/AL	NBRR19x1.2x10/AL-SA	NBRR19x1.2x10/GC
1"	25	1.2x8	1	NBRR25x1.2x8	NBRR25x1.2x8/SA	NBRR25x1.2x8/AL	NBRR25x1.2x8/AL-SA	NBRR25x1.2x8/GC
1- 1/4"	32	1.2x6	1	NBRR32x1.2x6	NBRR32x1.2x6/SA	NBRR32x1.2x6/AL	NBRR32x1.2x6/AL-SA	NBRR32x1.2x6/GC
1- 1/2"	40	1x4	1	NBRR40x1x4	NBRR40x1x4/SA	NBRR40x1x4/AL	NBRR40x1x4/AL-SA	NBRR40x1x4/GC
2"	50	1x4	1	NBRR50x1x4	NBRR50x1x4/SA	NBRR50x1x4/AL	NBRR50x1x4/AL-SA	NBRR50x1x4/GC

**NBRR** - NBR Rolls, **NBRS** - NBR sheets, **NBRT** - NBR Tubes.

**Note:** Sheets with width of 1 m are available upon request.

Please contact Technical Support for detailed sizes of rolls and sheets 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)		
Internal Diameter (ID)	Target	Target Tolerance
	ID + 1 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



Calculating the most optimal thicknesses of insulation. Available as **Desktop**, **iOS** and **Android** applications.

Visit our website: [aerofoam.co.in](http://aerofoam.co.in)



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
<b>Thermal conductivity</b> At 23 °C	0.034 W/m·K	ASTM C518
<b>Temperature range</b> Max. line temperature <i>Aerofoam® Technical Support should be consulted for applications with temperatures below -40 °C.</i>	+105 °C (+80 °C with PSA*)	ASTM C411
<b>Density of the foam core</b>	40-70 kg/m <sup>3</sup>	
<b>Water vapor diffusion resistance factor</b>	μ>12,800	BS EN 12086
<b>Water vapor permeance</b>	1.56 E-09 g/m <sup>2</sup> .s.Pa	ASTM E96
<b>Water absorption</b>	0.1% by volume	ASTM C209
<b>Reaction to fire</b>	FSI<25 & SDI<50	ASTM E84
	Class 0	BS 476 part 6 & part 7
	HF-1, V-0, 5VA	UL 94
<b>FM approval</b>	Approved	FM 4924
<b>Smoke and toxicity</b>	Passed	IMO MSC 307(88)
<b>Corrosion risk</b>	No corrosion risk for steel, stainless steel and copper pipes	DIN 1988
<b>Chemical analysis</b>	<0.05% (water soluble chloride ions)	DIN 1988
	pH - 6.8	ASTM C871
<b>Compression set</b>	20.6% (for 32 mm)	ASTM D3574
<b>Linear shrinkage</b>	5.1% at +105 °C	ASTM C534
<b>Resistance to fungi</b>	Zero growth	ASTM G21
<b>Resistance to bacteria</b>	Zero growth	ISO 22196
<b>Ozone resistance</b>	Excellent	ASTM D1149
<b>TVOC (emission rate - 24 hours)</b>	<0.5 mg/m <sup>2</sup> /hr	ASTM D5116
<b>Environment friendly</b> Ozone Depletion Potential Global Warming Potential CFC, HCFC, dust, fibers & asbestos	0 <5 Free	
<b>Storage life</b> <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> <b>Note:</b> 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 Technologies 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.