

# Sizes

## Installation Pipe (pieces per carton box)

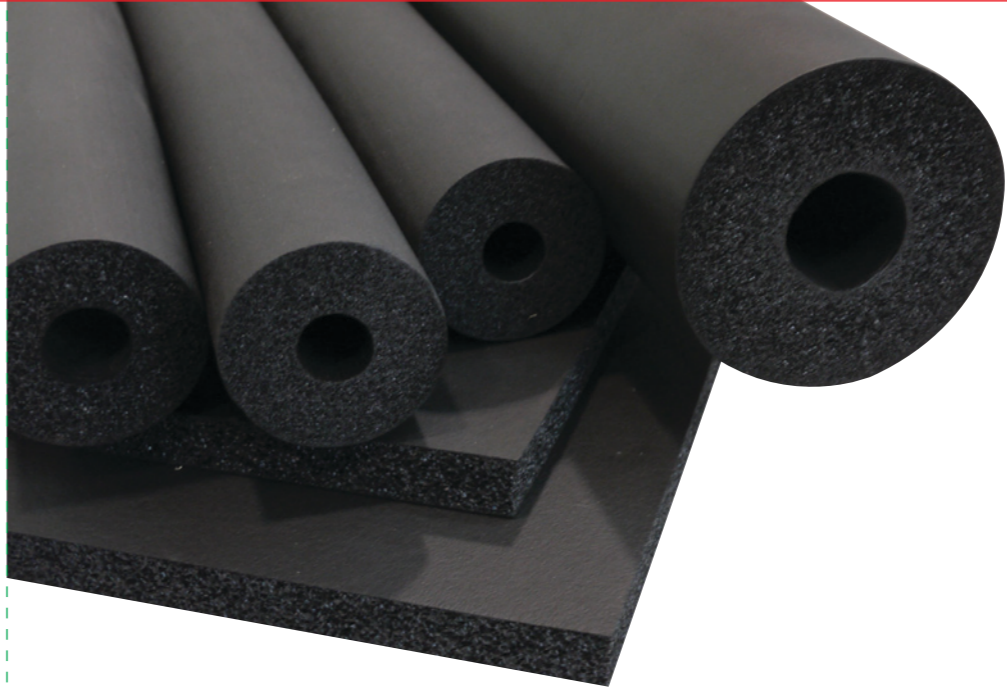
Internal Diameter	Insulation Wall Thickness								
	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
Inches mm	6	9	13	19	25	32	38	50	
1/4"	6	250	156	110	49	30			
3/8"	10	200	120	90	42	30			
1/2"	13	150	100	72	36	24	12	9	6
5/8"	16	120	90	63	36	20	12	9	6
3/4"	19	100	72	56	30	20	12	9	6
7/8"	22	90	64	48	25	18	9	9	6
1"	25	80	56	42	20	16	9	9	6
1 1/8"	28	72	49	36	20	16	9	9	6
1 1/4"	32	56	42	30	20	15	9	9	4
1 3/8"	35	48	36	30	16	12	9	9	4
1 1/2"	38	42	34	25	16	12	9	8	4
1 5/8"	42		30	25	16	12	9	8	4
1 7/8"	47		28	20	15	10	8	6	4
2"	51		24	20	12	9	8	6	4
2 1/8"	54		21	20	12	9	8	6	4
2 1/4"	57		21	20	12	9	6	6	4
2 3/8"	60		20	18	12	9	6	6	3
2 1/2"	64		18	15	9	8	6	6	3
2 5/8"	67		18	15	9	8	6	6	3
2 7/8"	73		18	13	9	8	4	4	3
3"	76		18	12	8	8	4	4	3
3 1/8"	80		16	12	8	6	4	4	
3 1/2"	89		16	12	8	6	4	4	
4"	102		14	12	6	6			
4 1/8"	105		14	12	6	5			
4 1/4"	108		14	12	6	5			
4 1/2"	114		14	12	6	4			
5"	127		10	9	6	4			
5 1/8"	130		10	9	6	3			
5 1/4"	133		10	9	6	3			
5 1/2"	140		10	8	6	3			

## Insulation Rolls

Thickness		Size	
Inches	mm	Feet	Metres
1/8"	3	4' x 30'	1.22 x 9.14
1/4"	6	4' x 30'	1.22 x 9.14
3/8"	10	4' x 30'	1.22 x 9.14
1/2"	13	4' x 30'	1.22 x 9.14
5/8"	16	4' x 30'	1.22 x 9.14
3/4"	19	4' x 30'	1.22 x 9.14
1"	25	4' x 30'	1.22 x 9.14
1 1/4"	32	3.29' x 30'	1 x 9.14
1 1/2"	38	3.29' x 30'	1 x 9.14
2"	51	3.29' x 6.75'	1 x 2

## Insulation Sheets

Thickness		Size		Pcs per carton
Inches	mm	Feet	Metres	
1/8"	3	4' x 3'	1.22 x 0.914	80
1/4"	6	4' x 3'	1.22 x 0.914	40
3/8"	10	4' x 3'	1.22 x 0.914	26
1/2"	13	4' x 3'	1.22 x 0.914	20
5/8"	16	4' x 3'	1.22 x 0.914	16
3/4"	19	4' x 3'	1.22 x 0.914	14
1"	25	4' x 3'	1.22 x 0.914	10
1 1/4"	32	4' x 3'	1.22 x 0.914	8
1 1/2"	38	4' x 3'	1.22 x 0.914	7
2"	51	4' x 3'	1.22 x 0.914	5



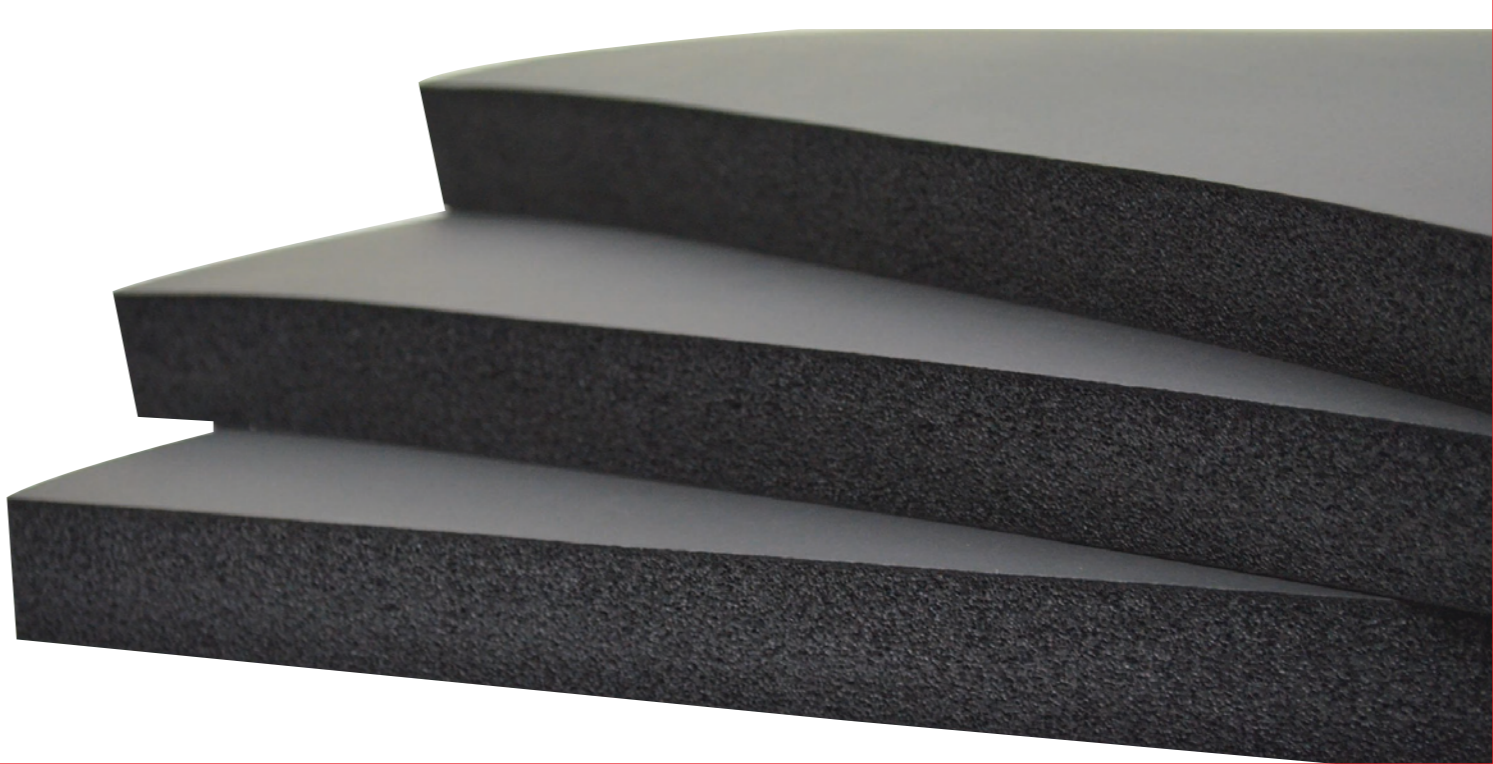
# SUPERLON®

## Quality NBR Insulation

## Accessories



Aluminium Rubber    Colour Product    Adhesive Rubber    Glue    Paint    Foam / Gasket Tape



Cert. No.: KLR0197083



Cert. No.: 402887

# SUPERLON®

Manufactured by

**Superlon Worldwide Sdn. Bhd.**

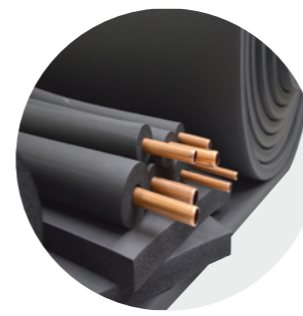
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Superlon products are produced with top qualities and meet various industry standards to ensure insulation performance.



## Class 0

High fire performance  
Low thermal conductivity  
High moisture resistance

When exposed to fire, Superlon Class 0 insulation material remains non-flammable, it does not drip, it does not contribute to fire spread, and it self-extinguishes when fire is removed.

Superlon insulation materials are certified for both class 0 and Class 1. British Standard (BS) 476 part 6 and part 7 Class 0 is a widely accepted test standard. Part 6 (fire propagation) measures the heat that is released under fire conditions. Part 7 (spread of flame) measures the material's ability to retard flame spread under fire conditions.

Superlon insulation materials are also available in class 1. Superlon Class 1 can be used for regular household applications.

## FM Approved

Prevent Flame Spread  
Low Smoke  
No Dripping



Superlon's Factory Mutual (FM) Approved insulation material is tested to the highest and most stringent standards and can help to prevent fire propagation at the most critical times. Some FM Approved insulation materials in the market prevent fire propagation; however, drips whilst being burned and may cause other objects nearby to ignite and start burning as well. Superlon FM Approved insulation material is not only non-flammable; it does not drip, does not contribute to fire spread and it self-extinguishes once fire stops.

	Values	Test Methods
Material	Nitrile Foam Rubber	
Cell Structure	Closed Cell	
Density Range	40kg/m <sup>3</sup> -70kg/m <sup>3</sup>	
Service Temperature	Maximum 105 °C pipes / (85 °C for flat surfaces) Minimum -50 °C	
<b>FIRE RESISTANCE</b>		
Surface Spread of Flames	Class 1	BS 476 Part 7
Fire Propagation	Total Index (I) ≤ 12 Sub Index (ii) ≤ 6	BS 476 Part 6
Fire Performance	Class 0	
Reaction to Fire	V-0, 5VA/HF-1, Self Extinguishing, Does not Drip	UL 94
Thermal Conductivity	Mean Temp	-10 °C    0 °C    20 °C
	W/m.K	0.033    0.034    0.036
	Btu·in/hr·ft <sup>2</sup> ·°F	0.23    0.24    0.25
Water Vapour Permeability	3.59 x 10 <sup>-10</sup> g/Pa.m.s μ ≥ 7000	ASTM E96
Water Absorption by Volume	0.2%	ASTM C209
Ozone Resistance	Good	
Corrosion Resistance	No Corrosion	
Environment	Dust and Fibre Free CFC Free, Zero ODP, Zero GWP	

	Values	Test Methods
Material	Nitrile Foam Rubber	
Cell Structure	Closed Cell	
Density	40kg/m <sup>3</sup> -70kg/m <sup>3</sup>	
Service Temperature	Maximum 105 °C pipes / (85 °C for flat Surfaces) Minimum -50 °C	
<b>FM Approved</b>	Pipes up to 2" (50mm) Thickness Sheets up to 1 1/2" (38mm) Thickness	
Thermal Conductivity	0.036 (0.25)	ASTM C518
W/m.K (Btu·in/hr·ft <sup>2</sup> ·°F)		
Mean Temp 20 °C		
Water Vapour Permeability	3.59 x 10 <sup>-10</sup> g/Pa.m.s μ ≥ 7000	ASTM E96
Water Absorption by Volume	0.2%	ASTM C209
Ozone Resistance	Good	
Corrosion Resistance	No Corrosion	
Environment	Dust and Fibre Free CFC Free, Zero ODP, Zero GWP	

## High Density (HD)

Harder  
Tougher  
Stronger

HD Superlon material is a higher density alternative for the regular line of Superlon insulation materials. It is harder, stronger and tougher with a higher tensile strength than other equivalent materials in the market.

HD Superlon material is highly durable with a shore C hardness of greater than 10 and density greater than 70kg/m<sup>3</sup>. Furthermore, like all other Superlon products, every piece of Superlon HD material is engineered, produced and controlled with stringent procedures to ensure quality and effectiveness.

	Values	Test Methods
Shore C hardness	≥ 10	
Density	≥ 70kg/m <sup>3</sup>	
Tensile Strength	290 - 360 Kpa	ASTM D 412
Service Temperature	-40 °C to 105 °C	
Thermal Conductivity	0.038 (0.27)	ASTM C518
W/m.K (Btu·in/hr·ft <sup>2</sup> ·°F)		
Mean temp 20 °C		



## About Superlon

Incorporated in Malaysia in 1992, Superlon Worldwide has accumulated more than 20 years of manufacturing experience in nitrile butadiene rubber (NBR) foam. Its utmost priority is to assure consistent excellence of their insulation materials and provide a service that is second to none. Superlon Worldwide pride themselves in presenting customers with quality products together with prompt and reliable services.

## Superlon Tips:

Correct installation will improve the lifespan and performance of the insulation. Key factor good insulation:

- Using correct thickness
- Installing the insulation material correctly

Before you install Determine the thickness of the insulation material based on five factors:

1. Ambient temperature
2. Relative humidity
3. Pipe Size (outer diameter of pipe)
4. Line temperature
5. Medium (gas or liquid)

For example:

	Piping Line Surface Temperature		
	15 °C	5 °C	-18 °C
<b>Normal Conditions</b> Based on average weather experienced in South East Asia <b>Maximum severity of 29 °C and RH of 78%</b>	1/2" (13mm)	1" (25mm)	1 1/2" (38mm)
<b>Severe Conditions</b> Confined and poorly ventilated areas with excessive moisture <b>Maximum severity of 35 °C and RH of 85%</b>	1" (25mm)	1 1/2" (38mm)	2" (50mm)
<b>Mild Conditions</b> Well ventilated air conditioned areas <b>Maximum severity of 26 °C and RH of 70%</b>	3/8" (10mm)	1/2" (13mm)	1" (25mm)

When you install -

- Glue must be applied to both ends of the joining area and allowed to dry before joining the insulation material together.
- Be gentle to avoid deformation of cells (may reduce performance.)
- It is always good to seal joining areas with foam tape to avoid temperature loss through contact with air. only use one insulation tube per pipe. Multiple pipes in one tube allow excess air around the pipe and higher chance of losing temperature.
- Always use aluminium jacketing or apply weather paint for outdoor installation to sustain the lifespan of the insulation material.

For more tips, installing methods and to determine correct thickness, please contact your Superlon advisor.