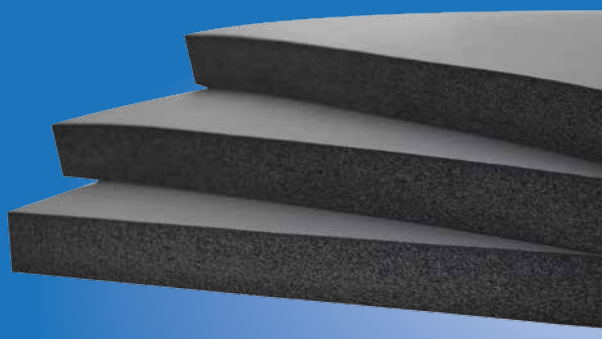
SUPERLON®

Quality NBR Insulation





Closed Cell NBR Insulation

Tubing and Sheet
for the HVAC&R Industry

SUPERLON Quality NBR Insulation

SUPERLON recognized as one of most trusted insulation brands around the world. The SUPERLON distributed to more than **70** countries worldwide.



SOUTH EAST ASIA
Malaysia (HQ)
Brunei
Cambodia
Indonesia
Laos
Myanmar
Philippines
Singapore
Thailand
Vietnam

EAST ASIA
China
Hong Kong
S. Korea
Japan
Taiwan

SOUTH ASIA
Bangladesh
India
Maldives
Nepal
Pakistan
Sri Lanka

MIDDLE EAST
Bahrain
Iran
Iraq
Israel
Jordan
Kuwait
Oman
Lebanon
Qatar
Saudi Arabia
Syria
UAE

AFRICA
Algeria
Egypt
Ethiopia
Kenya
Mauritius
Nigeria
Rwanda
South Africa
Tanzania
Uganda

EUROPE
Austria
Cyprus
Denmark
Germany
Greece
Malta
Norway
Portugal
Spain
Sweden
Switzerland
Turkey
United Kingdom

OCEANIA
Australia
New Zealand
Papua New Guinea

AMERICAS
Brazil
Canada
Chile
Colombia
Costa Rica
Dominican Republic
El Salvador
Ecuador
Guatemala
Honduras
Jamaica
Mexico
Peru
Puerto Rico
Panama
United States
Venezuela

About Superlon

Incorporated in Malaysia in 1992, Superlon Worldwide has accumulated more than 25 years of manufacturing experience in nitrile butadiene rubber (NBR) foam. Our utmost priority is to assure consistent excellence of our insulation materials and provide a service that is second to none. We pride ourselves in presenting our customers with quality products together with prompt and reliable services.

Superlon worldwide is the preferred NBR insulation manufacturer for the HVAC and R industry in Malaysia. Over the years, we have gained a wide array of experienced business partners, and formed various valuable collaborations and distribution networks allowing us to be the market leader.





Superlon insulation materials are engineered with the highest standard. Our closed cell characteristic is the key component to an effective insulator by providing a barrier between the pipe's surface and atmospheric conditions.

- ✓ **Low thermal conductivity and high moisture resistance**:
  Superlon's insulation materials are produced with a high percentage of closed cells.
- ✓ **Superior fire performance:**
  Superlon's insulation materials are available in Class 1, Class 0 and FM Approved. In addition, Superlon insulation materials have a high oxygen index.
- ✓ **Continuous commitment to provide the best**:
  Superlon invests in R&D and are striving to further enhance its formulation to provide the best insulation solution.
- ✓ **Fast and easy installation:**
  Superlon insulation materials are very flexible allowing installers to fabricate, cut to specific shapes, sizes and fittings for fast and efficient installations.
- ✓ **Low allergen:**
  Unlike other types of insulation products, Superlon insulation materials are dust and fiber free which do not present any health related hazards.
- ✓ **Eco Friendly:**
  Zero Ozone Depleting Potential (ODP), zero Global Warming Potential (GWP) and low Volatile Organic Compounds (VOC).
- ✓ **Aesthetically pleasing:**
  Although Superlon's insulation materials are mainly black in color, the surface of the skin is smooth presenting a respectable finish on any given job type. Color products are also available.

With the right installation methods and techniques Superlon insulation materials will not only provide good thermal insulation but also contribute to a longer life span of the system that it insulates.

Management Systems

Our on-going quality assessments for ISO 9001 quality management systems and ISO 14001 environmental management systems ensure that we meet customer requirements.

Indoor Air Quality

Superlon insulation does not contain any dusts and fibres.
Dust and fibres entering air ducts may cause discomfort when breathed and can sometimes be harmful to health.



Furthermore, Superlon insulation is produced with low volatile organic compounds (VOCs) which are crucial as good ventilation and insulation systems can reduce the incidences from indoor air pollutants.

Superlon's insulation products also does not contain any formaldehyde, and does not contribute to a buildings overall formaldehyde level. Formaldehyde is a known human carcinogen, it is essential to keep formaldehyde levels down.



Eco Friendly

Superlon's insulation's manufacturing process is produced without CFCs and HCFCs. Furthermore, it does not contribute to global warming and has no ozone depleting potential.

No Mould Growth

The inherent closed cell structure and high water vapour permeability inhibits mould growth. With no vapour barrier jacketing needed, Superlon's smooth skin surface does not trap dust.

Superlon Insulation Characteristic

Closed Cell Structure

Closed cell structure along with a lower density prevents thermal bridging and minimises heat gains/losses.



Low Thermal Conductivity

Superlon is the best energy saving choice with a low thermal conductivity of λ 20° C ≤ 0.034 W/m-K.

Low Water Absorption

Low water absorption of ≤ 0.2% ensures long term thermal conductivity stability so that it can continue to conserve energy and prevent surface condensation.

Low Water Vapour Permeability

Unlike other products in the market, Superlon does not need a vapour barrier such as a silver jacketing as the product itself has very low water permeability and a moisture resistance factor of $\mu \geq 12{,}000$.

Superlon Class 1 & Class 0







Superlon Class 1 and Class 0 is an elastomeric nitrile foamed insulation engineered and designed specifically to control condensation. Its main uses are for an insulating pipework particularly for air conditioning ducting, chilled water lines and refrigerated pipes.

Each insulation in tube or sheet form is made with closed cells that can properly insulate against heat loss and heat gain in many differing environments. With low k-value, water absorption and high moisture resistance, Superlon insulation ensures proper control of condensation in conjunction with reduced energy costs.

While thermal conductivity and water resistance have always been the key elements in determining the functionality and effectiveness of insulation, fire resistance has increasingly gained importance for its role in preventing flame spread.

Superlon's spread of flames is rated Class 1 (BS 476 part 7) for standard insulation tubes and sheets. Superlon's Class 0 (BS 476 part 6) is a higher standard of fire resistance with fire propagation rated a total index (I) ≤ 12 and sub-index (i_1) of ≤ 6.

Furthermore, both Class 1 and Class 0 insulation does not drip and self -extinguishes upon removal of flames. Its flexible black and aesthetically pleasing surface makes installation simple quick and easy.

FM Approvals®

Member of the FM Global Group



Superlon FM Approved

Factory Mutual (FM) Approved, it is a third party independent testing arm of a mutual insurance company for the purpose to insure a building or property exclusively.

FM Approvals uses scientific research and rigorously tested using real world tests such as the pipe chase test and room tests. It is one of the highest and most stringent standard and ensures all approved products pass the aggressive level of FM performance, efficiency and quality requirement of safety and property loss prevention.

All Superlon insulation materials does not drip, does not contribute to flame spread and the product self-extinguishes unlike other foam plastic insulation which could have devastating flame spread.

At Superlon, we ensure all products are manufactured at its top of the line standard.

Insulation Specification List

	Values				Test Methods
Material	Nitrile Foamed Rubber				
Cell Structure	Closed Cell				
Density	40kg/m³ -70kg/m³				
Service Temperature	-50°C to 105°C (85°C for flat surfaces)				
Surface Spread of Flames	Class 1				BS 476 Part 7
Fire Performance **Fire Propagation**	Class 0 Total Index (I) ≤ 12 Sub Index (i_1) ≤ 6				BS 476 Part 6
FM Approved	Pipes up to 2" (51mm) thickness Sheets up to 2" (51mm) thickness Multiple layers up to 4" (102mm) thickness				FM4924
Flame Spread Index/Smoke Developed Index	25/50				ASTM E84
Reaction to Fire	V-0, Self Extinguishing, Does not Drip				UL94 JIS K 6911
Oxygen Index	≥ 33%				KS M6962
Thermal Conductivity	Mean Temp	0°C	20°C	40°C	ASTM C518 ASTM C177
	W/m·K	≤ 0.032	≤ 0.034	≤ 0.036	
Water Vapour Permeability	≤0.89 x 10^{-14} kg/Pa.m.s				ASTM E96
Water Absorption by Volume	μ ≥ 12,000 ≤ 0.2%				ASTM C209
Tensile Strength	≥ 200 Kpa				ASTM D412
Dimensional Stability	<7% at 93°C (200°F) and 105°C (220°F)				ASTM C534
Compression Set	6.00%				KS M6962
Acoustic Performance based on 1" (25mm) thickness	**Octave Frequency**	**Sound Absorption Coefficient α**			ASTM C423
	125 Hz	0.13			
	250 Hz	0.22			
	500 Hz	0.53			
	1000 Hz	0.66			
	2000 Hz	0.61			
	4000 Hz	0.68			
	NRC	**0.50**			
Ozone Resistance **Corrosion Resistance**	Good No Corrosion				ASTM G155
Environment	Dust & Fibre Free, CFC Free, Zero ODP & GWP Certified by SGBC (Singapore) and DCL (Dubai) Green Label Compliant Formaldehyde Free Low Volatile Organic Compounds (VOCs) Low Smoke Toxicity RoHS Compliant No Fungal Growth Negligible Bacterial Growth				ASTM D5116 JIS A 1901 JIS K 7217 RoHS 2011/65/EU ASTM G21 ASTM E2180

Note:
For more information on test requirements and test results from for other standards, please contact our technical staff

Products Range



HD Tubing And Roll Sheets

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.

Superlon material is highly durable with a shore C hardness of greater than 10 and density greater than 70kg/m³. Furthermore, like all other Superlon products, every piece of Superlon material is engineered, produced and controlled with stringent procedures to ensure quality and effectiveness.

Aluminium Rolls & Sheets

When applications and installation areas require an aesthetically pleasing feel or to protect the insulation from unnecessary impact, aluminium sheets would be the recommended choice. Most commonly used in open ceiling ducting lines and also chiller systems. UV resistant aluminium jacketing is available upon request should the application is under harsh and extreme UV conditions.





Adhesive Rolls & Sheets

For your installation convenience adhesive backing with release paper is available. Adhesive sheets offer the ease of installation with the performance of specifically formulated adhesive lamination without the mess and hassle glue saving you both time and money.

Accessories



FOAM / GASKET TAPE

Our foam and gasket tapes can be used in a wide array of applications. Foam vibration dampening to cushioning to reduce impact. It is most commonly used for joining areas where glue was used for adhesion of our insulation materials.
Packing Size
3mm x 48mm x 30ft : 24 roll / ctn
5mm x 15mm x 10m: 72 roll / ctn



PAINT

Available in 5 liter tins. Black in color, the paint is best used for prolonging the lifespan of the insulation under normal atmospheric conditions. Should intense heat and continuous harsh UV conditions be present in the application area, we recommended the use of UV resistant jacketing such as UV resistant aluminum. (Available upon request)
Packing Size
5 Litre : 4 cans / carton
1 Litre: 12 cans / carton



GLUE

Available in 1 liter tins and 3.36 liter tins. The glue is specifically formulated for the best adhesion for our rubber foam. It is best used for joining sheets and tubes together. For enhanced performance, please apply foam tape on to joining area when glue dries.
Packing Size
1 Litre : 15 cans / ctn
3.36 Litre : 6 cans / ctn



COLOR PRODUCTS

Superlon insulation material is also available in various colors upon request.

Sizes & Packing Quantities

Insulation Pipes (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	10	13	19	25	32	38	51
1/4"	6	265	195	120	49	32			
3/8"	10	205	140	100	42	30	15		
1/2"	13	156	120	80	36	25	12	10	6
5/8"	16	123	100	72	36	23	12	9	6
3/4"	19	100	80	64	30	20	12	9	6
7/8"	22	90	72	56	27	18	11	9	6
1"	25	80	63	48	24	17	11	9	6
1 1/8"	28	72	56	42	24	16	9	9	6
1 1/4"	32	56	51	38	20	16	9	9	4
1 3/8"	35	48	46	35	16	12	9	9	4
1 1/2"	38	42	43	33	16	12	9	8	4
1 5/8"	42		40	30	16	12	9	8	4
1 7/8"	48		35	25	15	10	8	6	4
2"	51		24	20	12	9	8	6	4
2 1/8"	54		22	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		20	15	9	8	6	6	3
2 5/8"	67		18	15	9	8	6	6	3
2 7/8"	73		18	14	9	8	4	4	3
3"	76		18	14	8	8	4	4	3
3 1/8"	79		16	12	8	6	4	4	3
3 1/2"	89		16	12	8	6	4	4	3
4"	102		14	12	6	6	4	3	2
4 1/8"	105		14	12	6	5	4	3	2
4 1/4"	108		14	12	6	5	4	3	2
4 1/2"	114		14	12	6	4	4	3	2
5"	127		12	9	6	4	3	3	2
5 1/8"	130		10	9	6	3	3	3	
5 1/4"	133		10	9	6	3	3	3	
5 1/2"	140		10	8	6	3	3	3	
6"	152		10	8	6	3	3	3	
6 ¼"	159		9	8	6	3	3		
6 ½"	165		9	8	6	3	3		

Insulation Rolls

Thickness		Size
Inches	mm	Metres
1/4"	6	1.22 x 24.0
3/8"	10	1.22 x 21.0
1/2"	13	1.22 x 15.0
5/8"	16	1.22 x 14.0
3/4"	19	1.22 x 9.0
1"	25	1.22 x 8.0
1 1/4"	32	1.22 x 6.0
1 1/2"	38	1.22 x 5.0
2"	51	1.22 x 4.0
S Skin	All	1.22 x 9.14

Insulation Sheets

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

Note:

- Can be customized to single skin or double skin.
- Adhesive and aluminum jacketing available in the same sizes as above.
- 3mm (1/8") thk and other sizes can be customized, contact Superlon sales for more information.

SUPERLON PIPE SIZE MATCHING GUIDE

Superlon Tubing Internal Dimension (ID)		Steel Pipes ASME B36·1			PVC Pipes BS 3505		Copper Pipe for Water and Gas ASTM B088		Cooper Pipe for Air-Cond and Refrigeration ASTM B280	
		Nominal Size	Nominal Size	Actual OD Size	Nominal Size	Actual OD Size	Nominal Size	Actual OD Size	Nominal Size	Actual OD Size
Inches	mm	DN	Inch	mm	Inch	mm	Inch	mm	Inch	mm
1/4”	6								1/4”	6.35
3/8”	10						1/4”	9.52	3/8”	9.52
1/2”	13						3/8”	12.7	1/2"	12.7
5/8”	16						1/2”	15.9	5/8”	15.9
3/4”	19				3/8”	17.3	5/8”	19.1	3/4"	19.1
7/8”	22	15	1/2"	21.3	1/2"	21.5	3/4”	22.2	7/8”	22.2
1”	25									
1 1/8”	28	20	3/4"	26.7	3/4”	26.9	1”	28.6	1 1/8”	28.6
1 1/4”	32									
1 3/8”	35	25	1”	33.4	1”	33.7	1 1/4”	34.9	1 3/8”	34.9
1 1/2”	38									
1 5/8”	42	32	1 1/4"	42.2	1 1/4”	42.4	1 1/2”	41.3	1 5/8”	41.3
1 7/8”	48	40	1 1/2"	48.3	1 1/2"	48.4				
2”	51									
2 1/8”	54						2”	54	2 1/8”	54
2 1/4”	57									
2 3/8”	60	50	2”	60.3	2”	60.5				
2 1/2”	64									
2 5/8”	67						2 1/2"	66.7	2 5/8”	66.7
2 7/8”	73	65	2 1/2"	73						
3”	76				2 1/2"	75.3				
3 1/8”	79						3”	79.4	3 1/8”	79.4
3 1/2”	89	80	3”	88.9	3”	89.1				
4”	102	90	3 1/2"	101.6						
4 1/8”	105						4”	104.8	4 1/8”	104.8
4 1/4”	108									
4 1/2”	114	100	4”	114.3	4”	114.5				
5”	127	115	4 1/2"	127						
5 1/8”	130						5”	130.2		
5 1/4"	133									
5 1/2”	140	125	5”	141.3	5”	140.4				
6”	152									
6 1/4"	159									
6 1/2"	165	150	6”	168.3	6”	168.5				

Note:

- Superlon’s wide range of ID up to 6 ½” ensure that pipes can be fitted properly over a variety of sizes.
- For other pipes and pipes from other standards, it is recommended to check the actual size (OD) of the pipes.
- Superlon can assist if customers are unsure about the correct sizing.

Comprehensive Thickness Guide for Condensation Control

Recommended Thickness (mm) for Superlon Insulation Materials

Ambient Temperature	25˚C				30˚C				35˚C				40˚C			
Relative Humidity	75%	80%	85%	90%	75%	80%	85%	90%	75%	80%	85%	90%	75%	80%	85%	90%
LineTemp: +20˚C																
1" (25mm) Pipe OD	10	10	10	10	10	10	13	19	10	13	19	25	13	19	19	32
2" (51mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	32	13	19	25	38
3" (76mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	32	13	19	25	51
4" (102mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	32	13	19	25	51
5" (127mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	38	13	19	25	51
6" (152mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	38	13	19	32	51
8" (203mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	38	13	19	32	51
10" (254mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	38	13	19	32	51
12" (305mm) Pipe OD	10	10	10	13	10	10	13	25	10	13	19	38	13	19	32	51
LineTemp: +15˚C																
1" (25mm) Pipe OD	10	10	13	19	10	13	19	32	13	19	25	32	13	19	25	38
2" (51mm) Pipe OD	10	10	13	25	10	13	19	32	13	19	25	38	19	19	32	51
3" (76mm) Pipe OD	10	10	13	25	10	13	19	32	13	19	25	51	19	25	32	51
4" (102mm) Pipe OD	10	10	13	25	10	13	19	38	13	19	25	51	19	25	32	51
5" (127mm) Pipe OD	10	10	13	25	10	13	25	38	13	19	32	51	19	25	32	51
6" (152mm) Pipe OD	10	10	19	25	10	13	25	38	13	19	32	51	19	25	32	64
8" (203mm) Pipe OD	10	10	19	25	10	19	25	38	13	19	32	51	19	25	38	64
10" (254mm) Pipe OD	10	10	19	32	10	19	25	38	13	19	32	51	19	25	38	64
12" (305mm) Pipe OD	10	10	19	32	10	19	25	38	13	19	32	51	19	25	38	64
LineTemp: +10˚C																
1" (25mm) Pipe OD	10	13	19	32	13	19	25	38	13	19	25	38	19	25	32	51
2" (51mm) Pipe OD	10	13	19	32	13	19	25	38	19	25	32	51	19	25	32	51
3" (76mm) Pipe OD	10	13	25	38	13	19	25	51	19	25	32	51	19	25	38	64
4" (102mm) Pipe OD	10	19	25	38	13	19	25	51	19	25	32	51	19	32	38	64
5" (127mm) Pipe OD	10	19	25	38	13	19	32	51	19	25	32	64	25	32	38	64
6" (152mm) Pipe OD	10	19	25	38	19	19	32	51	19	25	32	64	25	32	38	64
8" (203mm) Pipe OD	10	19	25	38	19	19	32	51	19	25	38	64	25	32	51	76
10" (254mm) Pipe OD	10	19	25	51	19	19	32	51	19	25	38	64	25	32	51	76
12" (305mm) Pipe OD	10	19	25	51	19	19	32	51	19	25	38	64	25	32	51	76
Line Temp: +5˚C																
1" (25mm) Pipe OD	13	19	25	38	19	19	25	51	19	25	32	51	19	25	32	51
2" (51mm) Pipe OD	13	19	25	51	19	19	32	51	19	25	32	51	25	32	38	64
3" (76mm) Pipe OD	13	19	32	51	19	25	32	51	19	25	38	64	25	32	38	64
4" (102mm) Pipe OD	19	19	32	51	19	25	32	64	25	32	38	64	25	32	51	76
5" (127mm) Pipe OD	19	19	32	51	19	25	38	64	25	32	38	64	25	32	51	76
6" (152mm) Pipe OD	19	19	32	51	19	25	38	64	25	32	51	64	25	32	51	76
8" (203mm) Pipe OD	19	25	32	51	19	25	38	64	25	32	51	76	25	32	51	76
10" (254mm) Pipe OD	19	25	32	51	19	25	38	64	25	32	51	76	25	32	51	102
12" (305mm) Pipe OD	19	25	32	64	19	25	38	64	25	32	51	76	25	38	51	102
Line Temp: 0˚C																
1" (25mm) Pipe OD	19	19	32	51	19	25	32	51	19	25	32	51	25	32	38	64
2" (51mm) Pipe OD	19	25	32	51	19	25	38	64	25	32	38	64	25	32	51	64
3" (76mm) Pipe OD	19	25	32	51	25	32	38	64	25	32	51	64	25	32	51	76
4" (102mm) Pipe OD	19	25	38	64	25	32	38	64	25	32	51	76	32	38	51	76
5" (127mm) Pipe OD	19	25	38	64	25	32	51	64	25	32	51	76	32	38	51	102
6" (152mm) Pipe OD	19	25	38	64	25	32	51	76	25	32	51	76	32	38	51	102
8" (203mm) Pipe OD	19	25	38	64	25	32	51	76	25	38	51	76	32	38	64	102
10" (254mm) Pipe OD	19	25	38	64	25	32	51	76	25	38	51	102	32	38	64	102
12" (305mm) Pipe OD	19	32	38	64	25	32	51	76	25	38	51	102	32	38	64	102

At Superlon condensation prevention is our utmost priority. As a safety to prevent condensation, calculated figures are based on dew point temperature adding +0.5˚C with a external surface coefficient of 9 W/M2-K. Thicknesses should be recalculated if there is any use of jacketing such as aluminium as the external surface coefficient will be changed.

Note: Recommended thicknesses are to be used as a guide. Results are obtained under typical conditions. Superlon does not guarantee it will be prevent condensation. Other factors such as proper installation is crucial in condensation prevention. Calculations are based on condensation prevention only and does not take into account heat(cold) loss. Please consult with our technical staff for more precise calculations or if the installation environment differs.

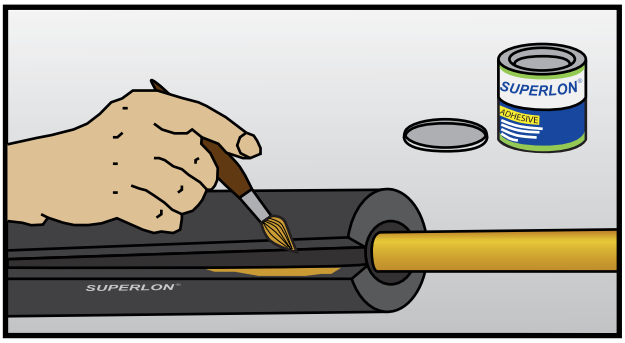
Comprehensive Thickness Guide for Condensation Control
Recommended Thickness (mm) for Superlon Insulation Materials

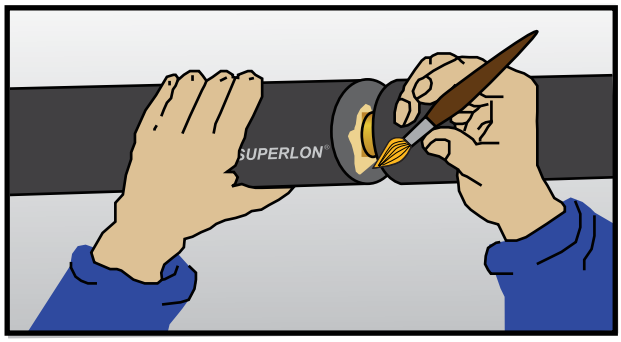
Ambient Temperature	25˚C				30˚C				35˚C				40˚C			
Relative Humidity	75%	80%	85%	90%	75%	80%	85%	90%	75%	80%	85%	90%	75%	80%	85%	90%
LineTemp: -5˚C																
1" (25mm) Pipe OD	19	25	32	51	19	25	38	51	25	32	38	64	25	32	38	64
2" (51mm) Pipe OD	19	25	38	64	25	32	38	64	25	32	51	64	25	32	51	76
3" (76mm) Pipe OD	25	32	38	64	25	32	51	76	25	32	51	76	32	38	51	76
4" (102mm) Pipe OD	25	32	51	64	25	32	51	76	32	38	51	76	32	38	51	102
5" (127mm) Pipe OD	25	32	51	76	25	32	51	76	32	38	51	102	32	38	64	102
6" (152mm) Pipe OD	25	32	51	76	25	38	51	76	32	38	51	102	32	51	64	102
8" (203mm) Pipe OD	25	32	51	76	25	38	51	102	32	38	64	102	32	51	64	102
10" (254mm) Pipe OD	25	32	51	76	32	38	51	102	32	38	64	102	32	51	64	102
12" (305mm) Pipe OD	25	32	51	76	32	38	51	102	32	51	64	102	32	51	64	102
LineTemp: -10˚C																
1" (25mm) Pipe OD	19	25	38	64	25	32	38	64	25	32	51	64	25	38	51	76
2" (51mm) Pipe OD	25	32	51	64	25	32	51	76	32	38	51	76	32	38	51	76
3" (76mm) Pipe OD	25	32	51	76	32	38	51	76	32	38	51	102	32	51	64	102
4" (102mm) Pipe OD	25	32	51	76	32	38	51	102	32	38	64	102	32	51	64	102
5" (127mm) Pipe OD	25	38	51	76	32	38	51	102	32	51	64	102	32	51	64	102
6" (152mm) Pipe OD	32	38	51	102	32	38	64	102	32	51	64	102	38	51	64	102
8" (203mm) Pipe OD	32	38	51	102	32	38	64	102	32	51	64	102	38	51	64	102
10" (254mm) Pipe OD	32	38	51	102	32	51	64	102	32	51	64	102	38	51	76	127
12" (305mm) Pipe OD	32	38	64	102	32	51	64	102	38	51	64	102	38	51	76	127
LineTemp: -15˚C																
1" (25mm) Pipe OD	25	32	38	64	25	32	51	64	32	32	51	76	32	38	51	76
2" (51mm) Pipe OD	25	32	51	76	32	38	51	76	32	38	51	102	32	51	64	102
3" (76mm) Pipe OD	32	38	51	76	32	38	51	102	32	51	64	102	38	51	64	102
4" (102mm) Pipe OD	32	38	51	102	32	51	64	102	32	51	64	102	38	51	64	102
5" (127mm) Pipe OD	32	38	64	102	32	51	64	102	38	51	64	102	38	51	64	102
6" (152mm) Pipe OD	32	38	64	102	32	51	64	102	38	51	64	102	38	51	76	127
8" (203mm) Pipe OD	32	51	64	102	38	51	64	102	38	51	64	102	38	51	76	127
10" (254mm) Pipe OD	32	51	64	102	38	51	64	102	38	51	76	127	51	51	76	127
12" (305mm) Pipe OD	32	51	64	102	38	51	64	127	38	51	76	127	51	64	76	127
LineTemp: -20˚C																
1" (25mm) Pipe OD	25	32	51	76	32	32	51	76	32	38	51	76	32	38	51	76
2" (51mm) Pipe OD	32	38	51	76	32	38	51	102	32	51	64	102	38	51	64	102
3" (76mm) Pipe OD	32	38	64	102	38	38	64	102	38	51	64	102	38	51	64	102
4" (102mm) Pipe OD	32	51	64	102	38	51	64	102	38	51	64	102	38	51	76	102
5" (127mm) Pipe OD	32	51	64	102	38	51	64	102	38	51	64	102	38	51	76	127
6" (152mm) Pipe OD	38	51	64	102	38	51	64	102	38	51	76	127	51	64	76	127
8" (203mm) Pipe OD	38	51	64	102	38	51	76	127	38	51	76	127	51	64	76	127
10" (254mm) Pipe OD	38	51	64	127	38	51	76	127	51	51	76	127	51	64	102	127
12" (305mm) Pipe OD	38	51	76	127	38	51	76	127	51	64	76	127	51	64	102	127
LineTemp: -25˚C																
1" (25mm) Pipe OD	32	38	51	76	32	38	51	76	32	38	51	76	32	38	64	102
2" (51mm) Pipe OD	32	51	64	102	32	51	64	102	38	51	64	102	38	51	64	102
3" (76mm) Pipe OD	38	51	64	102	38	51	64	102	38	51	64	102	38	51	76	102
4" (102mm) Pipe OD	38	51	64	102	38	51	64	102	38	51	76	127	51	64	76	127
5" (127mm) Pipe OD	38	51	64	102	38	51	76	127	51	64	76	127	51	64	76	127
6" (152mm) Pipe OD	38	51	76	127	38	51	76	127	51	64	76	127	51	64	76	127
8" (203mm) Pipe OD	38	51	76	127	51	64	76	127	51	64	76	127	51	64	102	127
10" (254mm) Pipe OD	38	51	76	127	51	64	76	127	51	64	102	127	51	64	102	153
12" (305mm) Pipe OD	51	51	76	127	51	64	76	127	51	64	102	153	51	64	102	153

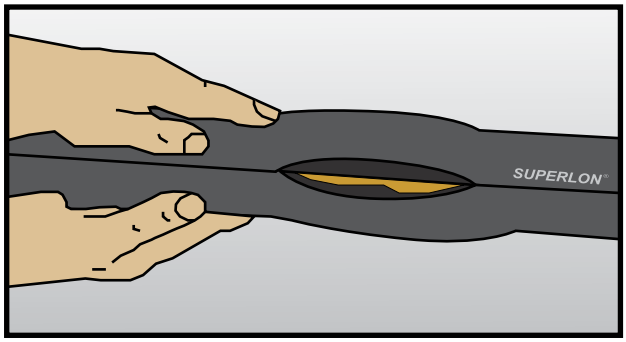
At Superlon condensation prevention is our utmost priority. As a safety to prevent condensation, calculated figures are based on dew point temperature adding +0.5˚C with a external surface coefficient of 9 W/M2-K. Thicknesses should be recalculated if there is any use of jacketing such as aluminium as the external surface coefficient will be changed.

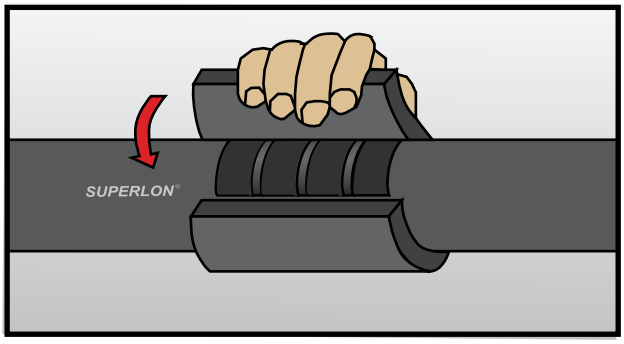
Note: Recommended thicknesses are to be used as a guide. Results are obtained under typical conditions. Superlon does not guarantee it will be prevent condensation. Other factors such as proper installation is crucial in condensation prevention. Calculations are based on condensation prevention only and does not take into account heat(cold) loss. Please consult with our technical staff for more precise calculations or if the installation environment differs.

INSTALLATION GUIDE









Allow 3-5 minutes for glue to dry while holding the sides/ends together.
Superlon glue works best when both sides are dry.

Once dry, prepare foam tape and apply foam tape to the joined area.
Do not apply too much pressure when applying foam tape. Do not stretch. Make sure the gap is completely sealed will enhance insulation performance.

Correction Installation will improve the lifespan and performance of the insulation:

- Using correct thickness
- Installing the insulation material correctly.

Before you install, determine the thickness of your insulation materials based of 5 factors:

- Ambient temperature
- Relative humidity
- Pipe size (Outer diameter of pipe)
- Line temperature
- Medium (Gas or Liquid)

Good Installation

Joining area sealed with foam tape to avoid temperature loss through contact with air.



Bad Installation

Two copper tubes inserted into one insulation tube, may cause damage to the copper tubes due to friction. Joining area sealed tightly with duct tape causing damage to the foam structure, reducing the insulation thickness and may lead to condensation.



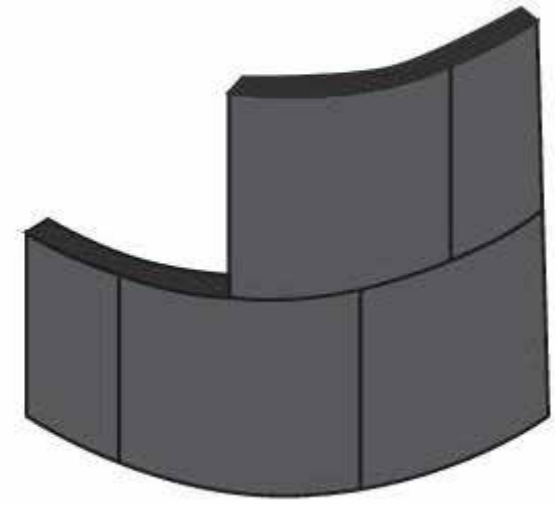
SUPERLON TIPS

DOUBLE LAYERING OF PIPEWORK



When applying layers of Superlon tube together (usually for applications that need more than 2", 51mm thickness) always make sure that all seams and butt joints do not correspond, so that the lower joints can be fully protected

SHEET INSULATION FOR FLAT AND CURVED SURFACES

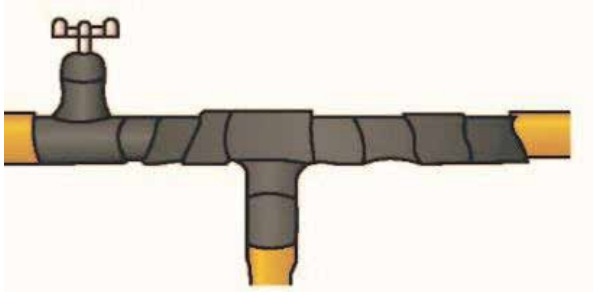


Superlon sheet is suitable for all ducts, vessels and tanks. When installing, draw up a work schedule of the sizes needed to complete the job and calculate the most efficient combination of rolls needed for the job.

Always cut oversize. When applying adhesive, always apply to the inner surface of the sheet as well as the metal surfaces that need to be insulated. This ensures that there is a full bond between the surfaces.

Superlon sheet is also ideal for insulating irregular shapes. Chalk lines drawn on the metal surface can be directly transferred onto Superlon's sheet. Press firmly against the marked surface for an accurate image of the outline.

SUPERLON FOAM TAPE TIPS



Superlon foam tape is used to complement Superlon tube and Superlon sheet to fill gaps in fittings, achieve neat, tight joints at brackets, flanges and on ductwork and vessels. It is useful for quick and efficient repair to damage on existing insulated systems. Superlon foam tape is also a solution to insulating short lengths of pipework and fitting in cramped spaces and hard to reach areas.

Upon installation, it is recommended to wrap the tape with a 50% overlap to ensure proper sealing. Use as many layers as necessary to meet the specified wall thickness. When insulating valves, fittings and irregular shapes, cut the tape to the required length and mould to suit the particular shape of the object to be insulated. Ensure that all surface areas are fully insulated without any gap an apply further layers to meet the thickness required. Always ensure that Superlon foam tape is never stretched during application.

Distributor

SUPERLON WORLDWIDE SDN BHD (252355-U)

Lot 2567, Jalan Sungai Jati, 41200 Klang,
Selangor Darul Ehsan, Malaysia.
Tel. No. : 603-3372 3888 / 3382 1688
Fax No. : 603-3371 5888 / 3381 5788
Email : inquiry@superlon.com.my
Website: www.superlon.com.my

Get our Superlon Thickness Calculation App
For more tips, installing methods and to determine correct thickness, please contact your Superlon advisor

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