

INSUL-TUBE / INSUL-SHEET



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K-FLEX MALAYSIA is part of **L'ISOLANTE K-FLEX spa**, Italian multinational company specialized in manufacturing of elastomeric thermal & acoustic Insulation materials and a worldwide market leader presents the **INSUL-TUBE / INSUL-SHEET**.

INSUL-TUBE / INSUL-SHEET Insulation is a "Closed Cell Elastomeric Rubber Foam Insulation", an Insulation designed, taking into consideration of the stringent requirement of international accepted properties.

INSUL-TUBE / INSUL-SHEET is manufactured at our World-Class manufacturing facility in Klang, near Selangor with machineries & setup capable of manufacturing the products adhering to strict international standard. **K-FLEX** engages the best quality raw materials, manufacturing practices and quality management system to ensure a superior quality end product.

With 21 plants worldwide, **K-FLEX** can uniquely provide On-Time Delivery, Consistent Product Quality and a Highly Competitive Price.

TECHNICAL BENEFITS & ADVANTAGES

- > **INSUL-TUBE / INSUL-SHEET** has a low and consistent level of thermal conductivity value, over a long period of time.
- > **INSUL-TUBE / INSUL-SHEET** is indeed a perfect solution for projects where fire safety is a priority concern.
- > **INSUL-TUBE / INSUL-SHEET** Insulation is a flexible and robust insulation material which offers easy and fast installation process and nevertheless a long and durable lifespan.
- > **INSUL-TUBE / INSUL-SHEET** Insulation comes with a complete closed cell structure which ensure an effective and consistent Insulation properties over time. The closed cell structure creates an effective vapor barrier to prevent water vapor ingress in the insulation system.
- > The superior properties of **INSUL-TUBE / INSUL-SHEET** Insulation is created through a long and tedious process of Research and Development program.
- > **INSUL-TUBE / INSUL-SHEET** Insulation achieves an effective thermal conductivity value of 0.034W/m.K @ 20 degrees Celsius and a high water diffusion factor μ value > 10,000.
- > **INSUL-TUBE / INSUL-SHEET** Insulation is tested according to a series of stringent standards. **INSUL-TUBE / INSUL-SHEET** is compliant to BS 476 Part 6 & 7 with Class "0" classification. ASTM E84 with effective result of 25/30 and UL 94 Class V-0.
- > **INSUL-TUBE / INSUL-SHEET** is clean room approved and environmental friendly Insulation system, with numerous 3rd party test laboratory certifications Low VOC, Formaldehyde Free, CFC /HCFC Free, Fiber Free/ Dust Free, Ozone Depletion Potential of Zero, Greenguard and Greenmark (Green Building Index) Approved.
- > **INSUL-TUBE / INSUL-SHEET** Insulation is also Factory Mutual Approved and tested for EMSL G21 Anti Microbial Resistant.

TECHNICAL DATA

Property	Value/Assessment	Special Remark
Material	Elastomeric foam - Nitrile Butadiene Rubber	
Cell structure	Closed-cell	
Temperature Range	Max. service temperature: +116 °C Min. service temperature: -200 °C	Tested acc.to EN 14706, EN 14707 and EN 14304
Thermal Conductivity	$\lambda \leq 0.034 \text{ W/(m.K)}$ at +20 °C $\lambda \leq 0.032 \text{ W/(m.K)}$ at 0 °C $\lambda \leq 0.028 \text{ W/(m.K)}$ at -50 °C	Tested acc. to DIN EN 12667, EN ISO 8497
Water vapour diffusion resistance	Water vapour diffusion resistance: $\mu \geq 10,000$ Water Absorption: 0.2% by volume	Tested acc. To EN 12086, EN 13469 Test acc to ASTM C 209
Fire performance	Surface Spread of Flames: Class 1 Fire Propagation: Total Index Performance (I) ≤ 12 Sub Index (i1) ≤ 6 Fire Performance: Class 0	Surface Spread of Flame: tested according to BS 476 Part 7:1997 Self-extinguishing, does not drip, does not spread flames Fire Propagation: tested according to BS 476 Part 6:1989
Density	50 to 80 kg/m ³	
Other certificates	Anti microbial Greenguard Low VOC Singapore Green Building Products Environmental Product Declaration (EPD)	Tested acc. To ASTM G21 Tested acc. To ISO 17025 Tested acc. To ISO 16000 part -3, -6, -9, -11 Approved Verified by UL
Ecological Data	CFC-HCFC Free Diphenyloxyde Free Formaldehyde Free	

For temperatures below -50 °C please contact our Customer Service Center to request for the corresponding technical information. Outdoor applications should be painted with K-FLEX finish paint to the recommended thickness. Two or more coats may required.

K-FLEX reserves the right to change data and technical requirements without notice.

INSUL-TUBE / INSUL-SHEET

"K-FLEX is the world's leading manufacturer of elastomeric Insulation systems. In twenty one production facilities around the world, including Poland, France, China, India, Malaysia, Dubai, Egypt, United Kingdom and United States some 6,200 employees develop and manufacture outstanding product solutions for thermal and acoustic Insulation.

K-FLEX is committed to ensuring its products comply with the fire safety and industry-wide safety standards.

K-FLEX has 63 sales offices on five continents, offering premium service to more than 50,000 customers.

As the world's fastest-growing company in the industry, K-FLEX is also a global player in the target markets of building services, refrigeration, air conditioning and ventilation, rail, shipping, automotive and beverage industries as well as the solar industry and OEM businesses.

K-FLEX has ISO 9001 and ISO 14001 certification."

PLANT TIMELINE



ACCESSORIES

SELF ADHESIVE FOAM TAPES



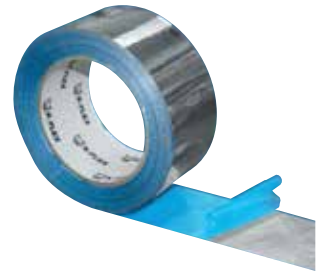
PIPE SUPPORT



K 414 GLUE



ALUMINIUM TAPE



APPLICATION AREAS

INSUL-TUBE / INSUL-SHEET Insulation system is the perfect solution for various HVAC thermal and acoustic applications:

- Refrigeration pipework
- Hot water piping system
- Ducting system
- Large pipe and tanks
- Chilled water piping system
- Drainage system



RANGE ► INSUL-TUBE (2 METRES)

Copper Pipe		Iron Pipe		6 • 1/4"		9 • 3/8"		13 • 1/2"		19 • 3/4"		25 • 1"		32 • 1 • 1/4"		40 • 1 • 1/2"		50 • 2"	
OC Inches	ø OD mm	IPS Inches	ø OD mm	size	pcs/ctn	size	pcs/ctn	size	pcs/ctn	size	pcs/ctn	size	pcs/ctn	size	pcs/ctn	size	pcs/ctn	size	pcs/ctn
1/4"	6			6x6	248	9x6	158	13x6	100	19x6	50	25x6	32						
3/8"	10	1/6"	10.2	6x10	182	9x10	120	13x10	76	19x10	40	25x10	30						
1/2"	13			6x13	140	9x13	100	13x13	64	19x13	36	25x13	25	32x13	18	40x13	10		
5/8"	16	1/4"	13.5	6x16	133	9x16	94	13x16	56	19x16	36	25x16	25	32x16	16	40x16	11	50x16	6
3/4"	19			6x19	90	9x19	68	13x19	52	19x19	30	25x19	20	32x19	16	40x19	11	50x19	6
7/8"	22	1/2"	21.3	6x22	90	9x22	64	13x22	49	19x22	30	25x22	19	32x22	12	40x22	9	50x22	6
1"	25			6x25	76	9x25	54	13x25	40	19x25	25	25x25	20	32x25	12	40x25	8	50x25	5
1.1/8"	28	3/4"	26.9	6x28	65	9x28	49	13x28	39	19x28	24	25x28	16	32x28	12	40x28	8	50x28	5
1.1/4"	32					9x32	42	13x32	29	19x32	20	25x32	16	32x32	11				
1.3/8"	35	1"	33.7	6x35	50	9x35	38	13x35	29	19x35	20	25x35	15	32x35	10	40x35	8	50x35	4
1.1/2"	38							13x38	30										
1.1/2"	40					9x40	34	13x40	24	19x40	18								
1.5/8"	42	1.1/4"	42.4	6x42	45	9x42	30	13x42	24	19x42	18	25x42	13	32x42	9	40x42	6	50x42	4
1.7/8"	48	1.1/2"	48.3			9x48	25	13x48	24	19x48	12	25x48	11	32x48	8	40x48	5	50x48	4
2"	51					9x51	24	13x51	19	19x51	12	25x51	10						
2.1/8"	54					9x54	23	13x54	20	19x54	12	25x54	9	32x54	7	40x54	5	50x54	4
2.3/8"	60	2"	60.3			9x60	23	13x60	16	19x60	11	25x60	9	32x60	6	40x60	4	50x60	4
2.5/8"	67					9x67	23	13x67	13	19x67	11	25x67	9	32x67	6	40x67	4	50x67	3
2.7/8"	73					9x73	20	13x73	15	19x73	10	25x73	6	32x73	5	40x73	4		
3"	76	2.1/2"	76.1			9x76	20	13x76	15	19x76	9	25x76	6	32x76	4	40x76	4	50x76	3
3.1/8"	79					9x79	18	13x79	15	19x79	9	25x79	6			40x79	4	50x79	3
3.1/2"	89	3"	88.9			9x89	18	13x89	12	19x89	9	25x89	6	32x89	4	40x89	4	50x89	3
4"	102					9x102	11	13x102	8	19x102	7	25x102	3	32x102	3			50x102	3
4.1/4"	108							13x108	10										
4.1/2"	114	4"	114.3			9x114	15	13x114	12	19x114	7	25x114	6	32x114	3	40x114	3	50x114	2
5"	127					9x127	11	13x127	8	19x127	5	25x127	3			40x127	3	50x127	2
5.1/2"	140	5"	139.8									25x140	5	32x140	3	40x140	2	50x140	2
6.5/8"	168	6"	165.2									25x168	3	32x168	3	40x168	2	50x168	2

RANGE ► INSUL-SHEET IN ROLLS

Type	Thickness		Sheet 1.14 metre wide	
	mm	inches	format	m ² /box
PL/RO 06	6	1/4"	30 x 1.14	34.20
PL/RO 10	10	3/8"	20 x 1.14	22.80
PL/RO 13	13	1/2"	14 x 1.14	15.96
PL/RO 19	19	3/4"	10 x 1.14	11.40
PL/RO 25	25	1"	8 x 1.14	9.12
PL/RO 32	32	1.1/4"	6 x 1.14	6.84
PL/RO 40	40	1.1/2"	4 x 1.14	4.56
PL/RO 50	50	2"	4 x 1.14	4.56



Self adhesive sheets available in all sizes.