

Marine Thermal Blanket Insulation

PRODUCT DESCRIPTION

Basic Use: Marine Thermal Blanket insulation can be used for general marine thermal and acoustic applications, including heating, ventilating and air conditioning ductwork.

Benefits: Marine Thermal Blanket insulation has excellent sound absorption characteristics to help reduce unwanted noise. When properly installed in correct thickness, it virtually eliminates condensation problems on cold duct surfaces. Marine Thermal Blanket provides thermal efficiency that reduces unwanted heat loss or gain from equipment and ductwork. The product cuts easily and installs with minimal effort.

Composition and Materials: Marine Thermal Blanket is a blanket-type insulation composed of tan, uniformly textured, inorganic fibrous glass formed with a formaldehyde-free, plant-based binding agent. It is available unfaced or with FSK vapor retarder facing. On faced products, a stapling/taping tab is provided on one edge.

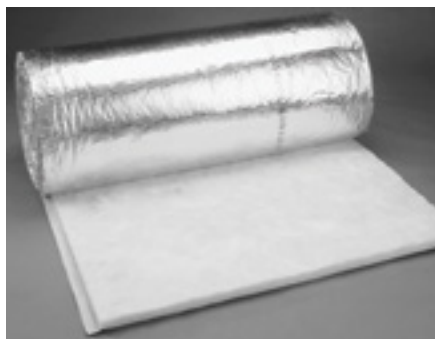
Limitations: The product should be kept clean and dry from the time of manufacture through job site installation and system operation. Marine Thermal Blanket is suitable for use with most heating, ventilating and air conditioning ductwork operating at temperatures from 35°F to 250°F (1.7°C to 121°C) for faced Marine Thermal Blanket, and from 35°F to 450°F (1.7°C to 232°C) for unfaced Marine Thermal Blanket.

Sizes: See table on next page for available sizes. Contact CertainTeed for other sizes and minimum order quantities.

INSTALLATION

Marine Thermal Blanket Insulation installs using normal installation practices for general marine thermal, acoustic and HVAC applications.

For installation details, consult the National Commercial and Industrial Insulation Standards (current edition) published by the Midwest Insulation Contractors Association (MICA).



Product Name	CertainTeed Marine Thermal Blanket Insulation
Manufacturer	CertainTeed Corporation
Address	20 Moores Road Malvern, PA 19355
Phone	610-893-6000 • 800-233-8990
Website	www.certainteed.com/technicalinsulation

TECHNICAL DATA

Applicable Standards

- Model Building Codes:
 - ICC
- Material Standards:
 - ASTM C1290
 - ASTM C553
 - > Type I; Type 75 Duct Wrap
 - > Type II; Type 100 & 150 Duct Wrap
 - > Type III; Type 150 Duct Wrap
 - CAN/CGSB-51.11-92
 - ASTM C1136
 - > Type II; FSK
- Fire Safety Standards:
 - NFPA 90A, NFPA 90B
- Certifications:
 - Non-Combustible Material (IMO)
 - > IMO FTP, Part 1, Annex 1
 - > USGC Certificate #164.109/58/0
 - Interior Finish (IMO)
 - > IMO FTP, Parts 2 & 5, Annex 1
 - > USCG Certificate #164.112/112/0
 - GREENGUARD Gold Certified



Fire Resistance

- Fire Hazard Classification:
 - UL 723, ASTM E84
 - CAN/ULC-S102
 - Max. Flame Spread Index: 25
 - Max. Smoke Developed Index: 50
- Non-Combustible:
 - ASTM E136
 - Meets test requirements

Physical/Chemical Properties

- Thermal Performance:
 - See table on back page
- Operating Limits/Temperature: ASTM C411
 - Faced: Max. 250°F (121°C)
 - Unfaced: Max. 450°F (232°C)
- Water Vapor Sorption: ASTM C1104
 - ≤ 5% by weight
- Water Vapor Transmission – Facing: ASTM E96
 - Desiccant Method
 - FSK: Max. 0.02 perms
 - (1.15 x 10⁻⁹g/Pa·s·m²)
- Corrosiveness: ASTM C665
 - Pass test requirements
- Fungi Resistance: ASTM C1338
 - Pass test requirements
- Odor Emission: ASTM C1304
 - Pass test requirements

Quality Assurance



CertainTeed's commitment to quality and the environment has ensured the registration of the Athens, Chowchilla and Kansas City plants to ISO 9001 and ISO 14001 Quality and Environmental Management System standards.

AVAILABILITY AND COST

Manufactured and sold throughout the United States. For availability and cost, contact your local distributor or call CertainTeed Sales Support Group at 800-233-8990.

WARRANTY

Refer to CertainTeed's Limited One-Year Warranty for Fiberglass Duct Wraps (30-29-047).

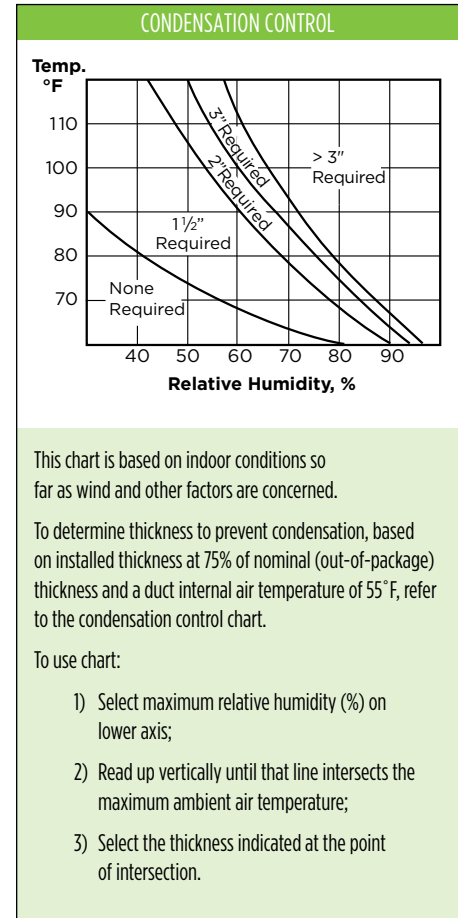
MAINTENANCE

An inspection and preventative maintenance program for the HVAC system is recommended to ensure optimum performance.

TECHNICAL SERVICES

Technical assistance can be obtained either from your local CertainTeed sales representative or by calling CertainTeed Sales Support Group at 800-233-8990.

AVAILABLE SIZES							
Product Type	Facing	Thickness		Length		Width	
		in.	mm	ft.	m	in.	mm
75	FSK	1½	38	100	30.5	48	1219
		2	51	75	22.9		
		2½	54	75	22.9		
		3	76	50	15.2		
100	FSK	1	25	100	30.5		
		1½	38	100	30.5		
		2	51	75	22.9		
150	FSK	1	25	100	30.5		
		1½	38	75	22.9		
		2	51	50	15.2		



THERMAL PERFORMANCE										
Product			Uncompressed R-Value		Installed Duct R-Value		Uncompressed K-Value		Installed Duct K-Value	
Type	Thickness		$\frac{h \cdot ft^2 \cdot ^\circ F}{Btu}$	$\frac{m^2 \cdot ^\circ C}{W}$	$\frac{h \cdot ft^2 \cdot ^\circ F}{Btu}$	$\frac{m^2 \cdot ^\circ C}{W}$	$\frac{Btu \cdot in}{h \cdot ft^2 \cdot ^\circ F}$	$\frac{W}{m^2 \cdot ^\circ C}$	$\frac{Btu \cdot in}{h \cdot ft^2 \cdot ^\circ F}$	$\frac{W}{m^2 \cdot ^\circ C}$
	in.	mm								
75	1½	38	5.2	0.91	4.2	0.74	0.29	0.042	0.27	0.039
	2	51	6.9	1.21	5.6	1.00	0.29	0.042	0.27	0.039
	2½	54	7.3	1.29	6.0	1.06	0.29	0.042	0.27	0.039
	3	76	10.3	1.82	8.3	1.46	0.29	0.042	0.27	0.039
	4	102	13.8	2.43	11.0	1.94	0.29	0.042	0.27	0.039
100	1	25	3.8	0.68	3.0	0.53	0.26	0.038	0.25	0.036
	1½	38	5.8	1.02	4.5	0.79	0.26	0.038	0.25	0.036
	2	51	7.7	1.35	6.0	1.06	0.26	0.038	0.25	0.036
150	1	25	4.2	0.73	3.2	0.56	0.24	0.035	0.23	0.033
	1½	38	6.3	1.10	4.8	0.85	0.24	0.035	0.23	0.033
	2	51	8.3	1.47	6.4	1.13	0.24	0.035	0.23	0.033

Tested in accordance with ASTM C518 and/or ASTM C177 at 75°F (24°C) mean temperature. R means resistance to heat flow. The higher the R-value, the greater the insulating power. The installed R-value and K-value are based upon 25% compression of the product thickness during installation. To get the installed R-value, it is essential that this insulation be installed properly. If you do it yourself, follow the installation instructions carefully.

INSTALLATION STRETCH-OUT DIMENSIONS										
Product Label Thickness		Average Installed Thickness			Stretch-Out Dimensions ¹					
					Round Duct		Square Duct		Rectangular Duct	
in.	mm	in.	mm		in.	mm	in.	mm	in.	mm
1½	38	1.13	29	P+	9.5	241	8	203	7	178
2	51	1.50	38	P+	12	305	10	254	8	203
2½	54	1.59	40	P+	12.6	321	10.4	270	8.4	213
3	76	2.25	57	P+	17	432	14.5	368	11.5	292
4	102	3.00	76	P+	22.0	559	18.5	470	14.5	368

¹The stretch-out dimension is equal to the duct perimeter (P) plus the add-on factor for the type of duct being installed.

