

Universal Blanket

PRODUCT DESCRIPTION

Basic Use: Universal Blanket is utilized in general-purpose applications where a flexible thermal, acoustical insulation is required. Available in five different densities, Universal Blanket can be fabricated into a variety of shapes and sizes to fit almost any application, and it will withstand temperatures up to 450°F.



Benefits: Universal Blanket reduces heat transfer through equipment walls, which lowers energy consumption, thereby reducing fuel bills. The product absorbs the level of equipment noise and, when installed with a suitable vapor retarder, helps reduce condensation on the surface of cooling equipment. Properly installed, Universal Blanket is unaffected by aging and temperature changes. The inorganic fibers will not rot or decompose and will maintain thermal and acoustical efficiency under normal conditions.

Composition and Materials: The product is composed of tan, uniformly textured, inorganic fibrous glass and bonded with a thermoset resin to form a blanket insulation.

Limitations: Insulation should be kept clean and dry during shipping, storage, installation and system operation.

Sizes: Rolls are available in 24" and 48" standard widths. For other widths, contact your CertainTeed representative.

ACOUSTICAL PERFORMANCE									
Type	Thickness		Absorption Coefficients @ Octave Band Center Frequencies (Hz)						NRC
	in.	mm	125	250	500	1000	2000	4000	
501	1½	38	0.21	0.49	0.71	0.79	0.80	0.80	0.70
	2	51	0.23	0.62	0.84	0.87	0.85	0.87	0.80
	4	102	0.51	0.92	1.01	0.93	0.95	1.06	0.95
751	1	25	0.14	0.33	0.64	0.77	0.83	0.86	0.65
	1½	38	0.17	0.45	0.78	0.84	0.92	0.93	0.75
1001	3	76	0.36	0.82	1.02	1.00	0.96	1.01	0.95
	1½	38	0.21	0.53	0.79	0.85	0.85	0.87	0.75
	2	51	0.28	0.69	0.94	0.91	0.90	0.93	0.85

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

Product Name	CertainTeed Universal Blanket
Manufacturer	CertainTeed Corporation
Address	20 Moores Road Malvern, PA 19355
Phone	800-233-8990
Website	www.certainteed.com/technicalinsulation

TECHNICAL DATA

Applicable Standards

- Model Building Codes:
 - ICC
 - California Quality Standards Reg. No. CA-T024 (PA)
- Material Standards:
 - ASTM C553, Type I, II & III
 - ASTM C1139, Type I, Grades 1, 2, 3 & 4, Type II, Grades 1, 2, 3 & 4.
 - MIL-I-22023D, Type I & Type II
 - GREENGUARD® Gold Certified
- Fire Safety Standards:
 - NFPA 90A, NFPA 90B

Fire Resistance

- Fire Hazard Classification:
 - UL 723, ASTM E84, NFPA 255
Max. Flame Spread Index: 25
Max. Smoke Developed Index: 50

Physical/Chemical Properties

- Thermal Performance (see table on other side)
- Acoustical Performance (see table at left)
- Operating Limits:
 - Temperature; ASTM C411:
Max. 450°F (232°C)
- Corrosion Resistance:
 - ASTM C665 / Pass
- Vibration Resistance:
 - ASTM C1139 / <0.5% weight loss and no thickness reduction
- Water Vapor Sorption:
 - ASTM C1104 / < 5% by weight

Quality Assurance



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

INSTALLATION

All fabrication, application and installation steps must be in accordance with the requirements of the National Commercial and Industrial Installation Standards (current edition) published by the Midwest Insulation Contractors Association (MICA). These installation requirements are general in nature. Other methods may be acceptable; please consult your contractor for recommendations best suited to the application.

AVAILABILITY AND COST

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

WARRANTY

Inasmuch as CertainTeed has no control over the installation design, installation workmanship, accessory materials or conditions of application, CertainTeed does not warrant the performance or results of any installation containing its products.

MAINTENANCE

An inspection and preventative maintenance program for the insulation and any applied jacketing, lagging or cladding system is recommended to ensure optimum performance.

TECHNICAL SERVICES

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

THERMAL PERFORMANCE										
Type	Density		Thickness		K-Value		C-Value		R-Value	
	Lb/ft ³	Kg/m ³	in.	mm	$\frac{\text{Btu}\cdot\text{in}}{(\text{h}\cdot\text{ft}^2\cdot^\circ\text{F})}$	$\frac{\text{W}}{(\text{m}\cdot^\circ\text{C})}$	$\frac{\text{Btu}\cdot\text{in}}{(\text{h}\cdot\text{ft}^2\cdot^\circ\text{F})}$	$\frac{\text{W}}{(\text{m}\cdot^\circ\text{C})}$	R	RSI
501	0.60	9.6	1½	38	0.32	0.046	0.21	1.21	4.7	0.83
			2	51			0.16	0.91	6.3	1.10
			3	76			0.11	0.61	9.3	1.65
			4	102			0.08	0.45	12.5	2.20
751	0.75	12.0	1½	38	0.29	0.042	0.19	1.10	5.2	0.91
			2	51			0.15	0.82	6.9	1.21
			3	76			0.10	0.55	10.3	1.82
			4	102			0.07	0.41	13.8	2.43
1001	1.00	16.0	1	25	0.26	0.037	0.26	1.48	3.8	0.68
			1½	38			0.17	0.98	5.8	1.02
			2	51			0.13	0.74	7.7	1.35
			3	76			0.09	0.49	11.5	2.03
1501	1.5	24.0	1	25	0.24	0.035	0.24	1.36	4.2	0.73
			1½	38			0.16	0.91	6.3	1.10
2001	2.00	32.0	1	25	0.23	0.033	0.23	1.31	4.3	0.77

Thermal conductance (C) and resistance (R) values are derived from the material thermal conductivity (K) value. Tested in accordance with ASTM C518 and/or ASTM C177 at 75°F (24°C) mean temperature.



CertainTeed Corporation

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