

# Specification Sheet



## **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 formed with a formaldehyde-free binding agent.

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

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

#### 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 contact your local distributor, or call CertainTeed Sales Support Group in Valley Forge, PA at 800-233-8990.

ACOUSTICAL PERFORMANCE									
Туре	Thickness		Absorption Coefficients @ Octave Band Center Frequencies (Hz)						
	in.	mm	125	250	500	1000	2000	4000	NRC
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
	3	76	0.36	0.82	1.02	1.00	0.96	1.01	0.95
1001	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	Universal Blanket				
Manufacturer	CertainTeed Corporation				
Address	P.O. Box 860 Valley Forge, PA 19482-0105				
Phone	610-341-7000 • 800-233-8990				
Fax	610-341-7571				
Website	www.certainteed.com/insulation				

#### **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
- · 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 environmental management has ensured the registration of the Athens, Chowchilla and Kansas City plants to ISO 9001:2000 and ISO 14001: 2004 standards.

## www.certainteed.com/insulation/hvac-mechanical

## **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 in Valley Forge, PA at 800-233-8990.

### **FILING SYSTEMS**

 Additional product information available upon request.

THERMAL PERFORMANCE										
Туре	Density		Thickness		K-Value		C-Value		R-Value	
	Lb/ft³	Kg/m³	in.	mm	Btu•in (h•ft²•°F)	W (m•°C)	Btu•in (h•ft²•°F)	W (m•°C)	R	RSI
		9.6	1½	38	- 0.32	0.046	0.21	1.21	4.7	0.83
501 0.0	0.60		2	51			0.16	0.91	6.3	1.10
	0.00		3	76			0.11	0.61	4.4	1.65
			4	102			0.08	0.45	12.5	2.20
751		12.0	1½	38	- 0.29	0.042	0.19	1.10	5.2	0.91
	0.75		2	51			0.15	0.82	6.9	1.21
	0.75		3	76			0.10	0.55	10.3	1.82
			4	102			0.07	0.41	13.8	2.43
1001		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
	1.00		2	51			0.13	0.74	7.7	1.35
			3	76			0.09	0.49	11.5	2.03
			4	102			0.07	0.37	15.4	2.71
1501	1.5	24.0	1	25	0.24	0.035	0.24	1.36	4.2	0.73
	1.0		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  $75^{\circ}$  F ( $24^{\circ}$ C) mean temperature.













## ASK ABOUT OUR OTHER CERTAINTEED PRODUCTS AND SYSTEMS:

**EXTERIOR:** ROOFING • SIDING • WINDOWS • FENCE • RAILING • TRIM • DECKING • FOUNDATIONS • PIPE **INTERIOR:** INSULATION • GYPSUM • CEILINGS

CertainTeed Corporation P.O. Box 860 Valley Forge, PA 19482 Professional: 800-233-8990 Consumer: 800-782-8777 www.certainteed.com/insulation

