



High Temperature Blanket

High Temperature Blanket is composed of rotary glass fibers bonded together using a thermosetting resin and formed into plain, flexible and resilient thermal insulation. It is designed for use on industrial equipment, panel systems, pipe fittings and tanks operating at temperatures up to 1000°F (538°C). Type I is available in either batt or roll form; Type II is available only as batts. HT blankets are easy to handle, cut with a knife and install, and contain over 60% recycled glass content.

Features & Benefits

Operating Conditions: Can be used on industrial equipment operating at temperatures up to 1000°F. **Installation:** Easy to handle, cut with a knife and install in a variety of applications.

Application

HT Types 1 and 2 are designed for use on industrial equipment operating at temperatures up to 1000°F (538°C). Type 1 can be used on panel systems, as a flexible wrap, or on industrial ovens. Type 2 can be used for metal mesh blankets, on boilers, vessels and other industrial equipment operating at temperatures up to 1000°F (538°C).

Installation

HT blanket insulations, both Type 1 and Type 2, may be applied directly to any hot surface. This is normally accomplished by securing through the use of welded studs and nuts or pins and speed washers and then providing a final covering of sheet metal, expanded metal, metal mesh or cementitious mastics. If pins and speed washers are incorporated, you must ensure that the insulation is not compressed under the washer. Whichever fasteners are used for securing, spacing is suggested to be no more than 4 inches in from each corner and no more than 16 inches on centre in either direction over the field on the insulation. Multiple staggered layers of insulation should be used to ensure good insulation coverage and eliminate hot spots.

APPLICABLE STANDARDS, CODE COMPLIANCE

Material Standards:

- Standard for Mineral Fiber Thermal Insulation for Buildings – CAN ULC-S702, Type 1 (pre-formed insulation without a membrane)
- ASTM C553 Types I, II, V, VI
- CAN/CGSB 51 Types 2 Class 4

PHYSICAL/CHEMICAL PROPERTIES

PROPERTY (UNIT)	TEST	VALUE
Behavior in Vertical Tube Furnace:	ASTM E136/ CAN4-S114	Pass
Critical Radiant Flux:	ASTM E970	$\leq 0.12 \text{ W/cm}^2$
Corrosiveness with Austenitic Steel:	ASTM C795	Pass
Corrosiveness to Steel:	ASTM C665	Pass
Water Vapor Sorption:	ASTM C1104	Maximum 5.0% by weight
Bacterial and Fungi Resistance:	ASTM C1338-96	Does not breed or promote
Odor Emission:	ASTM C1304	Pass
Smoulder Resistance:	ULC-S129	Mean mass loss 5% and each specimen $\leq 10\%$
Surface Burning Characteristics:	ASTM E84/ UL 723	Flame spread index: 25 max
	CAN/ULC-S102-M88	Smoke developed index: 50 max
Hot Surface Performance:	ASTM C411	Pass test at 1000°F (538°C), 8" stack
Density:	Type 1:	1.25lb/ft ³ (nominal) 20kg/m ³
	Type 2:	2.5lb/ft ³ (nominal) 40kg/m ³
Thermal Conductivity:	ASTM C177	Avg. K at 75°F mean BTU • in/ (hr • ft ² • °F)
Flexibility:	ASTM C1101	Flexible/Resilient
Thickness Recovery:	CAN/ULC-S702	Must meet actual thickness specification (-0) at point of use
Formaldehyde Emissions:	ASTM D5116 & GREENGUARD Modeling	< 0.05 ppm



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Available Sizes

Available standard sizes are listed in the table. Contact CertainTeed for non-standard sizes.

PRODUCT TYPE	THICKNESS		LENGTH		WIDTH	
	IN	MM	FT	MM	IN	MM
Type 1: Rolls	1	25.4	100	30.5	24	610
	2	50	70	21.3		
	2-1/2	64	55	16.8		
	3	76	40	12.2		
	3-1/2	89	35	10.7		
	4	102	30	9.1		
	1	25.4	100	30.5	36	914
	2	50	70	21.3		
	2-1/2	64	55	16.8		
	3	76	40	12.2		
	3-1/2	89	35	10.7		
	4	102	30	9.1		
	1	25.4	100	30.5	72	1829
	2	50	70	21.3		
	2-1/2	64	55	16.8		
	3	76	40	12.2		
	3-1/2	89	35	10.7		
	4	102	30	9.1		
Type 2: Batts	1	25.4	48	1.219	24	610
			96	2.439		
	2	50	48	1.219		
			96	2.439		
	3-1/2	64	48	1.219		
			96	2.439		
	3	76	48	1.219		
			96	2.439		
	3-1/2	89	48	1.219		
			96	2.439		
Type 2: Batts	4	102	48	1.219	24	610
			96	2.439		
	1	25.4	48	1.219		
			96	2.439		
	1-1/2	38	48	1.219		
			96	2.439		
	2	50	48	1.219		
			96	2.439		
	2-1/2	64	48	1.219		
			96	2.439		
	3	76	48	1.219		
			96	2.439		
	3-1/2	89	48	1.219		
			96	2.439		
	4	102	48	1.219		
			96	2.439		

K FACTOR AT °F AT MEAN TEMPERATURES							
	75	100	200	300	400	500	600
Type 1	0.25	0.27	0.34	0.43	0.56	TBD	TBD
Type 2	0.23	0.24	0.30	0.36	0.46	0.52	0.64

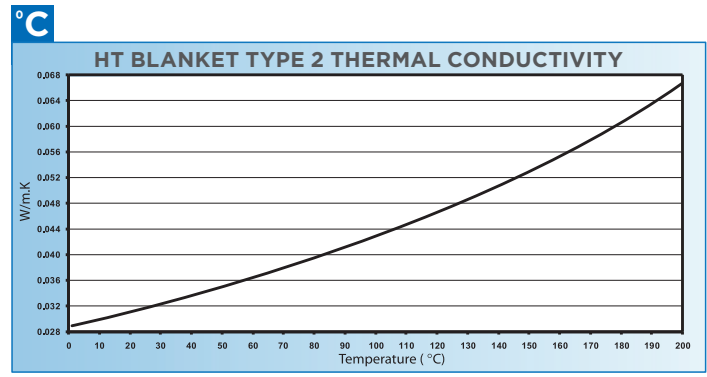
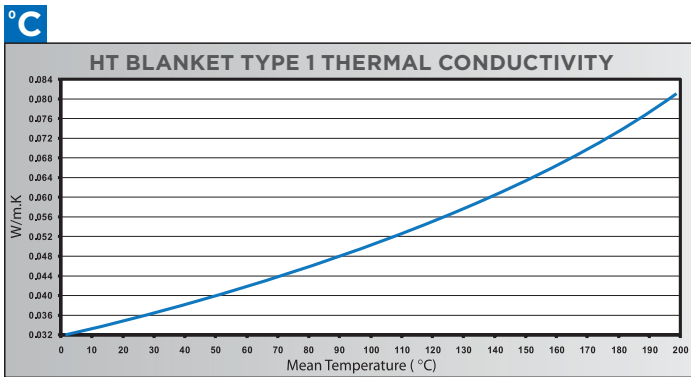
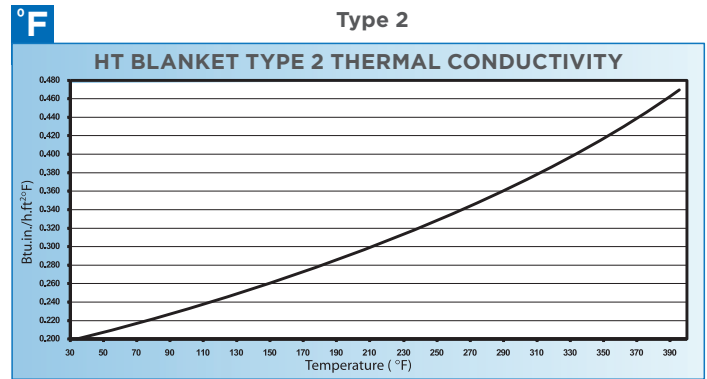
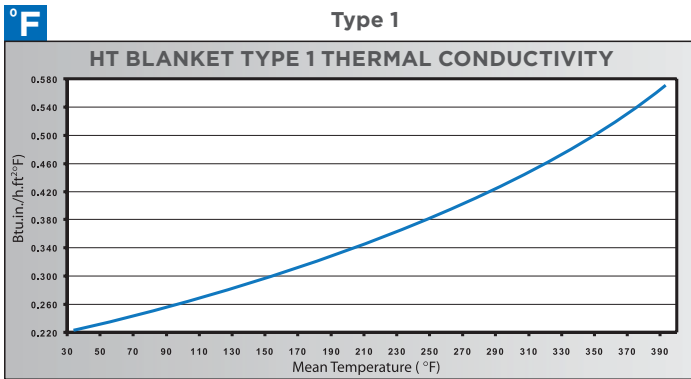
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Sound Absorption Test Results

ACCORDING TO ASTM C423-90A MOUNTING A ACCORDING TO ASTM E795		
Frequency (Hz)	Type 1 2" (50 mm) nominal Absorption Coefficient	Type 2 2" (50 mm) nominal Absorption Coefficient
80	0.17	0.05
100	0.15	0.19
125	0.19	0.32
160	0.43	0.56
200	0.58	0.80
250	0.79	1.06
315	0.99	1.20
400	1.13	1.26
500	1.16	1.23
630	1.17	1.20
800	1.17	1.17
1000	1.14	1.11
1250	1.12	1.08
1600	1.10	1.08
2000	1.06	1.06
2500	1.07	1.04
3150	1.07	1.05
4000	1.07	1.06
5000	1.08	1.07
6300	1.11	1.08
NRC	1.05	1.10

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Performance Data



TECHNICAL SERVICES

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

MAINTENANCE

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

AVAILABILITY & COST

For availability and cost, contact your local contractor or distributor, or call CertainTeed Sales Support Group at 800-233-8990.

WARRANTY

Refer to CertainTeed's Lifetime Limited Warranty for Fiberglass Building Insulation. Full warranty information can be found at certainteed.com/warranty.