

Specification Sheet

PRODIMAX

ISOLANTS ET SERVICES THERMIQUES

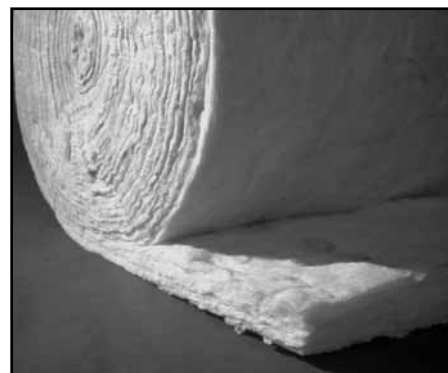
FDVHT Blanket

1. PRODUCT NAME

FDV HT Blanket (High Temperature Blanket)

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

High Temperature Blanket is composed of rotary glass fibres 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.

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).

AVAILABLE SIZES						
Product type	Thickness		Length		Width	
	in.	mm	ft	m	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 1: Batts	in.	mm	in.	m	24	610
	1	25.4	48	1.219		
			96	2.438		
	2	50	48	1.219		
			96	2.438		
	2-1/2	64	48	1.219		
			96	2.438		
	3	76	48	1.219		
			96	2.438		
	3-1/2	89	48	1.219		
			96	2.438		
	4	102	48	1.219		
		96	2.438			
Type 2: Batts	in.	mm	in.	m	24	610
	1	25.4	48	1.219		
			96	2.438		
	1-1/2	38	48	1.219		
			96	2.438		
	2	50	48	1.219		
			96	2.438		
	2-1/2	64	48	1.219		
			96	2.438		
	3	76	48	1.219		
			96	2.438		
	3-1/2	89	48	1.219		
		96	2.438			
4	102	48	1.219			
		96	2.438			

4. TECHNICAL DATA

Material Standards:

- Standard for Mineral Fibre Thermal Insulation for Buildings – CAN/ULC-S702-09, Type 1 (pre-formed insulation without a membrane)
- ASTM C553 Types I, II, V, VI
- CAN/CGSB 51.11 Type 2 Class 4

Physical/Chemical Properties:

- Behavior in vertical tube furnace:
 - ASTM E136 / CAN4-S114
 - Pass test
- Critical radiant flux:
 - ASTM E970
 - $\geq 0.12 \text{ W/cm}^2$
- Corrosiveness with austenitic steel:
 - ASTM C795
 - Pass test
- Corrosiveness to steel:
 - ASTM C665
 - Pass test
- 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 test
- Smoulder resistance:
 - ULC-S129
 - Mean mass loss 5% and each specimen $\leq 10\%$
- Surface burning characteristics:
 - ASTM E84/UL 723
 - CAN/ULC-S102-M88
 - Flame spread index: 25 max
 - Smoke developed index: 50 max
- Hot surface performance:
 - ASTM C411
 - Pass test at 1000°F (538°C), 8" stack
- Density:
 - Type 1: 1.25lb/ft³ (nominal) 20kg/m³
 - Type 2: 2.5lb/ft³ (nominal) 40kg/m³
- Thermal conductivity:
 - ASTM C177
 - Avg. K at 75°F mean BTU · in/(hr · ft² · °F)
 - See chart for K factor
- Flexibility:
 - ASTM C1101
 - Flexible/Resilient

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

- Thickness recovery (requirement must be met for up to 60 days after product shipment):
 - CAN/ULC-S702-09
 - Must meet actual thickness specification (-0) at point of use
- Formaldehyde emissions:
 - ASTM D5116 and GREENGUARD modeling
 - < 0.05 ppm
- Total aldehydes emissions:
 - ASTM D5116 and GREENGUARD modeling
 - < 0.10 ppm
- TVOC emissions:
 - ASTM D5116 and GREENGUARD modeling
 - < 0.50 mg/m³
- Moisture absorption:
 - Less than 1% by volume

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

5. 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.