

## High Temperature Batt 1000°F & HD Blanket 1000°F



**HIGH TEMPERATURE BATT 1000°F & HD BLANKET 1000°F** are semi-rigid thermal insulations (1.6 pcf, 25.6kg/m<sup>3</sup>), made from highly resilient, inorganic glass fibers, bonded by high-temperature thermosetting resin.

### APPLICATION

Manson HIGH TEMPERATURE BATT 1000°F (538°C) & HD Blanket 1000°F (538°C) are used in high-temperature marine applications, industrial furnaces, boilers, vessels, and industrial ovens, where light-weight insulation is needed or flexible and/or semi-rigid high-temperature insulations are needed for irregular surfaces.

### FEATURES AND BENEFITS

#### Excellent Thermal Properties

- Low thermal conductivity.
- Increase system efficiency and decrease fuel use.

#### Resilient Fiber Glass

- Maintains integrity at elevated temperatures.

#### Low Installed Cost

- Lightweight and easy to handle and fabricate.
- Flexibility makes them ideal for flat or irregular surfaces.

#### Packaging- Cartons & Sleeves

- More resistant to abuse than standard ET blankets.
- Tough and resilient.
- Resist damage in shipment, during and after installation.

### SPECIFICATION COMPLIANCE

#### ASTM C 795

#### ASTM C1139 replaces MIL-I-22023D

- Type I, Class 4 to Type I, Grade 5
- Type II, Class 4 to Type II, Grade 5

#### MIL-I-24244C

#### HH-1-558C

- Form B, Type 1, Class 7,8

#### NRC Reg Guide 1.36

#### In Canada

- CAN/ULC S102-M88

#### Water Vapor Sorption (ASTM C 1104)

- 0.1% or less by volume

#### Surface Burning Characteristics

- Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E 84, CAN/ULC S102-M88 and UL 723

#### Temperature Limitation (ASTM C 411)

- Up to 1000°F (538°C)

#### Microbial Growth (ASTM C 1338)

- Does not promote or support the growth of mold
- Will not rot
- Will not support vermin

#### Alkalinity (ASTM C 871)

- Less than 0.6% as Na<sub>2</sub>O
- pH between 7.5 and 12.0

#### Non-Corrosive (ASTM C 665)

- Will not accelerate corrosion of steel
- Complies to stress corrosion requirements of MIL-I-24244C

CONTRACTOR:

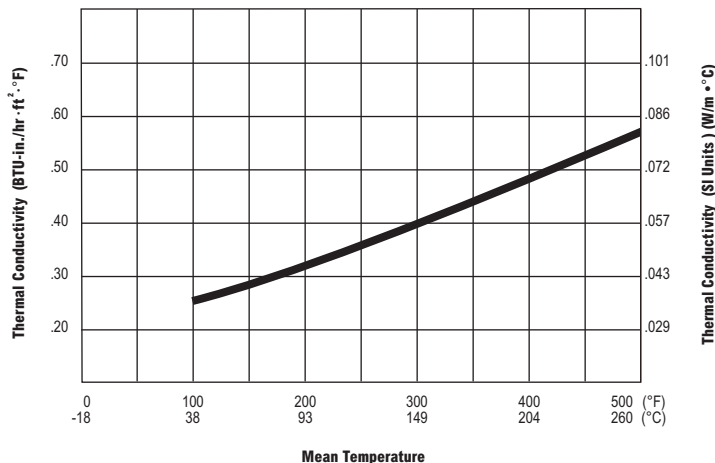
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# High Temperature Batt 1000°F & HD Blanket 1000°F



## Thermal Efficiency (ASTM C 177)



Mean Temperature	k	k(SI)
100°F (38°C)	0.24	0.035
200°F (93°C)	0.33	0.048
300°F (149°C)	0.44	0.063

## HT Batt 1000°F Forms Available

Thickness	Width	Length
1.5" (38 mm)	24" (610 mm)	48" (1219 mm)
2" (51 mm)		
2.5" (64 mm)		
3" (76 mm)		
3.5" (89 mm)		
4" (102 mm)		

## HD Blanket 1000°F Forms Available

Thickness	Width	Length
1.5" (38 mm)	48" (1219 mm)	120' (36.6 m)
2" (51 mm)		80' (24.4 m)
2.5" (64 mm)		70' (21.3 m)
3" (76 mm)		60' (18.3 m)
3.5" (89 mm)		50' (15.2 m)
4" (102 mm)		40' (12.2 m)

## NOTES

The chemical and physical properties of Manson High Temperature Batt 1000°F and Manson High Temperature HD Blanket 1000°F represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

Check with your Manson Territory Manager to assure information is current.

## APPLICATION & SPECIFICATION GUIDELINES

### PRECAUTION

- During initial heat-up to operating temperatures above 350°F (177°C), a slight odor and some smoke may be given off as a portion of the bonding material used in the insulation begins to undergo a controlled decomposition.
- If natural convection is not adequate in confined areas, forced ventilation should be provided in order to protect against any harmful fumes and vapors that might be generated.

### STORAGE

- Protect material from water damage or other abuse. Protect from welding sparks and open flame. The material may be stored outside if the packaging is not damaged.

### PREPARATION

- Apply the product on clean, dry surfaces.

### APPLICATION

- There is no heat-up cycle required for Manson High Temperature Batt 1000°F and Manson High Temperature HD Blanket 1000°F.
- The product should be secured with welded pins or studs and covered with sheet metal. An alternate method entails covering the insulation with a metal mesh and insulating cement, canvassing and painting.
- Care should be taken to avoid over compressing the insulation with the retaining washer.
- Pins and studs shall be located a maximum of 4" (102 mm) from each edge and spaced no greater than 16" (406 mm) on centre.
- For application of Manson High Temperature Batt 1000°F and Manson High Temperature HD Blanket 1000°F over 500°F (260°C), double layer application is recommended with staggered joints.
- When using the products at 1000°F (538°C), it is recommended that no more than 6" (152 mm) thickness should be used. For thicknesses in excess of 6", contact your Manson Territory Manager.

### CAUTION

Glass mineral wool may cause temporary skin irritation. Wear long-sleeved, loose-fitting clothing, head covering, gloves and eye protection when handling and applying material. Wash with soap and warm water after handling. Wash work clothes separately and rinse washer. A disposable mask designed for nuisance type dusts should be used where sensitivity to dust and airborne particles may cause irritation to the nose or throat.

### GLASS MINERAL WOOL AND MOLD

Glass mineral wool insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced.