



HIGH TEMPERATURE PANEL 1000°F is a semi-rigid, thermal insulation board (2.4 PCF, 38.4 kg/m³) made from highly resilient, inorganic glass fibers bonded with a high-temperature, thermosetting resin.

APPLICATION

Manson HIGH TEMPERATURE PANEL 1000°F is suitable for use in industrial heating applications up to 1000°F (538°C), such as high-temperature panel systems for ducts and precipitators, boilers, vessels, and industrial ovens. It is ideal for use in metal mesh blankets.

AVAILABILITY

Manufactured dimensions are listed in the Manson Insulation product catalog.

FEATURES AND BENEFITS

Excellent Thermal Properties

- Reduces operating cost

Resilient Fiber Glass

- Maintains integrity at elevated temperatures

Low Installed Cost

- Lightweight
- Easy to Fabricate

Packaging- Cartons & Sleeves

- Damage resistant
- Reduces storage space

SPECIFICATION COMPLIANCE

ASTM C 612

- Type IA
- Type IB
- Type II- category 1
- Type III

ASTM C 795

MIL-I-24244C

HH-1-558C

- Form A, Class 1, 3

NRC Reg Guide 1.36

ASTM C 1139

- Type I, Grade 5
- Type II, Grade 5

City of New York MEA 362-83-M

In Canada

- CAN/ULC S102-M88

PRODUCT FEATURES

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

Alkalinity (ASTM C 871)

- Less than 0.6% as Na₂O
- pH between 7.5 and 12.0

Corrosiveness (ASTM C 665)

- Will not accelerate corrosion of steel
- Complies to stress corrosion requirements of ASTM C 795, MIL-I-24244C and NRC Reg. Guide 1.36

Water Vapor Sorption (ASTM C 1104)

- 0.1% or less by volume

CONTRACTOR:

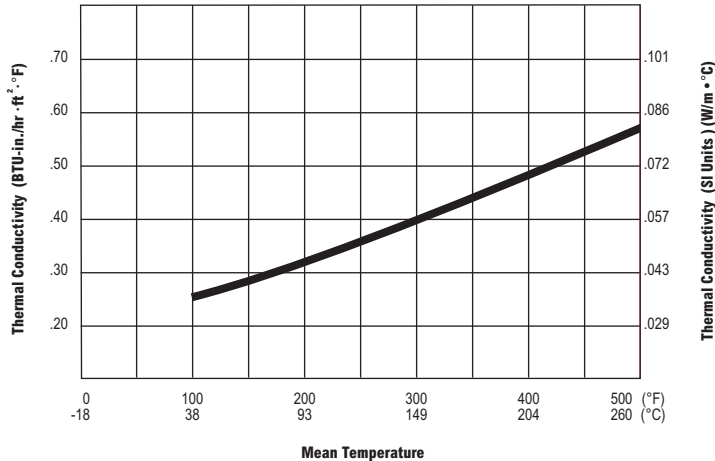
JOB NAME:

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HIGH TEMPERATURE PANEL 1000°F



Thermal Efficiency (ASTM C 177)



Mean Temperature	k	k(SI)
100°F (38°C)	0.25	0.036
200°F (93°C)	0.32	0.046
300°F (149°C)	0.40	0.058
400°F (204°C)	0.52	0.075
500°F (260°C)	0.68	0.098

Forms Available

Thickness	Width	Length
1" (25 mm)	24" (610 mm) and 48" (1219 mm)	24" (610 mm) to 120" (3048 mm)
1.5" (38 mm)		
2" (51 mm)		
2.5" (64 mm)		
3" (76 mm)		
3.5" (89 mm)		
4" (102 mm)		

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.

NOTES

The chemical and physical properties of Manson High Temperature Panel 1000°F (538°C) 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. Cartons are not designed for outside storage. Vacuum packaged material can be stored outside if care is taken not to puncture the polybag.

PREPARATION

- Apply the product on clean, dry surfaces.

APPLICATION

- All insulation joints must be firmly butted. Mount flush against surfaces to 1000°F (538°C) or use in panels mounted away from operating surface.
- Manson High Temperature Panel 1000°F (538°C) is designed to be applied over welded pins and/or studs up to ½" (13 mm) in diameter. The board is to be held in place by speed washers, tension clips or metal mesh reinforcement.
- Installation method should not compress material beyond maximum of 5% at any point.
- Pins and studs shall be located a maximum of 4" (102 mm) from each edge and spaced no greater than 16" (406 mm) on center.
- In temperatures over 550°F (288°C) and designed thickness over 3" (76 mm) dual layer application with staggered joints is recommended. Install thickness recommended by Manson or NAIMA 3E Plus program.
- Finish surface with metal cover, or with insulating cement and canvas.

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.