

Specifications for ET Board

Description

Elevated Temperature Board 850° is a lightweight insulation (2.8 PCF, 44.9 kg/m³) made from inorganic glass fibers bonded with a high-temperature thermosetting resin. It is a semi-rigid, board-like form with superior handling properties and insulating effectiveness at minimum cost.

Application

Elevated Temperature Board 850° is used for boiler walls, hot precipitators, hot ductwork, cylindrical tanks, towers, stacks, and industrial ovens.

Features and Benefits

Excellent Thermal Properties

Reduces operating cost.

Resilient Fiber Glass

Maintains integrity at elevated temperatures.

Specification Compliance

In U.S.:

ASTM C 612; Type IA, IB, II

ASTM C 795

HH-I-558C (Amend. 3); Form A, Class 1, 2, 3

MIL-I-22023D; Type III

MIL-I-24244C

NRC Reg. Guide 1.36

USCG 164.109/15/0

In Canada:

CAN/ULC S102-M88

T.C.270.F1.315

CGSB 51-GP-10M

Technical Data

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 850°F (454°C)

Alkalinity (ASTM C 871)

Less than 0.6% as Na₂O.

Corrosiveness (ASTM C 665)

Will not accelerate corrosion of steel.

Resistance to Microbial Growth (ASTM C 1338)

No growth.

Application and Specification Guidelines

Precautions

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 850°F (454°C) or use in panels mounted away from operating surface.

ET Board 850° is designed to be applied over welded pins and/or studs up to ¹/₂" (13 mm) in diameter.

Installation method should not compress material beyond maximum 5% at any point.

Caution

Fiber glass 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 and throat.

Notes

The chemical and physical properties of ET Board 850° 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.

THERMAL EFFICIENCY (ASTM C 177)

Mean Temperature	Mean Temperature (SI)	k	k(SI)
100°F	38°C	.25	.036
200°F	93°C	.33	.048
300°F	149°C	.40	.058
400°F	204°C	.49	.071
500°F	260°C	.57	.082