

DATA SHEET

Elevated Temperature Board 1000°

with ECOSE® Technology



DESCRIPTION

Elevated Temperature Board 1000° is a lightweight, semi-rigid, boardlike insulation made from highly resilient, inorganic glass fibers bonded with ECOSE Technology.

APPLICATIONS

- Boiler walls
- Hot precipitators
- Hot ductwork
- Cylindrical tanks
- Prefabricated panel systems towers
- Stacks
- Industrial ovens

SPECIFICATION COMPLIANCE

U.S.

- Conformity for Marine Equipment IMO 1408
 - ASTM C612; Type IA, IB, II and III; Category I
 - ASTM C1139; Type III (withdrawn 2019)
 - USCG 164 109/15/1
 - MIL-DTL-32585; Type I, Form I, Facing A
 - UL/ULC Classified (UL 723)
- ASTM C795, MIL-I-24244, NRC Reg. Guide 1.36
(Certification needs to be specified at time of order)

Canada

- ULC Classified
- CAN/ULC S102

CONTRACTOR: _____

JOB: _____

DATE: _____

DOING MORE FOR THE WORLD WE LIVE IN.

Knauf Insulation products with ECOSE® Technology are made using our patented, bio-based binder - a smarter alternative to the phenol/formaldehyde (PF) binder traditionally used in fiberglass products. The bio-based binder holds our product together, gives the product its unique appearance and makes it formaldehyde-free.

All of our products are made from sustainable resources, such as recycled glass and sand. And we're proud to be putting glass bottles back to work rather than into landfills. Our products are made with a minimum of 50% recycled glass—totaling an average of 26 million bottles each month.

with ECOSE®
TECHNOLOGY



TECHNICAL DATA

Property (Unit)	Test	Performance
Corrosiveness	ASTM C665	Does not accelerate corrosion of steel
Corrosion	ASTM C1617	Pass
Water Vapor Sorption (by weight)	ASTM C1104	Less than 5%
Maximum Service Temperature	ASTM C411	1000° F (538° C)
Mold Growth	ASTM C1338	Pass
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84, UL 723, CAN/ULC S102	25/50

FORMS AVAILABLE			
Density	Thickness	Width	Length
2.8 PCF (44.9 kg/m ³)	1" (25 mm)	24" (610 mm)	24" (1,219 mm)
	1½" (38 mm)		
	2" (51 mm)		
	2½" (64 mm)	and	to
	3" (76 mm)	48" (1,219 mm)	120" (3,048 mm)
	3½" (89 mm)		
	4" (102 mm)		

INDOOR AIR QUALITY

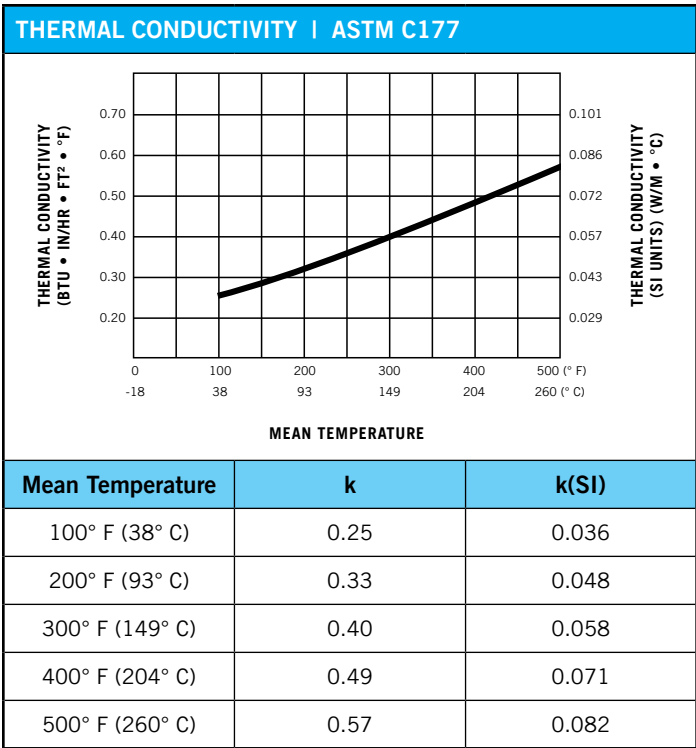
- UL Environment
 - GREENGUARD Certified
 - GREENGUARD Gold Certified
 - Validated to be Formaldehyde-Free
- Does not contain polybrominated diphenyl ethers (PBDE) such as: Penta-BDE, Octa-BDE or Deca-BDE
- EUCB Certified

PACKAGING

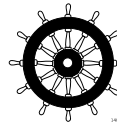
Vacuum packaging this product will reduce some mechanical properties of the insulation. By ordering vacuum packaged products, the customer acknowledges these reduced properties and assumes responsibility for the fitness for use in their application.

FIBERGLASS AND MOLD

Fiberglass 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.



CERTIFICATIONS



APPLICATION AND 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.
- Product 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 Knauf or NAIMA 3E Plus program.
- Finish surface with metal cover, or with insulating cement and canvas.

Check with your Knauf Insulation Territory Manager to ensure information is current.

The chemical and physical properties of this product represent 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.

This product is covered by one or more U.S. and/or other patents.
See patent www.knaufnorthamerica.com/patents

Visit knaufnorthamerica.com to learn more.

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