



DELTA[®]-4

MINERAL WOOL BOARD

Efficient - Versatile - Lightweight

DELTA[®]-4 Board is manufactured from felted mineral wool bonded together with a high temperature binder. It is a very efficient, semi-rigid type of insulation recommended for commercial and industrial applications from -20°F.(-29°C) to 850°F.*(454°C*). There is a wide range of applications for **DELTA[®]-4 Mineral Wool Board** including use on building envelopes {acoustical & wall}, bag houses and precipitators, ducts, storage tanks and equipment. It is easily cut with a knife, fit snugly over irregular surfaces and applied quickly because of its light weight. Generally, attachment is by means of weld pins and clips, or wire mesh, and then finished with either metal, plastic lagging, or reinforced mastic.

Physical Properties

All values in () are metric conversions.
 Density: Nom. 4 lb./c.f. (Nom. 64 kg./m³)
 Thermal Conductivity: °F.(°C) mean temp.= Btu in./h ft² °F (W/m K) [per ASTM C 177 with C 1045 calculations]
 75°F. (24°C) mean temp.= 0.24 (0.035)
 200°F. (93°C) mean temp.= 0.32 (0.047)
 300°F. (149°C) mean temp.= 0.42 (0.061)
 400°F. (204°C) mean temp.= 0.47 (0.069)
 500°F. (260°C) mean temp.= 0.67 (0.098)
 @75°F. (24°C) mean temp. -R = 4.17 per inch (25mm)

Service Temperature [ASTM C 411] -up to **850°F*** (**454°C***)

Corrosion [Steel, Aluminum, Copper, ASTM C 665] None
 Moisture Sorption [Vapor, ASTM C 1104]-Less than 1%
 Water *wicking* resistant* and Non-hygroscopic.*
 Does not promote growth of fungi or bacteria.

"**Incombustible**" [ASTM E 136 Test Method]
 Surface Burning Characteristics: [ASTM E 84 Test Method]
 Flame Spread Index = 0
 Smoke Developed Index = 0
 Properly installed protective vapor retarders must be used for below ambient applications to prevent movement of water vapor through or around the insulation towards the colder surface.

Forms Available

Thickness: 2 in.(51mm) thru 4 in.(102mm) in ½ in.(12.7mm) increments. Custom dimensions available.

Standard Width: 24 in. (61cm) Standard Length: 48 in. (122cm)

Packaged: *Shrink-pack* polyethylene, approx. 96 board feet/pkg.

Suggested Thickness: ≤ 140°F. Outer Surface Temp. 3EPLUS™ v2.12 computer model calculating for insulation thickness at various process temperatures on a vertical flat surface. Input data: Ambient air = 75° F, No wind, Emittance[oxidized aluminum] = 0.1

Temp.	Thickness	Temp.	Thickness
250°F	1.0 in.	650°F.	5.5 in.
350°F	1.5 in.	750°F.	7.5 in.
450°F	2.5 in.	850°F.	9.0 in.
550°F	4.0 in.		

Specifications

ASTM C 612-93, Type I, II, and III
 U.S. Federal Specification HH-I-558B and C
 Stainless Steel Stress Corrosion Specification:
Special provisions apply, contact manufacturer...
 ASTM C 795, per test methods C 871, & C 692
 MIL-I-24244 B and C [ships]
 Nuclear Regulatory Commission, Reg. Guide #1.36

* Consult manufacturer for limitations under elevated temperature conditions.