



DELTA[®]-9

MINERAL WOOL BOARD

Efficient - Versatile - Lightweight

DELTA[®]-9 Board is manufactured from felted mineral wool bonded together with a high temperature binder. It is a highly efficient, semi-rigid insulation recommended for commercial and industrial applications from -20°F. (-29°C) to 1200°F. (649°C)*. There is a wide range of applications for **DELTA[®]-9 Mineral Wool Board** including use on ovens, ducts, boilers, vessels, tanks and equipment. Because of its light weight, large sizes can be applied quickly and generally attached by means of weld pins and clips, strapping, or wire mesh, and then finished with either metal, plastic lagging, or reinforced mastic.

Physical Properties

All values in () are metric conversions.

Density: Nom. 9 lb./c.f. (Nom. 144 kg./c.m.)

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.= 0.28 (0.041)

300°F. (149°C) mean temp.= 0.33 (0.048)

400°F. (204°C) mean temp.= 0.38 (0.056)

500°F. (316°C) mean temp.= 0.45 (0.065)

600°F. (316°C) mean temp.= 0.53 (0.077)

@75°F. (24°C) mean temp.~**R = 4.17** per inch (25mm)

Service Temperature [ASTM C 411] -up to **1200°F***
(649°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 = 5

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: 1 in.(25mm) 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.	4.5 in.
350°F.	1.5 in.	750°F.	5.5 in.
450°F.	2.0 in.	950°F.	9.0 in.
550°F.	3.0 in.	1150°F.	13.5 in.

Specifications

ASTM C 612-93, Type I, II, III, and IV

U.S. Federal Specification HH-I-558B and C

Stainless Steel Stress Corrosion Specification:

*Special provisions apply concerning lot testing, contact
manufacture...*

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.