

FUSED SILICA
HOT PRESS PLATENS
CASTABLE CERAMICS
FIRED SHAPES
AEROSPACE TOOLING

Foundry Service & Supplies, Inc.

11808 E. Burke Street, Santa Fe Springs, CA 90670
Telephone: (562) 945-6511
Fax: (562) 696-1633

HI-TEMP INSULATIONS
CALCIUM SILICATE BOARDS
MIL BOARD AND BLANKET
PAPERS AND CEMENTS
CUTTING AND FABRICATING

Ultratemp M

Description

Ultratemp-M is an inorganic, incombustible material. Chemically, Ultratemp-M features a xonotlite crystal structure that results in exceptional strength and extremely low water of hydration. Ultratemp-M is composed primarily of lime, silica and reinforcing fibers. The product is white, essentially dust-free, and contains no asbestos.

Ultratemp-M is manufactured in 4' x 8' (1.22 m x 2.44 m) panels with a sanded finish on both sides. Thicknesses range from 1/2" (13 mm) through 3" (76 mm).

Applications

Since Ultratemp-M possesses good strength as well as exceptional insulation qualities, it can be readily machined into component parts of many sizes and shapes. Uses include fire-rated enclosures around kitchen exhaust hoods, fire proofing structural steel and fire-rated walls.

Physical Properties

Density (Average).....	28 pcf (449 kg/m ³)
Maximum Recommended Continuous Service Temperature.....	1800°F (982°C)
Flexural Strength.....	550 psi (3,792 kPa)
Compressive Strength @ 10% Deformation.....	900 psi (6,206 kPa)
Moisture Content, Normal Percentage of Dry Weight.....	4
Screw Holding Strength, #8 Screw @ 1/2" (22 mm) Penetration.....	70 lbs. (31.8 kg)

Standard Sizes

Thickness*	1/2", 3/4", 1", 1 1/2", 2", 2 1/2", 3" (13, 19, 25, 38, 51, 64, 76 mm)
Sheet Size.....	4' x 8' (1.22 m x 2.44 m)
Dimensional Tolerances	
Length and Width	± 1/8" (3 mm)
Thickness.....	± 1/32" (0.8 mm)

* Other thicknesses available upon request.

Specification Compliance

ASTM C 656, Type II, Grade 6	
ASTM C 795: Passes	
ASTM E 72: Passes	
ASTM E 84: Flame Spread: 0, Smoke Developed: 0	
ASTM E 136: Passes	
ASTM E 119: 1, 2, 3, 4 Hours	
ASTM E 814: Passes	
UL 263: 1, 2, 3, 4 Hours	
UL 1479: 3 Hours	
UL 1709: 1, 2, 3, 4 Hours	
Council of American Building Officials (ICBO, BOCA, SBCCI)	Report NER-332
UBC	2309, 2" (51 mm) Minimum Thickness
U.S. Coast Guard	164.009, 164.008
Underwriters' Laboratories, Inc. Design Numbers	U328, U446, U447, X307, XR301, YYET
UL Canada Design Numbers/ Grease Ducts	W420, W421, W422, Z200, Z202
Farmers Home Administration.....	Acceptance

Linear Shrinkage After 24 Hours At Temperature, %

Temperature °F (°C)	Length	Width	Thickness	Weight Loss
1700 (927)	0.9	0.9	2.3	9.7

Thermal Conductivity ("k")

Mean Temperature		"k"	
°F	°C	Btu • in/(hr • ft ² • °F)	W/m • °K
200	93	.61	0.088
400	204	.66	0.095
600	316	.73	0.105
800	427	.80	0.115