

FUSED SILICA
HOT PRESS PLATENS
CASTABLE CERAMICS
FIRED SHAPES
AEROSPACE TOOLING

Foundry Service & Supplies, Inc.

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

Ultratemp L

Description

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

Ultratemp-L is manufactured in 4' x 8' (1.22 m x 2.44 m) panels with a sanded finish on both sides. Thicknesses range from 3/4" (19 mm) through 3" (76 mm).

Applications

Since Ultratemp-L 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. It is used for bottom or sidewall insulation in aluminum electrolysis cells and for refractory backer in furnaces, boilers and kilns.

Physical Properties

Density (Average)..... 18 pcf (288 kg/m³)
Maximum Recommended Continuous
Service Temperature..... 1800°F (982°C)
Flexural Strength..... 260 psi (1,793 kPa)
Compressive Strength @ 10% Deformation 450 psi (3,103 kPa)
Moisture Content, Normal Percentage
of Dry Weight..... 4

Standard Sizes

Thickness* 3/4", 1", 1 1/2", 2", 2 1/2", 3" (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 5
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: 3 Hours
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
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)	1.0	1.0	2.1	9.6

Thermal Conductivity ("k")

Mean Temperature		"k"	
°F	°C	Btu-in/(hr-ft ² -°F)	W/m-°K
200	93	.54	0.078
400	204	.61	0.088
600	316	.67	0.097
800	427	.73	0.105