

Super Firetemp® M

HIGH TEMPERATURE INSULATION

DESCRIPTION

Super Firetemp M is an inorganic, noncombustible high temperature insulation for use in fireprotection systems. It can be used in systems operating up to 1800°F (982°C). Composed primarily of lime, silica and reinforcing fibers. This product is white, essentially dust-free, contains no asbestos, mercury or lead, and meets or exceeds ASTM C 656, Type II Grade 6.

ADVANTAGES

- Assured Fire Resistance
- Durable
- Economical

APPLICATIONS

Since Super Firetemp M possesses both exceptional strength and insulation qualities, it can be readily machined into component parts of many sizes and shapes. Uses include fire-rated enclosures around structural steel, fire-rated walls, pipe supports, high temperature oven and refractory backup.

SPECIFICATION COMPLIANCE

ASTM C 656	Type II Grade 6
ASTM C 795	Passes
ASTM E 72	Passes
ASTM E 84: Flame Spread/Smoke Developed	0/0
ASTM E 136	Noncombustible
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
NFPA 251	1, 2, 3, 4 Hours
Underwriters' Laboratories, Inc.	
Design Numbers	U328, U446, U447, X307, XR301
UL Canada Design Numbers	W420, W421, W422, Z200, Z202
UBC Minimum Thickness	
R-Value @ 75°F	1.7 per inch of thickness

PHYSICAL PROPERTIES

Density (Average)	28 pcf (449 kg/m³)
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

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 · ft² · °F)	W/m · °K
200	93	0.61	0.088
400	204	0.66	0.095
600	316	0.73	0.105
800	427	0.80	0.115

AVAILABLE FORMS

Thickness.. ½", ¾", 1", 1½", 2", 2½", 3" (13, 19, 25, 38, 51, 64, 76 mm)
Sheet Size 4' x 8' (1.22m x 2.44m)
Super Firetemp M is available with a sanded finish on one or both sides
The sanded surfaces are smooth and easy to machine.

DIMENSION TOLERANCES

Length and Width	+/- 1/8" (3.2 mm)
Thickness	+/- 1/8" (3.2 mm) Sanded One Side +/- 1/16" (1.6 mm) Sanded Two Sides

CODE COMPLIANCE

Super Firetemp undergoes stringent tests to comply with some of the toughest fire codes in the U.S. and Canada.



ISO 9001 REGISTRATION

Super Firetemp M is manufactured, under an ISO 9001:2000 registered quality system. This registration, along with regular independent third-party auditing for compliance, is your assurance that all our products deliver consistently high quality.

TYPICAL RATINGS FOR SUPER FIRETEMP® M

Use this table to estimate the thickness of Super Firetemp M. The table represents the most common applications. More specific information is available from IIG. For Structural Steel fire protection, use Super Firetemp L unless the product is going to be exposed to physical abuse such as warehouses, then use Super Firetemp M.

THICKNESS REQUIRED FOR STRUCTURAL STEEL (E119)

	1hr	2hr	3hr	4hr
TS 4 x 4 x 3/16	1"	2"	3"	4"
TS 8 x 8 x 1/4	1"	1½"	2½"	3½"
W 4 x 13	¾"	1½"	2½"	3½"
W 10 x 49	¾"	1½"	2"	2½"
W 14 x 228		½"	¾"	1"

THICKNESS OF SUPER FIRETEMP M FOR CABLE TRAYS AND RACEWAYS

	15 min	30 min	45 min
E119		1"	1½"
UL 1709	1"	1½"	

THICKNESS REQUIRED FOR STRUCTURAL STEEL (UL1709)

	1hr	2hr	3hr	4hr
TS 4 x 4 x 3/16	1½"	2½"	3½"	4½"
TS 8 x 8 x 1/4	1"	2"	3"	4"
W 4 x 13	1"	2"	3"	4"
W 10 x 49	¾"	1½"	2"	2½"
W 14 x 228		½"	¾"	1"

WALL RATINGS

1 hr	2 in.
1½ hr	2½ in.
2 hr	3 in.
2½ hr	4 in.
3 hr	4 in.
4 hr	5 in.
5 hr	5½ in.