

PRODUCT DATA SHEET

Super Firetemp M

Super Firetemp M is an inorganic, non-combustible, high-temperature insulation for use in fire protection 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 C656, Type II Grade 6.

THE 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.

AVAILABLE FORMS AND 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' (1.22m 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

LINEAR SHRINKAGE AFTER 24 HOURS AT TEMPERATURE, %

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

THERMAL CONDUCTIVITY

Mean Temperature		"k"	
°F	°C	Btu • in/(hr • ft ² • °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

ADDITIONAL INFORMATION AND SDS

Please visit our website at www.jm.com/industrial

CUSTOMER SERVICE, TECHNICAL & GENERAL INFORMATION (800) 866-3234



SUPER FIRETEMP M®
OPERATING TEMPERATURE LIMIT: 1800°F (982°C)

SPECIFICATION COMPLIANCE

ASTM C656	Type II, Grade 6
ASTM C795 Corrosion: Austenitic Stainless Steel	Passes
ASTM E72	Passes
ASTM E84 Surface Burning Characteristics	Flame Spread -0 Smoke Developed -0
ASTM E119 Building Fire Test	1,2,3,4 Hours
ASTM E136 Non-Combustible	Passes
ASTM E814	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
Underwriters Laboratories Canada Design Numbers	W420, W421, W422, Z200, Z202
UBC Minimum Thickness	
R-Value @ 75°F	1.7 per inch of thickness
Density (Avg.)	28 pcf (449 kg/m ³)
Maximum Recommended Continuous Service Temp.	1800°F (982°C)
Flexural Strength (Avg.)	550 psi (3792 kPa)
Compressive Strength @10% deformation (Avg.)	900 psi (6206 kPa)
Moisture Content, Normal % of Dry Weight (Avg.)	4%

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 Industrial Insulation Group. 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.

CODE COMPLIANCE

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



ISO 9000 CERTIFICATION

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.

PRODUCT CERTIFICATION

When ordering material to comply with any government specification or any other listed specification, a statement of that fact must appear on the purchase order. Government regulations and other listed specifications require specific lot testing, and prohibit the certification of compliance after shipment has been made. There may be additional charges associated with specification compliance testing. Please refer to IND-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

THICKNESS REQUIRED FOR STRUCTURAL STEEL (ASTM 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 REQUIRED FOR STRUCTURAL STEEL (UL 1709)

	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

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

THICKNESS OF SF M FOR CABLE TRAYS AND RACEWAYS

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

Industrial Insulation Group, LLC manufactures MinWool-1200® mineral fiber pipe, block and a variety of other insulations; Thermo-12® Gold Calcium Silicate pipe and block insulation; Microporous Blanket Insulation; Super Firetemp® fireproofing board; SprouleWR-1200® Perlite pipe and block insulation; high-temperature adhesives, and insulating finishing cement. The physical and chemical properties presented herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Customer Service Office to assure current information. All Industrial Insulation Group products are sold subject to the Johns Manville Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, email info.industrial@jm.com.

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TECHNICAL & GENERAL INFORMATION
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