

**SUPER FIRETEMP® L**

Super Firetemp L 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 C 656, Type II Grade 5.

**ADVANTAGES**

- Assured Fire Resistance
- Durable
- Economical

**APPLICATIONS**

Super Firetemp L has high 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 structural steel, tanks, equipment, fire-rated walls, high temperature ovens and refractory backup.

**AVAILABLE FORMS AND SIZES**

Thickness . . . . . ¾", 1", 1½", 2", 2½", 3" (19, 25, 38, 51, 64, 76 mm)  
 Sheet Size . . . . . 4' x 4' (1.22m x 1.22m)  
 . . . . . 4' x 8' (1.22m x 2.44m)

Super Firetemp L is available with a sanded finish on one or both sides. The sanded surfaces are smooth and easy to machine.

**Dimension Tolerances**

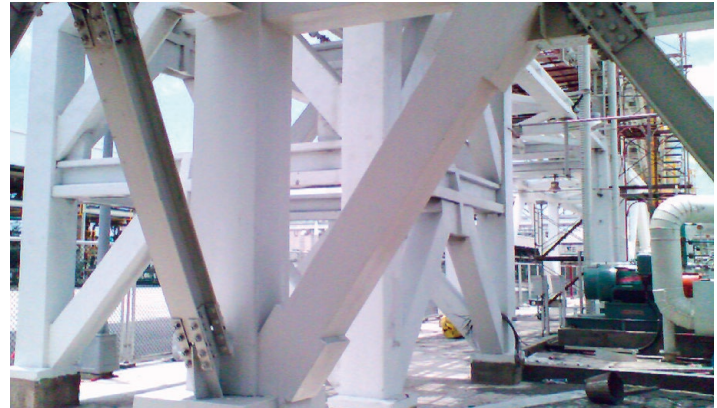
Length and Width . . . . . +/- 1/8" (3.2 mm)  
 Thickness . . . . . +/- 1/8" (3.2 mm) Sanded One Side  
 . . . . . +/- 1/16" (1.6 mm) Sanded Two Sides

**LINEAR SHRINKAGE AFTER 24 HRS. AT TEMPERATURE**

Temperature		Shrinkage			
°F	°C	Length	Width	Thickness	Weight Loss
1700	927	1%	1%	2.1%	10%

**THERMAL CONDUCTIVITY**

Mean Temperature	°F	200	400	600	800
	°C	93	204	316	427
Btu • in/(hr • ft² • °F)		0.54	0.61	0.67	0.73
W/m • °C		0.078	0.088	0.097	0.105



Operating Temperature Limit: 1800°F (982°C)

**SPECIFICATION COMPLIANCE**

ASTM C656	Type II, Grade 5
ASTM C795 Corrosion: Austenitic Stainless Steel	Passes
ASTM E72 Panel Strength	Passes
ASTM E84 Surface Burning Characteristics	Flame Spread - 0 Smoke Developed - 0
ASTM E119 Building Fire Test	1-2 Hours
ASTM E119 Structural Fire Test	1-4 Hours (see chart)
ASTM E136 Non-Combustible	Passes
ASTM E814 Penetration Fire Stop	1-2 hours
UL 263 Fire Testing	1-2 Hours
UL 1479 Penetration Fire Stop	1-2 Hours
NFPA 251 Fire Testing	1-2 Hours
Underwriters Laboratories, Inc. Design Numbers	U447, X307, XR301
Underwriters Laboratories Canada Design Numbers	Z200, Z202
R-Value @ 75°F	2.0 per inch
Density (Avg.)	20 pcf (288 kg/m³)
Maximum Recommended Continuous Service Temp.	1800°F (982°C)
Flexural Strength (Avg.)	260 psi (1793 kPa)
Compressive Strength @10% deformation (Avg.)	450 psi (3103 kPa)
UL 1709	2 hours

**TYPICAL RATINGS FOR SUPER FIRETEMP L**

Use this table to estimate the thickness of Super Firetemp L. 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 undergoes stringent tests to comply with some of the toughest fire codes in the US and Canada.

**ISO 9001 CERTIFICATION**

Super Firetemp L is manufactured and tested in our own facility under an implemented Quality Management System which is certified to be in accordance with ISO 9001 quality standards.

**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.

**UL X307 - ASTM E119 STRUCTURAL FIRE TEST**

Rating Hour	Minimum Column Size	Minimum Thickness (in)
1½ hr	TS4x4x0.188	1½"
2 hr	TS8x8x0.25	1½"
2 hr	W4x13	1½"
3 hr	W4x13	2½"
3 hr	W10x49	2"
3 hr	W14x228	¾"
4 hr	W14x228	1"

**QUALITY STATEMENT**

Industrial Insulation Group products are designed, manufactured and tested to strict quality standards in our own facilities. This along with third party auditing is your assurance that this product delivers consistent high quality.

**ADDITIONAL INFORMATION AND SDS**

Please visit our website at [www.jm.com/industrial](http://www.jm.com/industrial)  
Customer Service, Technical & General Information: (800) 866-3234



717 17th St.  
Denver, CO 80202  
(800) 866-3234  
JM.com

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the Super Firetemp® L listed 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. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

**All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit [www.jm.com/terms-conditions](http://www.jm.com/terms-conditions) or call (800) 654-3103.**