

Super Firetemp®

PASSIVE FIRE PROTECTION AND HIGH TEMPERATURE INSULATION

SPECIFICATION COMPLIANCE SUPER FIRETEMP L & M	
ASTM E 84	0 Smoke, 0 Flame
ASTM E 119	1, 2, 3 and 4 Hour Ratings
ASTM E 136	Passes
ASTM E 814	1, 2 and 3 Hour Ratings
ASTM C 656	Type II, Grade 5 and 6
ASTM C 795/C871/C692	Passes
Underwriters Laboratories 263 Underwriters Laboratories 1479 Underwriters Laboratories 1709	1, 2, 3 and 4 Hour Ratings 1, 2 and 3 Hour Ratings 1, 2, 3 and 4 Hour Ratings
UBC 2309	2 in. [51 mm] min. thickness of Super Firetemp M
Mine Safety and Health Administration	Approved
National Fire Protection Association 96	Super Firetemp L meets the requirements when installed according to manufacturers installation instructions.
National Electrical Code	Protection for Electrical Circuits.
International Standards Organization	
UL Design Numbers U328, U446, U447, X307, XR301	Wall system structural steel
ULC Design Numbers W420, W421, W422, Z200, Z202 FRD-11	Wall system structural steel Grease Ducts
Omega Point Laboratories	GD 515R
Design Numbers	(Super Firetemp L Only)

CODE COMPLIANCE

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



Industrial Insulation Group, LLC is a Calssilite/Johns Manville joint venture. IIG manufactures MinWool-1200® mineral fiber pipe, block and a variety of other insulations; Thermo-12® Gold Calcium Silicate pipe and block 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 IIG Limited Warranty and Limitation of Remedy. For a copy of the IIG Limited Warranty and Limitation of Remedy, email - info@iig-llc.com.

IIG
Industrial Insulation Group, LLC
A Calssilite/Johns Manville Joint Venture
2100 LINE STREET • BRUNSWICK, GA 31520

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

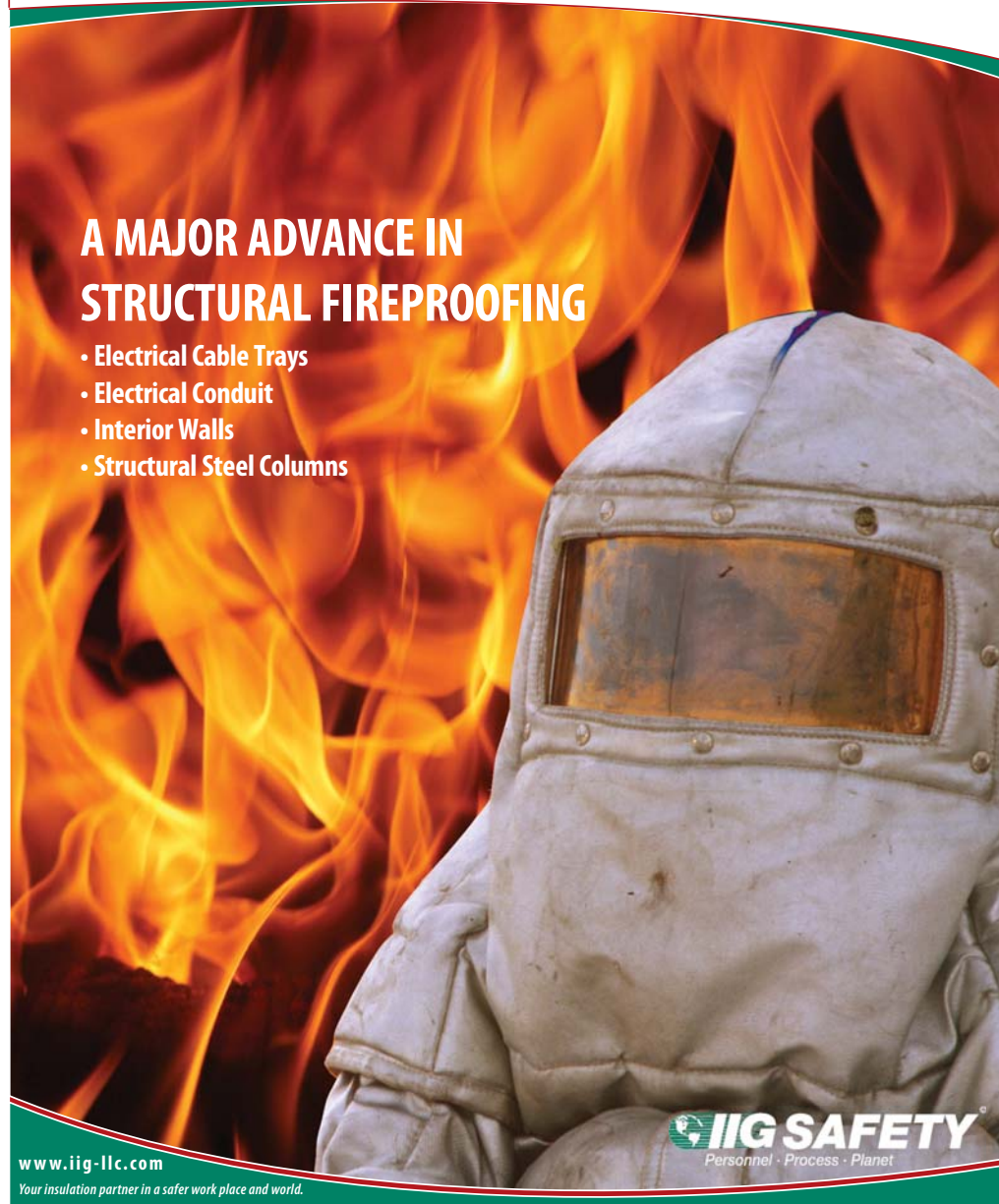


Industrial Insulation Group, LLC
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FIRE PROTECTION SYSTEMS

A MAJOR ADVANCE IN STRUCTURAL FIREPROOFING

- Electrical Cable Trays
- Electrical Conduit
- Interior Walls
- Structural Steel Columns



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Your insulation partner in a safer work place and world.

IIG SAFETY
Personnel • Process • Planet

Fireproofing Systems

SUPER FIRETEMP® WITHSTANDS 2000°F

Description

Super Firetemp is a noncombustible, Asbestos Free fireproofing board used in assemblies requiring one to four hour fire ratings, and is capable of withstanding temperatures in excess of 2000°F (1093°C).

Applications

Recommended for use on columns, beams, vessels, skirts, saddles, tanks, walls, air and exhaust ducts, cable trays, conduit, chimneys, refractory backups, and other applications that require fire ratings or high-temperature insulations.

Features

- Uniformly thick with fire rating consistent over every square inch of covered surface.
- Contains no asbestos.
- Zero clearance to combustibles

Composition

Composed of hydrous calcium silicate, the product features a high temperature crystal structure with low water of hydration, resulting in exceptional strength and stability under fire conditions in excess of 2000°F (1093°C). White in color, Super Firetemp is available in 4' x 8' (1.22 m x 2.44 m) panels of various densities and finish-sanded up to 3" (76 mm) thick.

Advantages

Assured Fire Resistance. Specified fire ratings are achieved by testing in accordance to ASTM, UL, and ULC test standards. Fire-rated assemblies are UL and OPL listed. The desired fire rating determines product thickness.

Durable. Super Firetemp is hard, solid, and an abrasive-resistant material with excellent physical properties. The material will neither chip nor flake.

Clean. Super Firetemp is nailed or screwed in place, not blown on. No protective curtains are required.

Easy to Install. Super Firetemp is easily handled and requires no special tools. The product cuts with a circular saw or a saber saw and is field installed using a power screwdriver and drywall screws or hammer and nails with an automatic nailer.

Attractive. The product's sanded surface readily accepts paints, wall coverings and veneers.

All-Weather. Contact IIG for proper weather protection for outdoor use.

Economical. Super Firetemp simplifies on-site labor and can greatly reduce overall job costs. Product preparation and application are easy; no special tools are required, and clean up is minimal.

Accessories

Super Calstik® is a high-temperature adhesive designed to bond porous insulating materials. Super Calstik is used to finish all Super Firetemp joints and seams.

PHYSICAL PROPERTIES		
PROPERTY	SUPER FIRETEMP L	SUPER FIRETEMP M
Board Size, ± 1/8" (± 3 mm)	4' x 8' (1.22 m x 2.44 m)	4' x 8' (1.22 m x 2.44 m)
Thickness, in. (mm)	3/4, 1, 1 1/2, 2, 2 1/2, 3** (19, 25, 38, 51, 64, 76)	1/2, 3/4, 1, 1 1/2, 2, 2 1/2, 3** (13, 19, 25, 38, 51, 64, 76)
Density, pcf (kg/m3)	18 (288)	28 (449)
Compressive Strength @10% Deformation, psi (kPa)	450 (3,103)	900 (6,206)
Flexural Strength, psi (kPa)	260 (1,793)	550 (3,792)
Screw-Holding Strength, lb. (kg)	36 (16)	70 (32)
Dielectric Strength, volts/in. (volts/mm)		30,000-60,000 (1,181-2,362)
Linear Shrinkage, % 24-Hour Heat Soak @ Maximum Temperature	<2	<2
Maximum Continuous Service Temperature, °F(°C)	1,800 (982)	1,800 (982)
R-Value per in. (mm), @ 75°F(24°C) Mean Temperature	1.8 (0.32)	1.7 (0.30)

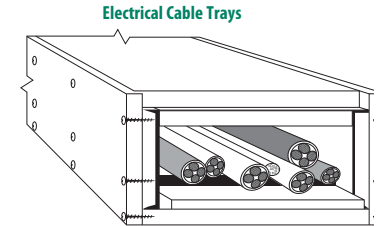
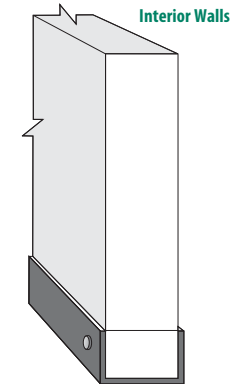
Mean Temperature		Thermal Conductivity			
		Btu-in/(hr-ft²-°F)	(W/m²-K)	Btu-in/(hr-ft²-°F)	(W/m²-K)
°F	°C				
200	93	.54	0.078	.61	0.088
400	204	.61	0.088	.66	0.095
600	316	.67	0.097	.73	0.195
800	427	.73	0.105	.80	0.115

* Typical average values derived in accordance with accepted test methods subject to normal manufacturing and experimental tolerances.

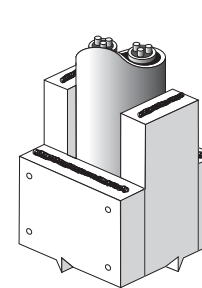
** Other thicknesses available on request.

Fireproofing Applications

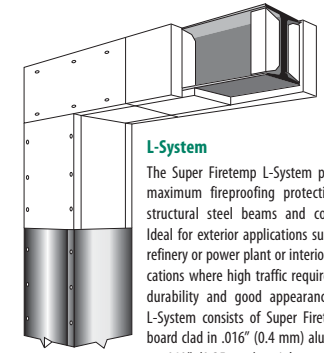
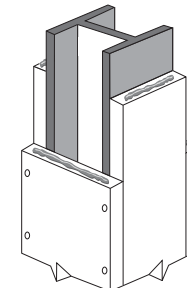
Super Firetemp® allows zero clearance to combustibles. Depicted are some of its more common applications. Contact IIG for complete application data for your specific requirements.



Electrical Conduit



Structural Steel Columns



The Super Firetemp L-System provides maximum fireproofing protection for structural steel beams and columns. Ideal for exterior applications such as a refinery or power plant or interior applications where high traffic requires high durability and good appearance. The L-System consists of Super Firetemp L board clad in .016" (0.4 mm) aluminum or .010" (0.25 mm) stainless steel roll jacketing.