



Industrial Insulation Group, LLC

A Calsilite/Johns Manville Joint Venture

Fire Protection Systems

Super Firetemp® X High Temperature Insulation

Description

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

Applications

Super Firetemp X has high strength as well as exceptional insulation qualities. It can be readily machined into component parts of many sizes and shapes. Uses include oven and furnace walls and structural supports.



Available Forms

Thickness 1/2", 3/4", 1", 1 1/2", 2" (13, 19, 25, 38, 51 mm)
Sheet Size 4' x 4' (1.22 m x 1.22 m)
4' x 8' (1.22 m x 2.44 m)

Super Firetemp X 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 mm)
Thickness +/- 1/16" (4 mm)

Additional Information and MSDS

Available at www.iig-llc.com

Physical Properties

Density (Average) 40 pcf (641 kg/m³)
Maximum Recommended Continuous Service Temperature 1700°F (927°C)
Flexural Strength 1000 psi (6,895 kPa)
Compressive Strength @ 10% Deformation . 2000 psi (13,790 kPa)
Screw Holding Strength (lb/screw), #8 Screw
1/2" (13 mm) Penetration 80 lbs. (36.3 kg)
1/4" (22 mm) Penetration 200 lbs. (90.7 kg)
Surface Hardness (Units) (Per Type "D" Durameter)
Top Surface 80
Bottom Surface 80
Moisture Content, Normal Percentage of Dry Weight 4%

Linear Shrinkage After 24 Hours at Temperature

Temperature 1700°F (927°C)
Length 0.7%
Width 0.8%
Thickness 3.3%
Weight Loss 9.9%

Specification Compliance

ASTM C 656 Type II, Grade 7
ASTM C 795 Passes
ASTM E 72 Passes
ASTM E 119 1, 2, 3, 4 Hours
ASTM E 84
Flame Spread/Smoke Developed 0/0
ASTM E 136 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

Consolidation Under Load (in/in)

Pressure		Deflection Under Load	Permanent Consolidation
psi	kPa		
200	1,379	0.008	0.002
500	3,448	0.014	0.002
1000	6,895	0.022	0.003
2000	13,790	0.059	0.005
3000	20,685	0.120	0.057
4000	27,580	0.243	0.164
5000	34,475	0.325	0.248
6000	41,370	0.364	0.287
7000	48,265	0.412	0.337

Thermal Conductivity ("k")

Mean Temperature		"k"	
°F	°C	Btu • in/(hr • ft² • °F)	W/m • °K
200	93	0.65	0.094
400	204	0.70	0.101
600	316	0.75	0.108
800	427	0.80	0.115

Super Firetemp® X

High Temperature Insulation

Code Compliance

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



ISO 9001 Registration

Super Firetemp X 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.

For technical information and assistance regarding application information, code approvals, and performance specifications, call **1-800-872-0338**.

Super Firetemp	For Customer Service and Order Placement (800) 525-0017 Fax: (970) 858-6248	For Sales Information (800) 866-3234 Fax: (866) 325-8180	For Technical Information (800) 872-0338 Fax: (866) 384-9338
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The physical and chemical properties of the Super Firetemp® X 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. 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 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.**

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