

## SUPER CALTEMP GOLD 1700

Super Caltemp Gold 1700 block is an inorganic, non-combustible, high-temperature insulation tailored for systems operating up to 1700°F(927°C), and is composed primarily of hydrous calcium silicate. Super Caltemp Gold 1700 meets or exceeds the physical and thermal property requirements of ASTM C533, Type II.

### ADVANTAGES

- Excellent Resistance to damage, enhancing the life of the system.
- Consistent Thermal Performance to 1700°F.
- Non-combustible.
- Structural Strength protects against damage to lagging.
- No Organic Binders; no loss of insulation integrity.
- With qualifying design details, Super Caltemp Gold 1700 calcium silicate meets the requirements for the UL 1709 (Section 9) standard.

### APPLICATIONS

Applications include, high-temperature insulation for curved vessels and large diameter pipes, boiler walls, high temperature ducts, flues, industrial breeching and as refractory backer in furnaces, boilers and kilns. Super Caltemp Gold 1700 may be double layered in the field for greater thicknesses.

### APPLICATION FORMS AND SIZES

Super Caltemp Gold 1700 is manufactured in 12" x 36" (305 mm x 914 mm) sheets, flat or 3-V scored. Thicknesses range from 1" (25 mm) through 3" (76 mm).

#### Dimension Tolerances

Thickness	1", 1½", 2", 2½", 3" (25, 38, 51, 64, 76 mm)
Sheet Size	12" x 36" (305 mm x 914 mm)
Dimension Tolerances: Length and Width Thicknesses	+/- 1/8" (3.2 mm) +/- 1/16" (1.6 mm)

### LINEAR SHRINKAGE AFTER 24 HRS. AT TEMPERATURE

Temperature		Shrinkage			
°F	°C	Length	Width	Thickness	Weight Loss
1700	927	1.0%	1.0%	2.1%	9.6%

### THERMAL CONDUCTIVITY

Mean Temperature	°F	200	400	600	800	1000
	°C	93	204	316	427	538
Btu • in/(hr • ft² • °F)		0.54	0.61	0.67	0.73	0.77
W/m • °C		0.078	0.088	0.097	0.105	0.111



**Operating Temperature Limit:** 1700°F (927°C)

### SPECIFICATION COMPLIANCE

ASTM C165 Compressive Strength@5% Deformation	>100 psi (>690 kPa)
ASTM C203 Flexural Strength	> 50 psi (>345 kPa)
ASTM C447 Maximum Recommended Continuous Service Temperature	1700°F (927°C)
ASTM C533 Type II Density (Average)	18 pcf (288 kg/m³)
ASTM C533 Material Specification	Type II
ASTM C795/C871/C692 Corrosion: Austenitic Stainless Steel	Passes
ASTM E84 Flame Spread/Smoke Developed	0/0
ASTM E136 Non-Combustible	Passes
MIL-I-2819	Class 3
UL 1709 (Section 9) Rapid Rise Fire Test 2	2 Hours. Call for qualifying design details.

## ISO 9001 CERTIFICATION

Super Caltemp Gold 1700 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.

## 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.

## FIRE SAFETY

**Surface Burning Characteristics.** When tested in accordance with ASTM E84, Super Caltemp® Gold 1700 has flame spread/smoke developed ratings of 0/0.

**Non-Combustible.** When tested in accordance with ASTM E136 as defined by NFPA 101.

**Rapid Rise Fire Test.** Super Caltemp® Gold 1700 calcium silicate insulation meets the 2-hour testing requirements for the Rapid Rise Fire Test UL 1709 (Section 9). Call for qualifying design details.

## 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  
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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 Caltemp® Gold 1700 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.**