



## Super Caltemp® Gold 1700 BLOCK INSULATION

### DESCRIPTION

Super Caltemp Gold 1700 block is an inorganic, noncombustible high temperature insulation tailored for systems operating up to 1700°F(927°C), and is composed primarily of hydrous calcium silicate. The gold color provides positive identification that it is Asbestos Free. 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.
- **Noncombustible.**
- **Structural Strength** protects against damage to lagging.
- **No Organic Binders;** no loss of insulation integrity.

### 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.

Super Caltemp Gold 1700 can be readily machined into component parts of many shapes and sizes.

### AVAILABLE FORMS & 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).

STANDARD SIZES	
Thickness	1", 1½", 2", 2½", 3" (25, 38, 51, 64, 76 mm)
Sheet Size	12" x 36" (305 mm x 914 mm)
Dimensional Tolerances:	
Length and Width	± 1/8" (3 mm)
Thickness	± 1/16" (0.8 mm)

### LINEAR SHRINKAGE AFTER 24 HOURS AT TEMPERATURE

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



## Super Caltemp® Gold 1700

Operating Temperature Limit: 1700°F

### SPECIFICATION COMPLIANCES

ASTM C165 Compressive Strength @ 10% Deformation	450 psi (3,103 kPa)
ASTM C203 Flexural Strength	260 psi (1,793 kPa)
ASTM C447 Maximum Recommended Continuous Service Temperature	1700°F (927°C)
ASTM C533 Type II Density (Average)	18 pcf (288 kg/m <sup>3</sup> )
ASTM C533 Material Specification	Type II
ASTM C795/C871/C692 Corrosion	Passes
ASTM E84 FlameSpread/Smoke Developed	0/0
ASTM E136 Noncombustible	Passes
Moisture Content, Normal Percentage of Dry Weight	4
MIL-I-2819	Class 3

### THERMAL CONDUCTIVITY ("k")

Mean Temperature		"k"	
°F	°C	Btu · in/(hr · ft <sup>2</sup> · °F)	W/m · °K
200	93	0.54	0.078
400	204	0.61	0.088
600	315	0.67	0.097
800	427	0.73	0.105

### 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 IIG-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

### ISO 9000 CERTIFICATION

Thermo-12 Gold is designed, manufactured, and tested in our own facilities, which are certified and registered to stringent ISO 9000 (ANSI/ASQ 90) series quality standards. This certification, along with regular independent third-party auditing for compliance, is your assurance that this product delivers consistent high quality.

Industrial Insulation Group, LLC is a Johns Manville company. 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.