REFRASIL® BLANKET 1800 (RB1800)

High Temperature Blanket Insulation

DESCRIPTION – REFRASIL®

BLANKET 1800 is a lightweight, high temperature insulation composed of 100% amorphous silica fiber that has the following unique physical properties:

- **Zero shot content**
- **Binder free**
- **Outstanding chemical resistance – especially acids and acidic vapors**
- **Contains no asbestos or refractory ceramic fiber (RCF)**
- **Excellent sound absorption**
- **Highly resilient**
- **Not soluble in water or oil**
- **Non-respirable • Outstanding resistance to vibrational degradation**
- **Increased strength with Temperature**

STANDARD SIZES

Thickness	Roll Width
1/8" (3mm)	36" (92cm)
1/4" (6mm)	36" (92cm)
1/2" (12mm)	36" (92cm) 1" (25mm) 36" (92cm)

* Special sizes available upon request

DENSITY

9.0 - 10.5 lbs./ft.^{3} (144 - 168 kg/m^3)

FIBER PROPERTIES

Fiber diameter: 6-13 microns
Fiber length: 2" - 4" avg. (50-102 mm)

MAXIMUM CONTINUOUS USE TEMPERATURE

For continuous use: 1800° F (980° C) Melting point: 2900° F (1593° C)

TENSILE STRENGTH (ASTM C686)

250 Grams / gram (1 inch material)

CHEMICAL ANALYSIS

Silica (SiO_2) - 93.5% minimum
Alumina ($A1_2O_3$) - 4.0%
Sodium (Na_2O) - 0.8%
Calcium Oxide (CaO) - 0.8%
Others - 1.0%

PERMANENT LINEAR CHANGE (ASTM C356)

% shrinkage 24 hrs. at 1000° F (540° C) - 3.00%
24 hrs. at 1200° F (650° C) - 4.00% 24 hrs. at 1400° F (760° C) - 6.50%
24 hrs. at 1600° F (870° C) - 6.50%
24 hrs. at 1800° F (980° C) - 6.50% 24 hrs. at 2000° F (1090° C) - 8.00%

THERMAL CONDUCTIVITY (ASTM C177)

Mean Temperature	Btu-in/hr.ft$_2$ °F
400° F (200° C)	0.36
750° F (400° C)	0.59
1100° F (600° C)	0.93
1500° F (820° C)	1.39
1800° F (980° C)	1.93

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. Therefore, the above listed data should not be taken as established maximum or minimum specifications. For technical support or specific application information, contact the HITCO Carbon Composites Materials & Fabrication Department at (800) 421-5444, or visit our website at www.hitco.com

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