

# INSWOOL® -HTZ BLANKET



## Product Data

8/05

### Description: 2600°F Alumina-Silica-Zirconia Ceramic Fiber Blanket

INSWOOL-HTZ BLANKET is a 2600°F rated alumina-silica-zirconia ceramic fiber blanket. It displays very low thermal conductivity, excellent thermal shock resistance, low heat storage, and good sound absorption. Typical applications are glass furnace crown insulation, expansion joint seals, furnace doors, and shields.

### Chemical Analysis: Approximate (Calcined Basis)

Silica (SiO <sub>2</sub> )	48.4%
Zirconia (ZrO <sub>2</sub> )	16.0%
Alumina (Al <sub>2</sub> O <sub>3</sub> )	35.0%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.1%
Lime (CaO)	0.1%
Magnesia (MgO)	0.1%
Titania (TiO <sub>2</sub> )	0.1%
Alkalies (Na <sub>2</sub> O + K <sub>2</sub> O)	0.2%

### Physical Data (Typical)

Maximum Service Temperature		
For Intermittent Use		2600°F (1427°C)
For Continuous Use		2450°F (1343°C)
Color		White
Fiber Length (Average)		3 in. (7.6 cm)
Fiber Diameter		3 microns
Tensile Strength - 8 lb/ft <sup>3</sup> , 1 in.		lb/in <sup>2</sup> (MPa)
Machine Direction		13 (.09)
Cross Direction		10 (.07)
Percent Shrinkage		
Heated for 24 hours at 2200°F (1204°C)		2.2%
Heated for 24 hours at 2400°F (1315°C)		2.8%
Thermal Conductivity	<b>6 lb/ft<sup>3</sup> (.10 g/cm<sup>3</sup>)</b>	<b>8 lb/ft<sup>3</sup> (.13 g/cm<sup>3</sup>)</b>
	Btu·in/hr·ft <sup>2</sup> ·°F (W/m·°C)	Btu·in/hr·ft <sup>2</sup> ·°F (W/m·°C)
At 600°F (316°C)	0.50 (.07)	0.40 (.06)
At 1000°F (538°C)	0.95 (.14)	0.80 (.11)
At 1400°F (760°C)	1.55 (.22)	1.20 (.17)
At 1600°F (871°C)	1.85 (.26)	1.40 (.20)
At 1800°F (982°C)	2.40 (.33)	1.74 (.25)

Note: The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.