

# MaxWool HPS & HTZ Refractory Ceramic Blanket



## Product Description

**MaxWool** high temperature insulation, made from long strand spun, high purity ceramic fibers to form a strong, flexible blankets providing superior insulation properties for temperatures up to 2600 F (1425 C). MaxWool is manufactured in two different temperature rated products to match the application requirement and economics. **MaxWool HPS** is rated to 2400 F (1300 C) and **MaxWool HTZ** contains Zirconia Oxide, allowing use up to 2600 F (1425 C). Both grades are available in a range of thicknesses and densities.

## Typical Applications:

- **Petrochemical:** Reformers, Heaters & Furnace lining, Gaskets & Seals, Exhaust Ducts Insulation.
- **Power Generation:** Boilers, Turbine Covers, Expansion Joints, Removable covers, Cable trays.
- **Iron & Steel:** Process Furnace linings, Slow Cool Cars, Soaking Pits, Ladle Covers.
- **Ceramic & Glass:** Kiln Linings, Car Insulation, Glass Furnace Crowns.
- **Others:** Structure Steels Fire Protection, Rail Car Fire Protection, Vehicle Exhaust Insulation & Heat Shield, Fire Barriers.

## Key Performance Features:

- Low Thermal Conductivity
- Low Thermal Shrinkage
- Strong, High Tensile Strength
- Total Inorganic
- Low heat Storage
- Resistant to Chemical Attack
- Flexible, light weight
- Contains No Asbestos
- Thermal Shock Resistant
- Excellent Sound Absorption
- Easy to fabricate and Install
- High Heat Reflective



**Physical Properties:**

	<b>Maxwool HPS</b>	<b>Maxwool HTZ</b>
Color	White	White
Max Service Temp:	2400F (1300C)	2600F (1425C)
Operating Temperature	2300 F (1200C)	2450F (1400C)
Shrinkage @ 2200 F/ 24 Hrs	0-3%	
Shrinkage @2400 F/24 Hrs		2%
Specific Heat (Btu/lbs/F)	0.27	0.27
Avg Fiber Diameter	3-4 Microns	3-4 Microns

**Chemical Composition: (%)**

Al <sub>2</sub> O <sub>3</sub>	44-50	33-37
SiO <sub>2</sub>	50-56	47-51
ZrO <sub>2</sub>		13-19
Trace Elements	Less Than 1%	Less Than 1%
LOI	0	0

**Thermal Conductivity**

	<b>Maxwool 4#</b>	<b>Maxwool 6#</b>	<b>Maxwool 8#</b>	<b>Maxwool 10#</b>
<b>Nominal Density, lb/ft<sup>3</sup> (Kg/m<sup>3</sup>)</b>	4 (64)	6 (96)	8 (128)	10 (160)
<b>Mean Temperature</b>	<b>Thermal Conductivity, BTU·in/hr·ft<sup>2</sup>·°F (W/m<sup>2</sup>·K)</b>			
392°F (200°C)	0.42 (0.06)	0.42 (0.06)	0.38 (0.06)	0.37 (0.05)
752°F (400°C)	0.83 (0.12)	0.76 (0.11)	0.69 (0.1)	0.65 (0.09)
1112°F (600°C)	1.53 (0.22)	1.32 (0.19)	1.11 (0.16)	0.97 (0.14)
1472°F (800°C)	2.5 (0.36)	2.08 (0.30)	1.74 (0.25)	1.53 (0.22)
1832°F (1000°C)	3.75 (0.54)	3.05 (0.44)	2.43 (0.35)	2.08 (0.30)

**Product Availability**

	<b>Maxwool HPS</b>	<b>Maxwool HTZ</b>
Density (PCF)	4,6,8,10	4,6,8,10
Thickness	½", 1", 1 ½", 2"	½", 1", 1 ½", 2"

**Roll Length (Std per thickness)**

½" 50 LF
1" 25 LF
1 ½" 12.5 LF
2" 12.5 LF

**Standard Widths;** 24" and 48" , custom widths available upon request.

