

Insulmat[™] 1200 – High Temperature Insulation

Our *Insulmat*TM 1200 is a high temperature needled E-glass mat that serves as an extremely cost effective insulation and sound absorbing medium suitable for elevated temperatures up to 1200°F. It's produced from a controlled selection of long textile glass fibers that are mechanically bonded with no organic or synthetic binders to create a remarkably uniform, light weight, and strong blanket up to 1" thick. *Insulmat*TM 1200 is extensively used in a wide variety of applications including petrochemical refineries, removable pads, ship turbines, die-cut applications, industrial furnaces and ovens, etc.

Worbo Technology

- Insulmat™ 1200 offers very good fire resistance with low heat storage and is an effective insulator even when exposed to extremely hot temperatures.
- Offers very good chemical resilience and is unaffected by most chemicals.
- The absence of organic or synthetic binders makes this product smoke free on heat up and allows the product to remain mechanically stable even after exposure to extreme temperatures.
- For some applications, it is possible to use *Insulmat*[™] 1200 above its classifications temperature (may experience a 2% weight loss at 1200°F (648°C)).
- The combination of long spun fibers and the needling operation produce tough resilient and strong blankets which resist tearing both before and after heating.
- Excellent vibration resistance, will not powder.
- Very adaptable for many application and has good conformability to irregular surfaces.
- Exhibits superior acoustic and sound absorption properties as well as thermal insulation characteristics.

Dimensional Data

Available in standard 60'' wide rolls with thicknesses varying between 1/8'' and 1'' thick. Roll lengths vary depending on thickness. Other widths are available upon request.

Manufacturing Spec

Military Spec MIL-1-16411 Type II, ASTM-C-1086-96, Coast Guard Spec for Incombustible Materials #164.009 and MIL-I-24244

Flame Resistance

Flame Spread 0, Smoke Development 0 (per ASTM E-84)

Temperature

Temperature classification up to 1200°F (648°C) continuous depending on the application

Density

 144 kg/m^3 (9 lbs/ft³) up to 176 kg/m³ (11 lbs/ft³)

Thermal Conductivity ASTMC177

	Thermal Conductivity "K" for 1"	
Temperature °C (°F)	W/m [·] K	BTU [·] in/hr [·] ft ^{2.o} F
24 (75)	0.042	0.29
149 (300)	0.058	0.40
260 (500)	0.072	0.50
370 (700)	0.094	0.65

