



Firwin 1200 Insulation Mat

Firwin 1200 Insulation is a mechanically bonded glass fiber insulating blanket that provides reliable, superior performance at temperatures up to 1,200°F. Manufacturing controls include use of carefully selected long glass textile fibers to ensure uniformity of mechanical bonding without additional binders and a finely engineered needling process that creates uniform insulating efficiency during extended exposure to elevated temperatures.

Firwin 1200 Insulation offers good drapeability, conforming to irregular surfaces with ease. It is odorless, does not contribute to metal corrosion, and resists decay, mold, and vermin. It offers excellent sound absorption properties and resistance to vibration without powdering.

Applications:

Removable pads, ship turbines, marine, industrial, and process piping, muffler insulation, thermal and acoustical insulation, power generating equipment, industrial furnaces and ovens, automotive floor and front dash insulation, high temperature filtration.

Standard Widths: Special widths and roll lengths are available on made to order basis.

- **Specifications:**

- U.L.®, ref. #R11184 - This is the Underwriters Laboratory approval number for Firwin 1200.
- MIL-I-16411 - This specification establishes requirements for fiberglass insulation felt for thermal insulation of machinery and equipment.
- MIL-I-24244 - This specification covers asbestos free thermal insulation with special corrosion, chloride, and fluoride requirements.
- ASTM-C-1086-88 - This is the standard specification for glass fiber felt thermal insulation

Thermal Conductivity

Typical for 11Lb/ft³ density [Firwin 1200]

Temperature	Btu in/hr/sq.ft/ °F
300°F	0.40
500°F	0.50
700°F	0.65



Physical Properties						
Thickness (in)**	Mass (oz/ft ²)	Density (lb/ft ³)	Width* (in)	Roll* Length (ft)	Area (per roll) (ft ²)	Roll Mass (Net) (lb.)
1/8 (3.18mm)	1.8 (549 g/m ²)	11.0 (176 kg/m ³)	46 (116.8 cm)	300 (91.4 m)	1150 (106.8 m ²)	71.9 (32.6 kg)
1/4 (6.35mm)	3.7 (1129 g/m ²)	11.0 (176 kg/m ³)	46 (116.8 cm)	150 (45.7 m)	575 (53.4 m ²)	71.9 (32.6 kg)
1/2 (12.7 mm)	7.3 (2228 g/m ²)	11.0 (176 kg/m ³)	48 (121.9 cm)	75 (22.9 m)	300 (27.9 m ²)	75.0 (34.0 kg)
1 (25.4mm)	14.7 (4485 g/m ²)	11.0 (176 kg/m ³)	48 (121.9 cm)	50 (15.2 m)	200 (18.6 m ²)	100.0 (45.4 kg)

On initial heat-up past 300° F, there is some out-gassing due to a small residual of organics on the glass fiber surface. Adequate ventilation and exhaust should be provided for any enclosed applications during this period

THERMAL CONDUCTIVITY

