



1685 Flint Road, North York, Ontario M3J 2W8

Tel: (416) 745-9389 Fax: (416) 745-0782

Firwin 1200 Insulation Mat

Firwin 1200 Insulation Mat due to a recent modernization and expansion of BGF's Industrial Nonwovens facility produces a more uniform, higher density product with the same thermal and acoustical properties as the original fiberglass 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:

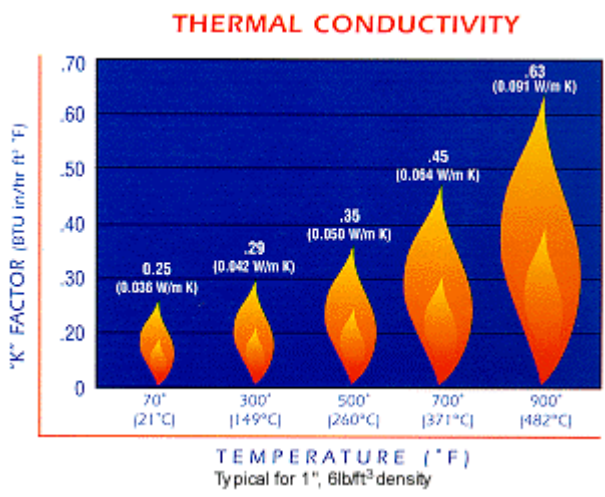
- U.L.®, ref. #R11184 - This is the Underwriters Laboratory approval number for Firwin 1200.
- MIL-I-16411 - This specification establishes requirements for fiberglass insulation felt for thermal insulation of machinery and equipment.
- MIL-I-24244 - This specification covers asbestos free thermal insulation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

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)	1.0 (305g/m ²)	6.0 (96 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)	2.0 (610 g/m ²)	6.0 (96 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)	4.0 (1220 g/m ²)	6.0 (96 kg/m ³)	48 (121.9 cm)	75 (22.9 m)	300 (27.9 m ²)	75.0 (34.0 kg)
1 (25.4mm)	8.0 (2440 g/m ²)	6.0 (96 kg/m ³)	48 (121.9 cm)	50 (15.2 m)	200 (18.6 m ²)	100.0 (45.4 kg)



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On initial heat-up past 300° F, there is some outgassing 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





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DATA SHEET

ALUMINIZED FIBRE GLASS FABRIC
FIRWIN AHQ9213

Durable heat cleaned glass fabric with a unique smooth highly reflective uniform mirror like coating of Aluminum on one face. The ideal fabric for applications where quality appearance and thermo reflectivity are important. This coating will not delaminate and exhibits good temperature resistance to 500°F continuous ambient

This is the ideal fabric for the protective outer cover on removable /reusable insulation covers, not exposed directly to natural outdoor weathering. It meets the requirements of non-combustibility for Coast Guard, and various Military and Aerospace applications.

ADVANTAGES: Metallic alluminum color. Thermal radiation reflector.
Non-Hazardous. Non-combustible. Drapes well.
Flame resistant.

APPLICATIONS: Removable/Reusable blankets. Aerospace. Military.
Flexible heat reflection.

PROPERTY DATA
FIRWIN AHQ9213

BASIC FABRIC: Fiberglass heat cleaned color natural.
COATING: Vacuum Coated with Aluminum on one side.
High thermal reflectivity.
ADHESION: No flaking or separation.
DRAPE: Excellent.

WEIGHT:
12oz/sq yard

WEAVE:
Plain Weave Thermal Barrier Fabric

THICKNESS:
0.014"

TENSILE STRENGTH*:
Warp 500
Filler 500

BURST STRENGTH*:
400

TEMPERATURE RANGE:
65°F-500°F limited by coating only
53°C-260°C continuous ambient

FLAME RESISTANCE*:
35 seconds.

*Fed Spec 191

CONTAINS NO ASBESTOS AND IS NON - HAZARDOUS.

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Firwin FWN 3259-2-SS Silicone Coated Fabric

DESCRIPTION:

Firwin FWN 3259 - 2 - SS is a fiberglass fabric meeting MIL-C-20079F impregnated with a specially formulated silicone rubber 25% total by weight. It is designed to meet the rigid requirements for use in nuclear reactors. This special high temperature, flame retardant silicone rubber provides greater life and improved resistance to abrasion, flexing, tear and puncture. This product is designed specifically for high temperature (500 deg. F) removable pads, flange and valve covers. This STANDARD DUTY product meets the requirements of NRC Guide 1.36 and Military Specification MIL-1-24244.

ADVANTAGES:

Aluminum color, water and oil resistant, flame retardant, low smoke, easily sewn, light weight.

APPLICATIONS:

Removable Insulation Pads, Flange Covers, Welding Curtains, Safety Clothing, Equipment Covers, Expansion Joints.

Property Data for FWN 3259-2-SS

<u>TEST</u>	<u>METHOD</u>	<u>RESULT</u>
WEIGHT	ASTM D-3776	17.5 oz / sy +/- 10%
THICKNESS	ASTM D-1777	0.018" +/- 10%
TENSILE STRENGTH	FED 191/5102	WARP-200 lbs / inch min. FILL - 150 lbs / inch min.
TEAR STRENGTH	FED 191/5136	WARP - 50 lbs min. FILL - 40 lbs min.
BURST STRENGTH	ASTM D-774	400 psi min.
BASE FABRIC and WEAVE		Fiberglass / Satin Weave
COLOR and COATING		Silver Aluminum
FLAME RESISTANCE	FED 191/5903.2	CHAR LENGTH -1 inch max. AFTERGLOW -1 second max. FLAME OUT -1 second max.

TEMPERATURE RESISTANCE:

COLD: -67 F, **HOT:** Continuous: 1000hrs. @ 500 F = No Change

INTERMITTENT: 100 hrs. @ =700 F - Weight Loss=10%, Strength Loss=50%

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Specializing in marine, aerospace, automotive and commercial fabrics for thermal and industrial applications

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