

ESLIN Needle-Mat FELT Material — EG-FELT Type

General Product Information

ESLIN™ EG-FELT Material is a high-density, e-glass fiber needled-felt (mechanically bonded), binder-free insulation for thermal insulation purposes. EG-FELT is used as a thermal insulation component in the fabrication of insulation systems for use on machinery and equipment, such as steam turbines, boilers, control valves, mufflers, industrial ovens and piping systems at temperatures from ambient up to 1200°F (650°C). It is also commonly used for removable pads and for “expansion joints” in high temperature installations where energy efficiency is an important factor. EG-FELT is manufactured using textile-grade e-glass fibers. It is available in three (3) thicknesses: 1/4” (6mm), 15/32” (12mm) and 17/32” (13.5mm)

Description & Common Applications

ESLIN™ EG-FELT is recommended as a component in any industrial insulation system. It has common usage in power plants, refineries geothermal, concentrating solar power (CSP), petro-chemical, bio-fuels and exhaust systems.

Thermal Conductivity (k)

Apparent Thermal Conductivity (Max)

Btu in/h/ft²/°F (W/m°C) at mean temp. of:

75°F (24°C)	0.29 (0.042)
300°F (149°C)	0.40 (0.058)
500°F (260°C)	0.50 (0.072)
700°F (371°C)	0.65 (0.094)



Physical Properties

- Good Thermal Conductivity
- Noncombustible
- Large Non Respirable Fibers
- Flame Spread / Smoke Developed = 0/0
- Excellent Vibration Resistance
- Negligible Moisture Absorption
- Excellent Sound Absorption Qualities
- Will Not Contribute to Metal Corrosion
- Odorless

ESLIN™ EG-FELT is manufactured to conform with requirements of MIL-I-16411 Type II and Coast Guard Specification for Incombustible Materials #164.009 and MIL-I-24244

Product / Packaging Information

Thickness	1/4" (6 mm) 6T*	15/32" (12 mm) 12T*	17/32" (13.5 mm) 13.5T*
Description			
Roll Width	40.95" (1040 mm)	40.95" (1040 mm)	40.95" (1040 mm)
Roll Length	164.04 feet (50 m)	82.02 feet (25 m)	75.46 feet (23 m)
Area Per Roll	538.2 ft ² (52 m ²)	279.86 ft ² (26 m ²)	257.47 ft ² (23.9 m ²)
Material Density	7.8 lb/ft ³ (125 kg/m ³)	9.4 lb/ft ³ (150 kg/m ³)	9.4 lb/ft ³ (150 kg/m ³)
* Denotes Manufacturers Thickness Designation			
Material Density Tolerance is +/- 10%			