

ESLIN™ TECHNICAL SPECIFICATION

ENERGY SAVING LAYERED INSULATION

Document: Revision: Date: TS: EG-SCUI 6 2024/05/01

Preformed Pipe & Board Material EG-SCUI Type

General Product Information

ESLINTM Industrial Insulation: Sustainable, preformed, unbreakable, reusable, pipe and board insulation with superior strength, great sound attenuation qualities, high compressive resistance and unmatched life-cycle performance. A proprietary manufacturing process combines specially processed high-density E-glass needled mat with 'inorganic' binder materials to form an easy to install non-combustible, high-temperature insulation with superior thermal performance, is non-contributory to CUI and has excellent fire resistant properties. Two-piece pipe cover is available in pipe sizes from 1/2" (15mm) to 44" (1117mm) in diameter sectional pieces are not required for large pipe sizes. Board materials are available both in flat form or preformed/rounded to fit the exact curvature of any vessel, tank, duct or exchanger. All ES-LINTM material is available in single thicknesses up to 4" (100 mm). ESLINTM NCUI Type is our basic and most costcompetitive alternative. "Safe-To-Use" and Made in the USA.

Description & Common Applications

ESLINTM Pipe and Board insulation is ideal for steam and process systems operating at temperatures up to 1400°F (760°C) where energy conservation, personnel protection and fire-resistance matter. It is especially recommended for use in high temperature industrial environments. Diverse applications include piping, ducts, vessels, tanks and exchangers in power plants, refineries geothermal, concentrating solar power (CSP), petro-chemical, bio-fuels and exhaust systems. ESLINTM SCUI material is highly water resistant making it ideal for applications where moisture is or could be present.

Specification Compliance

ASTM C1937-24 (Layered, Glass Fiber felt Pipe and Board Insulation)

ASTM C547 (Type I, II, IV, V)

ASTM C795 (Per test methods C871 & C692) *

ASTM C692/871 (28 Days Corrosion Tests St. St.)

ASTM C1617 (Noncorrosive to Carbon Steel)

ASTM C585 (ID/OD Dimensions)

ASTM C1104/1104M (Water Vapor Sorption)

ASTM E136 (Noncombustible)

ASTM E162 (Flammability)

ASTM E662 (Smoke Generation)

ASTM C547-A1 NAVSEA Compressive Resilience

CAN/ULC S102 (Surface Burning)

CAN/ULC S114 (Noncombustible)

IMO FTP Code, Annex 1, Part 1 (Non-combustibility)

MIL-I-24244 (all versions including B & C)

NRC Reg. Guide 1.36

Physical Properties

ASTM C 302/ C 303 Density (Dry) Average

12.5 lb/ft³ (200 kg/m³) Pipe Cover

11.2 lb/ft³ (180 kg/m³) Board Material

ASTM C 165 Compressive Resistance

1294 lb/ft² @ 10% Compression

ASTM C 356 Dimensional Stability (Linear Shrinkage)

< 2% @ 1200°F (650°C)

ASTM C 411, C 447 Maximum Service Temperature

& SAG Resistance

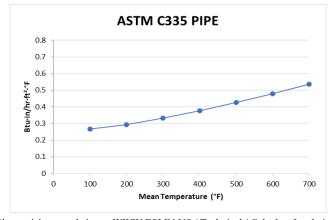
1400°F (760°C)
ASTM E 84 Surface Burning Characteristics

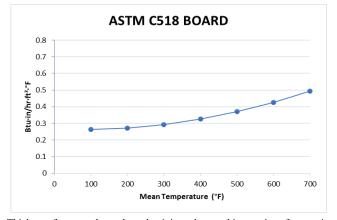
Flame Spread / Smoke Developed = 0/0

ASTM C 335/ C 518 See Below

Water Resistance: Surface treated for water resistance to readily shed any water that may gain entry into the insulation system.

Thermal Conductivity (k)





Please visit our website at: WWW.ESLIN.US / Technical / Calculate Insulation Thickness for exact thermal conductivity values and instructions for entering ESLINTM thermal values into the NAIMA 3E-Plus software, the industry standard for calculating insulation thicknesses, heat losses & surface temperatures.

*When ordering material to comply with any ASTM, government, or other specification, a statement of that fact must appear on the purchase order. These specifications require specific lot testing and prohibit the certification of the lot after shipment has been made. There will be additional charges associated with compliance testing.

