



Standard Guide for Selecting Jacketing Materials for Thermal Insulation¹

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1. Scope

1.1 This guide covers criteria for selecting thermal insulation jacketing materials and is not intended for use as a performance or product specification.

1.2 This guide applies to jacketing materials applied over thermal insulation for piping, ducts, and equipment.

1.3 This guide includes jacketing materials used over thermal insulation whether the insulation is in the form of pipe, board, or blanket, or field applied materials that are self-supporting, including insulating cements.

1.4 This guide does not include covers or other retaining walls that contain loose fill, other nonsupporting insulation materials, or conduits or containers for buried insulation systems.

1.5 This guide does not include mastics and coatings and their reinforcements.

1.6 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.7 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

- A240/A240M Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
- A366/A366M Specification for Commercial Steel (CS)

¹ This guide is under the jurisdiction of ASTM Committee C16 on Thermal Insulation and is direct responsibility of Subcommittee C16.40 on Insulation Systems.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

Sheet, Carbon, (0.15 Maximum Percent) Cold-Rolled (Withdrawn 2000)³

A1008/A1008M Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable

B209 Specification for Aluminum and Aluminum-Alloy Sheet and Plate

C165 Test Method for Measuring Compressive Properties of Thermal Insulations

C168 Terminology Relating to Thermal Insulation

C488 Test Method for Conducting Exterior Exposure Tests of Finishes for Thermal Insulation

C835 Test Method for Total Hemispherical Emittance of Surfaces up to 1400°C

C921 Practice for Determining the Properties of Jacketing Materials for Thermal Insulation

C1057 Practice for Determination of Skin Contact Temperature from Heated Surfaces Using a Mathematical Model and Thermesthesiometer

C1136 Specification for Flexible, Low Permeance Vapor Retarders for Thermal Insulation

C1258 Test Method for Elevated Temperature and Humidity Resistance of Vapor Retarders for Insulation

C1263 Test Method for Thermal Integrity of Flexible Water Vapor Retarders

C1338 Test Method for Determining Fungi Resistance of Insulation Materials and Facings

C1371 Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emis-someters

C1729 Specification for Aluminum Jacketing for Insulation

C1767 Specification for Stainless Steel Jacketing for Insulation

C1775 Specification for Laminate Protective Jacket and Tape for Use over Thermal Insulation for Outdoor Applications

C1785 Test Method for Concentration of Pinhole Detections in Moisture Barriers on Metal Jacketing

D774/D774M Test Method for Bursting Strength of Paper (Withdrawn 2010)³

³ The last approved version of this historical standard is referenced on www.astm.org.