



Designation: C1729 – 17

Standard Specification for Aluminum Jacketing for Insulation¹

This standard is issued under the fixed designation C1729; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers aluminum jacketing for thermal and acoustical insulation operating at either above or below ambient temperatures and in both indoor and outdoor locations. It does not cover insulation jacketing made from other materials such as mastics, fiber reinforced plastic, PVC, or stainless steel nor does it cover the details of thermal or acoustical insulation systems.

1.2 This specification provides physical requirements for aluminum jacketing for thermal and acoustical insulation. Guide C1423 provides guidance in selecting jacketing materials and their safe use.

1.3 This is a material specification and does not imply any performance of the installed system using the materials specified herein. For information about installation of aluminum jacketing, see (1).²

1.4 The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this standard.

NOTE 1—A version of this specification in SI units is available as C1729M.

1.5 *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.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

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

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² The boldface numbers in parentheses refer to a list of references at the end of this standard.

2. Referenced Documents

2.1 ASTM Standards:³

B209 Specification for Aluminum and Aluminum-Alloy Sheet and Plate

B487 Test Method for Measurement of Metal and Oxide Coating Thickness by Microscopical Examination of Cross Section

C168 Terminology Relating to Thermal Insulation

C450 Practice for Fabrication of Thermal Insulating Fitting Covers for NPS Piping, and Vessel Lagging

C585 Practice for Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe and Tubing

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

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

C1423 Guide for Selecting Jacketing Materials for Thermal Insulation

C1729M Specification for Aluminum Jacketing for Insulation

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

D3363 Test Method for Film Hardness by Pencil Test

E84 Test Method for Surface Burning Characteristics of Building Materials

F1249 Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheet Using a Modulated Infrared Sensor

2.2 AAMA Standard:⁴

AAMA 2605 Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix)

³ 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.

⁴ Available from American Architectural Manufacturers Association (AAMA), 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268, <http://www.aamanet.org>.