



Designation: ~~C1410-05a~~^{ε1} Designation: C1410 – 10

Standard Specification for Cellular Melamine Thermal and Sound-Absorbing Insulation¹

This standard is issued under the fixed designation C1410; 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.

~~ε¹Note—The units statement (1.4) was editorially updated in March 2010.~~

1. Scope

1.1 This specification covers the type, physical properties, and dimensions of open-cell melamine foam intended for use as thermal and sound-absorbing insulation for temperatures from –40 to +350°F (–40 to +177°C) in industrial environments.

1.2 Some uses of thermal insulation materials covered by this specification are governed by building codes that address fire performance.

1.3 The use of an appropriate vapor retarder is required on cold surface applications where water vapor condense and cause a decrease in thermal performance. Refer to Practice C755 for selection of vapor retarders. Facings shall be agreed upon between the purchaser and the manufacturer or supplier.

~~1.4~~ 1.4 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.

1.5 *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.*

2. Referenced Documents

2.1 ASTM Standards:²

C168 Terminology Relating to Thermal Insulation

C177 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus

C335 Test Method for Steady-State Heat Transfer Properties of Pipe Insulation

C356 Test Method for Linear Shrinkage of Preformed High-Temperature Thermal Insulation Subjected to Soaking Heat

C390 Practice for Sampling and Acceptance of Thermal Insulation Lots

C423 Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method

C518 Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

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

C755 Practice for Selection of Water Vapor Retarders for Thermal Insulation

C1045 Practice for Calculating Thermal Transmission Properties Under Steady-State Conditions

C1104/C1104M Test Method for Determining the Water Vapor Sorption of Unfaced Mineral Fiber Insulation

C1363 Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus

D2863 Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)

D3574 Test Methods for Flexible Cellular Materials Slab, Bonded, and Molded Urethane Foams

E84 Test Method for Surface Burning Characteristics of Building Materials

E176 Terminology of Fire Standards

E662 Test Method for Specific Optical Density of Smoke Generated by Solid Materials

¹ This specification is under the jurisdiction of ASTM Committee C16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.22 on Organic and Nonhomogeneous Inorganic Thermal Insulations.

Current edition approved May 1, 2005. Published May 2005. Originally approved in 1998. Last previous edition approved in 1998 as C1014-05. DOI: 10.1520/C1410-05AE01.

Current edition approved Nov. 1, 2010. Published November 2010. Originally approved in 1998. Last previous edition approved in 2005 as C1014-05a^{ε1}. DOI: 10.1520/C1410-10.

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.



E795 Practices for Mounting Test Specimens During Sound Absorption Tests

E800 ~~Guide for Measurement of Gases Present or Generated During Fires~~

E2231 Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics

2.2 *Boeing Standards:*

Boeing Specification Support Standard 72396 ³

iTeh Standards (<https://standards.iteh.ai>) Document Preview

ASTM C1410-10

</catalog/standards/astm/887e233d-1832-4bfe-a098-5eebf395b6b8/astm-c1410-10>

² The Boeing Company, Boeing Technology Services, Seattle, WA.

³ The Boeing Company, Boeing Technology Services, Seattle, WA, <http://www.boeing.com>.