



Standard Guide for Development of Standard Data Records for Computerization of Thermal Transmission Test Data for Thermal Insulation¹

This standard is issued under the fixed designation C1558; 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 guide provides recommended formats for the recording of thermal transmission test data for thermal insulation and similar materials for inclusion in computerized material property databases. From this information, the database designer is able to construct the database dictionary preparatory for development of a database schema.

1.2 This guide is applicable to thermal transmission test data obtained from standard test methods that cover planar and radial specimen geometries.

1.3 This guide is not intended for thermal transmission data obtained for thermal insulation assemblies or systems (that is, heat transmission coefficients for walls, roofs, ceilings, and floors).

1.4 *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 requirements 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
- C195 Specification for Mineral Fiber Thermal Insulating Cement
- C196 Specification for Expanded or Exfoliated Vermiculite Thermal Insulating Cement
- C208 Specification for Cellulosic Fiber Insulating Board

¹ This guide is under the jurisdiction of ASTM Committee C16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.30 on Thermal Measurement.

Current edition approved March 1, 2016. Published March 2016. Originally approved in 2003. Last previous edition approved in 2012 as C1558 – 12. DOI: 10.1520/C1558-16.

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.

- C335 Test Method for Steady-State Heat Transfer Properties of Pipe Insulation
- C449/C449M Specification for Mineral Fiber Hydraulic-Setting Thermal Insulating and Finishing Cement
- C516 Specification for Vermiculite Loose Fill Thermal Insulation
- C518 Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- C533 Specification for Calcium Silicate Block and Pipe Thermal Insulation
- C534 Specification for Preformed Flexible Elastomeric Cellular Thermal Insulation in Sheet and Tubular Form
- C547 Specification for Mineral Fiber Pipe Insulation
- C549 Specification for Perlite Loose Fill Insulation
- C552 Specification for Cellular Glass Thermal Insulation
- C553 Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications
- C578 Specification for Rigid, Cellular Polystyrene Thermal Insulation
- C592 Specification for Mineral Fiber Blanket Insulation and Blanket-Type Pipe Insulation (Metal-Mesh Covered) (Industrial Type)
- C610 Specification for Molded Expanded Perlite Block and Pipe Thermal Insulation
- C612 Specification for Mineral Fiber Block and Board Thermal Insulation
- C656 Specification for Structural Insulating Board, Calcium Silicate
- C665 Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing
- C726 Specification for Mineral Wool Roof Insulation Board
- C728 Specification for Perlite Thermal Insulation Board
- C739 Specification for Cellulosic Fiber Loose-Fill Thermal Insulation
- C745 Test Method for Heat Flux Through Evacuated Insulations Using a Guarded Flat Plate Boiloff Calorimeter (Withdrawn 2008)³
- C764 Specification for Mineral Fiber Loose-Fill Thermal Insulation

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