



Designation: ~~C479 – 04 (Reapproved 2013)~~ C479 – 04 (Reapproved 2017)

Standard Specification for Vitrified Clay Liner Plates¹

This standard is issued under the fixed designation C479; 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 establishes the criteria for the acceptance of vitrified clay liner plates used to protectively line or face pipe, culverts, abutments, structures, or appurtenances.

1.2 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.

1.3 *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.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[C43 Terminology of Structural Clay Products](#) (Withdrawn 2009)³

[C301 Test Methods for Vitrified Clay Pipe](#)

3. Terminology

3.1 *Definitions*—Clay, fire clay, shale, and surface clay are defined in Terminology [C43](#).

4. Classification

4.1 Liner plates manufactured in accordance with this specification shall be known as curved liner plates or flat liner plates.

5. Materials and Manufacture

5.1 Liner plates shall be manufactured from fire clay, shale, surface clay, or a combination of these materials that, when formed into liner plates and fired to suitable temperatures, yield a product that is strong, durable, serviceable, free of objectionable defects, and conform to this specification.

6. Physical and Chemical Requirements

6.1 *Absorption*—The absorption of liner plates shall not exceed 6 %.

6.2 *Acid Resistance:*

6.2.1 This test is used to determine the resistance of liner plates to the action of acids. The test shall be performed only when specified.

6.2.2 Liner plates shall be acceptable if the acid-soluble matter does not exceed 0.25 %.

7. Dimensions and Permissible Variations

7.1 *Tenon Ribs:*

¹ This specification is under the jurisdiction of ASTM Committee [C04](#) on Vitrified Clay Pipe and is the direct responsibility of Subcommittee [C04.20](#) on Methods of Test and Specifications.

Current edition approved Dec. 1, 2013Dec. 1, 2017. Published December 2013January 2018. Originally approved in 1961. Last previous edition approved in 20082013 as C479 – 04(2008)(2013). DOI: 10.1520/C0479-04R13-10.1520/C0479-04R17.

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.

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