

Designation: C499 - 09 (Reapproved 2019) C499 - 20

# Standard Test Method for Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile<sup>1</sup>

This standard is issued under the fixed designation C499; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

# 1. Scope

- 1.1 This test method covers the determination of the facial dimensions and thickness of flat, rectangular ceramic wall and floor tile. This test method covers tile as defined in Terminology C242.
- 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 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.
- 1.4 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:<sup>2</sup>

C242 Terminology of Ceramic Whitewares and Related Products

# 3. Terminology

- 3.1 Definitions:
- 3.1.1 For definitions relating to ceramic whitewares and related products, refer to Terminology C242.
- 3.2 Definitions of Terms Specific to This Standard:
- 3.2.1 major facial dimension—dimension, n—the overall length or width of the tile, including the lugs on opposite sides.
- 3.2.2 major thickness—thickness, n—the thickness of tile, including any maximum protuberances or ridges on the back.
- 3.2.3 minor facial dimension—dimension, n—the length or width of the tile exclusive of the lugs.
- 3.2.4 minor thickness—thickness, n—the thickness of tile that does not include maximum protuberances or ridges.

### 4. Significance and Use

4.1 This test method provides a means of determining whether a lot of tile meets specifications of variations in size and thickness. In specifications, the nominal size always refers to the minor facial dimension and the nominal thickness of a tile always refers to the major thickness.

## 5. Apparatus

5.1 A suitable measuring device such as a micrometer or dial indicator, reading in 0.001-in. (0.025-mm)(0.025 mm) divisions and accurate to  $\pm 0.001$  in.  $(\pm 0.025\text{ mm})$ , shall be used. If a dial indicator is used, suitable jigs for holding the tile and the indicator shall be provided.

<sup>&</sup>lt;sup>1</sup> This test method is under the jurisdiction of ASTM Committee C21 on Ceramic Whitewares and Related Productsand is the direct responsibility of Subcommittee C21.06 on Ceramic Tile.

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<sup>&</sup>lt;sup>2</sup> 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.