



# Standard Test Method for Evaluation of Water Leakage Performance of Masonry Wall Drainage Systems<sup>1</sup>

This standard is issued under the fixed designation C1715/C1715M; 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 test method describes a standard procedure for determining the ability of masonry wall drainage systems to collect water that penetrates the exterior masonry wythe during rainstorms and to direct this water back to the exterior surface of the wall.

1.2 This test method is applicable to wall systems that contain an exterior masonry wythe with a drainage zone on the interior face of the exterior wythe. It is not applicable to single-wythe drainage walls.

1.3 This test method is not applicable to masonry barrier walls or other masonry walls that are designed without drainage zones behind the exterior wythe.

1.4 This test method covers the application of the testing using either inch-pound or SI units. The values stated in either SI units or inch-pound units are to be regarded separately as standard. Within the text, the inch-pound units are shown in brackets. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with the 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:*<sup>2</sup>

[C1232 Terminology of Masonry](#)

[C1601 Test Method for Field Determination of Water Pen-](#)

[etration of Masonry Wall Surfaces](#)

[E514 Test Method for Water Penetration and Leakage Through Masonry](#)

[E631 Terminology of Building Constructions](#)

## 3. Terminology

3.1 *Definitions*—For definitions of terms relating to building construction used in this test method, see Terminology [E631](#). For definitions of terms relating to masonry, brick and clay tile, and concrete masonry units used in this test method, see Terminology [C1232](#).

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *back-up wall, n*—the portion of the wall system located on the interior side of the drainage zone.

3.2.2 *drainage zone, n*—the region located between the interior face of the exterior wythe of masonry and the exterior face of the back-up wall or the water-resistive barrier placed on the exterior face of the back-up wall to facilitate the flow of water to a flashing or water collection system.

3.2.2.1 *Discussion*—The drainage zone often includes other components such as rigid insulation in addition to devices that facilitate the flow of water or prevent mortar from blocking the weeps.

3.2.3 *flashing, n*—an impervious material placed at specified locations in a masonry wall drainage system to collect and direct water penetrating through the exterior wythe of masonry to the exterior face of the exterior wythe of masonry by means of a weep system.

3.2.4 *masonry barrier wall, n*—single or multi-wythe masonry wall system that does not contain a drainage zone directly behind the exterior masonry wythe.

3.2.5 *masonry drainage wall, n*—masonry wall system designed with a drainage zone immediately behind the exterior masonry wythe that allows water penetrating the masonry to flow down the drainage zone where the water is collected and diverted by flashing to the exterior face of the exterior wythe or collected and drained by some other water collection system.

3.2.5.1 *Discussion*—This wall type includes: masonry cavity walls; anchored masonry veneer walls; insulated cavity walls; and any other masonry wall systems with a drainage zone.

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee [C15](#) on Manufactured Masonry Units and is the direct responsibility of Subcommittee [C15.04](#) on Research.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.