



Designation: C 43 – 03

Standard Terminology of Structural Clay Products¹

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1. Scope*

1.1 This terminology contains terms and definitions of terms associated with the standards specific to masonry units and roofing tile manufactured by firing clay and shale raw materials.

1.2 The definitions and definitions of terms in this terminology pertain to Specifications C 32, C 34, C 56, C 62, C 126, C 212, C 216, C 279, C 410, C 652, C 902, C 1088, C 1167, C 1261, C 1272 and Test Methods C 67.

1.3 Generic terminology for masonry is found in Terminology C 1232. Terminology C 1232 also applies to masonry units manufactured by firing clay and shale raw materials.

2. Referenced Documents

2.1 ASTM Standards:

- C 32 Specification for Sewer and Manhole Brick (Made from Clay or Shale)²
- C 34 Specification for Structural Clay Load-Bearing Wall Tile²
- C 56 Specification for Structural Clay Non-Load-Bearing Tile²
- C 62 Specification for Building Brick (Solid Masonry Units Made from Clay or Shale)²
- C 67 Test Methods for Sampling and Testing Brick and Structural Clay Tile²
- C 126 Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units²
- C 212 Specification for Structural Clay Facing Tile²
- C 216 Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)²
- C 279 Specification for Chemical-Resistant Masonry Units²
- C 410 Specification for Industrial Floor Brick²
- C 652 Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)²
- C 902 Specification for Pedestrian and Light Traffic Paving Brick²
- C 1088 Specification for Thin Veneer Brick Units Made from Clay or Shale²

¹ This terminology is under the jurisdiction of ASTM Committee C15 on Manufactured Masonry Units and is the direct responsibility of Subcommittee C15.08 on Terminology.

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² Annual Book of ASTM Standards, Vol 04.05.

C 1167 Specification for Clay Roof Tiles²

C 1232 Terminology of Masonry²

C 1261 Specification for Firebox Brick for Residential Fireplaces²

C 1272 Specification for Heavy Vehicular Paving Brick²

C 1405 Specification for Glazed Brick (Single-Fired, Solid Brick Units)²

3. Terminology

3.1 Terms and Definitions:

RAW MATERIALS

clay, *n*—an earthy or stony mineral aggregate consisting essentially of hydrous silicates of alumina, plastic when sufficiently pulverized and wetted, rigid when dry, and vitreous when fired to a sufficiently high temperature.

fire clay, *n*—a sedimentary clay of low flux content.

reactive particulates, *n*—a particle or particles present in a clay body, which when near the surface may flake off or cause an eruption (pop-outs) of the surface when exposed to the weather.

shale, *n*—a thinly stratified, consolidated, sedimentary clay with well-marked cleavage parallel to the bedding.

surface clay, *n*—an unconsolidated, unstratified clay, occurring on the surface.

MANUFACTURE

cells/core holes, *n*—continuous openings or perforations within extruded clay products.

DISCUSSION—The extent of permissible openings is specified for each product as the percentage of gross area in the normal bedding surface plane that must be net (solid) area. Core hole is generally used for brick while cell is used for structural tile. Cells are distinguished from core holes by being larger in size. As an illustration, cells must be larger than 1 in.² (645 mm²) under Specification C 34, and 1½ in.² (968 mm²) under Specification C 652.

coring, *v*—the process of perforating structural clay products, generally performed during extrusion by supporting cores (rods) within the shaping cap of the extruder.

extrusion, *n*—shaping of brick by pushing plastic clay or shale through a die opening that forms the peripheral dimensions of the brick.

DISCUSSION—The column of extrudate is then cut into sections to provide the third dimension of the brick. Water is added to the clay or

*A Summary of Changes section appears at the end of this standard.