



ANSI/ASTM C 843 – 76

Standard Specification for APPLICATION OF GYPSUM VENEER PLASTER¹

This Standard is issued under the fixed designation C 843; 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.

1. Scope

1.1 This specification covers the minimum requirements for and methods of applying gypsum veneer plaster.

1.2 Where a specific degree of fire resistance is required for veneer plaster systems, applicable building code regulations shall be followed. Details of construction that have achieved required fire resistance endurance ratings may be obtained from official reports of fire tests conducted at recognized fire testing laboratories in accordance with Methods E 119.

1.3 Where a specific degree of sound control is required for veneer plaster assemblies and constructions, details of construction shall be in compliance with official reports of tests conducted in recognized sound testing laboratories in accordance with the applicable sound tests of Method E 90, Method C 423, or Method E 492.

NOTE 1—To ensure desirable results, this specification should be coordinated with the provisions of Specification C 844.

NOTE 2—General information regarding matters of a contractual nature concerning veneer plaster work will be found in Annex A1. Additional technical information related to veneer plastering is provided in Annex A2.

NOTE 3—The values stated in U.S. customary units are to be regarded as the standard.

2. Applicable Documents

2.1 ASTM Standards:

C 11 Definitions of Terms Relating to Ceilings and Walls²

C 423 Test for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method³

C 472 Physical Testing of Gypsum Plasters and Gypsum Concrete²

C 587 Specification for Gypsum Veneer Plaster²

C 588 Specification for Gypsum Base for Veneer Plasters²

C 631 Specification for Bonding Compounds for Interior Plastering²

C 844 Specification for Application of Gypsum Base to Receive Gypsum Veneer Plaster²

E 84 Test for Surface Burning Characteristics of Building Materials³

E 90 Laboratory Measurement of Airborne-Sound Transmission Loss of Building Partitions³

E 119 Fire Tests of Building Construction and Materials³

E 492 Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine³

3. Definitions

3.1 *veneer plaster system*—gypsum veneer plaster applied to (1) a gypsum base in accordance with 10.1 or (2) properly prepared masonry or monolithic concrete surfaces, neither side of which is exposed to moisture. The plaster may be applied with one or more components normally not exceeding 1/4 in. (6.4 mm) in total thickness.

3.2 *two-component system*—a veneer plaster system involving two separate materials

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² Annual Book of ASTM Standards, Part 13.

³ Annual Book of ASTM Standards, Part 18.

mixed and applied separately for base coat and finish coat.

3.3 one-component system—a veneer plaster system designed for application directly over approved bases in a single plaster mix applied in a single coat or double-back operation with the same material.

3.4 base coat—veneer plaster trowel or machine applied as the first coat of a two-component system.

3.5 finish coat—veneer finish plaster trowel or machine applied as the second coat over the base coat plaster in a two-component system.

3.5.1 smooth-trowel finish—a finish resulting from steel troweling with a minimum of water after the plaster has become firm. A smooth finish free of trowel marks, blemishes, or other imperfections.

3.5.2 texture finish—a finish resulting from (1) trowel application followed by floating or texturing of the surface with any of a variety of tools using a minimum of water or (2) machine application which may or may not be hand textured. The surface should be textured uniformly, free of slick spots or other blemishes.

3.6 reinforced joint—a joint between gypsum base boards that is reinforced with strip material embedded in a cementitious material.

3.7 joint-reinforcing embedment—the cementitious material used to embed the strip material that is compatible with the veneer plaster used.

3.8 Other terms relating to gypsum shall be as defined in Definitions C 11.

4. Delivery of Materials

4.1 All manufactured materials shall be delivered in the original packages, containers, or cartons bearing the brand name and manufacturer identification.

5. Protection of Materials

5.1 Plasters and other cementitious materials shall be kept dry until ready to be used; they shall be kept off the ground, under cover, and away from damp walls and surfaces.

6. Environmental Conditions

6.1 Temperature—When the ambient outdoor temperature at the building site is less

than 50°F (10°C) maintain a continuous uniform temperature at the minimum comfortable working level, but not less than 50°F and not more than 80°F (27°C) in the building for a period of not less than 1 week prior to the application of veneer plaster (Note 4), while the plastering is being done, and for a period of at least 1 week after the plaster is set. Distribute the heat evenly in all areas, and use deflective or protective screens to prevent concentrated or uneven heat on the veneer plaster near the heat source.

6.2 Ventilation—Provide ventilation to remove the water in excess of that required for hydration of the veneer plaster, immediately subsequent to its application and set (Note 5). See Annex A2.2 for provisions for ventilating portions of underside of roofs enclosed with veneer plaster ceilings.

NOTE 4—The building should be permitted to become adjusted to the uniform temporary heating conditions for at least 1 week prior to the start of veneer plastering to minimize the possibility of plaster cracking due to structural movements caused by thermal changes. Blasts of cold air through openings should be avoided.

NOTE 5—In glazed buildings ventilation shall be accomplished by keeping windows open approximately 2 in. (50 mm) top and bottom (or side-pivoted windows approximately 4 in. (100 mm) to provide air circulation. Avoid rapid drying. During periods of low indoor humidity, minimum air circulation is desirable following plastering and until the plaster is dry. For enclosed areas of buildings that lack natural ventilation, provisions shall be made to exhaust the moist air to the outside by mechanical means such as temporary circulators, exhaust fans, or the air conditioning system. A portion of the water used in mixing veneer plaster is necessary for the chemical reaction that rehydrates and hardens the plaster. The excess amount required for mixing and application must be exhausted from the plaster after set has taken place. Minimum circulation of air is desirable to prevent dryouts (see 10.4.1).

7. Materials

7.1 Gypsum Base for Veneer Plasters (hereinafter referred to as “gypsum base”) Specification C 588.

7.2 Veneer Plasters—Specification C 587.

7.3 Reinforcing—Noncorrosive strip providing the joint strength requirements of Specification C 587.

7.4 Liquid Bonding Compounds—Bonding compounds may be used at the discretion of the design authority and shall conform to the requirements of Specification C 631. See Annex A2.