



Designation: C 840 – 00

Standard Specification for Application and Finishing of Gypsum Board¹

This standard is issued under the fixed designation C 840; 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.

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

1. Scope

1.1 This specification covers the minimum requirements for the methods of application and finishing of gypsum board, including related items and accessories.

1.2 Where a fire resistance rating is required for a gypsum board assembly, details of construction shall be in accordance with reports of fire tests of assemblies that have met the requirements of the fire rating imposed.

1.2.1 Where this specification is more stringent (size or thickness of framing; size and spacing of fasteners) than the fire-rated construction, this specification shall govern.

1.3 Where sound control is required for a gypsum board assembly, details of construction shall be in accordance with reports of acoustical tests of assemblies that have met the required acoustical values.

1.4 Unheated spaces above gypsum board ceilings shall be properly ventilated (see Appendix X2).

1.5 The various application systems are located in the following sections:

I	Application of Single-Ply Gypsum Board to Wood Framing Members	8
II	Application of Two-Ply Gypsum Board to Wood Framing Members	9
III	Application of Gypsum Board by Adhesive Nail-On to Wood Framing Members	10
IV	Semi-Solid Gypsum Board Partitions	11
V	Solid Gypsum Board Partitions	12
VI	Application of Gypsum Board with Adhesives to Interior Masonry or Concrete Walls	13
VII	Application of Gypsum Board to Rigid Foam Insulation	14
VIII	Application of Gypsum Board to Steel Framing and Furring	15
IX	Arches and Bending Radii	16
X	Application of Gypsum Board to Receive Tile by Adhesive Application	17
XI	Exterior Application of Gypsum Wallboard and Exterior Gypsum Soffit Board	18
XII	Floating Interior Angles	19
XIII	Control (Expansion) Joints	20
XIV	Foil-Backed Gypsum Board	21

The values stated in inch-pound units are to be regarded as the standard. The SI (metric) values given in parentheses are approximate and are provided for information purposes only.

¹ This specification is under the jurisdiction of ASTM Committee C11 on Gypsum and Related Building Materials and Systems and is the direct responsibility of Subcommittee C11.03 on Specifications for Application of Gypsum and Other Products in Assemblies.

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1.6 The text of this specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

1.7 The following precautionary caveat pertains only to Sections 6-23. *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.*

1.7.1 For specific precautionary statements, see 4.1.1, 4.1.2 and 22.5.

2. Referenced Documents

2.1 ASTM Standards:

C 11 Terminology Relating to Gypsum and Related Building Materials and Systems²

C 36 Specification for Gypsum Wallboard²

C 442 Specification for Gypsum Backing Board and Core-board²

C 475 Specification for Joint Compound and Joint Tape for Finishing Gypsum Board²

C 514 Specification for Nails for the Application of Gypsum Board²

C 557 Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing³

C 630/C 630M Specification for Water-Resistant Gypsum Backing Board²

C 645 Specification for Non-Load Bearing (Axial) Steel Studs, Runners (Tracks), and Rigid Furring Channels for Screw Application of Gypsum Board²

C 754 Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board²

C 931/C 931M Specification for Exterior Gypsum Soffit Board²

C 954 Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness²

C 1002 Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases²

² Annual Book of ASTM Standards, Vol 04.01.

³ Annual Book of ASTM Standards, Vol 15.06.