



Designation: C 931/C 931M – 03

Standard Specification for Exterior Gypsum Soffit Board¹

This standard is issued under the fixed designation C 931/C 931M; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

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

1. Scope*

1.1 This specification covers exterior gypsum soffit board, designed to be used for exterior soffits and carport ceilings that are completely protected from contact with liquid water.

NOTE 1—Specification C 840 contains application procedures for exterior gypsum soffit board.

1.2 The values stated in either inch-pound units or SI (metric) are to be regarded separately as the standard. Within the text, the SI units are shown in brackets. The values stated in each system shall be used independently of the other. Values from the two systems shall not be combined.

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

2. Referenced Documents

2.1 ASTM Standards:

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

C 473 Test Methods for Physical Testing of Gypsum Panel Products²

C 645 Specification for Nonstructural Steel Framing Members²

C 840 Specification for Application and Finishing of Gypsum Board²

C 1264 Specification for Sampling, Inspection, Rejection, Certification, Packaging, Marking, Shipping, Handling, and Storage of Gypsum Board²

E 84 Test Method for Surface Burning Characteristics of Building Materials³

E 119 Test Methods for Fire Tests of Building Construction and Materials³

3. Terminology

3.1 Definitions of terms shall be in accordance with Terminology C 11.

4. Materials and Manufacture

4.1 Gypsum soffit board shall consist of a noncombustible core, essentially gypsum, surfaced with paper bonded to the core.

4.2 Exterior gypsum soffit board, type X (special fire-resistant) designates exterior gypsum soffit board complying with this specification that provides not less than 1-h fire-resistance for boards $\frac{5}{8}$ -in. (15.9-mm) thick or $\frac{3}{4}$ -h fire-resistance for boards $\frac{1}{2}$ -in. (12.7-mm) thick, applied parallel with and on each side of load bearing 2 by 4 wood studs spaced 16 in. (406 mm) on center with 6d coated nails, $\frac{1}{8}$ -in. (48-mm) long, 0.0915-in. (2.3-mm) diameter shank, $\frac{1}{4}$ -in. (6.4-mm) diameter heads, spaced 7 in. (178 mm) on center with exterior gypsum soffit board joints staggered 16 in. (406 mm) on each side of the partition and tested in accordance with Test Methods E 119.

NOTE 2—Consult producers for independent test data on assembly details and fire-resistance classifications for other types of construction. See test reports or listings from recognized fire testing laboratories for assembly particulars, materials, and classifications.

4.3 Gypsum soffit board shall have a flame spread index of not more than 25 when tested in accordance with the requirements of Test Method E 84.

5. Physical Properties

5.1 Specimens shall be taken from samples obtained in accordance with Specification C 1264.

5.2 Specimens shall be test in accordance with Test Methods C 473.

5.2.1 Flexural Strength:

5.2.1.1 The specimens shall be tested face up and face down. The average breaking load shall be not less than the following:

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 C11.01 on Specifications and Test Methods for Gypsum Products.

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² Annual Book of ASTM Standards, Vol 04.01.

³ Annual Book of ASTM Standards, Vol 04.07.

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