

Section 09 28 00
CEMENT BOARD

The following paragraphs are for insertion into sections of generic specifications or proprietary specifications covering gypsum board products manufactured by National Gypsum Company. The Gold Bond[®] BRAND product name follows the generic description in parentheses.

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

(Specifiers Note: Edit list below to conform to project requirements).

1. Cement board and accessories.

(Specifiers Note: Edit list below to conform to project requirements. Verify section numbers and titles).

B. Related Sections:

(Specifiers Note: If project includes cement board supported by wood framing then retain reference to Section 06 10 00).

1. Section 06 10 00, Rough Carpentry.
2. Section 09 29 00, Gypsum Board.
3. Section 09 30 00, Tile.

(Specifiers Note: Use the paragraph below to identify alternates described in Division 01, Section 01 23 00, that include work of this section).

C. Alternates:

1.02 REFERENCES

(Specifiers Note: Delete references not used in Part 2 or Part 3).

A. American National Standards Institute (ANSI):

1. A108.11, American National Standard for Interior Installation of Cementitious Backer Units.
2. A118.1, American National Standard Specifications for Dry-Set Portland Cement Mortar.
3. A118.4, American National Standard Specifications for Latex-Portland Cement Mortar.
4. A118.9, Test Methods and Specifications for Cementitious Backer Units.
5. A136.1, American National Standard Specifications for Organic Adhesives for Installation of Ceramic Tile.

B. American Society for Testing and Materials (ASTM):

1. C 473, Test Methods for Physical Testing of Gypsum Panel Products.
2. C 1325, Specification for Fiber-Mat Reinforced Non-Asbestos Cement Interior Substrate Sheets.
3. C 1002, Specification for Steel Drill screws for the Application of Gypsum Panel Products or Metal Plaster Bases.
4. D 2394, Methods for Simulated Service Testing of Wood and Wood-Based Finish Flooring.

1.03 SUBMITTALS

- A. Product Data: Manufacturers' specifications and installation instructions for each product specified.

(Specifiers Note: Retain single-source paragraph below if more than one manufacturer is listed in part 2 or if section is edited to be generic. Edit to conform to project requirements).

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Packaging and Shipping: Have materials shipped in manufacturer's original packages showing manufacturer's name and product brand name.
- B. Storage and Protection: Store materials inside and protected from damage by the elements. Protect ends, edges, and faces of cement boards from damage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

(Specifiers Note: Edit list below to conform to project requirements. If other manufacturers are being added to this section, then add listings of their proprietary product names). Proprietary product names may be listed in this article or in the "materials" article below. Listing them in both articles is overkill and invites coordination errors).

- A. National Gypsum Company.
 - 1. Cement Board:
 - a. Tile Backer: PermaBase[®] BRAND Cement Board.
 - b. Bendable Backer Board: PermaBase Flex[®] BRAND Cement Board.
 - c. Underlayment: PermaBase BRAND Underlayment.
 - d. Exterior Sheathing: PermaBase BRAND Cement Board.

(Specifiers Note: If specifying by the proprietary method, add manufacturers and product names for metal framing and accessories. Follow the format in the next article).

2.02 MATERIALS

(Specifiers Note: This article includes generic descriptions of cement board product. The names of the corresponding National Gypsum products follow in parenthesis. If this section is being edited to be generic, then these product names should be deleted).

(Specifiers Note: If other manufacturers are being added to this section, then (1) add the proprietary product names of those manufacturers, or (2) if proprietary names are listed in the "Manufacturers" article above, then delete them from this article altogether).

- A. Cement Board:
 - 1. Backer Board: Cementitious, water durable, board; surfaced with fiberglass reinforcing mesh on front and back; long edges wrapped; and complying with ANSI A118.9 and ASTM C 1325 (PermaBase BRAND Cement Board).
 - a. Thickness: ½ in., 5/8 in.
 - b. Width: 2 ft. 8 in., 3 ft., or 4 ft.
 - c. Length: 4 ft., 5 ft., 6 ft., or 8 ft.
 - d. Edges: Tapered.
 - e. Compressive Strength: Not less than 2250 lbs. per sq. in. when tested in accordance with ASTM D 2394.
 - f. Water Absorption: Not greater than 8 percent when tested for 24 hours in accordance with ASTM C 473.
 - 2. Bendable Backer Board: Cementitious, water durable, board; surfaced with fiberglass reinforcing mesh on front and back; long edges wrapped; and complying with ANSI A118.9 (PermaBase Flex BRAND Cement Board).
 - a. Thickness: ½ in.
 - b. Width: 4 ft.
 - c. Length: 8 ft.

- d. Edges: Tapered.
 - e. Compressive Strength: Not less than 2250 lbs. per sq. in. when tested in accordance with ASTM D 2394.
 - f. Water Absorption: Not greater than 8 percent when tested for 24 hours in accordance with ASTM C 473.
3. Underlayment: Cementitious, water durable, board; surfaced with fiberglass reinforcing mesh on front and back; long edges wrapped; and complying with ANSI A118.9 and ASTM C 1325 (PermaBase BRAND Cement Board Underlayment).
- a. Thickness: 1/4 in.
 - b. Width: 3 ft. or 4 ft.
 - c. Length: 4 ft. or 5 ft.
 - d. Edges: Tapered.
 - e. Compressive Strength: Not less than 2250 lbs. per sq. in. when tested in accordance with ASTM D 2394.
 - f. Water Absorption: Not greater than 8 percent when tested for 24 hours in accordance with ASTM C 473.
4. Fasteners:
- a. Nails: 1-1/2-in. long, hot dipped galvanized, and in accordance with FS FF-N-105B, Type 2, Style 20.

(Specifiers Note: Select nails or screws to conform to project requirements).

- b. Screws: Hi-Lo thread screws (No. 8) wafer head, corrosion-resistant, 1-1/4 in. or 1-5/8 in. long, and complying with ASTM C 1002.

USE ABOVE FOR WOOD AND 22 GA., OR LIGHTER, STEEL FRAMING. USE BELOW FOR 20 GA., OR HEAVIER, STEEL FRAMING.

- c. Screws: Drill point screws (No. 8) wafer head, corrosion-resistant, 1-1/4 in. or 1-5/8 in. long, and complying with ASTM C 1002.
5. Joint Treatment:
- a. Tape: Alkali-resistant fiberglass mesh tape intended for use with cement board.
6. Bonding Materials:
- a. Mortar: Dry-set portland cement mortar in accordance with ANSI A118.1.
 - b. Mortar: Latex-portland cement mortar in accordance with ANSI A118.4.
 - c. Adhesive: Organic adhesive in accordance with ANSI A136.1, Type 1.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: In accordance with the following reference standards and manufacturer's recommendations: ANSI A108.11.

(Specifiers Note: If other manufacturers were added in Part 2 then reference their installation recommendations below by title).

- 2. Manufacturer's Recommendations:
 - a. "PermaBase Cement Board Construction Guide;" 110831, National Gypsum Co.

END OF SECTION