

SECTION 06 16 63

CEMENTITIOUS SHEATHING

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies cement board sheathing applied to frame wall construction, ready to receive subsequent finishes.

1.2 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples: 1. Cement board panels, 200 mm by 200 mm (8 inches by 8 inches), minimum size.
 - 2. Fasteners, each type used.
 - 3. Reinforcing tape for joints 300 mm (12 inches) long.
 - 4. Water barrier backing, 300 mm (12 inches) square.
- C. Product Data:
 - 1. Cement board sheathing.
 - 2. Reinforcing tape.
 - 3. Fasteners.

1.3 DELIVERY AND STORAGE

- A. Deliver materials in containers with labels legible and intact.
- B. Store materials so as to prevent damage or contamination.

1.4 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
- B. American National Standards Institute (ANSI):
 - A108.11-1999.....Interior Installation of Cementitious Backer Units
 - A118.9-1999.....Cementitious Backer Units
- C. American Society for Testing and Materials (ASTM):
 - C954-04.....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 Thickness.
 - D226-06.....Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 - D4586-07.....Asphalt Roof Cement, Asbestos-Free
- D. Federal Specifications (FS):

UU-B-790.....Building Paper, Vegetable Fiber INT AMD 1 (Kraft,
Waterproofed, Water Repellant and Fire Resistant)

PART 2 - PRODUCTS

2.1 CEMENT BOARD SHEATHING

- A. Conform to ANSI A118.9, except physical property requirements defined in Table 1 changed to not less than the minimum values stated below.
- B. Property Minimum Average Value
 - 1. Water Absorption by Weight, ASTM D1037 20 percent maximum
 - 2. Flame Spread 5
 - 3. Smoke Density 0
 - 4. Thickness 13 mm (1/2 inch)
 - 5. Minimum Width 800 mm (32 inches)
 - 6. Flexural Strength wet and dry 6895 kpa (1000 psi)
 - 7. Fastener Holding wet and dry 33 kpa (125 pounds)

2.2 ACCESSORY MATERIALS

- A. Steel Drill Screws: ASTM C954. Modified for flat head. Bugle head not acceptable.
- B. Organic Felt: ASTM D226, Type II, 13.6 kg (30 lb).
- C. Roof Cement: ASTM D4586
- D. Joint Reinforcing Tape:
 - 1. Minimum 100 mm (4-inches) wide open mesh alkali resistant.
 - 2. Glass fiber mesh polymer coated as recommended by Cement Board manufacturer.
- E. Water Barrier: FS UU-B-790. Type I (Barrier paper), Grade D (Water-vapor permeable). Other products meeting or exceeding the Federal specification for a water barrier with water vapor permeability are acceptable.

PART 3 - EXECUTION

3.1 ENVIRONMENTAL REQUIREMENTS

- A. Do not install units when temperature is below 4.5 degrees Celsius (40 degrees F).
- B. Do not install joint reinforcing tape when temperature is below 10 degrees Celsius (50 degrees F).

3.2 INSTALLATION

- A. Remove wrapping and separate to allow air circulation for not less than seven days before installation.
- B. Installing Water Barrier over Framing Members:
 - 1. Apply roof cement or tape to framing members sufficient to adhere and support water barrier.
 - 2. Use either organic felt or water barrier.

3. Apply barrier shingle fashion with horizontal joints lapped not less than 50 mm (2 inches). Lap end joints over framing, not less than 100 mm (4 inches) cemented together with roof cement, stagger end joints.
4. Do not leave over 300 mm (12-inch) wide strip exposed when work is stopped.
5. Coordinate with installation of flashing to lap water barrier over flashing. Install weeps every 600 mm (24 inches) or as detailed, directly above flashing. Provide for clear exit of water to exterior.
6. Repair torn or cut barrier with barrier patch spanning framing space cemented to surface along top and side edges.

C. Installing Cement Board Units:

1. Apply cement board sheathing immediately over water barrier in accordance with ANSI A108.11, with rounded edges and rough side to exterior, except as specified otherwise.
2. Secure units to framing members with screws spaced not more than 200 mm (8 inches) on center and not closer than 13 mm (1/2-inch) from the edge of the unit.
3. Install screws so that the screw heads do not penetrate the surface of unit.
4. Install 13 mm (1/2-inch) wide horizontal control joints at floors and vertical control joints not over 4.87 m (16 feet) on center unless shown otherwise, maintain alignment.
5. Stop units at edges of building expansion joints.
6. Minimum bearing over framing members: 19 mm (3/4-inch.)

D. Joint and Surface Treatment: Apply joint reinforcing tape over joints, exposed edges, and corners using adhesive recommended by manufacturer.

E. Leave surface flush and ready to receive subsequent finishes.

3.3 PROTECTION AND REPAIR

- A. Protect board with temporary coverings against moisture until subsequent finish is applied.
- B. Patch and repair damaged surface prior to application of subsequent finish.
 1. Fill cracks.
 2. Replace loose, spalling or missing joint finish.
 3. Replace broken or damaged boards.

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