

## SECTION 09 29 00 - GYPSUM BOARD

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes:

1. Interior gypsum board.
2. Cement board.

#### 1.2 QUALITY ASSURANCE

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

### PART 2 - PRODUCTS

#### 2.1 INTERIOR GYPSUM BOARD

A. Manufacturers:

1. Certainteed Corp.
2. G-P Gypsum Corporation.
3. Continental Building Products, Inc.
4. National Gypsum Company.
5. USG Corporation.

- B. General: Complying with ASTM C 36/C 36M or ASTM C 1396/C 1396M, as applicable to type of gypsum board indicated and whichever is more stringent.

- C. Regular Type: 1/2 inch (12.7 mm), tapered, unless noted otherwise.

- D. Type X: 5/8 inch (15.9 mm), tapered.

- E. Water-Resistant Gypsum Backing Board: ASTM C 630/C 630M or ASTM C 1396/C 1396M, 1/2 inch (12.7 mm), Type X, tapered.

#### 2.2 CEMENT BOARD

- A. Cementitious Units: ANSI A118.9, 1/2 inch (12.7 mm), tapered.

1. Products:

- a. Certaineed Corp.; FiberCement Backerboard
- b. Custom Building Products; Wonderboard.
- c. FinPan, Inc.; Util-A-Crete Concrete Backer Board.
- d. National Gypsum Company; PermaBase Cement Board.
- e. Triton Watertight Systems; Triton BK Backer Board.
- f. USG Corporation; DUROCK Cement Board.

## 2.3 TRIM ACCESSORIES

- A. Trim Accessories: ASTM C 1047, manufacturer's standard metal trim accessories, of the beaded type, with face flanges for concealment in joint compound, except where semi-finishing or exposed type is indicated. Provide corner beads, L-type edge trim beads, U-type trim beads, special L-kerf-type edge trim beads, and one-piece control joint beads as indicated.

1. Interior Trim: Galvanized or aluminum-coated steel sheet or rolled zinc
2. Exterior Trim: Hot-dip galvanized steel.

## 2.4 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.

- B. Joint Tape:

1. Interior Gypsum Wallboard: Paper.
2. Exterior Gypsum Soffit Board: Paper.
3. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.
4. Tile Backing Panels: As recommended by panel manufacturer.

- C. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Provide chemical-hardening type for tape bedding, and ready-mixed vinyl-type for topping, on interior work.
2. Provide water-resistant type manufactured by United States Gypsum Co. for use with water-resistant (MR) gypsum board.
3. Provide chemical-hardening type for exterior work.

## 2.5 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.

- B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.

1. Use screws complying with ASTM C 954 for fastening panels to steel members from **0.033 to 0.112 inch** (0.84 to 2.84 mm) thick.
2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.

**PART 3 - EXECUTION**

**3.1 APPLYING AND FINISHING PANELS, GENERAL**

- A. Comply with ASTM C 840.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide ~~1/4-~~ to ~~1/2-inch-~~ (6.4- to 12.7-mm-) wide spaces at these locations, and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. STC-Rated Assemblies: Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.
  - 1. Minimum Assembly Rating: 47 STC.
  - 2. Install sound attenuation blankets before installing gypsum panels, unless blankets are readily installed after panels have been installed on one side.

**3.2 APPLYING GYPSUM BOARD**

- A. Install gypsum board in the following locations:
  - 1. Cementitious Backer Board: Provide as a substrate to ceramic tile in food preparation areas and restrooms from floor up to ~~4-feet~~ (1.22-m) AFF.
  - 2. Moisture Resistant Gypsum Board: Provide in all food preparation areas and restrooms from ~~4-feet~~ (1.22-m) to ceiling.
  - 3. Provide gypsum board on partitions from floor to ceiling, unless otherwise indicated.
  - 4. Provide drywall at vertical transition between ceilings of different height.
  - 5. Do not apply drywall to exterior walls behind refrigerated cases and shelving.

**3.3 INSTALLING TRIM ACCESSORIES**

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints at locations indicated on Drawings.
  - 1. Do not bridge building expansion joints.
    - a. Frame both sides of joints with furring and other supports, as indicated.
    - b. Leave space of the width indicated between boards, and install one-piece metal control joint.

2. Place control joints, using a standard "V" joint. Coordinate joint locations with masonry wall control joints.
3. Isolate drywall work from abutting structural and masonry work; provide edge trim and acoustical sealant as recommended by manufacturer.

### 3.4 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except those with trim having flanges not intended for tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
  1. Level 2: Dock and backroom walls, HVAC return air plenums, return airshafts and air-cooled compressor rooms to ensure airtight and surfaces to receive additional finishes such as FRP or ceramic tile.
    - a. At joints and interior angles, embed the tape in the joint compound and immediately apply the joint compound over the tape. Apply one coat of the joint compound on fastener heads, and flanges of trim accessories. Panel surfaces must be free of excess joint compound, but tool marks and ridges are acceptable.
  2. Level 4: Surfaces to receive painting or wall covering.
    - a. At joints and interior angles, embed the tape in the joint compound and immediately apply the joint compound over the tape. Apply two additional separate coats of the joint compound over flat joints. Apply one additional coat of the joint compound over interior angles. Apply three separate coats of the joint compound over fastener heads and flanges of trim accessories. Panel surfaces and the joint compound must be smooth and free of tool marks and ridges. "Drywall primer" must be applied to surfaces before applying final decoration.
- E. Cementitious Units: Finish according to manufacturer's written instructions.
- F. Sanding and Dust Control: Comply with manufacturer and OSHA 29 CFR 126.1153 requirements and guidelines as they relate to sanding quality and dust exposure.
  1. Wet sanding or vacuum sanding are required to control gypsum board and joint compound dust to an acceptable standard as evaluated by the Owner.
  2. Controlling and containing dust is essential for food safety in all areas involving open/operating facilities with Owner's employees, products, and customers.
  3. The Owner reserves the right to take additional containment and cleaning measures to control dust at the Contractor's expense.

3.5 PROTECTION

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
  - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 09 29 00

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