

## **SECTION 092900 - GYPSUM BOARD**

### **PART 1 - GENERAL**

#### **0.1 SUMMARY**

- A. Section Includes:
  - 1. Interior gypsum board.
  - 2. Tile backing panels.

#### **0.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product.

#### **0.3 QUALITY ASSURANCE**

- A. Mockups: Before beginning gypsum board installation, build mockups of at least 100 sq. ft. (9 sq. m) in surface area at locations as directed by Architect, to demonstrate aesthetic effects and to set quality standards for materials and execution.
  - 1. Build mockups for each level of gypsum board finish indicated for use in exposed locations.
  - 2. Apply or install final decoration indicated, including painting and wallcoverings, on exposed surfaces for review of mockups.
  - 3. Simulate finished lighting conditions for review of mockups.
  - 4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

### **PART 2 - PRODUCTS**

#### **0.1 PERFORMANCE REQUIREMENTS**

- 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.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.

#### **0.2 GYPSUM BOARD, GENERAL**

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

#### **0.3 INTERIOR GYPSUM BOARD**

- A. Gypsum Board, Type X: ASTM C 1396/C 1396M.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. CertainTeed Corporation.
    - b. Continental Building Products, LLC.

- c. Georgia-Pacific Building Products.
    - d. National Gypsum Company.
    - e. USG.
  - 2. Thickness: 5/8 inch (15.9 mm).
  - 3. Long Edges: Tapered.
- B. Gypsum Board, Type C: ASTM C 1396/C 1396M. Manufactured to have increased fire-resistive capability.
- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. CertainTeed Corporation.
    - b. Continental Building Products, LLC.
    - c. Georgia-Pacific Building Products.
    - d. National Gypsum Company.
    - e. United States Gypsum Company.
  - 2. Thickness: As required by fire-resistance-rated assembly indicated on Drawings.
  - 3. Long Edges: Tapered.
- C. Abuse-Resistant Gypsum Board: ASTM C 1629/C 1629M.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. CertainTeed Corporation; ProRoc Abuse Resistant.
    - b. Georgia-Pacific Building Products; ToughRock Abuse-Resistant Gypsum Board.
    - c. National Gypsum Company; Hi-Abuse Brand XP Fire-Shield Wallboard.
    - d. USG; FIBEROCK Brand Abuse-Resistant Gypsum Fiber Panel.
  - 2. Core: 5/8 inch (15.9 mm), Type X.
  - 3. Long Edges: Tapered.
  - 4. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.
- D. Mold-Resistant Gypsum Board: ASTM C 1396/C 1396M. With moisture- and mold-resistant core and paper surfaces.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. CertainTeed Corporation; ProRoc Moisture and Mold Resistant Gypsum Board with M2Tech.
    - b. National Gypsum Company; Gold Bond Brand XP Wallboard.
    - c. USG; SHEETROCK Brand Mold Tough or FIBEROCK Brand, Aqua Tough Interior Panels.
  - 2. Core: 5/8 inch (15.9 mm), Type X.
  - 3. Long Edges: Tapered.
  - 4. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.
- 0.4 TILE BACKING PANELS
- A. Glass-Mat, Water-Resistant Backing Board: ASTM C 1178/C 1178M, with manufacturer's standard edges.
- 1. Products: Subject to compliance with requirements, provide one of the following:

- a. CertainTeed Corporation; GlasRoc Tile Backer.
    - b. Georgia-Pacific Building Products; DensShield Tile Backer.
    - c. National Gypsum Company; eXP Tile Backer.
  - 2. Core: 5/8 inch (15.9 mm), Type X.
  - 3. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.
- B. Cementitious Backer Units: ANSI A118.9 and ASTM C 1288 or ASTM C 1325, with manufacturer's standard edges.
- 1. Basis-of-Design Product: Subject to compliance with requirements, provide United States Gypsum Company; DUROCK Cement Board.
  - 2. Thickness: 5/8 inch (15.9 mm).
  - 3. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.
- 0.5 TRIM ACCESSORIES
- A. Interior Trim: ASTM C 1047.
- 1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, or paper-faced galvanized steel sheet.
  - 2. Shapes:
    - a. Cornerbead.
    - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
    - c. Vinyl L-Bead: L-shaped, tear-away type that provides structural relief at perimeter of gypsum board assemblies; exposed long flange receives joint compound. Use where gypsum board abuts structure and where indicated.
      - 1) Basis-of-Design Product: Trim-Tex Inc., Lincolnwood IL ([trim-tex.com](http://trim-tex.com)); Super Seal Tear Away L Bead.
      - 2) Material: Extruded rigid PVC, with gasket that compresses against abutting structures upon installation.
    - d. Expansion (control) joint.
- 0.6 JOINT TREATMENT MATERIALS
- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
- 1. Interior Gypsum Board: Paper.
  - 2. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats. Do not use lightweight joint compounds for finish coats.
- 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.

- a. Use setting-type compound for installing paper-faced metal trim accessories.
- 3. Fill Coat: For second coat, use setting-type, sandable topping compound or drying-type, all-purpose compound.
- 4. Finish Coat: For third coat, use setting-type, sandable topping compound or drying-type, all-purpose compound.
- 5. Skim Coat: For final coat of Level 5 finish, use setting-type, sandable topping compound or drying-type, all-purpose compound.
- D. Joint Compound for Tile Backing Panels: As recommended by backing panel manufacturer.
- E. Joint Compound For Mold-Resistant Gypsum Board: As recommended by gypsum panel manufacturer for use with mold-resistant gypsum board products.

#### 0.7 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Perimeter Isolation Material: Where indicated to fill perimeter joints in gypsum board ceiling assemblies, provide cross-linked expanded polyethylene product complying with ASTM C 920, Type S, Grade NS, Class 35, and as follows:
  - 1. Basis-of-Design Product: Kinetics Noise Control, Dublin OH (800-959-1229, KineticsNoise.com); Model PIB/SRP.
- C. Ceiling Perimeter Tape: Where indicated to fill perimeter joints in gypsum board ceiling assemblies, provide cross-linked closed-cell polyethylene foam tape with pressure-sensitive adhesive; 1/4-inch thick by 7/8-inch wide (6-mm thick by 22-mm wide).
  - 1. Basis-of-Design Product: Kinetics Noise Control, Dublin OH (800-959-1229, KineticsNoise.com); Model CPT.
- D. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- E. 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.
- F. Sound Damping Compound: Viscoelastic damping compound recommended for laminating multiple layers of gypsum panels for improved sound transmission reduction in wall assemblies.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide The Green Glue Company, Saint-Gobain (greengluecompany.com); Green Glue Noiseproofing Compound.
- G. Sound-Attenuation Blankets: ASTM C 665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
  - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.

H. Acoustical Joint Sealant: As specified in Section 079200 "Joint Sealants."

I. Thermal Insulation: As specified in Section 072100 "Thermal Insulation."

### PART 3 - EXECUTION

#### 0.1 APPLYING AND FINISHING PANELS

- A. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- B. Comply with ASTM C 840.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. 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. 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.
- E. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- F. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- G. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
  - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
  - 2. Level 2: Panels that are substrate for tile.
  - 3. Level 3: Mechanical spaces and closets.
  - 4. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated and at panel surfaces serving as substrate for wall coverings.
  - 5. Level 5: Where indicated on Drawings.
- H. Install interior gypsum board in the following locations:
  - 1. Type X: Vertical and horizontal surfaces unless otherwise indicated.
  - 2. Abuse-Resistant Type: As indicated on Drawings.
  - 3. Mold-Resistant Type: Exposed surfaces located in moisture areas including kitchens, laundries, toilet rooms, showers, and janitor or custodial closets.
  - 4. Type C: Where required for specific fire-resistance-rated assembly indicated.
  - 5. Acoustically Enhanced Type: As indicated on Drawings.
- I. Glass-Mat Faced Panels: Finish according to manufacturer's written instructions.
- J. Cementitious Backer Units: Finish according to manufacturer's written instructions.
- K. 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 instructions for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

1. Apply sound damping compound between panels according to manufacturer's written instructions.
  - L. Laminating to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members, or base layer of gypsum board), temporarily brace or fasten gypsum panels until fastening adhesive has set.
  - M. Control Joints: Install control joints at according to ASTM C 840 and in specific locations approved by Architect for visual effect.
  - N. Interior Trim: Install in the following locations:
    1. Cornerbead: Use at outside corners.
    2. LC-Bead: Use at exposed panel edges.
- 0.2 PROTECTION
- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
  - B. Remove and replace panels that are wet, moisture damaged, and mold damaged.

END OF SECTION