

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

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

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- C. Samples: For each texture finish indicated on same backing indicated for Work.

1.3 QUALITY CONTROLS

- A. **Contractor to obtain each type of gypsum board, other panel products, and finishing materials from a single manufacturer.**
- B. **All gypsum assemblies shall be applied using screws. Nails are not permitted.**
- C. **All gypsum finishing shall be accomplished by vacuum sanding.**
- D. **All gypsum board patching to be from stud to stud.**
- E. **Interior gypsum assemblies at exterior walls shall be full height.**
- F. **Access panels shall be provided in all assemblies for any equipment or item requiring maintenance or periodic replacement.**

PART 2 - PRODUCTS

2.1 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.
 - 1. **Fire-Resistance Ratings shall comply with GA File Numbers in GA-600 "Fire Resistance Design Manual" or design designations in UL "Fire Resistance Directory" or in the listing of another testing and inspecting agency acceptable to authorities having jurisdiction.**

- 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.

2.2 GYPSUM BOARD, GENERAL

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

2.3 INTERIOR GYPSUM BOARD

- A. Gypsum Wallboard: ASTM C 1396/C 1396M.

- 1. Manufacturers: **Gypsum board manufactured outside the Continental United States is not permitted.** Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

- a. Georgia-Pacific Building Products.
- b. United States Gypsum Corporation.
- c. Quiet Solutions, Inc.
- d. National Gypsum Corporation.
- e. Approved equal prior to bid.

- 2. Thickness: 5/8 inch minimum or as indicated on drawings.
- 3. Long Edges: Tapered.

- B. Gypsum Board, Type X: ASTM C 1396/C 1396M. **Provide in all gypsum board locations, unless indicated otherwise.**

- 1. Thickness: **5/8 inch.**
- 2. Long Edges: Tapered.

- C. Gypsum Ceiling Board: ASTM C 1396/C 1396M.

- 1. Thickness: **5/8 inch.**
- 2. Long Edges: Tapered.

- D. Mold-Resistant Gypsum Board: ASTM C 1396/C 1396M. With moisture- and mold-resistant core and paper surfaces. To occur at all restroom locations. Refer to Drawings for locations.

- 1. Thickness: **5/8 inch Durock Cement Board Next Gen.**
- 2. Core: As indicated.
- 3. Long Edges: Tapered.
- 4. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

- E. Gypsum Board at Sound Wall Partitions

- 1. QuietRock 527 by Quiet Solution, Inc./Serious Energy, Inc. www.quietrock.com

- a. Edges: Tapered.
- b. Thickness: 5/8".
- c. Weight: 2.7 psf.

2.4 TILE BACKING PANELS

- A. Glass-Mat, Water-Resistant Backing Board: ASTM C 1178/C 1178M, with manufacturer's standard edges.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. Basis of Design: Georgia-Pacific Building Products, DensShield Tile Backer
 - b. United States Gypsum Corporation.
 - c. Quiet Solutions, Inc.
 - d. National Gypsum Corporation.
 - e. Approved equal prior to bid.
 2. Core: As indicated on Drawings.
 3. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

2.5 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
 1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet.
 2. Shapes:
 - a. **All control joints in wall or ceiling to be anodized aluminum drywall reveal molding unless noted otherwise.**
 - b. Cornerbead.
 - c. Bullnose bead.
 - d. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - e. L-Bead: L-shaped; exposed long flange receives joint compound.
 - f. U-Bead: J-shaped; exposed short flange does not receive joint compound.
 - g. Expansion (control) joint. **Provide at a minimum of every twenty feet (20'-0") in runs over twenty feet (20'-0") or as indicated on drawings.**
 - h. Curved-Edge Cornerbead: With notched or flexible flanges.
 3. Shapes:
 - a. Cornerbead.
 - b. Bullnose bead.
- B. Aluminum Trim: Extruded accessories of profiles and dimensions indicated.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. Fry Reglet Corporation.
 - b. Gordon, Inc.
 - c. Pittcon Industries.
 - d. Approved equal prior to bid.
2. Aluminum: Alloy and temper with not less than the strength and durability properties of ASTM B 221 (ASTM B 221M), Alloy 6063-T5.
3. Finish: Corrosion-resistant primer compatible with joint compound and finish materials specified. Finish as noted.

2.6 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.
 1. Prefilling: At open joints 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.
 4. Finish Coat: For third coat, use setting-type, sandable topping compound.
 5. **Skim entire wall Textured Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound. Use a trowel or large knife to spread joint compound in random, sweeping strokes. This mimics the irregular look of hand-applied plaster. Vary pressure and direction for a more natural, artisan look. Once dry, lightly sand high spots or overly sharp ridges. Finally, use a drywall primer to seal the compound and create a uniform surface for painting. Provide sample area to architect for approval prior to applying to all walls.**
 6. **Drying-Type Joint Compounds for Gypsum Board shall be factory-packaged vinyl-based products complying with the following requirements for formulation and intended use.**
 - a. **Ready-Mixed Formulation: Factory-mixed product.**
 - 1). **Taping compound formulated for embedding tape and for first coat over fasteners and face flanges of trim accessories.**
 - 2). **Topping compound formulated for fill (second) and finish (third) coats.**

3). All-purpose compound formulated for both taping and topping compounds.

- D. Joint Compound for Tile Backing Panels:
1. Glass-Mat, Water-Resistant Backing Panel: As recommended by backing panel manufacturer.
 2. Cementitious Backer Units: As recommended by backer unit manufacturer.
- E. **Reveal Molding detail:**
1. **For areas where gypsum board abuts different material as well as control joints in gypsum board (locations are on drawings) separate with a Fry Reglet reveal molding (www.fryreglet.com). Refer to Drawing I110 for requirements. Talk to architect about proper installation and reveal shapes. Material to be aluminum. Paint color of adjacent material.**
- 2.7 AUXILIARY MATERIALS
- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- C. 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 thick.
 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. 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.
 3. **Install for full height of wall assembly.**
- E. Acoustical Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
1. **Acoustic sealant shall be provided at the top and bottom, and around all penetrations of assemblies classified as "sound" or "acoustic" rated assemblies.**
 2. **Acoustical Sealant for Concealed Joints: Manufacturer's standard nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant**

recommended for sealing interior concealed joints to reduce transmission of airborne sound.

3. Sealant Products: Subject to compliance with these requirements, specify that the contractor shall provide one of the following:
 - a. Acoustical Sealant for Exposed and Concealed Joints:
 - 1). PL Acoustical Sealant; ChemRex, Inc.; Contech Brands.
 - 2). AC-20 FTR Acoustical and Insulation Sealant; Pecora Corp.
 - 3). SHEETROCK Acoustical Sealant; United States Gypsum Co.
 - b. Acoustical Sealant for Concealed Joints:
 - 1). BA-98; Pecora Corp.
 - 2). Tremco Acoustical Sealant; Tremco, Inc.

- F. Thermal Insulation: As specified in Section 072100 "Thermal Insulation."

PART 3 - EXECUTION

3.1 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- 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 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: **Not used on this project.**
 4. Level 4: **At all wall panel surfaces that will be exposed to view for back of house (non public rooms, storage rooms and equipment rooms.**
 - a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."
 5. Level 5: **At all public wall panel surfaces.**

- a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."
- H. Cementitious Backer Units: Finish according to manufacturer's written instructions.

3.2 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 according to ASTM C 840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.
 - 2. Bullnose Bead: Use where indicated.
 - 3. LC-Bead: Use at exposed panel edges.
 - 4. L-Bead: Use where indicated.
 - 5. U-Bead: Use where indicated.
 - 6. Curved-Edge Cornerbead: Use at curved openings.
 - 7. Custom shapes: where indicated.
- D. Exterior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.
 - 2. LC-Bead: Use at exposed panel edges.

3.3 Aluminum Trim: Install in locations indicated on Drawings.

3.4 FIRE BARRIER / SMOKE BARRIER / SMOKE PARTITION IDENTIFICATION

- A. Per intent of current edition of IBC Chapter 7: Fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with stenciling. Such identification shall:
 - 1. **Contractor shall permanently identify all fire resistant rated walls (and corresponding fire resistant rating) including fire barrier walls, smoke barrier walls, fire partitions, fire walls, and shaft enclosures either by installing signs or by stenciling in concealed spaces the following: (() HOUR FIRE AND SMOKE BARRIER, PROTECT ALL OPENINGS), Identification shall be spaced not more than twelve (12) feet on center with a minimum letter size of two (2) inches in height on a contrasting background (SBC section 7035 of the 2003 Georgia State Amendments (Title 25 State Fire Marshal's Rules and Regulations Chapter 120.3.3).**

3.5 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 092900