SECTION 09260

GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal stud wall framing.

B. Metal channel ceiling framing.

C. Acoustic insulation.

D. Gypsum wallboard.

E. Joint treatment and accessories.

1.02 REFERENCE STANDARDS

A. ANSI A108.11 - American National Standard for Interior Installation of Cementitious Backer Units; 1999 (R2005).

B. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 1999 (R2005).

C. ASTM C 36 - Standard Specification for Gypsum Wallboard; 2001.

D. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2002 (Reapproved 2007).

E. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2008.

F. ASTM C1325 - Standard Specification for Non-Asbestos Fiber-Mat Reinforced Cement Substrate Sheets; 2008b.

G. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2009a.

H. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2000 (Reapproved 2005).

I. GA-216 - Application and Finishing of Gypsum Board; Gypsum Association; 2010.

J. GA-226 - Application of Gypsum Board to Form Curved Surfaces; Gypsum Association; 2008.

1.03 SUBMITTALS

A. See Section 01300 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on metal framing.

1.04 QUALITY ASSURANCE

A. Perform in accordance with ASTM C 840.

1.05 REGULATORY REQUIREMENTS

A. Conform to applicable code for fire rated assemblies as indicated on drawings.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.

2.02 MANUFACTURERS

A. Gypsum Board:
   1. G-P Gypsum Corp.
   2. National Gypsum Co.
   3. United States Gypsum Co.

2.03 METAL FRAMING MATERIALS

A. Manufacturers - Metal Framing, Connectors, and Accessories:
   1. Dietrich Metal Framing; Product Steel Studs: www.dietrichindustries.com.
   2. USG; Product Steel Studs.

B. Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf.
   1. Studs: "C" shaped with flat or formed webs.
   2. Runners: U shaped, sized to match studs.
   3. Ceiling Channels: C shaped.
   4. Furring: Hat-shaped sections, minimum depth of 7/8 inch.

C. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required.

D. Partition Head To Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and screwed to secondary deflection channel set inside but unattached to top track.

2.04 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
   1. CertainTeed Corporation: www.certainteed.com.
   2. National Gypsum Company: www.nationalgypsum.com.
   3. USG Corporation: www.usg.com.

B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
   1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
   2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
      a. Mold-resistant board is required whenever board is being installed before the building is enclosed and conditioned.
   3. Thickness:
      a. Vertical Surfaces: 5/8 inch.
      b. Ceilings: 5/8 inch.

C. Backing Board For Wet Areas: One of the following products:
   1. Application: Surfaces behind tile in wet areas including tub and shower surrounds and shower ceilings.
   2. ANSI Cement-Based Board: Non-gypsum-based; aggregated Portland cement panels with glass fiber mesh embedded in front and back surfaces complying with ANSI A118.9 or ASTM C1325.
      a. Thickness: 1/2 inch.

D. Gypsum Wallboard: ASTM C 1396/C 1396M. Sizes to minimize joints in place; ends square cut.
   1. Thickness: 5/8 inch.
   2. Edges: Tapered.

E. Water-Resistant Gypsum Backing Board: ASTM C 1396/C 1396M; ends square cut.
   1. Application: Vertical surfaces behind thinset tile, except in wet areas.
   2. Edges: Tapered.
   3. Thickness: 5/8 inch.

4. Edges: Tapered.

2.05 ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced.

B. Acoustic Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.

C. Corner Beads: Galvanized steel.

D. Trim: ASTM C 840; Bead type L bead, as defined in ASTM C 840.

E. Accent / Control Joints: USG zinc control joint No. 093.

F. Joint Materials: ASTM C475 and as recommended by gypsum board manufacturer for project conditions.
   1. Ready-mixed vinyl-based joint compound.

G. Screws: ASTM C 1002; self-piercing tapping type; cadmium-plated for exterior locations.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 FRAMING INSTALLATION

A. Suspended Ceilings and Soffits: Space framing and furring members at 24 inches on center.
   1. Level ceiling system to a tolerance of 1/600.
   2. Laterally brace entire suspension system.

B. Studs: Space studs at 16 inches on center.
   1. Extend partition framing to structure where indicated and to ceiling in other locations.
   2. Partitions Terminating at Structure: Attach extended leg top runner to structure, maintain clearance between top of studs and structure, and brace both flanges of studs with continuous bridging.
   3. Extend stud framing through ceiling to structure above. Maintain clearance under structural building members to avoid deflection transfer to studs. Provide extended leg ceiling runners.

C. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.

D. Standard Wall Furring: Install at concrete and masonry walls scheduled to receive gypsum board, not more than 4 inches from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 24 inches on center.
   1. Orientation: Vertical.

E. Blocking: Install blocking for support of plumbing fixtures and toilet partitions. Comply with Section 06114 for wood blocking.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

B. Acoustic Sealant: Install in accordance with manufacturer's instructions.
   1. Place one bead continuously on substrate before installation of perimeter framing members.

3.04 BOARD INSTALLATION

A. Comply with ASTM C 840. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Non-Rated: Install gypsum board parallel to framing, with ends and edges occurring over firm bearing.

C. Cementitious Backing Board: Install over steel framing members where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.

D. Installation on Metal Framing: Use screws for attachment of all gypsum board.

E. Curved Surfaces: Apply gypsum board to curved substrates in accordance with GA-226.

F. Moisture Protection: Treat cut edges and holes in moisture resistant gypsum board with sealant.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
   1. Not more than 30 feet apart on walls and ceilings over 50 feet long.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials and as indicated.

3.06 JOINT TREATMENT

A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
   1. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
   2. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.

B. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
   1. Feather coats of joint compound so that camber is maximum 1/32 inch.

3.07 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

3.08 FINISH LEVEL SCHEDULE

A. Level 1: Above finished ceilings concealed from view.

B. Level 2: Utility areas and areas behind cabinetry.

C. Level 4: Walls and ceilings scheduled to receive flat or eggshell paint finish.

END OF SECTION