

SECTION 092900
GYPSUM BOARD SYSTEMS

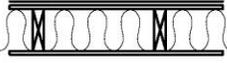
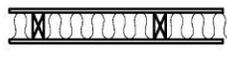
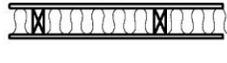
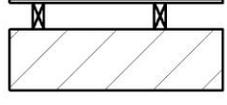
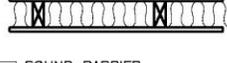
PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Acoustic insulation.
- B. Gypsum board with taped and sanded joint treatment.

1.2 SYSTEM DESCRIPTION

- A. Acoustic Attenuation for Identified Interior Partitions: 50 STC in accordance with ASTM E90.
- B. Conform to applicable code for fire rated assemblies as follows:
 - 1. Partition and Wall Systems

<u>Type</u>	<u>Description</u>
 <p>A-1 SIDING EXT. 1 HR. RATED A-2</p>	<p>VINYL SIDING / STONE VENEER 7/16" ZIP SHEATHING 5-1/2" UNFACED BATT INSUL (R-21) 2"x6" WOOD STUDS @ 12" O.C. (BASEMENT) 2"x6" WOOD STUDS @ 24" O.C. (1ST & 2ND FLOOR) 5/8" GYP BD. - TYPE X CORE ONE HOUR FIRE RATING (UL DESIGN U356)</p>
 <p>B-B 1 HOUR BEARING PARTITION B-1 B-2</p>	<p>5/8" GYP BD. TYPE X CORE TO CLG. BOTH SIDES. 5 1/2" SOUND INSUL. 2"x6" WOOD STUDS @ 12" O.C. (BASEMENT) 2"x6" WOOD STUDS @ 24" O.C. (1ST & 2ND FLOOR) ONE HOUR FIRE RATING (UL DESIGN U309)</p>
 <p>C 1 HOUR PARTITION</p>	<p>5/8" GYP BD. TYPE X CORE TO CLG. BOTH SIDES. 5 1/2" SOUND INSUL. 2"x6" WOOD STUDS @ 24" O.C. FULL HT. PARTITION TO UNDERSIDE OF FLOOR/ROOF TRUSSES ONE HOUR FIRE RATING (UL DESIGN U309)</p>
 <p>D-1 INT. STUD & CONCRETE BLOCK D-2 D-3</p>	<p>5/8" GYP BD. 2" x 6" (2 x 4 AS NOTED) WOOD STUDS @ 12" O.C. (BASEMENT) 2" x 6" (2 x 4 AS NOTED) WOOD STUDS @ 24" O.C. (1ST & 2ND FLOOR PLAN) 8" REINF. CMU 1 HR RATING PER 2015 IBC TABLE 721.1(2)</p>
 <p>E SOUND BARRIER</p>	<p>5/8" GYP BD. TYPE X CORE TO CLG. BOTH SIDES. 5 1/2" SOUND INSUL. (3 1/2" AS NOTED) 2"x6" WOOD STUDS @ 24" O.C. (2x4 AS NOTED) (2"x4" AS NOTED)</p>
 <p>F UNIT TYPICAL INT.</p>	<p>5/8" TYPE X GYP BD. TO CEILING BOTH SIDES. 2"x4" WOOD STUDS @ 24" O.C. (2"x6" AS NOTED) W/ DOUBLE TOP PLATE. SEE DETAIL A/A1</p>

Note: All bathrooms, laundry rooms, and other wet areas to receive 5/8" moisture resistant Gypsum Board.

2. Floor/Ceiling and Ceiling/Roof Assembly Types

- Type 1. Assembly at Wood Trusses (1 hr Rating UL Design L528): 5/8" Gypsum Board F.C. Type C applied at right angles to resilient furring channel with 1" Type S drywall screws 12" oc and 1-1/2" from edges and joints located mid-way between continuous channels 16" oc secured with 1 1/4" long No.6 Type S Bugle Head screws to parallel chord wood trusses 24" oc supporting 3/4" nominal floor sheathing with exterior glue, T&G edges, perpendicular to trusses, joints staggered 4' with construction adhesive and No. 6d ring shank nails 12" oc. Adhesive applied to each top chord and grooved edges of plywood. 6" sound attenuating insulation.
- Type 2. Assembly at Wood Joists (1 hr Rating UL Design L501): 5/8" Type X Gypsum Board ceiling, 3/4" floor sheathing with exterior glue screwed and glue to 2x joists, 6" sound attenuating insulation between joists.
- Type 3. Suspended Gypsum Board Ceiling (Not-Rated): 5/8" Gypsum Board applied to drywall suspended grid system equal to Armstrong SI8945.6" sound attenuating insulation.
- Type 4. Ceiling Roof Assembly (1 hr Rating – UL Design P533) Gypsum Board, Wood Joists, Roof Covering: One Layer 5/8" Type C gypsum wallboard applied at right angles to resilient furring channels 12" OC with 1 1/8" Type S drywall screws 8" OC. Gypsum board end joints attached with screws 8" OC to additional pieces of channel 60" long located 3" back on either side of end joint. Resilient channels applied at right angles to bottom chord of wood roof trusses 24" OC with 1 1/4" Type S or W screws. Glass fiber or mineral fiber with kraft paper facing applied directly over gypsum board. Trusses supporting 15/32" plywood or OSB roof sheathing applied at right angles to trusses with construction adhesive and 6d ring shank nails 12" OC.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with ASTM C840, GA-600 - Fire Resistance Design Manual.

PART 2 PRODUCTS

2.1 GYPSUM BOARD SYSTEM

- A. Manufacturers:
1. U.S. Gypsum Co.
 2. Domtar Gypsum
 3. Gold Bond Gypsum
- B. Gypsum Board Types: See Sections 1.2.1, 1.2.2, and 1.2.3. All Gypsum Board to be maximum permissible length; ends square cut, tapered edges; unless noted otherwise as follows:
1. Standard Type: ASTM C36.
 2. Fire Rated Type: ASTM C36 fire resistive, UL rated.
 3. Moisture Resistant Type: ASTM C630.

4. Gypsum Sheathing: ASTM C79

2.2 ACCESSORIES

- A. Sound Insulation: ASTM C665, preformed mineral wool, friction fit type, thickness as indicated.
- B. Acoustical Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board; manufactured by U. S. Gypsum Co., or equal.
- C. Corner Beads: Metal.
- D. Edge Trim: GA 201 and GA 216, Type LC L bead U shape exposed reveal bead.
- E. Joint Materials: GA 201 and GA 216, reinforcing tape, joint compound, adhesive, and water.
- F. Fasteners: ASTM C1002 Type S12 hardened screws.
- G. Drywall Suspended Grid System: Equal to Armstrong Drywall Grid System
- H. Ceiling Furring – ASTM C645, 7/8” Resilient Furring Channels
- I. Soffit Framing: 1 5/8” Light Gauge Metal Studs – Marino or Equal
- J. “Z” Furring Channels – US Gypsum or Equal

PART 3 EXECUTION

3.1 INSTALLATION – SOFFIT FRAMING

- A. Install studding in accordance with ASTM C754.
- B. Metal Stud Spacing: 16 inches o.c. – See Partition Types on Drawings.
- C. Partition Heights: As indicated on dwgs. Install additional bracing for partitions extending above ceiling.

3.2 INSTALLATION – CEILING FRAMING

- A. Install in accordance with ASTM C754.
- B. Coordinate location of hangers with other work. Install ceiling framing independent of walls, columns, and above ceiling work.
- C. Reinforce openings in ceiling suspension system which interrupt main carrying channels or furring channels, with lateral channel bracing.
- D. Laterally brace entire suspension system.

3.3 INSTALLATION – ACOUSTICAL ACCESSORIES

- A. Install resilient channels at maximum 24 inches on center. Locate joints over framing members.
- B. Place acoustical insulation in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.

- C. Install acoustical sealant within partitions in accordance with manufacturer's instructions.

3.4 INSTALLATION - GYPSUM BOARD

- A. Install gypsum board in accordance with manufacturer's instructions.
- B. Fasten gypsum board to furring or framing with screws.
- C. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
- D. Treat cut edges and holes in moisture resistant gypsum board, with sealant.

3.5 JOINT TREATMENT

- A. Tape, fill & sand exposed joints, edges & corners to produce smooth surface ready to receive finishes.
- B. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.
- C. Taping, filling, and sanding is not required at surfaces behind adhesive applied ceramic tile.
- D. Erect pre-decorated gypsum board vertically, with exposed batten fastening system.
- E. Erect in accordance with manufacturer's instructions.

3.6 TOLERANCES

- A. Maximum Variation from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION