

**09260: GYPSUM BOARD ASSEMBLIES**

**NON-LOAD BEARING METAL FRAMING**

Wall Systems: Select steel studs in accordance with the manufacturer's standard load tables and the following design pressures and deflections:

At Stairs, Elevator Hoistways, and Other Vertical Shafts: L/120 at 10 psf.

At Ground Floor Lobbies: L/120 at 15 psf.

At Partitions to Receive Stone Cladding: L/360 at 15 psf or 0.5 G (half the weight of stone cladding) applied laterally, as required by CBC Section 1632.

At Partitions to Receive Lath and Plaster: L/360 at 15 psf.

At All Other Partitions: L/240 at 5 psf.

At non-composite conditions where wallboard is partial height, require calculations be submitted by a structural engineer licensed in the State of California verifying compliance with required deflection.

Joisted ceiling deflection shall be designed to limit deflection to L/360.

Steel framing shall be isolated from building structure so as to prevent transfer of loading imposed by structural movement.

Contractor shall be required to submit and conform to the ICBO Report of framing system for stud gage and spacing for all wall conditions.

Require submittals that utilized manufacturer's standard details for bracing, top and bottom plate, and framing all openings. Specify fasteners, top and bottom, both sides.

**Materials:**

General: Metal studs, track, and sheet metal furring channels shall comply with ASTM C645.

**Partitions:**

Minimum Gauge: 20.

Use 16 gage studs at least 3-5/8 inches wide at wall-mounted fixtures, casework, equipment, shelving, handrails, and grab bars.

Manufactured Shaft Enclosure System, Cavity Wall Type: "Cavity Shaft Wall System, C-H Stud Design," by U.S. Gypsum; "620 Shaftwall System" by Domtar Gypsum; or equal. Select system and UL Design based on required fire rating.

Wire for tying and bracing shall be galvanized, soft annealed steel.

Specify that installation of metal framing comply with requirements of ASTM C754.

Show and detail metal backing plates on Drawings, 16-gage minimum.

If a fire rated assembly is required, indicate UL, CBC or other CSFM approved listing on Drawings. Assembly detail shall match the referenced assembly.

Powder driven fasteners, if used, shall conform to the requirements specified in Division 1 and restrictions imposed by the project structural engineer at post-tensioned slabs.

In gypsum board ceilings, locate and show required access panels as specified in Division 8. Size access panels large enough to provide maintenance access.

Where multi pipe/cable runs occur in corridors such as in Laboratory buildings, the use of suspended finished ceilings is discouraged.

### **GYPSUM BOARD**

Industry Standards: Work shall comply with the applicable requirements of GA publication GA-216 and GA-214.

#### Materials:

Fire-Rated Board: ASTM C1396, Type X, unless more stringent type required by code.

Thickness: 5/8 inch, unless otherwise noted.

Edges: Tapered and rounded.

Size: 4 feet 0 inches wide by lengths that will result in minimum footage of joints.

Fire-Rated Water-Resistant Board: ASTM C1396, Type X.

Thickness: 5/8 inch.

Edges: Tapered.

Size: 4 feet 0 inches wide by lengths that will result in minimum footage of joints.

Shaft-Liner Board: ASTM C442, 1 inch thick, square edge, unless otherwise required for selected UL assembly.

Laminating Adhesive: VOC compliant and as recommended by gypsum board manufacturer for laminating gypsum board together in fire-rated construction.

Screws: Phillips head with bugle shape, Type S, conforming to ASTM C1002. Use Type W for attachment to wood.

Concealed Metal Reinforcements and Casing: Electrogalvanized, conforming to ASTM C1047.

Taping and Finishing Products: Comply with ASTM C475 and with manufacturer's recommendations for specific project conditions.

Installation:

General: Comply with ASTM C840 and GA-216 in addition to requirements of CBC. Conform to UL designs for fire-rated partitions except where exceeded by other requirements.

Provide concealed metal reinforcement at external corners and where gypsum board meets dissimilar material.

Use water-resistant gypsum board at partitions to receive ceramic tile, in damp areas, and where exposed to excessive moisture. Do not use on ceilings unless support framing is maximum 12 inches on center. Use cementitious backer board of silicone impregnated backer board at partitions in wet areas.

Seal perimeter and penetrations at sound-rated construction to meet specific project acoustical requirements.

Construction Tolerances:

Gypsum board surfaces to be painted shall have no measurable variation in any 2-foot direction and a maximum variation of 1/8 inch in 10 feet 0 inches when a straightedge is laid on the surface in any direction.

Coordinate with tolerances required for surfaces to receive tile.

Do not exceed 1/16-inch offset between planes of abutting sheets at edges or ends.

Level of Finishes: In accordance with GA-214.

At Locations Indicated to Receive "Fire-Taping" and at Unexposed Gypsum Board Applications: Level 1.

Areas to Receive Ceramic Tile: Level 3.

Locations to Receive Paint with Gloss Level Greater than Eggshell (Except Restrooms and Utilitarian Areas such as Janitor Closets and Mechanical Rooms): Level 5.

All Other Locations: Level 4.

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