

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Performance criteria for gypsum board assemblies.
- B. Metal stud wall framing for interior partitions.
- C. Metal channel ceiling framing.
- D. Acoustic insulation.
- E. Gypsum wallboard.
- F. Joint treatment and accessories.

1.02 RELATED REQUIREMENTS

- A. Section 06 1000 - Rough Carpentry: Building framing and sheathing.

1.03 REFERENCE STANDARDS

- A. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2015.
- B. ASTM C645 - Standard Specification for Nonstructural Steel Framing Members; 2014.
- C. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2012.
- D. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2015.
- E. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2013.
- F. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2015.
- G. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2014.
- H. ASTM C1047 - Standard Specification for Accessories For Gypsum Wallboard and Gypsum Veneer Base; 2014a.
- I. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2014.
- J. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009.
- K. ASTM E413 - Classification for Rating Sound Insulation; 2010.
- L. GA-216 - Application and Finishing of Gypsum Board; 2013.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing gypsum board installation and finishing, with minimum ___ years of experience.

PART 2 PRODUCTS**2.01 GYPSUM BOARD ASSEMBLIES**

- A. Provide completed assemblies complying with ASTM C840 and GA-216.
- B. Interior Partitions, Indicated as Acoustic: Provide completed assemblies with the following characteristics:
 - 1. Acoustic Attenuation: STC of 45-49 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.
- C. Fire Rated Assemblies: Provide completed assemblies complying with applicable code.

2.02 METAL FRAMING MATERIALS

- A. 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/120 at 5 psf.
 - 1. Exception: The minimum metal thickness and section properties requirements of ASTM C 645 are waived provided steel of 40 ksi minimum yield strength is used, the metal is continuously dimpled, the effective thickness is at least twice the base metal thickness, and maximum stud heights are determined by testing in accordance with ASTM E 72 using assemblies specified by ASTM C 754.
 - a. Acceptable Products:
 - 1) Dietrich Metal Framing; UltraSteel (tm): www.dietrichindustries.com.
 - 2) Clark Western Building Systems; UltraSteel (tm): www.clarkwestern.com.
 - 2. Studs: "C" shaped with flat or formed webs with knurled faces.
 - 3. Runners: U shaped, sized to match studs.
 - 4. Ceiling Channels: C-shaped.
 - 5. Furring: Hat-shaped sections, minimum depth of 7/8 inch.
 - 6. Resilient Furring Channels: Single or double leg configuration; 1/2 inch channel depth.
- B. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required.
- C. 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 fastened as indicated on drawings.

2.03 BOARD MATERIALS

- A. 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.
- B. Gypsum Wallboard: ASTM C 1396/C 1396M. Sizes to minimize joints in place; ends square cut.
 - 1. Regular Type:
 - a. Application: Use for vertical surfaces, unless otherwise indicated.
 - b. Thickness: 5/8 inch.
 - c. Edges: Tapered.
 - 2. Fire Resistant Type: Complying with Type X requirements; UL or WH rated.
 - a. At Assemblies Indicated with Fire-Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X.
 - b. Application: Where required for fire-rated assemblies, unless otherwise indicated.
 - c. Thickness: 5/8 inch.
 - d. Edges: Tapered.
- C. 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. Core Type: Regular and Type X, as indicated.
 - 3. Thickness: 1/2 inch, and 5/8 inch, as indicated.
 - 4. Edges: Tapered.

2.04 GYPSUM WALLBOARD ACCESSORIES

- A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: 3 1/2 inch.
- B. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.
- C. Finishing Accessories: ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.
 - 1. Types: As detailed or required for finished appearance.
- D. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.

- E. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inch in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion resistant.
- F. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws, corrosion resistant.

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. Metal Framing: Install in accordance with ASTM C754 and manufacturer's instructions.
- B. Suspended Ceilings and Soffits: Space framing and furring members as indicated.
- C. 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 Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.
 - 3. 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.
- D. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.
- E. Standard Wall Furring: Install at concrete 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.
- F. Acoustic Furring: Install resilient channels at maximum 24 inches on center. Locate joints over framing members.
- G. Blocking: Install blocking for support of:
 - 1. Wall mounted cabinets.
 - 2. Plumbing fixtures (capable of sustaining a concentrated load of 250 lbs).
 - 3. Toilet partitions.
 - 4. Toilet accessories (grab bars capable of sustaining a concentrated load of 250 lbs).
 - 5. Wall mounted door hardware.
- H. Blocking: Install blocking for support of plumbing fixtures, toilet partitions, wall cabinets, toilet accessories, and hardware.

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.

3.04 BOARD INSTALLATION

- A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Fire-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

- A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
- B. Corner Beads: Install at external corners, using longest practical lengths.

3.06 JOINT TREATMENT

- A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:

1. Level 1: Fire rated wall areas above finished ceilings, whether or not accessible in the completed construction.
- B. Finish all gypsum board in accordance with ASTM C 840 Level 4.
- C. 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.

END OF SECTION