

SECTION 09111  
METAL STUD FRAMING SYSTEM

## PART 1 GENERAL

## 1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to work in this section.
- B. Requirements of this section apply to Gypsum Plaster and Portland Cement Plaster Work.

## 1.2 SYSTEM DESCRIPTION:

- A. The extent of the use of metal studs is indicated on the drawings and/or specified herein.

## 1.3 REFERENCES:

- A. ASTM A591/A591M – Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Weight [Mass] Applications.
- B. ASTM C645 – Standard Specification for Non-Load (Axial) Bearing Steel Studs, Runners (Track) and Rigid Furring Channel for Screw Attachment of Gypsum Board.
- C. ASTM C754 – Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Lath, Backing Board or Water-Resistant Backing Board.
- D. GA 203 – Installation of Screw Type Steel Framing Members to Receive Gypsum Board.
- E. MFMA (Metal Framing Manufacturer’s Association) – Guidelines for the Use of Metal Framing.
- F. ASCE 7-98 – Minimum Design Loads for Buildings and other Structures.
- G. Underwriters Laboratories (UL) - Fire Resistance Manual
- H. Gypsum Association (GA) - Fire Resistance Design Manual.
- I. Florida Building Code.

## 1.4 SUBMITTALS:

- A. Shop Drawings: Indicate prefabricated work, component details, stud layout, framed openings, anchorage to structure, type and location of fasteners, and accessories or items required of other related work.
- B. Describe method for securing studs to tracks, splicing, and for blocking and reinforcement to framing connections.
- C. Provide calculations for loadings and stresses of exterior walls to meet or exceed the requirements of ASCE 7-98 by a Professional Structural Engineer, licensed in Florida.
- D. Product Data: Provide data describing standard framing member materials and finish, product criteria, load charts and limitations.
- E. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

## 1.5 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver materials and store off the floor in dry area to prevent damage due to corrosion, moisture, excessive handling.
  - 1. When evidence of moisture occurs, immediately remove water and leave members completely dry.

- B. Installation of rusted framing members will not be accepted.

## PART 2 PRODUCTS

### 2.1 ACCEPTED MANUFACTURERS:

- A. Manufacturers subject to compliance with requirements, provide products of one of the following:
  1. Gold Bond Building Products Div., National Gypsum Co.
  2. Dale/Incor Industries
  3. United States Gypsum Co.

### 2.2 STUD FRAMING MATERIALS:

- A. Studs in interior partitions of at least 1<sup>5</sup>/<sub>8</sub>" x 3<sup>5</sup>/<sub>8</sub>" may be, 25-ga (less than 12' high), 22-ga or heavier (12'- 16' high), 20-ga or heavier (more than 16' high), ASTM C645 "Specification for Design of Cold-Formed Steel Structural Members.
- B. Provide minimum double 18-ga studs at window and door opening.
- C. Exterior wall framing: Studs shall be 4" CEE 16-ga galvanized steel studs conforming to ASTM C1007 for load-bearing stud systems, and ASTM C754 for non-load (axial) bearing systems.
- D. Floor and Ceiling Runners: Channel type metal runners, formed from 22-ga. galvanized steel, ASTM C645. Ceiling runners to have extended leg retainer. Provide same gauge runners as studs.
- E. All studs, tracks, runners and accessories shall be formed from steel having a minimum G-90 galvanized coating.
- F. Fasteners:
  1. Hex Washer Head Screw - for framing member connections.
  2. Pan Tex Screw - for framing member connections.
  3. Bugle Head Screw shall be used to attach gypsum lath to studs.
  4. Lath Tek Screw shall be used to attach metal lath to studs.

## PART 3 EXECUTION

### 3.1 EXAMINATION:

- A. Verify that conditions are ready to receive work.
- B. Verify field measurements are as shown on drawings.
- C. Verify that rough-in utilities are in proper location.
- D. Beginning of installation means installer accepts existing conditions.

### 3.2 ERECTION:

- A. Align and secure top and bottom runners at 24" o.c. with .145" diameter low-velocity power driven fasteners with 1<sup>1</sup>/<sub>4</sub>" penetration.
- B. Fit runners under and above openings; secure intermediate studs at spacing of wall studs.
- C. Install studs vertically at 16" o.c. unless otherwise noted.
- D. Studs shall be bottomed out, plumbed, aligned, and securely attached to each stud flange, top, and bottom.
- E. Stud splicing will not be permissible.
- F. Construct corners using a minimum three studs.

- G. Double studs at wall openings, door and window jambs, and not more than 2" each side of openings.
- H. Brace stud-framing system and make rigid. Bridging not to exceed 4'-3" o.c.
- I. Align stud web openings.
- J. Coordinate installation of bucks, anchors, and blocking with electrical and mechanical work to be placed in or behind stud framing.
- K. Blocking: Use of 2" x 4", 2" x 6", 2" x 8", 3/4" plywood, and fire rated lumber where required. Secure blocking to studs. Install blocking for support of plumbing fixtures, wall cabinets, counter tops, toilet partitions and accessories, hardware, door hardware, TV brackets, and other items as indicated.
- L. All partitions shall extend through the ceiling system and be supported from the structure above. See wall types shown on the drawings for exact requirements.

### 3.3 TOLERANCES:

- A. Maximum Variation from True Position: 1/8" per 10'.
- B. Maximum Variation of any Member from Plane: 1/8".

END OF SECTION