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SECTION 09 22 16 NON-STRUCTURAL METAL STUD FRAMING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work in this section.
- B. Requirements of this section apply to Gypsum Plaster and Portland Cement Plaster Work.
- C. Section 06 10 00 Rough Carpentry
- D. Section 05 40 00 Cold Formed Metal Framing
- 1.2 SYSTEM DESRIPTION
 - A. See plans for and this document for the extent of the use of metal studs.
 - B. See Section 05 40 00 Cold Formed Metal Framing, structural steel studs.
- 1.3 REFERENCES
 - A. ASTM C645 Standard Specification for Nonstructural Steel Framing Members
 - B. ASTM C754 Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products
 - C. MFMA (Metal Framing Manufacturer's Association) Guidelines for the Use of Metal Framing
 - D. ASCE 7 Minimum Design Loads for Buildings and other Structures
 - E. Underwriters Laboratories (UL) Fire Resistance Manual
 - F. Gypsum Association (GA) Fire Resistance Design Manual
 - G. Florida Building Code (FBC)
- 1.4 SUBMITTALS
 - A. Shop Drawings: Indicate prefabricated work, component details, stud layout, framed openings, anchorage to structure, type, 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, from Florida professional engineer, for loadings and stresses of exterior walls to meet or exceed the requirements of ASCE 7.
 - D. 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 is not acceptable.

PART 2 PRODUCTS

- 2.1 STUD FRAMING MATERIALS
 - A. Studs in interior partitions of at least 1[%] x 3[%] may be, 22-ga or heavier (less than 16' high), 20-ga or heavier (more than 16' high), ASTM C645 "Specification for Design of Cold-Formed Steel Structural Members.

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- 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, minimum.
- D. Floor and Ceiling Runners:
 - 1. Channel type metal runners, formed from 22-ga. galvanized steel, ASTM C645.
 - 2. Provide and install extended leg retainer on ceiling runners.
 - 3. Provide same gauge runners as studs.
- E. Use studs, tracks, runners, and accessories formed from steel having a minimum G-90 galvanized coating.
 - 1. May use steel having a minimum G-40 galvanized coating for interior studs, channels, and accessories, which are not in contact or anchored to concrete or masonry.
- F. Fasteners:
 - 1. Use Hex Washer Head Screw for framing member connections.
 - 2. Use Pan Tex Screw for framing member connections.
 - 3. Use Bugle Head Screw to attach gypsum lath to studs.
 - 4. Use Lath Tek Screw 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.
- 3.2 ERECTION
 - A. Align and secure top and bottom runners at 24" o.c. with .145" diameter low-velocity power driven fasteners with 1¹/₄" 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. Properly install studs in channels; bottomed out, plumbed, aligned, and securely attached top, and bottom.
 - E. Stud splicing will not be permissible.
 - F. Construct corners to allow for installation of wall board.
 - 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.
 - 1. Provide and install bridging not to exceed 4'-3" o.c., unless using an approved engineered system.
 - I. Align stud web openings.
 - J. Coordinate installation of bucks, anchors, and blocking with electrical and mechanical work placed in or behind stud framing.
 - K. Blocking:
 - 1. Secure metal stud blocking to studs.
 - 2. Install blocking for support of plumbing fixtures, wall cabinets, counter tops, toilet partitions and accessories, hardware, and other items as indicated.
 - 3. Provide and install, minimum 20-gage, horizontal doorstop blocking spanning 3-vertical studs at door handle height on the hinged side, starting at the doorframe.

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- L. All partitions shall extend through the ceiling system and be supported from the structure above.
 - 1. See wall types shown on the drawings for exact requirements.
- 3.3 TOLERANCES
 - A. Maximum Variation from True Position is 1/8" per 10'
 - B. Maximum Variation of any Member from Plane is $\frac{1}{3}$ "

END OF SECTION