

DIVISION 5 - METALS (SUBJECT TO DIVISION 1)

Includes lintels, foundation access doors, anchors, stairs and railings, foundation vents, liners, and siding.

Dissimilar metals are approved if proper protection against galvanic action is used through the establishment of a Dielectric Isolator union.

5.A. STRUCTURAL

1. Structural steel members shall be sized and installed as specified in the Bid Document.

5.B. WINDOW WELLS

1. Window wells shall be made of galvanized steel or aluminum and be a minimum of 20 gauge if steel.
2. Wells to be of sufficient height, securely anchored to foundation and caulked to prevent water entry and to ensure proper window protection against earth wash. Top height to be three inches above finished grade.
3. Installation shall include four inches of crushed gravel in the bottom to help promote drainage and hinder vegetation growth.

5.C. RAILINGS AND HANDRAILS

1. Railings and component parts shall be fabricated from mild steel or assembled and installed as per manufacturer's directions. All joints must be welded and ground smooth.
2. Wrought iron handrails and railings shall be of ½" square balusters with a maximum 4" between them, and ¾" newels on 1" x 3/8" channel. Height of handrail/guardrail shall be determined by the Uniform Building Code for height and openings.

5.D. PORCH IRONWORK COLUMNS

1. Corner and flat iron columns shall be sized, positioned and spaced to carry required load. Columns to be plum and resting on sound plates. Attached to floor and ceiling with approved flanges.

5.E. STEEL COLUMNS

1. Columns shall be 3" in diameter, steel adjustable, with bearing plates at top and bottom. Columns shall be positioned and spaced to carry the required loads. Provide concrete footings of width and depth necessary to conform to Code. USED PIPE WILL NOT BE ACCEPTABLE.
2. Anchor both top and bottom plates to structure with a minimum of two (2) bolts or lag screws of designated size.

5.F. METAL STORAGE BUILDING

1. Furnish and install metal storage building approximately 9'6" x 9'6" x 6'8" high. Double ribbed steel panels, heavy duty bottom frame, reinforced entry mid-wall bracing. Anchor to full coverage 4" concrete slab. Furnish all anchors, set level and true.

5.G. FLUE LINERS

1. Furnish and install prefabricated metal liners as provided by the Mechanical Code.
2. Liners shall be installed according to manufacturer's specifications to within six inches above top of exterior brickwork. All work shall comply with all applicable codes.

5.H. ROOF VENTING

1. Roof vents shall be aluminum, installed so that the net free ventilating area shall be not less than $1/150$ of the area of the space ventilated, except that the area may be $1/300$, provided at least 50% of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated, at least three feet above eave or cornice vents, with the balance of required ventilation provided by eave or cornice vents.
2. All vents to be installed with caulking and galvanized nails into prepared openings cut with close tolerance to ensure watertight fit. All work shall comply with all applicable codes.
3. Roof vents shall be installed when new roofs are called for in the Bid Document.
4. Ridge vent shall be installed according to the manufacturer's instructions and used in conjunction with proper soffit vents.