

**SECTION 05 50 00
METAL FABRICATIONS**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies items and assemblies fabricated from structural steel shapes and other materials as shown and specified.
- B. Items specified.
 - 1. Shelf Angles

1.2 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings:
 - 1. Each item specified, showing complete detail, location in the project, material and size of components, method of joining various components and assemblies, finish, and location, size and type of anchors.
 - 2. Mark items requiring field assembly for erection identification and furnish erection drawings and instructions.

1.3 QUALITY ASSURANCE

- A. Each manufactured product shall meet, as a minimum, the requirements specified, and shall be a standard commercial product of a manufacturer regularly presently manufacturing items of type specified.
- B. Each product type shall be the same and be made by the same manufacturer.
- C. Include additional features, which are not specifically prohibited by this specification, but which are a part of the manufacturer's standard commercial product.

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - A36/A36M-08.....Structural Steel
 - A123-09.....Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
 - A167-99(R2009).....Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
 - F593-02(R2008).....Stainless Steel Bolts, Hex Cap Screws, and Studs
- C. Structural Steel Painting Council (SSPC)/Society of Protective Coatings:
 - SP 3-04.....No. 3, Power Tool Cleaning

PART 2 - PRODUCTS

2.1 DESIGN CRITERIA

- A. Manhole Covers: 1200 kg/m² (250 pounds per square foot).

2.2 MATERIALS

- A. Structural Steel: ASTM A36.
- B. Stainless Steel: ASTM A167, Type 302 or 304.

2.3 HARDWARE

- A. Rough Hardware:
 - 1. Furnish rough hardware with a standard plating, applied after punching, forming and assembly of parts.
 - 2. Use G90 galvanized coating on ferrous metal for exterior work unless non-ferrous metal or stainless is used.
- B. Fasteners:
 - 1. Bolts with Nuts:
 - a. ASTM F593 for stainless steel.
 - 2. Washers: ASTM F436, type to suit material and anchorage.

2.4 FABRICATION GENERAL

- A. Material
 - 1. Use material as specified. Use material of commercial quality and suitable for intended purpose for material that is not named or its standard of quality not specified.
 - 2. Use material free of defects which could affect the appearance or service ability of the finished product.
- B. Size:
 - 1. Size and thickness of members as shown.
 - 2. When size and thickness is not specified or shown for an individual part, use size and thickness not less than that used for the same component on similar standard commercial items or in accordance with established shop methods.
- C. Connections
 - 1. Holes, for rivets and bolts: Accurately punched or drilled and burrs removed.
- D. Fasteners and Anchors
 - 1. Use methods for fastening or anchoring metal fabrications to building construction as shown or specified.
- E. Workmanship
 - 1. General:
 - a. Fabricate items to design shown.
 - b. Fabricate straight, true, free from warp and twist, and where applicable square and in same plane.

2.4 SHELF ANGLES

A. Fabricate from steel angles of size shown.

PART 3 - EXECUTION - N/A

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