SECTION 055000 – METAL FABRICATIONS

PART 1 - GENERAL

1.1 MSU ISSUES

A. All exterior stainless steel will be Type 316.

B. LEED

Comply with LEED NC 3 Credit Requirements EQ Credit 4.1: Low-Emitting Materials: Adhesives and Sealants for the following:
Interior Sealants and Adhesives: Maximum VOC content in accordance with South Coast Air Quality Management District (SCAQMD) Rule #1168, effective July 1, 2005 and amended January 7, 2005.

1) Interior Sealants: Maximum VOC 250 g/L
2) Contact Adhesive: Maximum VOC 80 g/L
3) Metal to Metal Adhesive: Maximum VOC 30 g/L
4) Multipurpose Construction Adhesive: Maximum VOC 70 g/L

1.2 Related sections include the following:

1. Division 03 Section CONCRETE FOR BUILDING CONSTRUCTION for installing anchor bolts, steel pipe sleeves, wedge-type inserts and other items indicated to be cast into concrete.
2. Division 04 Section UNIT MASONRY for installing loose lintels, anchor bolts, and other items indicated to be built into unit masonry.
3. Division 05 Section PIPE AND TUBE RAILINGS
4. Division 05 Section METAL FINISHES
5. Division 09 Sections GYPSUM VENEER PLASTERING and PORTLAND CEMENT PLASTER for metal stud systems.

1.3 METAL STAIRS

A. Composite metal pan and concrete stairs will be avoided at or near any high traffic entrances because salt water tracked in by pedestrians penetrates the concrete and corrodes the pans. All galvanized steel or all reinforced concrete are preferred.

B. Nosings of grating stair treads will be abrasive coated.

1.4 GRATINGS

A. All exterior areaway gratings and required structural support will be Type 316 stainless steel, aluminum, or galvanized steel. Areaways will have a ledge formed integral with the concrete

structure support the perimeter of the grating in lieu of any shelf angles. Gratings at grade level areaways will be bolted down from below, or prepared to be secured by padlock.

B. Other exterior gratings required for mechanical equipment access will be hot-dipped galvanized to match the mechanical equipment support.

C. Unless required otherwise, all grating will be bolted or welded to its supporting structure. Cat walk gratings will not be supported on suspended ceilings.

D. The latest publication of the following manual shall establish the minimum requirements when not otherwise specified in this section:

1. "Metal Bar Grating Engineering Design Manual" by the National Association of Architectural Metal Manufacturers

E. Acceptable Manufacturers:

1. IKG Industries, Division of Harsco Corporation
2. Ohio Gratings, Inc.
3. Reliance Steel Company, Division of Reliance Steel & Aluminum Co.
4. or approved equal

1.5 EXPANSION JOINT COVERS

A. Exterior Wall to Wall Joint Covers

1. Exterior expansion joint covers shall consist of a floating extruded aluminum cover plate and fixed extruded aluminum holders of 6063-T aluminum alloy with a natural anodized finish, paired on each side of the joint. The fixed holders shall have continuous backer extrusions and snap-on, rectangular section covers. The unit will show no exposed fasteners. At full extension, the exposed face shall not be greater than 5", and the total thickness shall not be greater than ¾".
2. Exterior covers will be securely fastened with non-corrosive fasteners and will be caulked on each side.
3. Acceptable manufacturers

    a. Architectural Art Mfg., Inc., Division of Pittcon Industries
    b. Balco, Inc.
    c. MM Systems Corporation
    d. Or approved equal

B. Interior Floor Joint Covers

1. Floor to floor expansion joint covers shall be all metal having no rubberized cork, urethane, vinyl, or other joint fillers. The cover plate shall be 1/8" thick, full floating, self-centering, and be secured to the base at 20" o.c. or less. The base member shall be designed to set the cover plate flush with the surrounding 1/8" vinyl flooring and have secure anchorage. Material shall be either all extruded aluminum of 6065-T5 or T6 aluminum alloy, brushed finish, or type 302 stainless steel, satin finish.

END OF SECTION 055000