

Series "M"  
COVERS

05532-1

TRENCH AND ACCESS

SECTION 05532  
TRENCH AND ACCESS COVERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. "M" Series Trench and Access Covers.
- B. "M" Series Trench and Access Covers.
- C. Work included, Drawings and installation processes of the Contract, including General Conditions, Supplementary Conditions and Division-1 General Requirements apply to the work of this section.

1.02 RELATED SECTIONS

- A. Division 3 - Concrete Section.

1.03 REFERENCES

- A. ASTM B209 - Standard specification for aluminum and aluminum-alloy sheet and plate.
- B. ASTM B211 - Standard specification for aluminum and aluminum-alloy extruded bars, rods, wire, shapes and tubes.
- C. ASTM A240 - Standard specification for heat-resisting chromium and chromium-nickel stainless steel plate, sheet, and strip for pressure vessels.
- D. ASTM A525-G90 - Standard specification for galvanized sheet steel.

1.04 SYSTEM DESCRIPTION

- A. "M" Series Trench! Access Covers and Panels.
  - 1. "M" Series shall be constructed of aluminum.
  - 2. For 4" to 36" trench widths.
  - 3. Loads are limited by either a maximum deflection of 1!150 of the short side length or a maximum stress of 28,000 psi. The deflection is small in comparison with the thickness of the plate. The plate is uniformly loaded. 22" to 36" spans have 3!16" x 2" x 2" aluminum angle stiffness at 24" O.C. Max.
  - 4. Other Features:
    - a. Factory Assembled.
    - b. Dual-Vinyl hollow O-Ring Compression Gaskets.
    - c. Cast-In-Place ! Block-Out Anchors Available.
    - d. Floor Recess from 1!8" to 1 1/2"

- e. Optional Liners Available in Aluminum, Stainless Steel and Galvanized.
- f. Optional Recessed Lift Handles.

#### 1.05 SUBMITTALS

- A. Product Data: Submit, for each type of trench and access cover assembly specified, include the manufacturer's product specifications, installation instructions, details of construction relative to materials, dimensions of individual components, profiles and finishes.

1. Please note that submissions or substitutions must be made within 10 working days of the general contract award to avoid project delay. If not followed, the Architect will designate the exact product to be used and the contractor will have no recourse.

- B. Shop Drawing: Submit detailed drawings showing layout trench and access cover assemblies and all special connections, jointing and accessories which are not completely shown in the manufacturer's data.
- C. Samples: Submit 6" long samples of each trench and access cover assembly for approval.

#### 1.06 QUALITY ASSURANCE

- A. Single Source Responsibility: Obtain trench and access cover assembles from one source from a single manufacturer.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection: Protect trench and access cover assembles from damage, after delivery to site and, before installation.

### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

- A. Specifications and drawings are based on Architectural Art Mfg., Inc. Products; 6409 Rhode Island Ave; Riverdale MD; Phone: (888) 213-0952, Fax: (800) 897-3129.
- B. Substitutions: Submit proposed substitution in writing to the Architect within 10 days of the bid due date. Submit samples and product data for Architects review and addendum approval.

#### 2.02 MATERIAL

- A. Extruded Aluminum: Alloy 6063-T5.

- B. Plate Aluminum: Alloy 6061-T6 or 5052-H32.
- C. Vinyl: 70 Duro PVC.
- D. Stainless Steel: Alloy 304.
- E. Abrasive: Black-abrasive grit on high-bonding, pressure-sensitive adhesive.
- F. Galvanized Steel: G90.

#### 2.03 FINISHES

- A. Mill: Standard exposed finish.
- B. Optional: R1-204 Clear .4 mil, and R1-215 Clear .70 mil. C.

Zinc Chromate: All surfaces in contact with wet cement. 2.04

#### FABRICATION

- A. Shop assemble components and provide with all required components, anchors and fittings.
- B. Fabricate special transitions, connections, corner fittings, etc. as required.
- C. Provide assembled components in single lengths wherever practical.
- D. Provide assembly components of design, basic profile, materials and operation indicated.

#### PART 3 EXECUTION

##### 3.01 PREPARATION

- A. Verify field measurements on Shop Drawings.

##### 3.02 INSTALLATION

- A. Install trench and access cover assemblies in accordance with manufacturer's instructions for each type of condition encountered.

##### 3.03 PROTECTION

- A. Protect trench and access cover assemblies from damage until adjacent construction is complete.

##### 3.04 CLEANING

- A. Do not remove protective material until finish work in adjacent areas is complete. When protective material is removed, clean exposed metal surface to comply with manufacturer's instructions.