

SECTION 055813 - FORMED METAL COLUMN COVERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Formed metal column covers.

1.2 RELATED REQUIREMENTS

- A. Division 05 Section "Structural Steel" for supports for formed metal column covers.
- B. Division 05 Section "Cold-Formed Metal Framing" for supports for formed metal column covers.

1.3 REFERENCE STANDARDS

- A. American Architectural Manufacturer's Association (AAMA): www.aamanet.org:
 - 1. AAMA 620 - Voluntary Specification High Performance Organic Coatings on Coil Coated Architectural Aluminum.
 - 2. AAMA 621 - Voluntary Specification for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) and Zinc-Aluminum Coated Steel Substrates.
 - 3. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- B. American Welding Society (AWS): www.aws.org:
 - 1. AWS D1.2 - Structural Welding Code - Aluminum.
 - 2. AWS D1.6 - Structural Welding Code - Stainless Steel.
- C. ASTM International (ASTM): www.astm.org:
 - 1. ASTM A 653 - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM A 666 - Standard Specification for Austenitic Stainless Steel, Sheet, Strip, Plate, and Flat Bar.
 - 3. ASTM B 209/B 209M - Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate.
 - 4. ASTM B 221/B 221M - Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- D. National Association of Architectural Metal Manufacturers (NAAMM): www.naamm.org:
 - 1. NAAMM MFM - Metal Finishes Manual.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Conduct preinstallation meeting at site attended by installer, manufacturer's technical representative, and affected trade contractors.
 - 1. Coordinate building framing in relation to formed metal column covers.
 - 2. Coordinate installation of adjacent materials and systems, and other openings and penetrations of formed metal column covers.

1.5 QUALITY ASSURANCE

- A. Manufacturer/Source: Provide formed metal column covers and accessories from a single manufacturer.
- B. Manufacturer Qualifications: Approved manufacturer listed in this Section with minimum five years experience in manufacture of similar products in successful use in similar applications.
 - 1. Approval of Comparable Products: Submit the following in accordance with project substitution requirements, within time allowed for substitution review:
 - a. Product data, including certified independent test data indicating compliance with requirements.
 - b. Samples of each component.
 - c. Sample submittal from similar project.
 - d. Project references: Minimum of five installations not less than five years old, with Owner and Architect contact information.
 - e. Sample warranty.
 - 2. Substitutions following award of contract are not allowed except as stipulated in Division 01 General Requirements.
 - 3. Approved manufacturers must meet separate requirements of Submittals Article.
- C. Installer Qualifications: Experienced Installer with minimum of five years experience with successfully completed projects of a similar nature and scope.
- D. Welding Standards: Comply with applicable provisions of AWS D1.2 and AWS D1.6.
- E. Mockups: Build mockup in size and location indicated or as directed by Architect. Show details of formed metal column covers. Demonstrate methods and details of installation. Show details of vertical and horizontal joints, and top and bottom of column. Include sealants and gaskets.
 - 1. Approval of mockup does not relieve Contractor of responsibility to comply with all requirements of contract documents.
 - 2. Approved mockup may become part of installation if approved by Architect.

1.6 ACTION SUBMITTALS

- A. Product Data: Manufacturer's data sheets for specified products.

- B. Shop Drawings: Provide shop drawings prepared by manufacturer or manufacturer's authorized dealer. Include elevations and sections showing openings and penetrations and interface with adjacent work. Include details of each condition of installation and attachment. Provide details at a minimum scale 1-1/2-inch per foot of all required trim and extrusions needed for a complete installation.
 - 1. Include data indicating compliance with performance requirements.
 - 2. Indicate points of supporting structure that must coordinate with formed metal column cover installation.
 - 3. Distinguish between factory assembled and field assembled work.
- C. Samples for Initial Selection: For each product and finish specified, including exposed sealants and gaskets. Provide representative color charts of manufacturer's full range of colors.
- D. Samples for Verification: Provide 12-inch (300 mm) section of column showing finishes, horizontal joinery, vertical joint return, column stiffener and anchoring details, with gaskets and sealants installed. Provide 12-inch (300 mm) long pieces of each trim.

1.7 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: Indicating compliance of products with requirements, from a qualified independent testing agency.
- B. Qualification Information: For Installer.
- C. Manufacturer's warranty: Sample copy of manufacturer's warranty.

1.8 CLOSEOUT SUBMITTALS

- A. Maintenance data.
- B. Manufacturer's Warranty: Executed copy of manufacturer's warranty.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Protect products during shipping, handling, and storage to prevent staining, denting, deterioration of components or other damage.
 - 1. Deliver, unload, store, and erect column covers and accessory items without misshaping products or exposing products to surface damage from weather or construction operations.
 - 2. Store in accordance with Manufacturer's written instructions.

1.10 WARRANTY

- A. Special Manufacturer's Warranty: On manufacturer's standard form, in which manufacturer agrees to repair or replace column covers that fail in materials and workmanship within two years from date of Substantial Completion.
- B. Special Finish Warranty: On manufacturer's standard form, in which manufacturer agrees to repair or replace column covers that evidence deterioration of finish within 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: CENTRIA, Column Covers. Other acceptable manufacturers are:
 - 1. ATAS.
 - 2. Citadel Architectural Products
 - 3. Firestone Metal Products
 - 4. Alcoa Aluminum Panels

2.2 MATERIALS

- A. Aluminum Face Sheet: Coil-coated, ASTM B 209, 3003-H14 alloy.
 - 1. Face Sheet Thickness: 0.080 inch (2.0 mm) thick.
 - 2. Surface: Smooth.
- B. Aluminum Extrusions: ASTM B 221, 6063-T5 alloy.

2.3 FORMED METAL COLUMN COVERS

- A. Butt Joint and Reveal Type Column Covers: Form column covers from metal substrate indicated, with vertical edges formed with return leg stiffener configured with tight butt joint. Form vertical and horizontal joints as specified, in locations indicated on drawings.
 - 1. Basis of Design Product: CENTRIA, Column Covers Series 3000.
 - 2. Column Cover Shape: Square.
 - 3. Substrate: Aluminum sheet.
 - 4. Horizontal Joints: 5/8-inch- (15.9 mm-) wide by 3/4-inch (19-mm-) deep reveal.
 - 5. Vertical Joints: Hairline V-joint with keyhole connection.
 - 6. Finish: Fluoropolymer three-coat system.
 - 7. Color: As selected by Architect from manufacturer's standard colors..
 - 8. Exposed Trim and Fastener Finish: Match column cover finish.

2.4 ACCESSORIES

- A. Provide manufacturer's recommended fasteners, shims, sealants, and gaskets required for a complete installation.
- B. Formed Trim: Aluminum, minimum thickness 0.063 inch (1.59 mm). Include manufacturer-provided extruded trim for the following locations and as indicated on Drawings:
 - 1. Base trim.
 - 2. Top trim.
 - 3. Reveal trim.
- C. Stiffeners: Manufacturer's standard stiffeners and joint backing as required for installation.
- D. Fasteners: Provide self-tapping screws, bolts, nuts, self locking rivets and bolts, and other suitable fasteners as required for installation.

1. Concealed Fasteners: Corrosion-resistant, as recommended by column cover manufacturer for application.
- E. Sealants: Type recommended by column cover manufacturer for application, meeting requirements of Division 07 Section "Joint Sealants."

2.5 FABRICATION

- A. General: Fabricate column covers and accessories at factory using manufacturer's standard procedures and processes to minimize field splicing and assembly. Form metal to indicated profiles in maximum sizes to minimize joints. Form bent metal corners to the smallest radius possible without causing grain separation or otherwise damaging the work.

2.6 FINISHES

- A. Finishes, General: Comply with NAAMM MFM recommendations for application of finishes and finish designations.
 1. Protect finishes by applying strippable temporary protective covering.
- B. Aluminum Sheet Finishes: Prepare surfaces by cleaning to remove contaminants and pretreat as required for specified organic coating.
- C. Aluminum Sheet Coil-Coated Finish:
 1. Fluoropolymer Three-Coat System: 0.8 mil primer with 0.8 mil 70 percent PVDF fluoropolymer color coat, and a 0.8 mil 70 percent PVDF fluoropolymer clear coat, AAMA 621.
 - a. Basis of Design: CENTRIA Duraguard Plus.
 2. Unexposed Finish: Manufacturer's standard primer.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine column cover substrate and supports with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of column covers.
 1. Confirm presence of acceptable framing members at recommended spacing to match installation requirements of column covers.
 2. Inspect framing that will support column covers to determine if support components are installed as indicated on approved shop drawings and are within tolerances acceptable to column cover manufacturer.
 3. Verify that penetrations and adjacent work match layout on shop drawings.
- B. Correct out-of-tolerance work and other deficient conditions prior to proceeding with column cover installation.

3.2 PREPARATION

- A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction.
 - 1. Coordinate installation of anchors and clips on structural steel to receive application of sprayed fire resistive material.

3.3 COLUMN COVER INSTALLATION

- A. General: Install column covers in accordance with approved shop drawings, manufacturer's written instructions, and project drawings.
- B. Installation: Attach column covers securely to supports using recommended clips, screws, fasteners, bolts and anchors, sealants, and adhesives indicated on approved shop drawings and as required to comply with performance requirements.
 - 1. Install column covers using concealed fasteners.
 - 2. Form tight joints with exposed connections accurately fitted together. Provide uniform reveals and openings for sealants and joint fillers as indicated.
 - 3. Horizontal Joinery: Provide joint type specified.
 - 4. Vertical Joinery: Provide joint type specified.
 - 5. Galvanic Action: Where elements of column covers and accessories will come into contact with dissimilar materials, treat faces and edges in contact with dissimilar materials as recommended by manufacturer.

3.4 CLEANING AND PROTECTION

- A. Remove temporary protective films. Clean finished surfaces as recommended by column cover manufacturer. Maintain in a clean and protected condition during construction.
- B. Replace damaged column covers that cannot be repaired by field repair.

END OF SECTION