SECTION 10 73 16.16 - METAL CANOPIES

TIPS:
To view non-printing Editor's Notes that provide guidance for editing, click on MasterWorks/Single-File Formatting/Toggle/Editor's Notes.
To read detailed research, technical information about products and materials, and coordination checklists, click on MasterWorks/Supporting Information.

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:
   1. Hanger Rod supported metal canopies including fascia gutter, decking and attachment hardware.
   2. Building attached metal awnings.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product. Include:
   1. Technical data for metals used.
   2. Technical data for attachment devices to framing system.
   3. Full range of color and finish selection.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work including anchor-bolt plans and templates.
   1. Canopy shall conform to local building codes.
   2. Confirm specific load requirements for canopies and provide stamped engineering calculations for location in which canopy is installed.
   3. Confirm wall construction assumptions at support locations with Architect prior to preparation of shop drawings. Make recommendations to Architect for additional internal wall support or wall construction modifications necessary to support canopies.

C. Samples: For each type of exposed finish.

1.3 INFORMATIONAL SUBMITTALS

A. Evaluation Reports: For anchors, from ICC-ES.

B. Sample warranty.
1.4 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.5 WARRANTY

A. Special Warranty: Manufacturer agrees to repair finish or replace canopies that fail in materials or workmanship within specified warranty period.

1. Warranty Period: [Five] <Insert number> years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Structural Performance: Shelters shall withstand the following loads and stresses within limits and under conditions indicated according to [ASCE/SEI 7] <Insert requirement>:

1. Design Loads: [As indicated on Drawings] <Insert loads>.

B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): [120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces] <Insert temperature range>.

C. Safety Glazing Products: Category II materials complying with testing requirements in 16 CFR 1201, permanently marked with certification label acceptable to authorities having jurisdiction.

D. Fabrication: Fabricate canopies as an integrated set of welded components ready for installation on Project site.

2.2 MANUFACTURER


2.3 ALUMINUM CANOPIES

A. Canopy Size: [As indicated on Drawings] <Insert dimensions>.

B. Metal Canopy GJ-MC <Insert drawing designation>


2. Tie backs for projections over 30 in.
3. Finish: [Powder Coat] [custom]

C. Metal Canopy with Pans GJ-MCP <Insert drawing designation>
2. Upper extension required for fascia over 12 inches.
3. Upper support rod assembly.
4. Internal gutter system with [single] [multiple] scupper(s) located at [front] [rear] [left] [right].
5. Finish: [Powder Coat] [custom].

D. Louvered Sunshade GJ-LVS <Insert drawing designation>
1. Louver Spacing: [As required] [As indicated in drawings].
2. Louver Style: [Z-blade] [Airfoil] [Rectangular].
3. Aluminum channel or tubing perimeter: [6] [8] [10] [12] [custom] inches [Custom height].
4. Tie backs as required for projections over 30 inches.
5. Finish: [Powder Coat] [custom].

E. Bahama Shutter GJ-BSA <Insert drawing designation>
1. Louvers: Z-Blade, 2 inch.
2. Low profile
3. Fixed arm return.
4. Finish: [Powder Coat] [custom].

F. Traditional, Solid Valance Standing Seam GJ-TVSS <Insert drawing designation>
1. Roof: [Flat], [Standing seam gable] [with perimeter gutter].
   a. Exterior Roof Panels: Fabricated from 0.032-inch- (0.81-mm-) thick aluminum sheet with protective plastic sheet finish.
   b. Canopy Fascia: Fabricated from 0.063-inch- (1.60-mm-) thick aluminum sheet of manufacturer's standard design.
2. Seam Width: 12 inches
3. Valance and Ends: Closed with flat sheeting to match standing seam color
5. Frame Finish: [Mill] [Powder Coat][custom].

G. Tradition, Standing Seam GJ-TSS <Insert drawing designation>
1. Seam Width: 12 inches
2. Valance and Ends: No valence, ends [open] [closed with flat sheeting to match standing seam color].
4. Frame Finish: [Mill] [Powder Coat][custom].

H. Structural Framework: Fabricated from manufacturer's standard aluminum tubing, channel, angle, or tee extrusions. Connect framework with exposed mechanical fasteners.

I. Materials:
3. Hanger Rods and Attachments:
   a. Clevis: Steel forged clevis rod ends, Manufacturer's standard 5 inch.
   b. Wall Plate: Manufacturer's standard aluminum plate with receiver.
c. Threaded Rod: #10 [galvanized] [stainless] steel threaded rod.
d. Sleeve: Aluminum tubing, 6005-T5 alloy and temper.

J. PVDF Fluoropolymer Color Finish: AAMA 621-01, with a minimum of 70% Kynar/Hylar polyvinylidene fluoride resins of 1.0 mil total dry film thickness or thicker.

K. Powder-Coat Finish: AAMA 2604 compliant dependent upon the color, with a minimum dry film thickness of 2.5 mils.

2.4 FABRICATION

A. See drawings for size and configurations. Fabricate system in accordance with approved shop drawings. Accurately form components to suite each other and to building structure.

B. Fit and weld all joints and components in largest practical sizes for delivery to site.

C. Fabricate Fascia gutter systems with welded joints and bolt together at frame splits if necessary.

D. Exposed Fastenings: Unobtrusively locate, consistent with design of component except where specifically noted otherwise.

E. Supply components required for anchorage of framing. Fabricate anchors and related components of same material and finish as framing, except where specifically noted otherwise.

F. Systems with internal gutters and concealed drainage: Water shall drain from covered surfaces into integral fascia gutter and directed to either the front for drainage or to the rear for ground level discharge via one or more designated downspouts.

G. Hanger rods and attachments hardware shall be powder coated to match canopy.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Erection shall be performed by manufacturer's approved installer and scheduled after all concrete, masonry and roofing in the area is completed.

B. Confirm that surface area where canopy is to be installed is complete in construction and workmanship. Verify that wall substrate anchors are acceptable and ready to receive work. Confirm dimensions and locations of attachment points are as shown on approved shop drawings. Any discrepancies shall be reviewed with the Architect, prior to installation.

C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best results for the substrate under the project conditions.
3.2 INSTALLATION

A. Install in accordance with manufacturer's approved shop drawings and written instructions.

B. Set canopy plumb and level, accurately fitted, free from distortion or defects.

C. Provide required anchors for connecting framing to structure.

D. Conceal bolts and screws whenever possible. Where not concealed, use flush countersunk fasteners.

3.3 ADJUSTING

A. Maximum Variation from Plumb: 1/4-inch per story, non-cumulative. Maximum Misalignment from True Position: 1/4-inch.

B. After completing installation, inspect exposed finishes and repair damaged finishes according to manufacturer's instructions.

END OF SECTION 107316.16