

SPECIFICATIONS

Section 107312 – Overhead Supported Canopy – Round Rod

Part 1: General

1.1 Related Documents

- A. The requirements of Division 1 specifications shall apply to work specified in the section.

1.2 Engineering Design Criteria

- A. International Building Code 2015
- B. ASCE 7-10, Minimum Design Loads for Buildings and Other Structures
- C. Aluminum Design Manual 2015
- D. AWS D1.2 – 2014, Structural Welding Code - Aluminum
- E. Local governing codes and standards for site location

1.3 General Description of Work

- A. Work in this section shall include design, fabrication, and installation of aluminum protective covers. All work shall be in accordance with the shop drawings and this specification section.

1.4 Submittals

- A. Shop Drawings – Submit complete shop drawings including:
 - 1) Overall canopy layout dimensions
 - 2) Cut section details including elevation, bent layout dimensions, canopy connection details, and wall connection details
 - 3) Flashing details pertaining to aluminum canopy
 - 4) Canopy anchorage details
- B. Product Data – Submit manufacturer's product information, specifications, and installation instructions for the aluminum canopy.
- C. Samples – Submit color selection samples of actual coated aluminum material or actual anodized aluminum material.
- D. Certification – Provide Professional Engineer certification that the proposed canopy design and layout meets or exceeds all applicable loadings (ex: wind load, rain live load, dead load, snow load) for the job location (city & state) in accordance with IBC 2015 and ASCE 7-10.

1.5 Quality Assurance

- A. Manufacturer Qualifications: Minimum five years experience in design, fabrication, and production of aluminum protective covers.
- B. Components shall be assembled in shop to greatest extent possible to minimize field assembly.
- C. Aluminum protective cover, including material and workmanship, shall be warranted from defects for a period of one year from date of completion of aluminum protective cover installation.

Part 2: Products and Materials

2.1 Acceptable Manufacturer

A. Mitchell Metals, LLC

1761 McCoba Drive
Smyrna, GA 30080
Phone: 770.431.7300
www.mitchellmetals.net

B. Dittmer Architectural Aluminum

1006 Shepard Road
Winter Springs, FL 32708
Phone: 407.699.1755
www.dittdeck.com

- C. Equivalent systems by other manufacturers will be approved for substitution by addendum if the following conditions are met:
- 1) Other manufacturers must have submitted requested information and have been qualified to bid no less than 10 days prior to bid closing date.
 - 2) Manufacturer must submit complete company literature and information to the architect for review
 - 3) Manufacturer must submit complete proposed canopy system details, including sizes and strength values of all members to be used.

2.2 Design & Assembly

- A. Canopy shall use perimeter extruded gutter and extruded decking running perpendicular to wall being attached to. Extruded Decking shall be a roll-locked design where the extruded cap and pan shall interlock to make a rigid structure. Crimped decking is not allowed.

- B. Canopy gutter frame shall be welded into a single frame unless shipping does not allow. If shipping does not allow, canopy frame shall be riveted together at the corners and caulked inside to make a water-tight frame.
- C. Canopy shall be secured to the wall using a round support rod system which uses a galvanized steel round overhead support rod (minimum $\frac{3}{4}$ " schedule 40 pipe). The support rods shall have a galvanized steel eye bolt welded to each end. The canopy wall bracket shall be a galvanized steel eye bolt welded to the center of a 6"x6" galvanized steel plate. The support rod shall be connected to the wall bracket using a $\frac{7}{8}$ " galvanized steel Bolt, Nut, and Washers. The canopy frame shall have a galvanized steel saddle bracket with a galvanized steel eye bolt welded to the top of it. The support rod shall be connected to the saddle bracket using a $\frac{7}{8}$ " galvanized steel Bolt, Nut, and Washers. The saddle bracket shall connect to a 2"x2" aluminum frame support tube that sides inside of the decking pan. The 2"x2" frame support tube shall connect to the gutter frame using 4 – 300 series stainless steel fasteners, 2 at each end.
- D. Canopies shall drain from the decking to the perimeter gutter, and discharge from the bottom of the gutter out of a drain scupper. Downspouts can be used to drain the water from the overhead supported canopy to the ground upon the architect's request.
- E. Canopy shall be pitched toward the scupper/downspout to allow proper drainage out of the canopy frame.

2.3 Materials

- A. Support Rods
 - 1) Support rods shall be fabricated from galvanized round pipe (minimum $\frac{3}{4}$ " schedule 40).
 - 2) Round rods shall have an eye bolt welded to each end for connections.
- B. Frame Supports
 - 1) Frame support tubes shall be 2"x2" square tubing (minimum of 0.125" thick).
- C. Decking
 - 1) Decking shall be a rigid roll-locked design that is self flashing and utilizes interlocking sections.
 - 2) Extruded decking shall exceed loading requirements in section 1.2 – Engineering Design Criteria. Minimum 3" x 6" cap and pan.
- D. Gutter
 - 1) Gutter shall be radius cornered aluminum extrusion that exceeds loading requirements in section 1.2 – Engineering Design Criteria. Minimum gutter size shall be 4"x 6" at 0.093" thick.
- E. Flashing
 - 1) Flashing shall be made of aluminum sheet painted to match the color of the canopy. Minimum flashing thickness shall be 0.040" thick.

2.4 Fasteners

- A. All framing fasteners shall be 300 series stainless steel with neoprene washers. All rivets are 3/16" aluminum. All decking fasteners shall be long life coated steel with a 300 series stainless steel cap and neoprene washer.
- B. All connecting bolts shall be hot dipped galvanized.

2.5 Finishes

- A. Factory applied baked enamel
 - 1) Enamel is to comply with AAMA 2603.
 - 2) Color is to be as selected by architect from manufacturer's standard color chart.

Part 3: Installation and Execution

3.1 Erection

- A. Canopies are to be installed according to approved shop drawings and plans.
- B. The entire structure shall be installed straight, true, and plumb according to standard construction procedures.
- C. All fasteners penetrating the building's face shall be caulked.
- D. Any blocking necessary to install the overhead supported canopy shall be installed by the General Contractor according to the approved shop drawings prior to canopy installation.
- E. Canopies shall be installed with minimal slope to allow water flow from top of canopy to draining scuppers/downspouts and eliminate ponding.
- F. All joints, corners, and connections shall be tight and clean.
- G. All exposed fasteners and galvanized members are to be painted to match the canopy color.
- H. Decking is to be aligned and secured to aluminum frame structure.

3.2 Cleaning

- A. All canopy surfaces exposed are to be cleaned after installation is complete.
- B. Surplus materials and debris shall be removed from the jobsite after installation is complete.

3.3 Protection



Aluminum Canopies • Walkway Covers • Metal Awnings

-
- A. General Contractor shall ensure protection of installed aluminum canopies from other construction so that canopies are without damage at time of substantial completion of project.