

SPECIFICATIONS
Section 10530 – Aluminum Walkway Covers
CANTILEVERED ENTRANCE CANOPY

Part 1: General

1.01 Related Documents

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

1.02 References

- A. International Building Code 2006
- B. ASCE 7-05, Minimum Design Loads for Buildings and Other Structures
- C. Aluminum Design Manual 2005
- D. Local governing codes and standards for site location

1.03 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.

1.04 Submittals

- A. Shop Drawings – Submit complete shop drawings including:
 - 1) Overall canopy layout dimensions
 - 2) Cut section details including elevation, bent layout dimensions, and connection details
 - 3) Flashing details pertaining to aluminum canopy
- B. Product Data – Submit manufacturer’s product information, specification, and installation instructions for aluminum canopy.
- C. Samples – Submit color selection samples of actual coated aluminum material or actual anodized aluminum material.
- D. Certification – Provide letter of compliance certifying 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 2006 and ASCE 7-05.



1.05 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

2.01 Acceptable Manufacturers

- A. **Mitchell Metals, LLC**
1761 McCoba Drive, Suite A
Smyrna, GA 30080
Phone 770.431.7300
Fax 770.431.7305
www.mitchellmetals.net
- B. 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.

2.02 Design & Assembly

- A. Aluminum protective cover shall be welded together into a two part frame system consisting of the main support frame and the decking frame. Mechanically fastened connections can be used if shipping does not allow welded system.
- B. Canopy shall use perimeter 2"x2" aluminum angle as fascia and the decking shall run perpendicular to the plane of the wall. All beams shall have welded caps at the ends to prevent any water leakage.
- C. Roll Formed Flat Pan decking shall be installed so each panel interlocks with the next. All connections of the Flat Pan decking shall be caulked.

- D. Polycarbonate Panel decking shall be attached using H-Channel to connect each panel together. All connections of the Polycarbonate Panel shall be caulked.
- E. Canopies shall drain from the decking to the drain beam against the wall, down the vertical column at each end, and discharge at the bottom of the column out the deflector hole. Deflector plates are to be installed at the bottom of the vertical columns to discharge the water away from the entrance. The deflector plates are to be caulked inside the column and fastened to the column using a single rivet.
- F. The canopy frame is to be fastened to the wall using required fasteners to withstand adequate wind loading and rain loading on the canopy.
- G. Custom flashing is to be used under the decking frame to prevent water from blowing out between the decking and drain beam.

2.03 Materials

- A. Canopy Main Frame
 - 1) Main frame is to be made using 4"x6" aluminum tubular extruded members (unless larger are required due to canopy spans). The 4"x6" members are to be solid tubular and have a minimum thickness of 0.125".
 - 2) Main frame is to be welded into a solid frame prior to installation.
- B. Decking Support Frame
 - 1) Support frame is to be made using 2"x2" aluminum tubular extruded members (unless larger are required due to canopy spans). The 2"x2" members are to be solid tubular and have a minimum thickness of 0.125".
 - 2) Support frame is to be welded into a solid frame prior to installation.
- C. Decking
 - 1) Decking shall be one of the following:
 - a. 1 1/2" x 12" x 0.040" Roll Formed Flat Pan decking.
 - b. 10mm (minimum) translucent Polycarbonate Panel
- D. Perimeter Fascia
 - 1) Perimeter Fascia shall be aluminum extrusion of size indicated on architect's drawings. Minimum fascia size shall be 2"x2" at 0.070" 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.

2.04 Fasteners

- A. All fasteners shall be stainless steel with neoprene washers and rivets are 3/16" aluminum.

2.05 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.
 - 3) Custom colors can be used upon the architect's request.

Part 3: Installation and Execution

3.01 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. Decking frame is to be fastened to the top of the main frame after the main frame has been mounted to the wall.
- D. Canopies shall be installed with positive and negative slope of 1/8" per foot to allow water drainage from top of canopy to draining columns and eliminate ponding.
- E. All joints, corners, and connections shall be tight and clean.
- F. All exposed fasteners are to be painted to match the canopy color.
- G. Decking is to be aligned and secured to aluminum frame structure.
- H. Decking is to be caulked to the perimeter 2"x2" angle to prevent any water leakage.

3.03 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.

3.04 Protection

- 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.