

SPECIFICATIONS
Section 105500 – Postal Specialties
Cluster Box Unit (CBU) Canopy Cover

Part 1: General

1.01 Section Includes

- A. Aluminum Cluster Box Unit (CBU) canopy cover.

1.02 Related Sections

- A. Section 033000 – Cast-in-place concrete

1.03 References

- A. International Building Code 2018
- B. ASCE 7-16, Minimum Design Loads for Buildings and Other Structures
- C. Aluminum Design Manual 2015
- D. Local governing codes and standards for site location
- E. Comply with USPS-B-1118 specification

1.04 General Description of Work

- A. Work in this section shall include design, fabrication, and installation of aluminum Cluster Box Unit (CBU) canopy covers. All work shall be in accordance with the shop drawings and this specification section.

1.05 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) Concrete footing layout and canopy anchorage details
- B. Product Data – Submit manufacturer's product information, specifications, and installation instructions for the aluminum canopy cover.
- C. Samples – Submit color selection samples of actual coated aluminum material.



1.06 Quality Assurance

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

Part 2: Products and Materials

2.01 Manufacturers

- A. Basis of Design: **Mitchell Metals, LLC** aluminum Cluster Box Unit (CBU) canopy cover. 1761 McCoba Drive, Smyrna, GA 30080 - 770.431.7300
www.mitchellmetals.net
- B. Request for substitutions will be considered in accordance with provisions of Section 01600.

2.02 Design & Assembly

- A. Aluminum canopy cover shall consist of cantilevered column and brace welded into single structure. Mechanically fastened beam using internally welded brackets and concealed 300 series stainless steel fasteners.
- B. Canopy shall use perimeter gutter and roll form flat pan decking. Beams are to be notched to receive the extruded gutter to allow decking to sit flush to the top of the beam.
- C. Canopies shall drain from the decking to the perimeter gutter, into the drain beam and discharge at the bottom of the column.
- D. Deflector plates are to be installed at the bottom of the column to discharge the water away from the column. The deflector plates are to be caulked inside the column and fastened to the column using a single rivet.
- E. Columns are to be locked into the post footer using a single piece of rebar, approximately 9" long, running through the bottom of the column below finished floor.

2.03 Materials

A. Columns

- 1) Columns are to be radius cornered aluminum tubular extrusion of size indicated on architect's drawings. Minimum column size shall be 4"x 6" at 0.150" thick.
- 2) Polyester baked on paint serves as galvanic reaction protection between the aluminum column and the concrete footer.
- 3) Tombstone shaped water outlet holes are to be cut at the bottom of all draining columns with deflector plates installed inside.

B. Beams

- 1) Beams are to be open topped aluminum tubular extrusion of size indicated on architect's drawings.
- 2) Size of beam used shall accommodate applied loadings without over-stress or over-deflection. Minimum beam size shall be 4"x 6" at 0.150" thick.

C. Decking

- 1) Decking shall be a roll formed flat pan that is self flashing and utilizes interlocking sections. Minimum decking thickness 0.032.

D. Gutter

- 1) Gutter shall be radius cornered aluminum extrusion 4"x 6" and minimum thickness of 0.093".

2.04 Fasteners

- A. All fasteners shall be 300 series stainless steel with neoprene washers and rivets are 3/16" aluminum.

2.05 Finishes

- A. Factory applied baked enamel to comply with AAMA 2603.
 - 1) Framing color to be Bronze or Silver.
 - 2) Decking color to be Bronze or White.

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. Canopies shall be installed with a slight positive or negative slope to allow water drainage from top of canopy to draining columns and eliminate ponding.
- D. All joints, corners, and connections shall be tight and clean.

- E. All exposed fasteners are to be painted to match the canopy color.
- F. Decking is to be aligned and secured to aluminum frame structure using 300 series stainless steel fasteners.

3.02 Column Footings

- A. Styrofoam blockouts shall be provided by the canopy manufacturer and installed by others.
- B. General Contractor shall pour the required footer size around the Styrofoam blockouts provided by the manufacturer.
- C. Canopy installer is to remove the Styrofoam after footer has cured, set column in cavity, and fill with minimum 3,000 psi grout to level of finished concrete slab.
- D. Slab mounting of aluminum columns for cantilevered canopies is not allowed.
- E. Footer design is not covered in this specification and scope of work.

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.