

SPECIFICATION 10530 – EXTRUDED ALUMINUM WALKWAY COVERS

PART 1 - GENERAL

1.01 Related Documents

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, shall apply to work specified in this section.

1.02 General Description of Work

A. Work in this section shall include design, fabrication and installation of a complete flat, gable, or pitched extruded aluminum canopy system with welded drain beams and trusses in accordance with the drawings and this specification.

1.03 References

- A. Aluminum Design Manual 2000, Specifications & Guidelines for Aluminum Structures.
- B. ASCE 7, Minimum Design Loads for Buildings and Other Structures.
- C. American Architectural Manufacturers Association (AAMA)
- D. American Society for Testing and Materials (ASTM)

1.04 Related Sections

- A. Concrete Work - Section 03300
- B. Masonry Work - Section 04200
- C. Miscellaneous Metals - Section 05500
- D. Flashing and Sheet Metal - Section 07600
- E. Sealants - Section 07900

1.05 Submittals

- A. **Product Data:** Submit manufacturer's product information, specifications and installation instructions for components and accessories.
- B. **Shop Drawings:** Submit complete erection drawings showing attachment system, column and gutter beam framing, transverse cross sections, covering and trim details, and optional installation details to clearly indicate proper assembly of components, sealed by a State Registered Structural Engineer in the state in which the work is being performed.
- C. **Certification:** Submit written Certification prepared and signed by a State Registered Structural Engineer verifying that framing design will safely resist wind uplift as computed by ANSI A58.1, IV=150, Exposure C, as well as meet indicated loading requirements of the Standard Building Code, latest edition as referenced in State Requirements for Educational Facilities 1999 and wind loading requirements of ANSI/ASCE 7-98, live and dead loads and other load requirements.
- D. **Design and engineering of canopy footings and attachment surfaces are not covered in this specification and scope of work.**

1.06 Quality Assurance

A. Codes and standards: Comply with provisions of the following except as otherwise indicated: Standard building code, latest addition with amendments, if any. AWS (American Welding Society) standards for structural aluminum welding.

B. Manufacturer: Obtain aluminum covered walkway system from only one (1) manufacturer, although several may be indicated as offering products complying with requirements.

C. Installer Qualifications: Firm with not less than three (10) years experience in installation of aluminum walkway covers of type, quantity and installation methods similar to work of this section.

D. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible, to insure proper fitting of work.

E. Coordination: Coordinate work of this section with work of other sections which interface with covered walkway system (sidewalk, curbs, building fascias, etc.).

1.07 Warranty

A. Provide manufactures standard one-year warranty that shall include, but not limited to, coverage for structural, water tightness and finish beginning the day of Substantial Completion of Installation.

PART 2 - PRODUCT

2.01 Manufacturers

A. Contract documents are based on products manufactured by:

- **Tennessee Valley Metals, Inc.**
190 Industrial Park Road, Oneonta, AL 35121
205.274.9500, fax 205.274.9501
800.551.2579,
sales@tvmetals.com , www.tvmetals.com

B. Interested manufacturers will be considered for substitution only when the following conditions are met: Complete details, including connections and structural calculations showing loads applied in accordance with the specification, must be submitted to the architect for review. Submit complete details with structural properties (moment of inertia, section modulus, modulus of elasticity, etc.) for all proposed sections (bents, columns, decking and other structural members).

2.02 Materials

A. Aluminum Extrusions: All sections shall be extruded aluminum 6063 alloy, heat treated to T-6 temper.

B. Finishes: For factory baked enamel finish, specify AAMA 603.8 standard or custom color.

For fluoropolymer (Kynar) finish, AAMA 605.2, two or three coats.

For satin anodized finish, specify 204.R1 meeting Aluminum Association specification AA-M-10C-22A21.

2.03 Components

- A. Columns: Columns shall be radius-cornered tubular extrusion of size shown on drawings with cutout and internal diverter for drainage where indicated. Circular downspout opening in column is not acceptable. Provide a small weep hole at the bottom of all non-draining columns to allow for the escape of condensation.
- B. Beams (when used): Beams shall be tubular extrusions of size and shape shown on drawings (open-top tubular extrusions of size and shape shown on drawings with top edges thickened for strength as necessary).
- C. Deck: Deck shall be extruded self-flashing sections interlocking into a composite unit.
- D. Fascia: Fascia shall be manufacturer's standard shape. Size as indicated on drawings.
- E. Flashing: Flashing shall be .032" aluminum (min.). All thru-wall flashing is completed by others.
- F. Arches: Arches for barrel vault protective covers shall be sharp-cornered tubular extrusions of size shown in drawings.

2.04 Fabrication

- A. Drainage: Water shall drain internally from deck to fascia to beams (when used) to columns, for discharge out of rain diverters at or below ground level as indicated on architectural drawings.
- B. Deck Construction: Deck shall be manufactured of extruded modules that interlock in a self-flashing manner. Interlocking joints shall be positively fastened at 18" O.C. creating a monolithic structural unit capable of developing the full strength of the sections. The fastenings must have minimum shear strength of 350 pounds each. Deck shall be assembled with sufficient camber to offset dead load deflection.

PART 3 - EXECUTION

3.01 Preparation

- A. Erection shall be performed after all concrete, masonry, and roofing work in the vicinity is complete and cleaned.

3.02 Installation

- A. Column Sleeves: Column sleeves (styrofoam block-outs) or anchor bolts (if required) shall be furnished by Tennessee Valley Metals and installed by the General Contractor.
- B. Erection: Protective cover shall be erected true to line, level and plumb.

3.03 Cleaning

- A. All protective cover components shall be cleaned promptly after installation.

3.04 Protection

- A. Extreme care shall be taken to protect materials during and after installation.

