

**SECTION 10 73 26
WALKWAY COVERINGS**

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 specification section, apply to work of this section.
 - 1. Section 31 20 00 – Earth Moving
 - 2. Section 03 11 00 – Concrete Formwork
 - 3. Section 03 30 00 – Cast-in-Place Concrete

1.2 SECTION INCLUDES

- A. Design, fabricate, and install a welded, extruded aluminum walkway cover with protective finish and illumination of covered areas.

1.3 REFERENCES

- A. AAMA 603.8 – Voluntary Performance Requirements & Test Procedures for Pigmented Or
- B. AAMA 606.1 - Voluntary Guide Specifications and Inspection Methods for Integral Color Anodic Finishes for Architectural Aluminum
- C. AAMA 607.1 – Voluntary Guide Specifications and Inspection Methods for Clear Anodic Finishes for Architectural Aluminum
- D. AAMA 608.1 – Voluntary Guide Specifications and Inspection Methods for Electrolytically Deposited Color Anodic Finishes for Architectural Aluminum
- E. AAMA 2603 – Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels
- F. AAMA 2604 – Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels
- G. ASCE 7 - - Minimum Design Loads for Building and Other Structures
- H. ASTM B206/B206M – Standard Specification for Copper Nickel Zinc (Nickel Silver) Wire and Copper Nickel Alloy Wire
- I. ASTM B211- Standard Specification for Aluminum and Aluminum Alloy Rolled or Cold Finished Bar, Rod and Wire
- J. ASTM B221- Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- K. FBC - Florida Building Code

1.4 SUBMITTALS

- A. Submit shop drawings including plans, elevations, and details, with dimensions and grades, for approval by Architect.
- B. Submit manufacturer's product information, specifications, and installation instructions for review by Architect.
- C. Submit design calculations signed by a State of Florida Professional Engineer verifying the walkway cover system design meets wind loading requirements of ASCE 7, live and dead loads, footings and other load requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and protect products as instructed by manufacturer.
- B. Promptly inspect shipment to assure the products comply with requirements, quantities are correct, and products are undamaged.
- C. Stack the materials to prevent twisting, bending, or abrasion, and to provide ventilation.

1. Slope metal sheets to ensure drainage.
 - D. Prevent contact with materials during storage, which may cause discoloration or staining.
- 1.6 QUALITY ASSURANCE
- A. Manufacturer shall be a specialist with a minimum 5-years documented experience in manufacturing product.
 - B. Installer shall be specialized with a minimum 5-years documented experience in erecting, applying the work, approved, and certified by manufacturer.
- 1.7 WARRANTY
- A. Provide a 5-year warranty that shall include coverage for structural, water tightness and finish beginning the day of Substantial Completion.

PART 2 PRODUCTS

2.1 DESIGN

- A. Design loads for the structure and accessories, auxiliary and collateral loads shall comply with FBC and ASCE 7.
 1. Use exposure category C, Risk Category III, for wind design.
 2. Live load = 20 pounds per sq. ft.
- B. Design the structure for temperature change of 100° F.

2.2 COMPONENTS

- A. Aluminum members shall be extruded aluminum alloy 6063, heat-treated to T-6 temper.
- B. Columns shall be radius-cornered tubular extrusions with cutout and internal diverter for drainage.
- C. Beams shall be open-top tubular extrusions; top edges thickened for strength and designed to receive deck members in a self-flashing manner.
 1. Install extruded structural ties in the top of all beams.
- D. Deck shall be extruded self-flashing sections interlocking into a composite unit with sufficient camber to offset dead load deflection and cause positive drainage.
 1. Use welded plates as closures at deck ends.
- E. Fascia shall be manufacturer's standard shape and a minimum 0.040 aluminum.
- F. Fasteners shall be aluminum, 18-8 stainless steel, 300 series stainless steel, or 410-stainless steel with neoprene washers.
- G. Protect aluminum columns embedded in concrete with clear acrylic.
- H. Grout shall be 2,000-psi compressive strength; concrete 2,500-psi minimum.
- I. Gaskets shall be dry seal pressure type of manufacturer's standard material.

2.3 FABRICATION

- A. Beams and columns shall be factory welded with mitered corners into one-piece rigid bents.
 1. Welds shall be smooth and uniform using inert gas shielded arc, with 100% penetration.
 2. Grind welds only where interfering with adjoining structure to allow a flush connection.
- B. Field welding is not permitted, use rigid mechanical joints when shipping limitations exist.
- C. Deck shall be extruded modules that interlock to form a self-flash condition.
 1. Positively fasten interlocking joints at 8" on center forming a monolithic structural unit to develop the full strength of the sections.
 2. Fastenings shall have minimum shear strength of 350 pounds each.
 3. Assemble the deck with sufficient camber to offset dead load deflection.

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2.4 FACTORY FINISH

- A. As selected by the Architect one of the following shall apply:
- B. Factory-baked enamel - AAMA 603.8, standard or custom color, as selected.
- C. Clear anodized - AA-M-10C-22A-31 (AAMA 607.1).
- D. Bronze or black anodized - AA-M-10C-22A-44 (AAMA 606.1).

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine the areas and conditions where installing walkway covers.
- B. Notify the contractor of any unsatisfactory conditions.

3.2 ERECTION

- A. Erect the walkway covers true to line, level and plumb.
 - 1. Protect all aluminum columns in concrete with clear acrylic to prevent electrolytic reaction.
- B. Downspout columns shall have welded water diverters or other material at the discharge level to prevent standing water.
 - 1. Non-draining columns shall have weep-holes at concrete grade level to remove condensation.
 - 2. Do not allow discharge to drain across walkways.
- C. Provide concrete splash blocks in size and location to prevent washout of lawn or landscape.
 - 1. Grade the adjacent area for water to drain away from walkways.
- D. Devices, screws, bolts, and crimps shall be on topside of deck with none visible on the underside.

3.3 CLEANING

- A. Clean and polish the walkway component upon completion.

3.4 PROTECTION

- A. Take extra care to protect materials during and after installation.
- B. Remove and replace damaged and defective members.

END OF SECTION