## A.A.C.E., INC. WALKWAY COVER MANUFACTURER

## **WALKWAY COVERS**

## **SPECIFICATIONS**

1. General: Aluminum Cover or Canopy shall be an all-extruded structural system of anodized aluminum rigid bents and longspan deck, as manufactured by A.A.C.E. Co., Inc. All sections shall be extruded aluminum alloy 6063, heat treated to maximum strength in T6 temper. Shop drawings shall be furnished for architects approval and general contractors verification of dimensions and elevations.

The structure shall be designed to withstand walking on top, severe icing, heavy hail and hurricane winds.

2. Concealed drainage: Water shall drain internally from deck to beams to columns, spouting out at ground level through designated columns.

- 3. Bent construction: Anodized beams and columns either shall be welded into one piece rigid bents or be built as mechanical joints in the manufacturer's shop, depending on shipping requirements at A.A.C.E.S. 's option, as specified per shop drawings. Extruded structural ties shall be rigidly installed in tops of all beams, also serving as closures between draining deck sections.
- 4. Roof deck: Extruded sections shall interlock in a homogenous structural unit, with joint designed and fabricated into structurally rigid shape which is self-flashing. Interlocking joints shall be fastened rigidly with fastenings which shall be 8" on center. Fastening may be self-riveted by upsetting the metal or by screws or rivets. These fastenings shall have minimum shear strength of 350 lbs. each. Roof deck on simple spans of 15' or more shall be assembled with camber sufficient to neutralize deflection caused by the dead load of the material and to provide positive drainage from the center of the deck. No protruding ribs on the underside of the deck are permissible.

## Section 10.530 in Specifications

- **5. Expansion joints:** Structure shall be designed for temperature changes of 120°F, with expansion joints provided if required and shown on shop drawings. Such joints shall have no metal-to-metal contact between deck and beam or clamps.
- **6. Section properties:** All extrusions shall be of dimensions shown on plans and shall have minimum engineering properties shown in current die catalog for these sections.
- Finish: All extrusions shall be etched and satin anodized.\*
- Dimensions: General Contractor shall verify and approve dimensions and elevations shown on shop drawings prior to releasing to manufacturer for fabrication.
- 9. Erection: Shall be performed by the manufacturer and scheduled after all concrete, masonry and roofing work in the vicinity is complete and cleaned. Column sleeves (and anchor bolts if required) shall be furnished by the manufacturer and installed by the general contractor to elevations and dimensions on approved shop drawings. Columns and beams shall be aligned with care before columns are grouted. Downspout columns shall be filled to the discharge level to prevent standing water, and downspout deflectors installed after grouting.

Grout shall be 2000# compressive strength. Mix by volume 1 part Portland cement and 3 parts masonry sand. Add water to make pouring consistency and vibrate with a small rod to fill voids. Use an accelerator during cold weather.

Extreme care shall be taken to prevent damage or scratching. All workmanship must be of the very best, with neat miters and fitted joints, as befits an ornamental structure

- **10. Flashing:** If needed at adjoining construction, to be by A.A.C.E.
- 11. Approval: Other manufacturers may bid only after written approval of the architect, obtained 10 days prior to bid opening, the following must be submitted for evaluation before approval:
  - (1) Full details of proposed design.
- (2) Sample extrusions (anodized) including interlocked deck joint, roof deck expansion joint, welded column/beam corner, beam cap and rain cap.
- (3) Engineering calculations supporting physical properties of columns, beams and deck.
- (4) List of completed installations in proposed design, suitable for inspection.

\*Aluminum Association Specification AA, M-10, C-22, A-21

**Finish Options:** For factory painted finish specify: Finish shall be long life, exterior grade, two component, catalytic curing. Polyurethane. Anodized Aluminum shall be prepared for painting by cleaning and degreasing, followed by one coat of etching vinyl wash primer. Top coat of Polyurethane material shall be applied to obtain a dry coating thickness of 1 mil. minimum. Color to be selected.

For Hardcoat Bronze Finishes specify: "Extrusions shall be anodized Bronze with integral color as per Aluminum Association Specification AA-M10C22A42. Color to be selected.

For Hardcoat Black Anodized specify: "Extrusions shall be anodized Black according to Aluminum Association Specification AA-M10C22A42."

Underside of roof deck coating of protective clear acrylic is optional.

