

## Mapes Solar Deck Specifications

### Part 1: General

- 1.1 Description of Work
  - A. Work in this section includes furnishing and installation of extruded aluminum walkway canopies or extruded aluminum wall-supported canopies as manufactured by Mapes Industries Inc.
  - B. Related Items and Considerations
    - 1. Concrete for canopy footings. Footing block outs for post-supported units provided by manufacturer to be installed as part of concrete work.
    - 2. Flashing may be needed for wall-mounted units.
    - 3. Ensure adequate wall condition to carry canopy loads where required.
    - 4. Consider water drainage away from canopy where necessary.
    - 5. Any necessary removal or relocation of existing structures, obstructions or materials.
- 1.2 Quality Assurance
  - A. Products meeting these specifications established standard of quality required as manufactured by Mapes Industries, Inc. Lincoln, Nebraska 1-800-228-2391.
- 1.3 Field Measurement
  - A. Confirm dimensions prior to preparation of shop drawings when possible.
  - B. If requested, supply manufacturer s standard literature and specifications for canopies.
  - C. Submit shop drawings showing structural component locations/positions, material dimensions and details of construction and assembly.
- 1.4 Performance Requirements
  - A. Canopy must conform to local building codes.
  - B. Determine if specific load requirements have been established for canopies and if stamped calculations are required for location in which canopy is installed.
- 1.5 Deliver, Storage, Handling
  - A. Deliver and store all canopy components in protected areas.

### Part 2: Products

- 2.1 Manufacturer
  - A. Mapes Canopies  
Lincoln, Nebraska  
Phone: 1-888-273-1132.  
Fax: 1-877-455-6572.
- 2.2 Materials
  - A. Decking, beams, posts and fascia shall be extruded aluminum, alloy 6063-T6, in profile and thickness shown in current Mapes brochures.
  - B. Acrylic glazing shall be \_ thick with tint of choice of clear, bronze or gray.
  - C. Pyramid and Bubble acrylic unit glazing shall be from 3/16 to \_ thick with tint of choice of clear, bronze or gray.
- 2.3 Finishes
  - A. Standard factory options are clear anodized, white baked enamel or bronze baked enamel.
  - B. Optional finishes include Powder Coat and standard two-coat Kynarcolors.
- 2.4 Fabrication
  - A. Support columns and gutter beams shall be designed such that the columns will be notched to create a saddle that will receive and secure the gutter beams.
  - B. Post and beams shall be mechanically assembled utilizing 3/16 fasteners with a minimum shear stress of 350 lb. Pre-welded or factory-welded connections are not acceptable.

- C. Decking shall be designed with interlocking extruded aluminum members with mechanical fasteners field applied to provide structural integrity for the completed assembly.
- D. Acrylic units shall be designed to use mechanical fasteners field applied to provide structural integrity for the completed assembly.
- E. Concealed drainage. Water shall drain from covered surfaces into integral gutter beam and be directed to ground level discharge via one or more designated support posts.

### **Part 3: Execution**

- 3.1 Inspection
  - A. Confirm that surrounding area is ready for the canopy installation.
  - B. Installer shall confirm dimensions and elevations to be as shown on drawings provided by
  - C. Mapes Industries.
  - D. Erection shall be performed by an approved installer and scheduled after all concrete, masonry and roofing in the area is completed
- 3.2 Installation
  - A. Installation shall be in strict accordance with manufacturer s shop drawings. Particular attention should be given to protecting the finish during handling and erection.
- 3.3 After installation, entire system shall be left in a clean condition.