



Design Standards

Pre-Fabricated Canopy

A. General

1. Design Loads: A/E Structural Engineer to set criteria per governing codes; considerations are dead, live, concentrated, and uplift loads for design.
2. Certification: Mobile Walkways, Inc. State Licensed Structural Engineer certifies compliance to all load and governing code criteria.
3. Minimum and Maximum Design Heights:
 - a. 8'-0" to 14'-6" Clearance
 - b. 14'-6" Clearance at bus loading and other vehicular crossings.
4. Horizontal Overlap: 1"-0 to 4' : at differing height intersections.
5. Drainage:
 - a. Modular sections drain to pre-determined area per owners request.
 - b. Trim is mounted 1-1/2" from pan to provide adequate room for leaves and debris to run off.
 - c. Optional gutter assembly.
6. Independent column anchor assembly, not monolithic with paving or walks.
7. Deck Span: maximum 15'-0"; maximum deflection of L/240 under full loading. L/360 also available.
8. Warranty: One Year against leakage.

B. Design Data

1. Design Load: 30 pounds per sq. ft (146.5 kg per sq. m.). Design load may be live load.
2. Design Wind Load (Velocity): Up to 146 mph as required by location.
3. Minimum roof deck thickness: Galvanized Steel 26 GA
4. Minimum roof deck thickness: Aluminum .038 GA
5. Engineering Data: Manufacturer's design charts include design load capacities design wind loads, roof loads, roof slope, span limits and the dimensional information.
6. Aluminum Materials: 6063 T-6 aluminum alloy heat-treated to T6 temper.
7. Fasteners: With neoprene washers at wet area fastenings. Each fastener shall has a minimum shear strength of 350 pounds.
8. Flashing and Trim: Minimum 0.030" aluminum.
9. Finish: Class I clear anodized AA-M12C22A41, or painted finish to match existing exterior building colors; verify choice with owner.
10. Sealants: Reference "sealants" section of specifications.

C. Execution

1. Components are fabricated in shop into modular units, then shipped to site for final assembly.
2. Priming: Provided on all aluminum/ steel in contact with concrete, mortar, masonry, and/or other metals to prevent electrolysis.
3. Install units plumb, level, aligned anchored into footings to prevent uplift, and rigid. Canopies covering a sloped sidewalk may be designed to have a roof line that is sloped or that is stepped, at the discretion of the architect/ owner.
4. Completed assemblies will be given touch-up and protection until substantial completion.



Central Florida Chapter

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Technical Specifications

Part 1: General

1. Summary

- a) Pre-engineered protective cover consists entirely of steel or aluminum structural sections and roll formed panels or equal. System consists of one-piece rigid structural columns and beam assemblies; roof decking and hardware to provide a complete system, Mobile Walkways, Inc.
- b) Walkway cover designed to span variable width concrete sidewalks. The cover, including all column and beams can be removed, relocated, and reused at a different site.

2. Design Requirements

- a) Design Load: 30 pounds per sq. ft (146.5 kg per sq. m.). Design load may be live load.
- b) Design Wind Load (Velocity): Up to 146 mph as required by location.
- c) Minimum roof deck thickness: Galvanized Steel 26 GA
- d) Minimum roof deck thickness: Aluminum .038 GA
- e) Engineering Data: Manufacturer's design charts include design load capacities, design wind loads, roof slope, span limits and the dimensional information,
- f) Conforms to requirements of Standard Building Code, IBC 2006, IRC 2006, AISI 2001 w/ supplements, Fire/Life Safety Code IFC 2006 with local amendments online, Accessibility Code INTL. ASCE 7-05
- g) Verified to be in compliance with local and state codes.
- h) Roofing material has current Florida Product Approval
- i) Roofing sections manufactured as modular components in specified widths.
- j) The complete assemblies installed without the use of heavy machinery or cranes
- k) All canopies meet or exceed 2007/ 2009 supplements INTL, and ASCE 2005.
- l) Column and beam assemblies are able to be installed in variable widths and are able to be installed in variable spacing from 1 foot to 14 foot increments
- m) Column and beams pre-engineered and pre-assembled for quick and accurate installation

3. Submittals

- a) Product Data: Manufacturer's product data, detail sheets, specifications, component performance data and installation instructions.
- b) Signed sealed drawings showing dimensions of protective covers. Submit detailed drawings and layout of walkway cover system and upright post and beam and all hardware.

4. Quality Assurance

- a) Codes and Standards: Comply with provisions of the following except as otherwise indicated: (SEE 2-f above).
- b) Field Measurements: Field measurements prior to installation where possible, to insure proper fitting of work. However, allow for adjustments within specified tolerations wherever taking of field measurements before installation might delay work.
- c) Shop Assembly: preassemble units to ship the greatest extent possible and disassemble as necessary for shipping and handling limitations.

5. Performance Requirements

- a) System Performance: Covered walkway system that has been designed, produced, fabricated and installed to withstand normal temperature changes as well as live loading, dead loading and wind loading in compliance with Standard Building Code requirements for geographic area in which work is located and as follows:
 - i) Live Load: 30 psf minimum
 - ii) Structural design for wind forces
 - iii) Design Wind Velocity: Up to 146 mph as required my location
 - iv) Importance factor: .85
- b) Sizes shown on drawings are to be considered minimum
- c) Structure shall be capable of sustaining severe icing, hail, and hurricane force winds and supporting a concentrated load such as being walked upon.

6. Delivery, Storage, and Handling

- a) Inspect materials upon delivery to assure that the specified products have been received.
- b) Properly store materials in designated areas before use.

Part 2: Product

1) Manufacturer

- a) Acceptable Manufacturers: Basis of design: Drawings and specifications are based on products by: Mobile Walkways, Inc. (877) 321-5492.

2) Materials

- a) Listed below are "minimum" requirements for the canopy. Products meet or exceed these minimum requirements and provide engineering submittals with required data and calculations for design.
 - i) Columns and Beams- min. 3"x3", Galvanized
 - ii) Column and Beams- Aluminum- min. 3"x3" extruded aluminum,
 - iii) Deck- 12"x3" Standing Seam, Galvalume roll formed
 - iv) Deck- Aluminum 12" x 21/2"x roll formed.
 - v) Runners-min. 2"x3", Galvanized
 - vi) Runners-min. 2"x3", extruded aluminum

2) Warranty:

- a) Manufacturer warrants the entire system against any defects in labor and materials for a period of one (1) year commencing on the date of substantial completion as established in Division one of these specifications
- b) Intention of the warranty is the manufacturer will come onto the jobsite and do all necessary to effect corrections of any deficiencies.

Part 3: Execution

1) Examination

- a) Verify all dimensions existing and provided
- b) Examine adjacent work for conditions that would prevent installation of system.
- c) Do not proceed until defects are corrected.
- d) Make reasonable adjustments in fabrication and erection to provide an acceptable finished walkway cover.

2) Delivery, Storage and Handling:

- a) Deliver, store and handle covered walkway system components as recommended by manufacturer. Handle and store in a manner to avoid deforming members and to avoid excessive stresses.

3) Installation

- a) Columns to span over concrete sidewalk with approved fittings
- b) Align columns using a transit to ensure true alignment.
- c) Set columns plumb and true in both directions.
- d) Shall not be mechanically fastened system
- e) Roof panels shall sheet drain rainwater in direction indicated.
- f) Minor connections and incidental details shall be as shown on the drawings.
- g) Ensure that end caps are securely into place
- h) Fabricate roof panels to required lengths
- i) Install level and square to beams to avoid "out of square" conditions at beam ends
- j) Install roof deck sections, accessories and related flashing in accordance with the manufacturer's instructions. Provide roof deck units to structural support frames.
- k) Caulk at wall where walkway cover units contact surface.
- l) Seal fabrication joints and seams away from view.
- m) Seal other points where water penetration might be expected.

Structural Modular Walkway Units

Part 1: General

1) Summary

- a) Provide Modular Walkway units for access to buildings, classrooms and structures for permanent or temporary use.
- b) Units delivered by the manufacturer to various project sites as directed by the Owner, for installation by the manufacturer or Owner.

2) Submittals

- a) Product Data: Submit complete engineering product data and engineered drawings for each item supplied under this Section at the time of the bid. Engineered drawings certified to comply as required by the above referenced codes by a Structural Engineer registered in the state of the installation.

3) Quality Assurance

- a) Skilled workmen: The installer shall submit written information regarding the following
 - i) Use a minimum of two (2) skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with specified requirements and the methods needed for proper performance of the work in this section.

4) Design Criteria

- a) Walkways designed using 100 pounds per square foot live load.
- b) Walking surfaces slip resistant
- c) Walkway surface pre-engineered and assembled (each module) for quick and accurate installation
- d) Walkway adjustable to various site conditions and meet all ADA requirements with effect upon canopy elevation
- e) Walkway and covered canopy system able to be adjusted independent of one another
- f) Each modular piece less than 200 LBS. as to eliminate large machine for installation or relocation of walkway systems

5) Tests

- a) The Manufacturer demonstrates to the Owner that each of the requirements of this specifications and the codes listed have been met or exceeded by the units delivered. Accomplished by load tests and/or engineering data assembled and presented in a logical and understandable method.
- b) Faulty units immediately replaced at the site without additional cost to the Owner.

Part 2 Product

1) Manufacturer

- a) Units manufactured by:

Mobile Walkways, Inc.
1150 Albright Road
Sanford, FL 32771
(877) 321-5492

Part 3 Execution of Orders

1) Rental

- a) Units delivered by the manufacturer to a site designated by Owner at the bid price per unit.
- b) Units off loaded by the manufacturer at one location on the designated site.



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