



FBC June 2012

SECTION 10530
EXTRUDED ALUMINUM SUSPENDED CANOPIES

PART I GENERAL

1.01 RELATED DOCUMENTS

- A. The bidding requirements, general conditions, supplementary conditions, drawings and requirements of division one specification shall apply to work specified in this section.

1.02 DESCRIPTION OF WORK

- A. The extents of aluminum suspended canopies are shown on the drawings and as specified herein.
- B. Definition: Extruded Aluminum Suspended Canopy shall consist entirely of extruded aluminum sections (roll-formed not acceptable). System shall consist of heli-arc welded gutter fascia frame, decking, braces, accessory items and hardware to provide a complete system.
- C. Water shall drain from deck into gutter fascia and out discharge holes in gutter fascia.

1.03 SUBMITTALS

- A. Project Drawings: Submit detailed drawings, including partial site plan, layout and section of suspended canopies, brace locations, all mechanical joint locations with complete details, connections, jointing and accessories.
- B. Product Data: Submit manufacturer's product data, specifications, component performance data and installation instructions.
- C. Project Drawings: Provide signed and sealed drawings for the proposed project by a professional engineer registered in the State of Florida, who professes his discipline to be structural engineering. Specific project loading criteria shall be clearly indicated on cover page to indicate compliance with codes and standards as well as project specific criteria.

1.04 QUALITY ASSURANCE

- A. Codes and Standards: Comply with provisions of the following except as otherwise indicated:
 - Florida Building Code, 2010 Edition with amendments, if any
 - AWS (American Welding Society) standards for structural aluminum welding
 - Aluminum Design Manual
 - Aluminum Association of Florida Guide to Aluminum Design in High Wind Areas
- B. Manufacturer: Obtain aluminum suspended canopies from only one (1) manufacturer, although several may be indicated as offering products complying with requirements.
- C. Installer Qualification: Contractor with not less than three (3) years experience in installation of aluminum suspended canopies of type, quantity and installation methods similar to work of this section.



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- D. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible, to insure proper fitting of work. However, allow for adjustments within specified tolerations wherever taking of field measurements before fabrication might delay work.
- E. Shop Assembly: Preassemble units in shop to greatest extent possible and disassemble as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- F. Coordination: Coordinate work of this section with work of other sections which interface with aluminum suspended canopies (building fascia, gutters, etc.).

1.05 PERFORMANCE REQUIREMENTS

- A. System Performance: Provide aluminum suspended canopies that have been designed, produced, fabricated and installed to withstand normal temperature changes as well as live loading, dead loading and wind loading in compliance with Florida Building Code requirements for geographic area in which work is located and as follows:

Live Load: 20 PSF minimum

Design Wind Velocity: In accordance with Chapter 26 thru 30 of ASCE 7

Importance Factor: Based upon ASCE 7

Stability Criteria: FBC Section 1604

Industry Guidelines: Aluminum Design Manual

- B. Sizes listed in specifications are to be considered minimum.
- C. Structure shall be capable of sustaining severe icing, hail, hurricane force winds and supporting a concentrated load such as being walked upon.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- 1. Architectural Metals of SW Florida, Inc.
 - 2. DITT-Deck Extruded Aluminum Walkway Cover System by Dittmer
 - 3. Perfection Architectural Systems, Inc.
- B. Equivalent systems by other manufacturers will be approved by addendum provided the following are submitted ten (10) days prior to bid opening and are complete:
- 1. Submit evidence of having operated a successful business of manufacturing complete extruded aluminum suspended canopies.
 - 2. Business must have been in operation under submitted name and ownership for a minimum of ten (10) years.
 - 3. Submit a list of successfully completed projects of similar scope, size and complexity within the State of Florida. List shall include job name, date of completion, architect's firm name, address and phone number, owner's name with representative and phone number.
 - 4. Submit complete shop drawings for above completed jobs.
 - 5. Submit complete details with structural properties (moment of inertia, section modulus, modulus of elasticity, etc.) for all proposed sections (beams, columns, decking and other structural members).
 - 6. Comply with the requirements pertaining to substitution as set forth in Instruction to Bidders.



2.02 MATERIALS

- A. All aluminum extrusions shall be alloy 6063 heat treated to a T-6 temper.
- B. Standard finish for all components shall be satin anodize 204-R1 meeting Aluminum Association Specification AA-M-10C-22A-21. Refer to shop drawings for project specific finish alternatives.
- C. Fasteners:
 - a. Deck Screws (rivets not permitted): Type 18-8 non-magnetic stainless steel sealed with a neoprene "O" ring beneath 5/8" outside dimension, conical washer.
 - b. Bolts: All bolts, nuts and washers to be 18-8 non-magnetic stainless steel.
- D. Warranty:
 - a. Contractor shall warrant the entire system against 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 this warranty is the Contractor will come onto the jobsite and do all necessary to effect corrections of any deficiencies.
 - c. Prima Facie Evidence of defects in labor and material may include but is not limited to, one or more of the following:
 - i. Moisture leaks
 - ii. Metal failure including excessive deflection
 - iii. Fastener failure
 - iv. Finish failure

2.03 FABRICATION

- A. Comply with indicated profiles, dimensioned requirements and structural requirements.
- B. Use sections true to details with clean, straight, sharply defined profiles and smooth surfaces of uniform color and texture, free from defects impairing strength and durability.
- C. All welding do be done by heli-arc process.
- D. Gutter fascia frames shall consist of mitered corners to be shop welded one piece units.
- E. Mechanical joints shall consist of stainless steel bolts with a minimum of one (1) bolts per fastening. All such mechanical joints must be detailed on shop drawings showing all locations.
- F. Roof Deck: Extruded Aluminum shapes, interlocking self-flashing sections. Shop fabricate to lengths and panels widths required for shop assembly. Depth of sections to comply with structural requirements.

PART 3 EXECUTION

3.01 DELIVERY, STORAGE AND HANDLING:

- A. Deliver, store and handle aluminum suspended canopy components as recommended by manufacturer. Handle and store in a manner to avoid deforming members and to avoid excessive stresses.

3.02 EXAMINATION

- A. Examine adjacent work for conditions that would prevent quality installation of system.
- B. Do not proceed until defects are corrected.



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3.03 FIELD DIMENSIONS

- A. General contractor shall field confirm brace locations, dimensions and elevations shown on shop drawings prior to fabrication.

3.04 INSTALLATION

- A. Erect aluminum suspended canopies in accordance with manufacturer's installation instructions.
- B. Set plumb, straight, and true to line at the proper elevation, adequately braced to maintain position.
- C. Assemble all components in a neat, workmanlike manner.

3.05 CLEANING AND PROTECTION

- A. Damaged Units: Replace roof deck panels and other components of the work which have been damaged or have deteriorated beyond successful minor repair.
- B. Cleaning: Remove protective coverings at time in project construction sequence which will afford greatest protection of work. Clean finished surfaces as recommended by manufacturer. Maintain in a clean condition during construction.
- C. Protection: Advise Contractor of protection and surveillance procedures, as required to ensure that work of this section will be without damage or deterioration at time of substantial completion.

END OF SECTION 10530