# SECTION 10 73 00 / 10530 OVERHEAD SUPPORTED HANGING ROD CANOPIES

# PART 1 - GENERAL

# 1.1 Scope

Furnish and install an extruded aluminum mechanical fasten structural panel protective canopy

system in strict accordance with specification details and plan drawings. Shop welded connecting are not acceptable.

#### 1.2 RELATED WORK

Provisions of General conditions, Supplementary conditions and Division 1, apply to the work under this section.

## 1.3 SUBMITTALS

- A. Furnish shop drawings bearing the seal of a state registered structural engineer to indicate proper construction in compliance with all local codes including, but not limited to, wind ratings, load bearing, footings required, spacing of posts in accordance with fire codes for entrance and egress, and drainage of precipitation.
- B. Shop Drawings include: Layout and erection drawings showing roof framing, deck panels, cross sections, trim details, assembly instruction and hardware kit.
- C. Submit signed Certification by a state registered structural engineer that design complies with latest Standard building Code applicable to location and applicable ANSI/ASCE requirements.
- D. Submit detailed product data on all components including part numbers and characteristics.
- E. Furnish samples of the color and finish.

# 1.4 QUALITY ASSURANCE

The manufacturer shall provide evidence of experience designing and producing at least five prior projects of similar scope in the past three years, and at least five years experience specializing in the manufacture of aluminum covering systems.

The erector shall provide evidence of experience completing at least five prior projects of similar scope in the past three years.

#### PART 2 - MATERIALS

# 2.1 MANUFACTURER

Rusco SUPERDECK by Rusco Custom Canopies, Knoxville, TN 865 938-4717.

Products evaluated for consideration as substitutes shall meet or exceed specifications in shapes, thickness, function, and installation methods. Component specifications may be reviewed at: http://www.swbrownco.com/architecturalspecifications

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# 2.2 COMPONENTS

A. Deck, beam, and column components shall be 6063 alloy T6 extruded aluminum meeting properties specified in ASTM B 221. Roll formed is not acceptable.

# (use one or both of the following according to support and drain design):

B. Frame shall be integrated beam, fascia, and gutter by Rusco Custom Canopies, model R524, having dimensions 4"W x 7.5"H, 0.094" thickness, and shall be capable of receiving and supporting R576, R577, and R578 roof decking.

# (use one of the following depending on roof panel style - shaped or flat):

- C. Decking shall be Rusco Custom Canopies model R576 and R577 matched pair 1 foot wide by 3" high 6" upper / 6"lower square shaped pattern, 0.090" and 0.078" thickness respectively, and capable of securely interlocking for a watertight seal and interface with R524 and R594 frame and fascia components.
- C. Decking shall be Rusco Custom Canopies model R578 flat bottom style 6" wide, 0.100" thickness, and capable of securely interlocking for a watertight seal and interface with R524 and R594 frame and fascia components.

## (use one of the following depending on color selection and finish):

- D. Color shall be clear anodized electrolytic sealing finish with a 15 minute process and meet AAMA 611 performance specifications
- D. Color coating shall be factory electrostatic spray applied in a controlled environment and meet AAMA 2603 performance specifications.
- D. Color coating shall be factory electrostatic spray applied in a controlled environment and meet AAMA 2604 performance specifications.
- D. Color coating shall be factory electrostatic spray applied in a controlled environment and meet AAMA 2605 performance specifications.
- E. Deck design shall have sufficient strength and camber for dead, live, and wind loads, including uplift, as required to meet applicable code and assure proper drainage, in accordance with sealed engineering drawings.

- F. Beams shall be sized in accordance with sealed engineering drawings specific to the application. The drain beam shall be Rusco Custom Canopies model R575, having dimensions 3 5/8"W x 6"H, 0.190" thickness. Other supporting beams and columns shall be extruded shapes of width, height, and thickness as shown on engineering drawings, but in no case less than 0.125 thickness.
- G. Fasteners shall be bolts and nuts with washers as shown on shop drawings and shall be of suitable grade, quality, and finish for exterior overhead support use. General purpose, consumer grade, or unrated fasteners are not acceptable.
- H. Flashing shall be 0.032" aluminum applied in accordance with instructions.
- I. Sealer shall be commercial grade high viscosity permanent sealer designed to bond aluminum with minimal flow and maximum fill properties. General purpose consumer grade caulks and silicones are not acceptable.

#### PART 3 - EXECUTION

## 3.1 FABRICATION

- A. Where corners occur, they shall be mitered ends of the fascia material itself, factory, cut using a fixed calibrated large format saw. Separately fabricated corner assemblies overlaid in the field are not acceptable. Field cutting corners using hand tools is not acceptable.
- B. Structural connections shall be securely made using Strong Point ASTMA C 1513, ASTMAC 1513, SAE J 78 and be STRONG SHIELD COATED, as shown on engineering drawings. Mechanical fastening shall take place on-site employing a transit level to insure plumb and true construction in the field with correction for any variances in the column footing elevations. Use of prefabricated support sections is not acceptable. Field welding is not acceptable.
- C. The canopy shall be built to drain rainwater internally through the column supports to discharge at or below ground surface level.

## 3.2 INSTALLATION

- A. Install canopy in a plumb manner to the highest standards of the trade and in strict accordance with the engineering drawings and manufacturers instructions.
- B. Placement and installation of manufacturer-provided Styrofoam block-outs shall be by others at the direction of the general contractor in accordance with the positions shown on engineering drawings.
- C. Install columns and beams at straight and true angles, level where shown, even if there are variances in the concrete at post locations.

- D. Key posts into grout and fill with grout up to any drain openings to prevent standing water inside post.
- E. Securely fasten all hardware and tighten nuts and bolts in accordance with engineering drawings.
- F. Mitered corners shall be mechanically fastened and sealed.
- G. Install flashing between adjacent structures and the canopy in a manner to prevent any runoff between the two. Ends of decking, beams, and joints shall be capped and sealed to control drainage.
- H. Touch-up any irregular finishes according to manufacturers instructions
- I. Thoroughly clean and wash canopy. Test drainage system.

**END OF SECTION** 

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