

# **Material Specifications for Superior Canopy Corporation**

## **Pre-Fabricated Steel Canopies**

### **Structural Components**

#### **Columns:**

Structural steel tubing shall be used.

Square steel tube to be ASTM A500 Grade B with a minimum yield stress of 46,000 ksi.

Round steel tube to be ASTM A500 Grade B with a minimum yield stress of 42,000 ksi.

Size to meet or exceed specific project design load requirements.

Provide each column with a 4" electrical access opening and cover plate.

#### **Base Plates:**

ASTM A36 – 1" Structural steel plate with a minimum yield stress of 36,000 ksi. Plate to be a minimum ¾" A572 Grade 50 thick with welded gussets. Shop fabricated with pre-punched or pre-drilled bolt holes.

#### **Top Plates:**

ASTM A36 structural steel plate with a minimum yield stress of 36,000 ksi. Plate to be a minimum of ¾" thick with welded gussets. Shop fabricated with pre-punched or pre-drilled bolt holes.

#### **Structural Framing:**

ASTM A992 – 50 ksi - 034 wide flange steel beams shall be used.

**Structural Connections:**

ASTM A36 structural steel plates with a minimum yield stress of 36,000 ksi.

All framing members shall be shop fabricated for bolted field assembly.

Domestic ASTM A325 high strength bolts shall be used. All ASTM A325 bolts shall be installed per the RSCS Specification for Structural Steel Manual of Steel Construction, Allow Stress Design, 9<sup>th</sup> Edition.

Flange and purlin bracing where required.

**Anchor Bolts:**

ASTM A572 or A490 Grade 50 threaded round stock with a minimum yield stress of 50,000 psi.

1 1/4" diameter x 36" long rod with a 90 degree, 6" minimum bent leg shall be used. Total bolt length 42".

Threaded projection above footing shall be 7".

Double nuts and washers for each bolt shall be provided, one set to be used for plumbing and leveling.

Templates for setting anchor bolts shall be provided.

Templates shall be removed before setting column on foundation.

**Painting:**

All framing members will be given one shop coat of drying red oxide primer, as per industry standards.

## **Deck Panels**

ASTM A653 Grade 50 with a minimum yield stress of 50 ksi having a G60 galvanized surface.

20 gauge, 16" wide x 3" deep steel panels.

Panels are fastened to the wide flange beams with an engineered screw type clamp and lock nut system.

No splicing of deck panels will be allowed.

Panels shall have a finish side coated with a full coat of polyester paint baked on over an epoxy primer. A white wash coat of polyester baked on over an epoxy primer shall protect the reverse side.

Panels to be manufactured in sufficient length to avoid unnecessary center gutters.

## **Fascia**

### **Laminated Panels:**

24 gauge sheet steel

Factory pre-assembled in 10' lengths

No exposed fasteners on bottom or exterior face.

Panel core material: 1" thick virgin expanded polystyrene in 1.23 PCF density.

Panels shall have both sides finish coated with a full coat of polyester paint baked on over an epoxy primer.

Backer sheet of laminated panel to be G60 galvanized sheet metal.

### **ACM Panels:**

Aluminum composite material of varying thicknesses is available as an option for the laminated panels. ACM panels consist of 2 aluminum sheets laminated

### **Fascia Attachment Systems:**

Fascia support brackets to be 20 gauge galvanized steel. Break to form channel 1 ½" x 2" x 1 ½" x 8' long.

### **Accessories**

#### **Gutter:**

Straight sections to be ASTM A653 Grade 50 with a minimum yield stress of 50 ksi and having a G60 galvanized surface.

Straight sections 20 gauge steel and are 8" wide x 6" deep.

Straight gutter section shall have a finish side coated with a full coat of polyester paint baked on over epoxy primer. A white wash coat of polyester paint baked on over epoxy primer shall protect the interior surface.

#### **Downspouts:**

External downspouts to be 4" x 3" roll formed 26 gauge steel with watertight locked seams.

Exterior paint with one full coat of polyester paint baked on over epoxy primer.

Downspouts to be of one contiguous length up to 15'.

#### **Collectors:**

Collectors to be circular and constructed of gel-coated fiberglass

#### **Internal Drains:**

3" schedule 40 PVC.

#### **Hardware:**

Gutter to deck panel fasteners shall be #14 x ¾" long self drilling screws.

#### **Sealant:**

a. Tube sealant shall be 100% silicone and or urethane caulk.

## **General Notes**

All material is new and without defects which would lessen quality of work.

All material will conform to requirements, tolerances, etc. of the latest editions of the AISC Manual of Steel Construction, AISI Specifications for general requirements for rolled steel plates, shapes, sheets, and bars for structural use, and AWS for welded connections.

Permit drawings include required foundation plans.

Building erection drawings to be furnished at time of shipment. Piece marks included for field identification of all major parts.

Upon request, design calculations or a letter of design certification sealed by a registered professional engineer licensed in the state in which the job is located shall be provided.

All A325 bolts shall be tightened by the turn of nut method.