

**DATUM**

***Plexus Cantilever Canopy***

**1.0 GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. Work in this section includes furnishing and installation of Flat Metal Canopies as manufactured by Datum.
- B. Related Items and Considerations
  - 1. Plan for proper attachment to wall construction including fastener type, size and locations. Coordinate for blocking or additional interior wall structure as require to support canopy loads.

**1.02 STANDARDS**

- A. All work and materials shall conform to the following standards.
  - 1. ASTM
  - 2. American Welding Society
  - 3. National Fire Protection Agency
  - 4. National Association of Architectural Metal Manufacturers
  - 5. AAMA2064
- B. Performance requirements
  - 1. Canopy must conform to local building codes.
- C. Determine if specific load requirements have been established for canopies and if stamped calculations are required for location in which canopy is installed.
- D. Installer Qualifications: Must have at least 10 years' experience in installation canopies of type and installation method similar to work in this section.

**1.03 SUBMITTALS**

- A. Shop Drawings
  - 1. Drawings showing all frame dimensions
  - 2. Canopy locations
  - 3. Connection Details
  - 4. Product Information
- B. Frame Finish
  - 1. Choice of standard RAL colors

**1.04 WARRANTY**

- A. Canopy
  - 1. Manufacturer shall warrant all manufacture supplied components against defects in structural labor and materials for a period of fifteen (15) years commencing on the date of substantial completion.
- B. Installation
  - 2. Installer shall warrant entire scope of installation including connection of canopies to building, caulking or flashing of canopies and installation of decking panels, against defects in all labor and materials for a period of one year commencing on the date of substantial completion.
- C. Finish
  - 1. Standard powder coat finish shall be warrantied for a period of five (1) years by the powder coat applicator.

2. Premium powder coat finish, Kynar or equivalent, shall be warranted for a period of ten (5) years by the powder coat applicator.

## **2.0 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Datum, West Palm Beach Florida, 954-541-9745  
[www.datumwholesale.com](http://www.datumwholesale.com)

### **2.02 MATERIALS**

- A. Body shall be:
  1. 1/4" Aluminum Wire Weave x 2" Mesh
  2. 1/8" Aluminum Wire Weave x 1" Mesh
  3. 3/8" round hole 0.0625" thick perforated aluminum sheet
  4. 3/4" round hole 0.0625" thick perforated aluminum sheet
  5. 1" x 4" x .080" extruded aluminum airfoil
  6. 1" x 5" x .080" extruded slanted tubing
  7. 1" x 5" x .080" extruded rectangle tubing
- B. Fascia to be extruded aluminum, choice of profiles below:
  1. 8" tall x 2" x .125" extruded aluminum tubing
  2. 12" tall x 2" x .125" extruded aluminum tubing
  3. 2" x 4" x .083" extruded aluminum half round bull nose
  4. 1/4"-1/2" thick aluminum sheet used for side outriggers
- C. Optional - Combinations of above fascia's are allowable.
- D. All hardware shall be noncorrosive, non-staining bolts, shims and accessory items – minimum 304 stainless steel.
- E. Mounting hardware & mechanical pins shall not be less than 3/8" thick stainless steel complying with ASTM A193.

### **2.03 FRAME FINISH: Powder Coat Finish**

- A. General
  1. Standard powder coat finish to be polyester powder coated to meet the performance criteria of the AAMA 2604 coating specification.
  2. Premium, Kynar or equivalent, powder coat finish to be polyester powder coated to meet the performance criteria of the AAMA2605 coating specification.
- B. Pre-Assembly
  1. Before powder coating, canopy fascia/gutter assemblies shall be fully assembled, with welded joints.
- C. Coating performance
  1. When tested in dry film hardness shall pass "F Hardness & no film rupture."
  2. When tested in compliance with ASTM D523 & ASTM D2454
  3. Coated frame shall have a minimum salt spray resistance & humidity (>#8) of 3,000 hours without loss of paint adhesion.
- D. Awnings must be painted as a single unit and not in pieces to be assembled. This will ensure water tightness and that screws are not exposed to the elements.

### **2.04 FABRICATION**

- A. Aluminum Components
  1. To be joined by welding in compliance with ASW standards. All members to be cut so as to form tight joints with no gaps.
  2. Use clean, straight, smooth material that comply with approved plans and shop drawings.

B. Decking

1. Decking panels to be pre-fabricated, installed by the manufacturer and powder coated as single units for water tightness.
2. Decking or mesh to be ALUMINUM only. Steel is not acceptable.
3. Decking panels to be welded.

**3.0 EXECUTION**

**3.01 INSPECTION**

- A. Installer shall confirm dimensions prior to fabrication.
- B. Confirm surrounding area is ready for canopy installation.

**3.02 INSTALLATION**

- A. Install canopies in positions indicated in manufacturer's shop drawings.
- B. Installation shall be structurally sound, level, plumb and leak free.
- C. Installer to protect finish during handling and erection and complete installation leaving canopies in clean condition.