

## Angled Airflow Series 1 - B&C Office Bldg.

# ARCHITECTURAL ALUMINUM SHUTTER

## Part 1: GENERAL

### 1.1 SUMMARY

Section includes:

Fixed and/or adjustable arms, extruded-aluminum, louvered shutter.

### 1.2 REFERENCES:

#### A. Aluminum Association Inc:

1. Aluminum Design Manual
2. Aluminum Structures: A Guide to Their Specification and Design.

#### B. ASTM International (ASTM):

1. ASTM B 209 – Aluminum and Aluminum Alloy Sheet and Plate.
2. ASTM B 221 – Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.

#### C. American Welding Society (AWS):

Standard D1.2 – Structural Welding Code – Aluminum.

## Part 2: PRODUCTS

### A. MATERIALS:

#### Angled Airflow Series - 1

- Framing member extruded custom shape - Alloy 6063-T5
  - i. Use Die BC 118 (1"x1 5/16" x .125 inch thick aluminum)
  - ii. Use Die BC117 ( 1"x1 3/16" x .125 inch thick aluminum)
- Louver Blades – Aluminum Extruded- Alloy 6063-T5
  - i. Use Die BC 116 ( 13/16"x1/16" x .063 thick aluminum)
- Hinge (Custom) -Aluminum Extruded – Alloy 6063-T5
  - i. Use Die BC 109 (3"x 3/4"x 5/32"thick aluminum )
- Fasteners
  - i. Stainless Steel 304
  - ii. Galvanized steel
  - iii. Aluminum
- Supports
  - i. Polished or painted stainless steel clevis – Type CL120
  - ii. Aluminum brackets 3/16 inch thick (min.) – Style B316
  - iii. Round aluminum or stainless steel tube with 1/2" stainless steel threaded ends.

### B. FABRICATION :

1. All frames assembled together. Contact between aluminum and dissimilar materials shall be insulated by the use of stainless steel shims, elastomeric gaskets, and/or non-metallic bearing pads.
2. Frame assemblies with mitlered corners
3. Clearly mark units for self reassembly and coordinated installation.

4. Design and fabricate perimeter supports, if welded, in accordance with Aluminum Association's Aluminum Design Manual, and the American Welding Society D1.2.

## **C. FINISHING** ( For Aluminum) : **Approved Applicator Only**

For Outdoor use, Highly UV and Weather Resistant

### **1. Preparatory Finishing (AAMA 2605 standards)**

- Chromating or chrome-free treatments

### **2. Optional Finishes Include :**

- Powder Coat (Polyester- TGIC)
  - 2.5 mils (min.)
  - 5 year warranty
- Fluoropolymer Finish
  - 2 coat finish - 1.2 mils (min.)
  - 3 coat finish - 1.6 mils (min.)
  - up to 20 year warranty
- Wood Effect Finishing
  - Powder Coat: Urethane Polyester – 2.5 mils (min.)
  - Wood effect transfer with vacuum oven baked
  - Clear coat – 1.2 mils (min.)
  - Up to 6 year warranty
- Paint Finish
  - Epoxy paint
- Anodizing
  - To ASTM standards

## **D. Installation:**

1. Install awnings per manufacturer's written instructions and as indicated on the Drawings.
2. Locate and place awnings level, plumb, and at indicated alignment with adjacent work.
3. Use concealed anchorages where possible. Provide brass, lead, or vinyl washers fitted to screws where required to protect metal surfaces and to make a weather resistant connection.
4. Repair damaged finishes so no evidence remains of corrective work. Return items that cannot be refinished in the field to local factory. When installers are unable to make professional corrections, alterations, or refinishing, the units will be returned for qualified fabrication or replacement.