

## **TSC4 - RECOMMENDED SPECIFICATION**

**Airolite TSC4 Sun Controls** are produced from extruded aluminum 1 x 4" (25.4 x 101.6 mm) rectangular tube blades. Outriggers are constructed from a minimum 0.25" (6.35 mm) aluminum plate material. Standard fascia is a 4" (101.6 mm) round tube, but optional fascia may be specified. Optional extruded aluminum mounting tees by Airolite are standard construction. Blade spacing shall be 4.5" (114.3 mm) on center. Sun controls utilize mechanically fastened construction, with welded construction as an option. All materials are available in Airolite's broad array of baked enamel and fluoropolymer finishes for durability and compatibility with adjacent components. Custom color matching is available upon request. Please contact your local Airolite representative or the factory for assistance with the layout and design of support systems when required.

### **GENERAL**

Where indicated on plan drawings or described in schedules, furnish and install Airfoil Blade Sun Controls as designed and manufactured by The Airolite Company LLC, Schofield, Wisconsin. Sun controls shall be furnished in the configurations represented on the plan drawings in factory assembled sections, installation hardware and finishes as specified and required for a complete installation. Sections shall be finished after assembly.

### **SUBMITTALS**

Manufacturer shall submit documentation that illustrates sections and details showing profiles, spacing of components, frames and anchors. When welded construction is required, theoretical calculations prepared by a professional engineer specializing in the application of welding technology demonstrating that each fillet weld joining infill elements and frame members will withstand a minimum of 526 pounds of force in shear shall be submitted. Provide samples of manufacturer's finish and color charts showing the full range of finishes and colors available.

### **PRODUCTS**

Architectural Sun Controls shall be Airolite TSC4 Sun Control as follows:

- o Blade Type: Rectangular Tube
- o Blade Material: Extruded Aluminum (Alloy 6063-T5)
- o Blade Material Thickness: 0.125 in. (3.18 mm)
- o Blade Dimension: 1 x 4 in. (25.4 x 101.6 mm)
- o Outrigger Material: Aluminum Plate (Alloy 6061-T6)
- o Outrigger Material Thickness: 0.250 in. (6.35 mm)
- o Standard Fascia: 4 in. (101.6 mm) Round Tube
- o Optional Fascia: Rectangular Tube or Channel
- o Optional Mounting: Extruded Aluminum Tee
- o Construction: Mechanically Fastened, Welded Optional

### **OPTIONAL WELDED ASSEMBLY**

Join sun control components with fillet welds concealed from view, unless the size of the sun control makes bolted connections between sun control sections necessary. Sun control blades shall be joined to each jamb frame with a minimum of two fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/Mig) process.

### **STRUCTURAL DESIGN CRITERIA**

Manufacturer shall design and furnish all supports required to design load of up to 25 pounds per square foot. The design load includes loads derived from wind, snow (including drift), seismic events and the dead load of the sunshade. Consult factory for higher loading conditions. Maximum section size is 144-inches (3,658 mm) wide x 48-inches (3,048 mm) projection, with standard fascia. Maximum section size may vary depending on optional fascia selected. Consult factory for larger sizes. Sun Control members, blades, outriggers, fascia and anchorages shall be demonstrated to withstand the specified wind design load.