

# Architectural Sun Controls



Architectural and High-Performance Louvers, Grilles, Screens, Sun Controls



#### **Exacting Detail. Custom Design.**





Airolite's architectural sun control program has been carefully crafted with the design professional in mind. Our sun control products can begin with an in-house assortment of blade profiles, fascia and outriggers. Better yet, submit your original ideas to our expert team and produce a distinguishing compendium of light levels and shading into "The look that works."

Horizontal, vertical and inclined configurations may be used to filter up to 80% of the sun's heat and glare, cut wintertime radiant heat loss and integrate natural light into atriums, walkways, skylights, reception areas and work spaces.



Airolite's architectural sun control products are an ideal solution for reducing total energy loads and additional investments in mechanical equipment. Shading and day lighting are applied in building applications to:

- Augment interior light levels to reduce or eliminate perimeter lighting
- Benefit from a virtually maintenance free passive shading system
- Decrease energy usage and costs
- Enhance occupant comfort, satisfaction, productivity and learning

• Integrate solar input during heating seasons

AIROL

The look that works.™

- Lower heat transfer during cooling seasons
- Reduce unwanted solar gain
- Regulate glare and contrast without diminishing views

Airolite's expertise is second to none, with our vast experience in sun shade system design and manufacturing, supported by our professional field representation network and fully staffed internal resources, we've got you covered. Airolite is available to assist in the design of cost effective solutions. From concept to finished product Airolite provides "The look that works."







#### Koll Airport Professional Center

The renovated Koll Airport Professional Center in Irvine, CA received a LEED Silver Certificate in 2009 from the U.S. Green Building Council for Core and Shell. In fact, the building is considered one of the nation's very first LEED-certified office condominiums. To unify the two new first floor buildings, and to maximize natural lighting, a dramatic canopy of 48 Airolite aluminum sun controls was designed and suspended over an employee plaza between the two wings.

The sun controls were finished in clear anodize to reflect light into the offices while creating interesting patterns of sunlight and shade for employees and visitors who enjoy the outdoor plaza area during the day. The sun controls are especially dramatic in the evening when they emit a soft orange glow from exterior security lighting and the renowned California sunset.



Koll Airport Professional Center Irvine, CA LPA, Inc.





# University of Colorado Hospital - Anschutz Inpatient Pavilion

A massive curvilinear window system frames the western view of the mountains from the ambulatory care center. This ten-foot high wall of glass paints a constantly evolving image of the changing seasons evidenced in the roof garden and the majestic Rocky Mountain backdrop. At the same time, this large expanse of glass poses monumental challenges for maintaining energy efficiency. The height of the glass wall dictated a monumental horizontal sun control projection of more than eight and one-half feet to shade the windows to inhibit thermal heat transmittance and glare during peak daylight hours. Surprisingly, only the fascia element is radiused to lend the perception that the entire sun control system is comprised of a series of non-linear segments.









#### First Federal Financial Center

The signature feature noted as one approaches the contemporary three-story First Federal building is the prominent span of non-linear Airolite sun controls that project more than five feet from each of two upper floor levels. Adjacent walls feature sleek, linear Airolite sun control configurations with mitered corners that yield continuous, uninterrupted sight and shadow lines.

While the attractive Airolite sun controls contribute substantially to the building's sleek contemporary appearance, they also serve several other critically important functions. The Myrtle Beach climate is dominated by intense sun, high temperatures and severe humidity from March through September. The sun controls, installed above the curtain wall and windows on the south-facing facade, provide critical shading from the sun's intensity. This helps mitigate energy transfer as well as manage glare in interior work spaces.







# Mammoet USA South, Inc.

Formed in 1987, Mammoet USA Inc. offers fullservice handling of heavy-lift cargo and specializes in the transport and placement of heavy equipment for power plants, refineries, chemical plants, bridges and many offshore projects. Mammoet USA Inc.'s new headquarters features an "expressed" design that celebrates the company's Homeric roles by emphasizing structural and metallic elements in the building envelope.

The canted window orientation and customengineered exterior Airolite sun controls yield solar shading and manage glare imposed by the intense Texas sun. The sleek sun control profiles further serve to break up the stark metal and glass walls to lend scale and detail to the facade. The building was designed to LEED standards, but certification was not pursued.



Mammoet USA South, Inc. Rosharon, TX Philo Wilke Partnership







Sun Contro Model	Typo	Blade Material	Blade Material Thickness	Blade Widths	Outrigger Material	Material Thickness	Fascia	Method of Construction
ASC4	Airfoil	Extruded Aluminum	0.081″	4″	Aluminum Plate	< 0.250"	3" Round Tube	Mechanically Fastened, Welded
ASC6	Airfoil	Extruded Aluminum	0.081″	6″	Aluminum Plate	< 0.250"	4" Round Tube	
ASC8	Airfoil	Extruded Aluminum	0.081″	8″	Aluminum Plate	< 0.250"	8" Rectangular Tube	
FSC4	Fan	Extruded Aluminum	0.081″	4″	Aluminum Plate	< 0.250″	3" Round Tube	Optional
FSC6	Fan	Extruded Aluminum	0.081″	6″	Aluminum Plate	<0.250"	4" Round Tube	

\* Information in table is representative of details above.



# Standard Sun Controls









Sun Control Model	Blade Type	Blade Material	Blade Material Thickness	Blade Widths	Outrigger Material	Outrigger Material Thickness	Fascia	Method of Construction
TSC4	Rectangular Tube	Extruded Aluminum	0.125″	4″	Aluminum Plate	< 0.250″	4" Round Tube	Welded
TSC6	Rectangular Tube	Extruded Aluminum	0.125″	6″	Aluminum Plate	< 0.250″	6" Rectangular Tube	
TSC8	Rectanglular Tube	Extruded Aluminum	0.125″	8″	Aluminum Plate	< 0.250″	8" Rectangular Tube	
ZSC4	Louver	Extruded Aluminum	0.125″	4″	Aluminum Plate	< 0.250"	4" Round Tube	

\* Information in table is representative of details above.

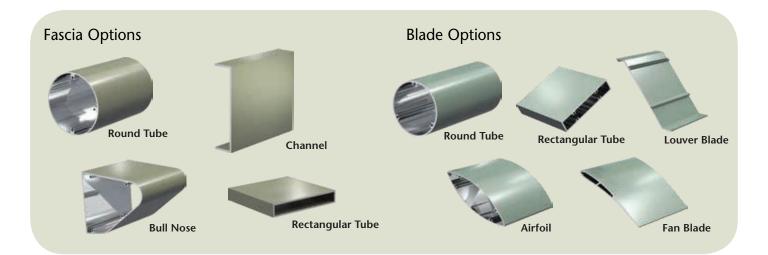


#### **Sun Control Components**

Blades, Fascia and Outriggers

The leading-edge blade configuration may be altered to serve as a trim or fascia member. Optional extruded aluminum fascia components may be integrated into the design to maintain visual continuity or provide a dramatic contrast to adjacent elements. Hollow airfoil, round and tube blade configurations are recommended for larger spans.

Blades Blades Cutrigger Cutrigger Cutrigger Cutrigger Cutrigger

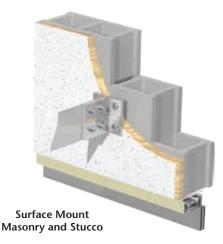


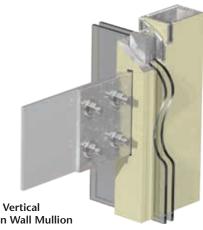


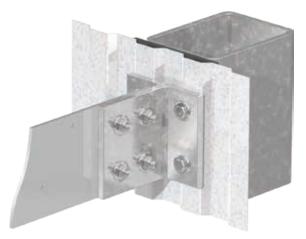
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# Representative Sun Control **Installation Details**

**Steel Construction Through Brick** 







Vertical Steel Construction **Through Steel Siding** 

**Curtain Wall Mullion** 



Concrete Through Wall



# **Finishes and Colors**

Your vision becomes reality when you can choose from 39 standard fluoropolymer colors and limitless custom color matching possibilities. Our knowledgeable in-house color and finish experts listen carefully to your ideas and will work hard to help you achieve your goal.



**ACRYLIC ENAMEL:** Louvers shall be cleaned, pretreated and FINISHED-AFTER-ASSEMBLY with an oven-cured thermosetting acrylic enamel finish that meets or exceeds the performance requirements of AAMA 2603, "Voluntary Specification Performance Requirements and Test Procedures for Pigmented Organic Coatings."

**2-COAT FLUOROPOLYMER:** Louvers shall be cleaned, pretreated and FINISHED-AFTER-ASSEMBLY with an inhibitive primer and oven-cured Kynar 500<sup>®</sup> / Hylar 5000<sup>®</sup> resin coating with minimum 1.2 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

**3-COAT FLUOROPOLYMER:** Louvers shall be cleaned, pretreated and FINISHED-AFTER-ASSEMBLY with an inhibitive primer and oven-cured Kynar 500<sup>®</sup> / Hylar 5000<sup>®</sup> resin coating with minimum 2.0 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

Finishes meet or exceed AAMA 2605, AAMA 2604, and AAMA 2603 requirements. Please consult the factory for complete information on standard and extended paint warranties. \* Reference the Airolite Finishes and Colors brochure for more information.

Front Cover: Koll Airport Professional Center, Irvine, CA



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Workmanship. Partnership. Leadership.

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