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# Sunshades

A circular sun icon with a human-like face, rendered in a golden-yellow color, positioned above the word "Sunshades". A thin, curved yellow line is located beneath the word.

Creates shade, without  
eliminating light.



Available in multiple configurations to accommodate  
any design. Custom sizes and colors.

*Service. Quality. Reliability.*



Since 1992 Perfection Architectural Systems, Inc. has become an industry leader in providing outstanding service and products of the utmost quality.

STARBUCKS  
ICP INTERNATIONAL PLAZA, MIAMI, FL  
ARCHITECT: DORSKY, HODGSON & PARTNERS, FT LAUDERDALE, FL

We are especially proud of our Sunshades line in their versatility, and ability to reduce heat gain while allowing direct sunlight to filter through.



The functionality of Sunshades also gives a marketable return on your investment in energy savings.

Our architectural aluminum Sunshades are aesthetically driven yet cost effective and all are custom produced. We work closely with architects and designers to achieve the desired look.



FREEDOM HIGH SCHOOL, ORLANDO, FL  
ARCHITECT: SCHENKEL SHULTZ, INC., ORLANDO, FL

Whether your goal is to make a creative transition between the structure and the environment or to enhance an already existing structure, Sunshades give you the flexibility in design to achieve a dynamic effect.





AT RIGHT AND BELOW:  
FREEDOM ELEMENTARY SCHOOL, BRADENTON, FL  
FAWLEY BRYANT ARCHITECTS, INC.,  
BRADENTON, FL



*From vision to installation.*

ABOVE: NEW TAMPA COMMUNITY PARK, TAMPA, FL  
ARCHITECT: LONG & ASSOCIATES, TAMPA, FL

RADIUM SPRINGS ELEMENTARY SCHOOL, ALBANY, GA  
SRJ ARCHITECTS, INC., ALBANY, GA



# Perfection Architectural Systems, Inc.

EXTERIOR SUN CONTROL DEVICES SECTION 10705 - EXTERIOR SUN CONTROL DEVICES

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### 1.2 SUMMARY

A. This Section includes the following:

1. Horizontal and or inclined fixed, extruded-aluminum sun control assemblies.

B. Related Sections include the following:

1. Division 5 Section "Structural Steel" for supporting structure.

### 1.3 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide exterior sun control assemblies capable of withstanding the effects of loads and stresses from dead loads, live loads, snow loads, snow drift loads, wind loads, and normal thermal movement without evidencing permanent deformation of assembly or components including blades, frames, and supports; noise or metal fatigue caused by blade rattle or flutter; or permanent damage to fasteners and anchors. Assemblies shall comply with state and local codes.

1. **Dead Load:** As required by applicable building code.
2. **Live Load:** As required by applicable building code.

### 1.4 SUBMITTALS

A. **Product Data:** Manufacturer's technical and descriptive data on sun control components and assemblies.

B. **Shop Drawings:** For exterior sun control assemblies and accessories. Include plans; elevations; sections; and details showing profiles, angles, and spacing of blades, frames and supports. Show unit dimensions related to supporting and adjoining structures and construction. Indicate anchorage details and locations.

C. **Structural Calculations:** Submit a comprehensive analysis of design loads, including dead loads, live loads, snow loads, snow drift loads, wind loads and thermal movement. Design calculations shall identify the moment and shear forces transferred to the structure or supports through the installation connections. Calculations shall be stamped and signed by a professional engineer registered in jurisdiction where Project is located.

### 1.5 QUALITY ASSURANCE

A. **Professional Engineer Qualifications:** A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of kind indicated. Engineering services are defined as those performed for installations of sun controls that are similar to those indicated for this Project in material, design, and intent.

### 1.6 PROJECT CONDITIONS

A. **Field Measurements:** Verify actual supporting and adjoining construction by field measurements before fabrication; and indicate recorded measurements on final Shop Drawings. Coordinate construction to ensure that sun control assemblies fit properly to supporting and adjoining construction and coordinate schedule with construction progress to avoid delaying the work.

1. **Established Dimensions:** Where field measurements cannot be made without delaying the work, verify

dimensions and proceed with fabricating of sun control assemblies without field measurements. Coordinate construction to ensure that sun control assemblies correspond to established dimensions.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

A. **Manufacturers:**

1. Perfection Architectural Systems, Inc.  
2310 Mercator Drive  
Orlando, FL 32807  
800-238-7207 Fax 407-671-8252  
www.perfectionarch.com

### 2.2 MATERIALS

A. **Aluminum Extrusions:** ASTM B 221 (ASTM B 221M), alloy 6063-T5 or T-52.

A. **Aluminum Sheet:** ASTM B 209 (ASTM B 209M), alloy 3003 or 5005 with temper as required for forming, or as otherwise recommended by metal producer for required finish.

B. **Aluminum Castings:** ASTM B 26/B 26M, alloy 319.

C. **Stainless-Steel Sheet:** ASTM A 666, Type 302 or 304.

D. **Fasteners:** Of same basic metal and alloy as fastened metal or 300 series stainless steel, unless otherwise indicated. Do not use metals that are incompatible with joined materials.

1. Use types and sizes to suit unit installation conditions.

F. **Anchors and Inserts:** Of type, size, and material required for loading and installation indicated. Use non-ferrous metal or hot-dip galvanized anchors and inserts for exterior installations and elsewhere as needed for corrosion resistance. Use toothed steel or expansion bolt devices for drilled-in-place anchors.

G. **Bituminous Paint:** Cold-applied asphalt mastic complying with SSPC-Paint 12 but containing no asbestos fibers, or cold-applied asphalt emulsion complying with ASTM D 1187.

### 2.3 FABRICATION, GENERAL

A. Assemble sun control assemblies in factory to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

B. Sun control assemblies shall be assembled entirely by mechanical fasteners or welding. Components shall be joined with a minimum of two fillet welds each one-inch (25.4 mm) long produced with the Pulsed Gas Metal Arc Welding (GMAW/MIG) process with minimum 0.125" (3.18 mm) throat.

C. Maintain equal sun control blade spacing, including separation between blades and frames to produce uniform appearance.

D. Include supports, anchorages, and accessories required for complete assembly.

E. Join frame members to one another and to fixed sun control blades with mechanical joints concealed from view, unless size of sun control assembly makes concealed, bolted connections between frame members necessary.

### 2.4 HORIZONTAL and/or INCLINED FIXED, EXTRUDED-ALUMINUM SUN CONTROLS

A. Horizontal and/or inclined, fixed, extruded-aluminum sun control assemblies complying with the following:

1. **Blade:** Specify blade type, material and thickness,

as indicated.

2. **Outrigger:** Specify outrigger type, material and thickness, as indicated.

3. **Fascia:** Specify fascia type, material and thickness, as indicated.

### 2.5 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Finish sun controls after assembly.

### 6.ALUMINUM FINISHES

1. **Clear Anodized:** AA-M-10C-22A-31, Architectural Class II, comply with AAMA 607.1.

2. **Bronze Anodized:** AA-M-10C-22A-44, Architectural Class I, comply with AAMA 608.1.

3. **Thermo-Set Enamel:** AA-C-12C-42R-1, comply with AAMA 603.

## PART 3 - EXECUTION

### 3.1 PREPARATION

A. Coordinate Installation Drawings, diagrams, templates, instructions, and directions for anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

### 3.2 INSTALLATION

A. Locate and place sun control assemblies level, plumb, and at indicated alignment with adjacent work.

B. Use concealed anchorages where possible. Provide stainless steel/neoprene washers fitted to screws where required to protect metal surfaces and to make a weather tight connection.

### 3.3 CLEANING AND PROTECTING

A. Clean exposed surfaces of sun control devices that are not protected by temporary covering to remove fingerprints and soil during construction period.

B. Clean and touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

**For further information and a more detailed downloadable electronic version of these specifications along with AutoCAD details please visit our website at [www.perfectionarch.com](http://www.perfectionarch.com).**

**Or contact Perfection directly.**



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REFER TO SWEETS SECTION 10 73 00 FOR  
INFORMATION ON OUR LINE  
ARCHITECTURAL PROTECTIVE COVERS