Bacon's Architectural SunShades Guide Specification for:

10 71 13 SECTION (10705) EXTERIOR SUN CONTROL DEVICES

PART 1 - GENERAL

1.1 Description

- A. Provide fixed horizontal, extruded aluminum custom sun shade assemblies directly attached to the exterior of aluminum storefront and curtain wall framing. (or)
 - A. Provide fixed horizontal, extruded aluminum custom sun shade assemblies with custom-designed attachment over storefront and curtain wall framed openings.
 - B. Related work specified elsewhere:

Metal Fabrication — 05500

1.2 Reference

- A. National Association of Architectural Metal Manufacturers (NAAMM)
- B. American Architectural Manufacturers Association (AAMA)

1.3 Related Documents

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

1.4 Performance Requirements

Structural Performance: Provide exterior sun shade 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. Sun shade assemblies shall comply with state and local codes.

- A. Dead Load: Performance requirements as required by applicable building code.
- B. Live Load: Performance requirements as required by applicable building code.

- C. Snow Load: Performance requirements as required by applicable building code.
- D. Snow Drift Load: Performance requirements as required by applicable building code.
- E. Wind Load: Uniform pressure (velocity pressure) of (Insert Design Criteria, lbs./sq. ft.) *or* (Insert Design Criteria Pascals):
 - 1. acting inward and
 - 2. acting outward
- F. Thermal Movements: Provide assemblies that allow for thermal movements resulting from the maximum (Insert Temperature Range, Degrees F° or C°) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, and other detrimental effects.

1.5 Submittals

- A. Product Data: Manufacturer's technical and descriptive data on sun shade components and assemblies.
- B. Shop Drawings: For exterior sun shade 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. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for units with factory-applied color finishes.
- D. Samples for Verification: Of each type of metal finish required, prepared on samples of same thickness and material indicated for final work. Where finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
- E. [Optional] 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.
- F. [Optional] Structural Calculations shall be stamped and signed by a professional engineer registered in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated for installations of sun shades that are similar to those indicated for this Project in material, design, and intent.

1.6 Quality Assurance

Manufacturer shall design, operate, assemble and finish their product in the United States of America as a "Made in America" product.

1.7 Project Conditions

- A. Field Measurements: Installer to verify actual supporting and adjoining construction by field measurements before fabrication; and indicate recorded measurements on final approved Shop Drawings. Coordinate construction to ensure that sun shade assemblies fit properly to supporting and adjoining construction and coordinate schedule with construction progress to avoid delaying the work.
- B. Established Dimensions: Where field measurements are not taken and dimensions are determined by the Installer, it is the Installer's responsibility for submitting and approving all dimensions prior to the fabricating of sun shade assemblies. The Installer is to coordinate construction to ensure that sun shade assemblies correspond to established dimensions.

PART 2 - PRODUCTS

2.1 Acceptable Manufacturers:

Bacon's Architectural SunShades, a division of Bacon & Van Buskirk Glass Co., Inc.

801 S. Neil Street Champaign, IL 61820 Phone: 800-747-6471

Fax: 217-352-7267 www.basshades.com

2.2 Acceptable Products:

Bacon's Architectural SunShades (BASS®), Briese Soleil Sun Shades configured with one of the following blades as specified:

BASS Standard Blade

(or)

BASS airfoil blade

2.3 Materials

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

- B. 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.
- C. Anchors and Inserts: Of type, size, and material required for loading and installation indicated. Use nonferrous 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.

2.4 Fabrication, General

- A. Completely assemble sun shade assemblies in factory. Clearly mark units for coordinated installation.
- B. Sun shade assemblies shall be assembled entirely by mechanical fasteners.
- C. Maintain equal sun shade blade spacing (or custom spacing as specified), including separation between blades and frames to produce uniform (or intended) appearance.
- D. Include supports, anchorages, and accessories required for complete attachment to the exterior of storefront and/or curtain wall framing.

2.5 Finishes, General

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

2.6 Finishes, Aluminum

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

(or)

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

(or)

Fluoropolymer Coating: 70 percent PVDF resin-based fluoropolymer, AA-C-12C-42R-1, (two coat) *or* (three coat) application, color as selected by architect, to comply with AAMA 605.

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.
- B. Coordinate delivery of such items to Project site.

3.2 Installation

- A. Locate and place sun shade assemblies level, plumb, and at indicated alignment with adjacent work.
- B. Use concealed anchors where possible.

3.3 Cleaning and Protecting

- A. Clean exposed surfaces of sun shade assemblies that are not protected by temporary covering to remove fingerprints and soil during construction period.
- B. Clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.
- C. Protect sun shade assemblies from damage during construction. Use temporary protective coverings where needed.
- D. 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.

END OF SECTION