

SECTION 10 71 00
ALUMINUM SUNSHADES

PART 1 GENERAL

1.1 DESCRIPTION:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. This section includes products to assist in controlling the effects of the sun.
- C. Work included in this section: The extent of the extruded aluminum sunshade system is shown on the contract documents and hereby defined to include all sunshade devices (Aluminum Tube and Slat Systems) shown and specified herein.

1.2 RELATED WORK:

- A. Related Sections include the following:
 - 1. Sustainable Design Requirements: Section 01 81 11, SUSTAINABLE DESIGN REQUIREMENTS.
 - 2. Thermal Insulation: Section 07 21 13, THERMAL INSULATION
 - 3. Flashing and Sheet Metal: Section 07 60 00, FLASHING and SHEET METAL
 - 4. Joint Sealants: Section 07 92 00, JOINT SEALANTS
 - 5. Aluminum Framed Entrances and Storefronts: Section 08 41 13, ALUMINUM FRAMED ENTRANCES and STOREFRONTS

1.3 INDUSTRY STANDARD:

- A. Reference:

Products and executions are specified in this section be reference to the following industry and or trade specifications or standards of the following:
- B. National Association of Architectural Metal Manufacturers (NAAMM), the Aluminum Association (AA), American Architectural Manufacturers Association (AAMA).

1.4 SUBMITTALS:

- A. Product Data:

Manufacturer's technical and descriptive data
- B. Shop Drawings:

Submit for architects approval prior to commencement of any work or fabrication under this section, detail shop drawings showing all areas of work profiles and sections of all components, finishes and fastening details.

1. Show locations and extent of all sunshade devices.
2. Include details of interfaces with other materials that form part of the exterior wall system.

C. Structural Calculations:

Submit comprehensive analysis of design loads, dead, live, snow, wind and thermal movements. Calculations shall be stamped and signed by a professional engineer in the jurisdiction where the project is Located.

D. Warranty:

The work in this section shall be guaranteed against defects in material and workmanship for a period of one (1) year from date of acceptance of the building. Contractor shall replace and repair any defects at no cost to the owner.

1.5 DELIVERY, STORAGE, AND HANDLING:

A. Shipping and Handling:

Deliver materials to the job site ready for erection. Assembled units to be packaged and shipped to prevent damage during freight and storage on site.

PART 2 PRODUCTS

2.1 MATERIALS:

A. General:

Metal shall be free from defects impairing strength, durability or appearance.

1. Aluminum - ASTM B 221, alloys 6063-T5 and 6063-T6 for extrusions. ASTM B 209, alloys 5052-H32 or greater.
2. Fasteners - Unless otherwise noted, fasteners shall be 300 series non-magnetic stainless steel. ASTM A-307, grade A or better.

B. Tube Sunshade system: For basis of design, use Architectural Grilles and Sunshades, Inc. (AGS, Inc.) Constellation Series "Hercules - 30" or approved equal.

2.2 COMPONENTS:

- A. Sunshades component shall be -6063 T5 extruded aluminum.
- B. Outriggers shall be -6063 T5 extruded aluminum.
- C. Fascia shall be -6063 T5 extruded aluminum.
- D. Components shall be shop assembled in large practical sections to allow for immediate erection.

2.3 ALUMINUM FINISH:

A. General:

Finish on exposed aluminum shall be compliant with the performance standards set forth in AAMA Specifications 2605-98, "Superior Preforming Organic Coatings on Aluminum".

B. Type:

Factory-applied, high performance, 70% Polyvinylidene Flouride (PVDF) coating based on Elf Atochem Inc. Kynar 500 or Ausimont USA Inc. Hylar 5000 resin, formulated by a licensed paint manufacturer, and applied by paint manufacturer's warranty-approved applicator.

C. Pretreatment:

Applicator to pretreat the aluminum with solutions to remove organic and inorganic surface soils, remove residual oxides, followed by a chrome phosphate conversion coating - at minimum 40 mg/square foot - to ensure adhesion of paint to the aluminum.

D. Application:

One primer coat, one color coat, for a minimum of 1.2 mils of dry film thickness.

E. Color:

Architect to choose from standard colors.

PART 3 EXECUTION

3.1 FIELD DIMENSIONS:

A. Verify conditions:

Examine areas where work is to be performed and identify any conditions that could be detrimental to proper or timely completion.

B. General contractor shall field confirm openings and elevations as shown on shop drawings prior to fabrication.

C. Installation should not proceed until all conditions are satisfactory.

3.2 INSTALLATION:

- A. Qualified installer needs to comply with manufacturer's installation instructions.
- B. Verify all dimensions and the supporting structure and provide accurate field measurements, so that the sunshades will be properly designed, fabricated and fitted to the structure.
- C. Anchor sunshades to the building per the architectural drawings.
- D. A maximum of +/- 1/8" tolerance between any column to column spacing is acceptable.
- E. Do not cut or trim any sunshade components without written approval by the manufacturer.
- F. Do not erect any damaged or deformed members. Remove or replace any damaged members in the erection process as directed by the manufacturer.
- G. Set sunshade units level, plumb, with uniform joints.
- H. Qualified installer to erect sunshades after all adjacent painting, and roofing have been completed.

3.3 CLEANING:

- A. Clean exterior sunshades surfaces to prevent buildup of dust and debris, refer to manufacturer's cleaning instructions based on the finish of the material.

3.4 PROTECTION:

- A. Protect sunshade materials after installation to prevent damage by other tradespersons.

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