

**Aluminum Grilles
Guide Specifications
10240**

Part 1 – General

1.1 Summary

A. Related work specified elsewhere

1. _____ Concrete Section
2. _____ Sheet Metal Work Section
3. _____ Glazed Aluminum Curtainwall Section

B Work included in this section.

The extent of the extruded aluminum grille system is shown on the contract drawings and hereby defined to include all ornamental grille devices of the type shown and specified herein.

1.2 Quality Assurance:

- A. Comply with SMACNA “Architectural Sheet Metal Manual” recommendations for fabrication, construction details and installation procedures, except as otherwise indicated.
- B. Field Measurements: Verify size, location, placement of grille units prior to fabrication, whenever possible.
- C. Shop Assembly: Coordinate field measurements and shop drawings with fabrication and shop assembly to minimize field changes, mechanical attachment and field fabrication of units. Pre-assemble units in shop to greatest extent possible, and clearly mark units for field coordination and installation.

Part 2 – Products

1.3 Qualifications

A. Acceptable Manufacturers:

Architectural Grilles and Sunshades, Inc. (AGS, Inc.)
Address: 22442 S. Fey Drive • Frankfort, IL 60423
Phone: (708) 479-9458 ext. 23 • Fax: (708) 479-9478
Contact: Eric Niemeyer (e-mail: eric@agsshade.com)

Other manufacturers may bid only after written approval of the architect, obtained 10 days prior to bid opening and issued addendum. Interested manufacturers must furnish full details of proposed product, engineering calculations on all sections involved, physical samples of all shapes and finishes, a list of installations similar in size and design, and must have a minimum of five years experience in manufacturing and installing extruded aluminum grilles.

1.4 Submittals:

A. Shop Drawings:

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

B. Warranties:

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 Product 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.

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

2.3 Fabrication, General:

A. Provide Modular Screen and accessories of design, materials, sizes, depth arrangement, and metal thickness as indicated or as required for optimum performance with respect to strength; durability; and uniform appearance.

B. Include anchorages and accessories required for complete assembly.

2.4

2.5 Screen Construction:

AGS, Inc. Aluminum Screen shall be AGS, Inc. Grille Pattern, AGS Model Name _ _ _ _ , as manufactured by Architectural Grilles and Sunshades, Inc. Bars to be fabricated from extruded aluminum section in 6063.T52 alloy and to be minimum .125” thick. Blade connections within the grille shall be accomplished by cross lap joints tack welded where required. Grille to be mechanically secured to horizontal or vertical steel supports (not by AGS, Inc.) with extruded aluminum clip angles. All fasteners to be stainless steel or aluminum.

2.6 Aluminum Finish:

A. General:

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

B. Type:

Factory-applied, high performance, 70% Polyvinylidene Fluoride (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 standard color.

OR

A. Class I, clear anodic finish: AA-M12C22A41 (Mechanical Finish: Chemical finished: etched, medium matte; anodic coating: Architectural class I, clear coating 0.018 mm or thicker) complying with AAMA 607.1.

PART 3 – EXECUTION:

3.1 Installation:

- 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 Erection:

- 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 Grille 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 Grille components without written approval by AGS, Inc.
- F. Do not erect any damaged or deformed members. Remove or replace any damaged members in the erection process as directed by AGS, Inc.
- G. Set Grille units level, plumb, with uniform joints.

End of Section 10240