

Architectural Grilles | Modular

Suggested Specifications | Section 10 24 00 and 05 70 10

PART 1 - General:

1.01 Summary

- A. Provide materials, and services necessary to furnish, deliver this Section as shown on the drawings and as specified. For a complete and proper installation.

1.02 Related Documents

- A. Drawings and general provisions of contract, including general and supplementary conditions and Division-1 specification sections, apply to work of this section.

1.03 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, and placement of grille units prior to fabrication, wherever possible.
- C. Shop Assembly: Coordinate field measurements and shop drawings with fabrication and shop assembly to minimize field adjustments, mechanical attachment, and field assembly of units. Pre-assemble units in shop to greatest extent possible and disassemble as necessary for shipping and handling limitations. Clearly mark units for re-assembly and coordinated installation.

1.04 Submittals

- A. Product Data: Submit manufacturer's specifications, technical data, and installation instructions for required products, including finishes.
- B. Shop Drawings: Submit shop drawings for fabrication and erection of grille units and accessories. Include plans, elevations and details of sections and connections to adjoining work. Indicate materials, finishes, fasteners, joinery, and other information to determine compliance with specified requirements.

PART 2 - PRODUCTS:

2.01 Manufacturers

A. Basis of Design – manufactured by Construction Specialties subject to compliance with requirements listed. The grilles and related materials herein specified and indicated on the drawings shall be manufactured by: Construction Specialties, 3 Werner Way, Lebanon, NJ 08833. Tel: 800.233.8493. Email: cet@c-sgroup.com. No substitutions.

B. Drawings and specifications are based on manufacturer's literature from Construction Specialties, Inc. drawings and specifications unless otherwise indicated. Other manufacturers must be approved equal by Architect/Owner.

2.02 Materials:

- A. Aluminum extrusions: ASTM B 211, Alloy 6063-T52.
- B. Clip Angles: Structural grade aluminum.
- C. Fastenings: Fasteners shall be aluminum or stainless steel. Provide types, gauges, and lengths to suit unit installation conditions. **Grille fasteners to be designed and engineered by manufacturing/supplier of Grilles based upon attachment application.**
- D. Anchors and Inserts: Use non-ferrous metal or hot-dip galvanized anchors and inserts for installation and elsewhere as required for corrosion resistance. Use stainless steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

2.03 Fabrication, General:

- A. Provide Modular Grille 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.

2.04 Grille Construction:

- A. CS Aluminum screen shall be CS para linear Modular Grille pattern, zero degree slope as manufactured by Construction Specialties Inc.

Vertical bars shall be spaced ____" on center (2" to 12", indicate spacing required)

Horizontal bars to be spaced ____" on center (2" to 12", indicate spacing required)

Bar depth to be ____" (2" to 8", indicate depth required)

- B. Bars to be fabricated from extruded aluminum sections 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 C/S) with extruded aluminum clip angles. All fasteners to be stainless steel or aluminum.

2.05 Aluminum Finish: *[Specifier note: select one below and delete others]*

- A. General: Comply with NAAMM "Metal Finishes Manual" for finish designations and application recommendations, except as otherwise indicated. Apply finishes in factory after products are assembled. Protect finishes on exposed surfaces prior to shipment. Remove scratches and blemishes from exposed surfaces that will be visible after completing finishing process. Provide Color as indicated or, if not otherwise indicated, as selected by architect from standard Kynar 500 colors.
1. Fluorocarbon Coating: Inhibitive thermo-cured primer, 0.2 mil minimum dry film thickness, and thermo-cured fluorocarbon coating containing "Kynar 500" resin, 1.0 mil minimum dry film thickness.
 2. Furnish manufacturer's twenty (20) year guarantee of "Kynar 500" finish.
 3. Finish shall be applied in the plant of the manufacturer.
- A. Three Coat Fluorocarbon Coating
1. Sunshades to be finished with a minimum 1.4 mil (0.035mm) thick full strength 70% resin, 3 coat Fluoropolymer system.
 2. All aluminum shall be thoroughly cleaned, etched, and given a chromated conversion pre-treatment before application of the Kynar/Hylar coating. The coating shall consist of a primer, a high **Metallic** color coat and a clear PVF2 topcoat. It shall receive a bake cycle of 17 minutes at 450°F. All finishing procedures shall be one continuous operation in the plant of the manufacturer.
 3. Manufacturer to furnish an extended 20 limited warranty for the Kynar/Hylar coating. This limited warranty shall begin on the date of material shipment.

OR

B. Two Coat Fluorocarbon Coating

1. Sunshades to be finished with a minimum 1.0 mil (0.025mm) thick full strength 70% resin, 2 coat Fluoropolymer system.

2. All aluminum shall be thoroughly cleaned, etched, and given a chromated conversion pre-treatment before application of the **MICA II** coating. The coating shall consist of a primer and a pearlescent pigmented PFV2 topcoat. It shall receive a bake cycle of 17 minutes at 450°F. All finishing procedures shall be one continuous operation in the plant of the manufacturer.

3. Manufacturer to furnish an extended 20 limited warranty for the Kynar/Hylar coating. This limited warranty shall begin on the date of material shipment.

PART 3 - EXECUTION:

3.01 Installation:

- A. Locate and place grille units' plumb, level and in proper alignment with adjacent work.
- B. Form tight joints with exposed connections accurately fitted together.
- D. Use isolation tape made by other manufacturer where aluminum meets steel or concrete.

END OF SECTION