



PART 2 PRODUCTS

2.01 Manufacturers

A. The louvers and related materials herein specified and indicated on the drawings shall be as manufactured by:

Construction Specialties, Inc.
49 Meeker Avenue
Cranford, New Jersey 07016
Telephone: 800-631-7379

Construction Specialties (UK) LTD
1010 Westcott Venture Park, Westcott,
Aylesbury,
Bucks HP18 0XB. United Kingdom.
Telephone: +44 (0) 1296 652800

Construction Specialties, LLC
1705 World Trade Centre
PO Box 9260
Dubai, U.A.E.
Telephone: +971-4-3312167

CS Group Construction Specialties Ltd.
Room 616-617
No.899 Cross Region Plaza, Lingling Road
Xuhui District, Shanghai, China 200030
Telephone: +86-21-64329257

B. Products equal to the CS materials may be offered providing that the manufacturer and materials are pre-approved at least 10 working days before the bid date.

2.02 Materials

- A. Aluminum Extrusions: ASTM B211, Alloy 6063-T5, 6063-T6 or 6061-T6.
- B. Aluminum Sheet: ASTM B3209, Alloy 1100, 3003 or 5005.

2.03 Fabrication, General

- A. Provide CS louver models, bird screens, blank-off panels, structural supports and accessories as specified and/or shown on the drawings. Materials, sizes, depths, arrangements and material thickness to be as indicated or as required for optimal performance with respect to strength; durability; and uniform appearance.
- B. Louvers to be mechanically assembled using stainless steel or aluminum fasteners.
- C. Include supports, anchorage, and accessories required for complete assembly.

2.04 Louver Models

A. **CS FEMA Approved 5" (127.0mm) Fixed Sight Proof Extreme Weather Louver Model EW-5210**

- 1. **Material:** Heads, sills, jambs and mullions to be one piece structural formed aluminum members with integral caulking slot and retaining beads. Blades to be Aluminum Association standard 3"x3" angles 1/4" thick. Compression gaskets shall be provided between bottom of mullion or jamb and top of sill to insure leak tight connections.
- 2. Maximum PSF Design Load: 300 PSF
- 3. FEMA 361 and ICC 500 Certified
- 4. ASTM E330/E330M structural and cyclical test compliant
- 5. **AMCA Performance:** A 4' x 4' unit shall conform to the following:

Free Area	7.22sq. ft. (0.671 sq. m.)
Free area velocity at the point of beginning water penetration	525 FPM
Intake Pressure drop 525 FPM	0.10 in. H ₂ O

2.05 Finishes

A. General: Comply with NAAMM "Metal Finishes Manual" for finish designations and application recommendations, except as otherwise indicated. Apply finishes in factory. 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.

- B. 100% Fluoropolymer Resin Powder Coat System complying with AAMA-2605-5 standards for gloss and color retention. Finish thickness to be 1.5 to 3.0 mils.
 - 1. Finish to allow zero VOCs to be emitted into facility of application or at job site.
 - 2. Finish to adhere to a 4H Hardness rating.
 - 3. Furnish manufacturer's twenty (20) year warranty for finish for gloss and color retention

OR

- B. Three Coat Fluorocarbon Coating
 - 1. Louvers 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. Louvers 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.

OR

- B. Clear Anodize
 - 1. Louvers to be given a one hour 215R1 Architectural Class I anodic coating of 0.7 mil (0.018mm) thickness (Aluminum Association designation AA-C22A41).
 - 2. The thickness of the coating shall be tested in accordance with ASTM B244-68.
 - 3. The coating shall be sealed to pass the ASTM B136-77 Modified Dye Stain Test.

OR

- B. Bronze Anodic
 - 1. Louvers to be given a Bronze Anodic Architectural Class 1 coating of 0.7 mil (0.018mm) minimum thickness; and a minimum weight of 27 mg. per sq. in.
 - 2. The thickness of the coating shall be tested in accordance with ASTM B244-68.
 - 3. The coating shall be sealed to pass the ASTM B136-77 Modified Dye Stain Test.

2.06 Bird Screens

- A. Unless otherwise indicated, all louvers to be furnished with mill finish bird or insect screens.



- B. Screens to be 5/8" (15.9mm) mesh, 0.050" (1.27mm) thick expanded and flattened aluminum bird screen secured within 0.055" (1.40mm) thick extruded aluminum frames. Frames to have mitered corners and corner locks.

OR

- B. Screens to be 18 x 16 aluminum mesh 0.011" (0.279mm) diameter wire insect screens secured within 0.055" (1.40mm) thick extruded aluminum frames. Frames to have mitered corners and corner locks.

2.07 Blank Offs

- A. Furnish where indicated on the drawings blank-off panels fabricated by the louver manufacturer.
- B. Blank-off panels to be 0.050" (1.27mm) thick aluminum sheet. Panels to be finished with Kynar 500 minimum 1 mil (0.025mm) thick full strength 70% resin Fluoropolymer coating. Color to be selected by the architect.

OR

- B. Blank-off panels to be 1" (25.4mm) thick and to be faced on both sides with 0.032" (0.81 mm) thick aluminum sheet. Panels to be fabricated with an expanded polystyrene (EPS) core having an R-value of 4 ($^{\circ}\text{F}\cdot\text{ft}^2\cdot\text{h}/\text{Btu}$). Panel perimeter frame to be 0.050" (1.27mm) thick-formed aluminum channels. Panel frame to be mitered at the corners. Panels to be finished to match louvers.

OR

- B. Blank-off panels to be 2" (50.8mm) thick and to be faced on both sides with 0.032" (0.81 mm) thick aluminum sheet. Panels to be fabricated with an expanded polystyrene (EPS) core having an R-value of 8 ($^{\circ}\text{F}\cdot\text{ft}^2\cdot\text{h}/\text{Btu}$). Panel perimeter frame to be 0.050" (1.27mm) thick-formed aluminum channels. Panel frame to be mitered at the corners. Panels to be finished to match louvers.