

SECTION 08350 FOLDING (SLIDING) GRILLES

AMSTEL AS600CA CLASSIC 126 GRILLE

THREE PART SHORT FORM SPECIFICATIONS (CSI)

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Sliding Vertical Rod Open Panel Security Grilles.

1.2 RELATED SECTIONS

- A. Section 03300 – Concrete: Concrete openings.
- B. Section 04200 – Masonry: Masonry openings.
- C. Section 05500 – Metal Fabrications: Supporting members.
- D. Section 06100 – Carpentry: Framing and trim.
- E. Section 09250 – Gypsum Drywall: Opening finish.
- F. Section 16130 - Raceway and Boxes: Conduit from electric circuit to grille operator and from grille operator to control station.
- G. Section 16150 - Wiring Connections: Power to disconnect.

1.3 REFERENCES

- A. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- B. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- C. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- D. ANSI B 46.1 – Stainless Steel Finishes.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Stacking:
 - 1. Minimum stacking shall be 1.05 inches/linear foot (87.5 mm/meter) of opening plus 3.5 inches (89 mm) for each locking member.
 - 2. Grille support must be able to carry the weight of a fully stacked door at any point along its length. Support is to carry the total weight / the total stacking.
- B. Lintel Deflection: Accommodate deflection of lintel without damage to components, deterioration of seals, or movement between door frame and perimeter framing.
- C. Thermal Movement: Design sections to permit thermal expansion and contraction of components to match perimeter opening construction.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate opening dimensions, elevations and framed opening tolerances.
- C. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.



128 CENTRE STREET EAST
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3. Installation methods.
- D. Verification Samples: For each finish specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A company that specializes in the manufacturing of the folding grille products required for the project with a minimum of 10 years documented experience.
- B. Installer Qualifications: Contractor that has minimum of two years documented experience installing folding grille products similar to those specified.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 1. Finish areas designated by Architect.
 2. Do not proceed with remaining work until workmanship, color, and finish is approved by Architect.
 3. Refinish mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect finished surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to substrate when exposed to sunlight or weather
- C. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- D. Store materials in a ventilated weather tight location.

1.8 COORDINATION

- A. Coordinate Work with other operations and installation of finish materials to avoid damage to the materials.

1.9 WARRANTY

- A. Manufacturers standard limited product warranty for a period of two years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Amstel Manufacturing, 128 Centre Street East, Richmond Hill, Ontario L4C 1A6, Canada. Tel: (905) 508-0855 or 1-800-663-6206. Fax: (866) 525-1304, (905) 508-8487. Email: greg@amstel-doors.com Web: www.amstel-doors.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 MATERIALS

- A. **AS600CA Classic 126** Sliding Security Grille by Amstel Manufacturing:
 1. Curtain: Constructed of 5/16 inch (8 mm) diameter vertical rods on 3-1/2 inches (89 mm) centers with 1/8 inch by 5/8 inch by 7-3/4 inches (3 mm by 16 mm by 197 mm) flat horizontal bars. Bars are vertical spaced every 12 inches (305 mm) with 7/16 inch (11 mm) diameter PVC sleeves over alternating rods. Panel to have 2 inches (51 mm) high truss-like polycarbonate plates at the top and bottom of the closure.
 2. Weight: 1.2 lbs./sq. ft. (5.9 kg/sq.m).



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3. Aluminum is to be 6063 aluminum alloy with T-5 temper conforming to ASTM B 221.
4. Stainless steel shall conform to ASTM A 666.
5. Locking:
 - a. Lead Posts:
 - 1) Provide a top and bottom ratcheted rod lead post (#2) activated by a keyed cylinder or thumb turn. Supply dustproof floor sockets for all drop bolts. Provide rubber bumper at the edge of locking post.
 - 2) Provide lead post (#7) with a concealed hook bolt lock activated by a keyed cylinder or thumb turn that engages a full height wall channel.
 - b. Intermediate posts:
 - 1) Provide intermediate posts (#4) at maximum of 10 feet (3048 mm) of curtain length for floor mounting condition. For counter mounts and at each curve provide intermediate posts a maximum of 6 feet (1828 mm) of curtain length. Supply dustproof floor sockets for all drop bolts.
 - 2) Intermediate posts contain an adjustable manually operated drop bolt with optional cylinder locks (#3). Supply dustproof floor sockets for all drop bolts.
 - c. End Posts:
 - 1) Provide end post (#7) with a concealed hook bolt lock activated by a keyed cylinder or thumb turn that engages a full height wall channel.
 - 2) Provide a top and bottom ratcheted rod end post with dustproof floor sockets for all drop bolts (#2). Provide rubber bumper at the edge of locking post.
 - 3) Provide fixed end post (#8).
 - 4) Provide trailing end post (#6) with an attached full height protection plate and self locking into a steel V-stop mounted to the floor or counter inside the storage pocket.
 - d. Bi-parting assemblies (#5) are provided as required. One lock member will retain a hook-bolt deadlock activated by keyed cylinder or thumb-turn cylinder. A second intermediate locking member is provided with a steel floor bolt and shall include a full height channel to accept the hook-bolt deadlock.
 - e. Optional emergency egress door option. Where local by-laws dictate provide fall-away man-door egress operable by means of thumb-turn. Door should not be used as a regular means of egress.
6. Track:
 - a. Overhead track shall be 1.3 inches (33 mm) wide by 1.8 inches (46 mm) high and sized to accept 1-1/8 inches (29 mm) diameter roller trolleys.
 - b. Rollers bear on 0.27 inch (7 mm) thick aluminum surface within the track.
 - c. Radius Track: Provide the following where indicated.
 - 1) Radius: 10 inches (254 mm) in 90 degrees.
 - 2) Radius: 14 inches (356 mm) in 90 degrees.
 - 3) Radius: 14 inches (356 mm) in 45 degrees.
 - 4) Provide custom radius track as indicated on the Drawings.
7. Factory Finishes: Use two letter suffix to denote required door finish.
 - a. Standard Clear Anodized: CA, 0.0004 inch (10 micron) clear anodizing.

2.3 ACCESSORIES

- A. Anchors: Galvanized or corrosion resistant steel.

2.4 FABRICATION

- A. Size and fabricate grille assembly to allow for tolerances of rough framed openings, clearances, shim spacing and shims around perimeter of assemblies.
- B. Ensure joints and connections are flush and hairline.
- C. Accurately and rigidly fit joints and corners.
- D. Match components to ensure continuity of line.



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PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify openings are ready to receive work and opening dimensions and clearances are as indicated on shop drawings.
- C. Provide full size template for custom radius track prior to fabrication.
- D. If openings are the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces as recommended by the manufacturer for achieving the correct installation under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Attach frame and shims to perimeter opening to accommodate construction tolerances and other irregularities.
- C. Use anchorage devices to securely fasten sliding door assembly to wall and ceiling construction without distortion or imposed stresses.
- D. Separate aluminum and other corrodible surfaces from sources of corrosion of electrolytic action at points of contact with other materials.
- E. Install perimeter trim and interior closures.
- F. Adjust hardware for smooth operation.

3.4 CLEANING

- A. Remove protective material from factory finished surfaces.
- B. Remove labels and visible markings

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.3.A. END OF SECTION

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE