

## SECTION 08350 FOLDING (SLIDING) GRILLES

### AMSTEL AS630SS STAINLESS 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.

##### 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 designed 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 expressed as pounds/linear foot.
- B. Lintel Deflection: Accommodate deflection of lintel to prevent 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, elevation sections and support requirements.
- 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.
  - 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. **AS630SS Stainless 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 12 GA. (0.109 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 1/2 inch (13 mm) diameter stainless steel tubes over alternating rods. Panel to have alternating truss-like stainless steel plates at the top and bottom of the closure.
  - 2. Weight: 1.9 lbs./sq. ft. (9.28 kg/sq.m).
  - 3. Stainless steel shall conform to ASTM A 666. Stainless steel to be Type 304, #4 polish.
  - 4. Aluminum is to be 6063 aluminum alloy with T-5 temper conforming to ASTM B 221.
  - 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 aluminum 1.3 inches (33 mm) wide by 1.8 inches (46 mm) high aluminum 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 aluminum track 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 Stainless Steel: SS, Type 304, #4 polish. Stainless steel with a #4 finish in conformance with ASI B 46.1.

## 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.

## 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***