SECTION 08 35 16 – side folding grilles

1. General
   1. SUMMARY
      1. This Section includes requirements for supply and installation for manually operated side folding grilles intended to function as a security barrier.
      2. Related Requirements:
         1. Section 05 50 00 – Metal Fabrications.
         2. Section 08 71 00 – Door Hardware for supply of lock cylinders to match building standard.
   2. REFERENCE Standards
      1. Aluminum Association (AA):
         1. DAF 45‑03, Designation System for Aluminum Finishes.
      2. American Architectural Manufacturers Association (AAMA):
         1. AAMA 609.1‑85, Voluntary Guide Specification for Cleaning and Maintenance of Architectural Anodized Aluminum.
      3. Canadian General Standards Board (CGSB):
         1. CAN/CGSB‑12.1‑M90, Tempered or Laminated Safety Glass.
   3. SUBMITTALS
      1. Provide required information in accordance with Section 01 33 00 – Submittal Procedures.
      2. Action Submittals: Provide the following submittals before starting any work of this Section:
         1. Product Data: Submit manufacturer's printed product literature, specifications and data sheets for each size of side folding grille and accessories.
         2. Shop Drawings: Submit shop drawings for special components and installations not dimensioned or detailed in manufacturer's standard product literature; indicate assembly and instruction details, dimensions of fabrication, required clearances materials, finishes, egress doors and hardware.
         3. Samples for Initial Selection: Submit manufacturer's colour charts showing full range of colours available for units with factory applied finishes for initial selection.
         4. Samples for Verification: Submit one (1) sample of each type of exposed finish required, prepared on samples of size indicated below for final verification:
            1. Door Curtain: 300 mm long.
            2. End Post: 150 mm long.
            3. Intermediate Post: 150 mm long.
            4. Lead Post: 150 mm long.
            5. Floor Guide: 150 mm long.
            6. Panel Inserts: 300 mm long.
   4. PROJECT CLOSEOUT SUBMISSIONS
      1. Provide operation and maintenance data for side folding grilles and closures and hardware for incorporation into manual specified in Section 01 33 00 – Submittal Procedures.
   5. QUALITY ASSURANCE
      1. Qualifications: Provide proof of qualifications when requested by Consultant:
         1. Manufacturer: Obtain products listed in this Section from listed manufacturers and that have local distribution for the past two (2) years.
         2. Installers: Use installers that have completed manufacturer's authorized training program and that certified to install and maintain units delivered for this Project.
         3. Source Limitations: Obtain products through one source from a single manufacturer.
2. Products
   1. MANUFACTURERS
      1. Basis-of-Design products are named in this Section; additional manufacturers offering similar setting systems may be incorporated into the work provided they meet the performance requirements established by the named products.
      2. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Project include, but are not limited to, the following:
         1. Mobilflex Inc.
         2. Dynamic Closures Corporation.
         3. Cookson Company.
         4. Cornell Ironworks.
         5. Dynamic Closures Corporation.
         6. Kinnear/Wayne‑Dalton Corporation.
         7. Overhead Door Corporation.
   2. SIDE FOLDING GRILLES
      1. Door Curtain: Manufacturer’s standard construction as follows:
         1. Top and Bottom Sections: Fitted with an aluminum panel 102mm (4”) high and consisting of an aluminum extrusion 1.6mm (1/16”) thick.
         2. Curtain Construction: Vertical rods of 8mm (5/16”) in diameter, with spacing between the rods of 67mm (2-5/8”), in a brick pattern.
         3. Glazing: 1/8" (3mm) tempered glass with a 100 percent viewable area of 8-7/8" (225.5mm).
            1. Tempered glass in accordance with CAN/CGSB 12.1.
         4. Rods are linked together by flat horizontal bars of 3mm x 16mm x 168mm (1/8” x 5/8” x 6-5/8”).
         5. Bars are spaced vertically every 305mm (12”) by aluminum sleeves of 13mm (1/2”) diameter.
         6. Connect panels with two-piece vertical aluminum tubular hinges.
         7. Finish: Refer to Section 09 06 05 Product and Finish Schedule
      2. Hardware: Manufacturers standard hardware and as follows:
         1. Overhead Track: Extruded aluminum, 33mm (1-5/16") wide by 40mm (1-9/16”) high, with continuous extruded profile seamed together by alignment bars and track pins. Track to accept 1 1/8" (28mm) nylon trolleys and carry weight of complete curtain.
         2. Hangers: Ball bearing type.
         3. Locking Post: Single, side opening locking post configuration.
         4. Locking: Provide cylinder locks operable from both sides for pocket locking. Provide one cylinder lock and spring loaded dustproof drop bolt to intermediate members.
      3. Egress Door: Manufacturers standard emergency collapsible egress door egress door incorporated into side folding grille construction; 914mm x 2032mm (36”) wide x 2032mm (80") high; having hardware required for correct function including; but not limited to, thumb turn lock operator.
      4. Basis-of-Design Material: System S-126; Brick Pattern by Mobilflex Inc.
   3. ALUMINUM FINISHES
      1. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
      2. Acrylic Enamel Finish:
         1. One (1) Coat Acrylic Extrusion Coating: AA C12 Chemical Finish, cleaned with inhibited chemicals; C40 Chemical Finish, conversion coating; Rx Acrylic Coating, manufacturer's standard single coat factory spray applied acrylic coating; prepare, pre-treat, and apply coating to exposed metal surfaces to 0.020 mm or thicker in accordance with AAMA 2603 and with coating manufacturer's written instructions.
         2. Colour: As selected by Consultant from manufacturer's full range.
         3. Acceptable Materials: PPG Duracron.
      3. Clear Anodized Finish:
         1. Class II Finish: Architectural Class II, clear coating 0.010 mm or thicker in accordance with AAMA 611.
      4. Mill finish is acceptable for non-exposed components.
3. Execution
   1. INSTALLATION
      1. Install side folding grilles and required hardware, jamb and head moulding strips, anchors, inserts, hangers, and equipment supports in accordance with shop drawings, manufacturer's written instructions and as specified.
      2. Adjust operating components to ensure smooth opening and closing of side folding grilles and closures.
   2. CLEANING
      1. Perform cleaning after installation to remove construction and accumulated environmental dirt.
      2. Clean aluminum and stainless steel with damp rag and approved non‑abrasive cleaner in accordance with manufacturer's instructions.
      3. Remove traces of primer, caulking materials; clean grilles and frames.
      4. Clean glass and glazing materials with approved non‑abrasive cleaner.
      5. Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION