PART 1 GENERAL

1.1 SECTION INCLUDES

A. Side Folding Security Grilles, manually operated.

1.2 RELATED SECTIONS

** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.

A. Section 05500 - Metal Fabrications: Support framing and framed opening.
B. Section 06200 - Finish Carpentry: Wood jamb and head trim.
C. Section 08332 - Overhead Coiling Counter Doors.
D. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.
E. Section 16130 - Raceway and Boxes: Conduit from electric circuit to grille operator and from grille operator to control station.
F. Section 16150 - Wiring Connections: Power to disconnect.

1.3 REFERENCES

** NOTE TO SPECIFIER ** Delete references from the list below that are not actually required by the text of the edited section.

A. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
B. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
E. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
F. NEMA ICS 2 - Industrial Control and Systems: Controllers, Contactors, and Overload Relays, Rated Not More Than 2000 Volts AC or 750 Volts DC.
1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. 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.

C. Shop Drawings: Include detailed plans, elevations, details of framing members, required clearances, anchors, and accessories. Include relationship with adjacent materials.

**NOTE TO SPECIFIER** Delete selection samples if colors have already been selected.

D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finish product specified, two samples, representing actual product, color, and patterns.

F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.

B. Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.

**NOTE TO SPECIFIER** Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
   1. Install in areas designated by Architect.
   2. Do not proceed with remaining work until workmanship and installation is approved by Architect.
   3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.

C. Store materials in a dry, warm, ventilated weathertight location.

1.7 COORDINATION
A. Coordinate Work with other operations and installation of adjacent finish materials to avoid damage to installed materials.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Overhead Door Corp., 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: www.overheaddoor.com. E-mail: info@overheaddoor.com.

** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SIDE FOLDING SECURITY GRILLES

A. Side-Folding Open Aluminum Grilles: Overhead Door Corporation Model 681.

1. Curtain: Constructed of 1 inch (25 mm) aluminum plates spaced at 12 inch (307 mm) horizontal intervals incorporating three vertical rods spaced 1-7/8 inch (49 mm) and covered with aluminum tubes. Aluminum plates shall fit into one piece vertical aluminum tubular hinges.
   a. Panel Width: Wide-body 11-1/4 inch (286 mm).
   b. Frame: Truss like aluminum frame, minimum 2 inch (51 mm) high bottom and 5-1/4 inch (133 mm) high top plates.

2. Finish:

   ** NOTE TO SPECIFIER ** Select the aluminum finish required from the following two paragraphs and delete the paragraph not required. Delete both if a painted finish is required.
   a. Aluminum clear anodized.
   b. Aluminum color anodized. Color as selected by Architect.
   c. Duracron acrylic or powder coat paint. Color as selected by Architect.

3. Track:
   a. Trolley assemblies shall be 1-1/8 inch (29 mm) and adjustable 1 inch (25 mm) upward or downward without the removal of the curtain.
   b. Track shall be heavy extruded aluminum 1-3/8 inch (35 mm) wide by 1 5/8 inch (41 mm) high.

   ** NOTE TO SPECIFIER ** Include the following paragraphs if curves are required. Edit to identify the curve and the radius. Delete the paragraphs not required. Delete entirely if curves are not required. Consult factory for special curves.
   c. Curves:
      1) 90 degrees.
      2) 120 degrees.
      3) 135 degrees.
      4) 150 degrees.
      5) Radius: 14 inch (356 mm) radius.
      6) Radius: 22 inch (559 mm) radius.

4. Locking:
   a. Provide lead post with a concealed a hook bolt lock activated by a keyed cylinder or thumb turn that engages a full height wall channel. Where required, provide a top and bottom spring loaded locking post.
with interior thumb turn and protection or keyed cylinder and dustproof floor sockets for all drop bolts. Provide rubber bumper at the edge of locking post.

b. Intermediate posts:

** NOTE TO SPECIFIER ** Select the mount(s) required from the following two paragraphs and delete the paragraph not required.

1) Floor mounted provide intermediate posts a maximum of 10 feet (3048 mm) of curtain length.
2) For counter mounts and at each curve provide intermediate posts a maximum of 6 feet (1828 mm).
3) Intermediate posts contain an adjustable concealed spring loaded drop bolt with cylinder locks keyed alike. Provide with dustproof floor sockets for all drop bolts.

c. Traveling end post shall have an attached full height protection plate and shall be self locking into a steel V-stop. End post are fixable to a wall when stacked in the opening using top and bottom locking posts.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify opening sizes, tolerances and conditions are acceptable.

B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.

C. If substrate preparation is 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 using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.

C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.

D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

** NOTE TO SPECIFIER ** Select the following paragraph for electric operation of grilles and delete if not required.

E. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.

F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
G. Install perimeter trim and closures.

3.4 ADJUSTING
   A. Test security grilles for proper operation and adjust as necessary to provide proper operation without binding or distortion.
   B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING
   A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
   B. Remove labels and visible markings.
   C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION
   A. Protect installed products until completion of project.

END OF SECTION