PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Manual push-up [crank] [chain hoist] [electric motor operated] overhead rolling doors.
   2. Operating hardware [, controls,] and supports.

B. Related Sections:
   1. 05500 Metal fabrications; door jamb and header.
   2. 06100 Rough carpentry; door jamb and header.
   3. 08310 Access doors and panels.
   4. 08710 Door hardware; keyed mortise cylinders
   5. Division 16; all miscellaneous wiring for electric motors and accessories.

1.2 REFERENCES


1.3 SUBMITTALS

A. Submittals for Review:

1. Shop Drawings: Indicate opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
2. Product Data: Provide information on grille construction, components, materials, and finishes.

B. Sustainable Design/LEED Submittals: Documentation of recycled content and location of manufacturer.
   1. LEED, MR Credit 4 – Recycled Content: Provide documentation for cost of products having recycled content indicating percentages by weight of postconsumer plus 1/2 of the preconsumer content.
   2. LEED, MR Credit 5 – Regional Materials: Provide documentation for cost of materials or products that have been extracted, harvested, or recovered and also manufactured within 500 miles of project site.

C. Closeout Submittals:
   1. Operation and Maintenance Data.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum of three years experience in the fabrication and installation of Coiling Doors and Grilles.

B. Installer Qualifications: Authorized representative of the manufacturer.

1.5 DELIVERY, STORAGE AND HANDLING

A. Reference Section 01660 Product Storage and Handling Requirements.
B. Deliver materials in labeled protective packages. Store and handle in compliance with manufacturer's instructions.

1.6 WARRANTIES

A. Provide manufacturer's 2 year warranty against defects in materials and workmanship.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Contract Documents are based on products by Dynamic Closures Corporation. (www.dynamicclosures.com) Telephone: 1-800-663-4599; Fax: 800-205-6665 E-mail: CustomerService@DynamicClosures.com

B. Equivalent products by the following manufacturers are acceptable:
   1. CHI Overhead Doors. (www.chiohd.com)

C. Substitutions: [Under provisions of Division 01.] [Not permitted.]

2.2 MATERIALS

A. Aluminum Extrusions: ASTM B221, 6063-T5 or T6 alloy and temper.

2.3 COMPONENTS

A. Lift Ready Vortex Curtain:
   2 – 3/8 inch high x ½ inch deep full length interlocking aluminum flat slat, .062 minimum material thickness with center V-groove

A. Bottom Bar: Tubular aluminum extrusion with bottom [astragal], [ceiling conceal

B. Hood: [None] Fascia: [None] Minimum 26 gage [aluminum] [steel].

C. Guides: Extruded aluminum, 3 x 1-1/2 inches (76mm x 38mm) with shoulders for curtain retention, fitted with vinyl stripping both sides of curtain.

D. Counterbalance: Aluminum barrel with enclosed helical torsion spring with grease sealed ball bearings or self-lubricating graphite bearings for rotating members, sized to grille weight with maximum deflection of 0.03 inch (0.8mm) per foot (305mm) of width.

E. Bracket Plates: 3/8 inch (10mm) thick by 15 inch (381mm) front-loading off-set steel plate. Finish: grey metallic powder-coat paint.

G. Operation:
      Or
   2. Hand crank from coil side of curtain.
      Or
   1. Chain hoist from coil side of curtain.
      Or
   4. Electric Operator:
      a. Externally mounted on drive side.
      b. Sufficient power to operate grille at 12 inches (305mm) per second.
      c. Manually disconnect to make operable in case of power failure.
      d. Electrical characteristics: [115] [208] [230] [460] VAC; [single] [3] phase.
      e. Control station: 24 volt; constant contact [push button] [keyed switch] station mounted [interior][exterior] [both interior/exterior]. [Furnish [two] [____] keys per station.]
      f. Emergency release device: [none] Interior [surface] [recess]-mounted wall handle.
g. Four-wire electric sensing edge: [none] [wired/coil cord] [wired/reel] [wireless] connection.

H. Lock: Note: All thumb turn locking on grilles require protection rod pattern.
   1. Interior: [none] [thumb turn] [keyed cylinder]
   2. Exterior: [none] [keyed cylinder]
   3. Locking for more than one Grille/Closure [not applicable][keyed alike] [keyed random]
   4. Key type: [not applicable] [key to section 087100] [manufacturers standard cylinder
      acceptable]

I. Support Note: Telescoping tubes maximum height 8 feet (2438mm) above clear opening height.
   1. Steel tube: 3 x 3 x 1/8 inch (76 x 76 x 3mm) x 24 feet (7315mm) unpainted.
      Or
   2. Steel angle 2 x 3 x ¼ inch (51 x 76 x 6mm) x required length unpainted.
      Or
   3. Aluminum double/single wall angle 3 x 2-1/2 inch (76 x 64mm) x required length clear
      anodized
      Or
   4. Aluminum telescoping tube 3 x 2-1/2 inch (76 x 64mm) mill finish w/integral steel U channel.

J. Finishes: Clear anodized is standard finish on curtain, bottom bar and guides.
   1. Curtain/BB/Guides: Anodized, [clear.] [champagne] [light bronze] [bronze] [black] color.
   2. Hood and Fascia:[not applicable] [clear anodized aluminum] [painted steel [grey] brown] white]

PART 3    EXECUTION

3.1 INSTALLATION
   A. Install grille assembly in accordance with manufacturer's instructions.
   B. Follow approved shop drawings.
   C. Fit and align grille assembly including hardware, level and plumb, to provide smooth operation.

3.2 ADJUSTING/MAINTENANCE
   A. Test Operation of door and adjust to provide smooth and proper operation.
   B. Clean exposed surfaces using manufacturers recommended cleanser.

END OF SECTION