SECTION: 08 35 16
FOLDING GRILLES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Side-folding aluminum grilles.
   2. Operating hardware and supports.

B. Related Sections:
   1. Division 01: Administrative, procedural, and temporary work requirements.
   2. Section 087100 - Door Hardware.

1.02 PERFORMANCE REQUIREMENTS

A. All locking posts shall allow for horizontal sway without pressure to side walls of track from trollies while opening and closing the curtain.

B. All post’s standard locking hardware and handles shall be flush within post with exceptions for exit hardware.

1.03 REFERENCES


1.04 SUBMITTALS

A. Submittals for Review:
   1. Shop Drawings: Indicate track layout and dimensions including pocket, required curves, types and locations of posts, required locking and hardware, options, finish and installation details.
   2. Product Data: Provide information on grille construction, components, materials, and finishes.

B. Sustainable Design Submittals:
   1. Recycled Content.
   2. Regional Materials – not applicable.

C. Closeout Submittals:
   1. Operation and Maintenance Data

1.05 WARRANTIES

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

PART 2 PRODUCTS

2.01 MANUFACTURERS
A. Basis of design: Dynamic Closures Corporation. (www.dynamicclosures.com)

B. Equivalent products by the following manufacturers are acceptable:
   1. CHI Overhead Doors. (www.chiohd.com)
   2. Overhead Door Corp. (www.overheaddoor.com)
   3. Wayne-Dalton Corp. (www.wayne-dalton.com)

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

2.02 MATERIALS

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

2.03 COMPONENTS

A. EL 126 Brick curtain:
   1. 7 inches [178mm] wide with 4 inches [102mm] high bottom and 4 inches [102mm] high top plates, truss-like aluminum.
   3. Pattern: Brick
   4. Stacking depth: 8% of curtain length. Add 3 inches [76mm] per hookbolt post, intermediate post, top and bottom post, travelling post. Add 4 inches [102mm] per bi-part post.
   5. Clearance width required: 8 inches [203mm] continuous on center of track.


C. Curtain Carriers: Dual bearing trolleys with 1.125 inches [29mm] diameter tires.

D. Overhead Track: Extruded aluminum, 1.375 inches [35mm] wide x 1.675 inches [43mm] high, continuous profile seamed with alignment bars and track pins at splices.

E. Curves: Detailed type and location on drawing if required.

F. Locking Post: Extruded aluminum, all post’s standard locking hardware and handles shall be flush within post with exceptions for exit hardware. Locks may be on the public side, secure side or both. All stainless-steel lock rods engage stainless steel floor or counter sockets. All locking posts shall allow for horizontal sway without pressure to side walls of track from trollies while opening and closing the curtain. Refer to detailed drawing for location and type of posts. Post type and location detailed on drawing.

   Wall Channel: A floor to track extruded aluminum channel that the hookbolt fits and locks into. This channel is secured permanently to the wall.

   HookBolt Lead: This post has a hookbolt that secures it to the Wall Channel. Additional top locking or double hookbolt locking available.

   Bi-Part: A pair of posts that lock together with a hookbolt with an added lock rod to keep the curtain in place. It is used to separate larger doors into manageable sections, or to split the door to stack in two different directions. The concealed stainless steel lock rod engages into a floor or counter socket. Doors should have at least one Bi-Part for every 30 feet [9144mm] of width. Top stainless-steel rod locking available.
Top & Bottom: Lead or Trailing End option. This post contains spring loaded stainless steel lock rods that engage a floor or counter socket with the bottom rod and the top rod engages into the track and header. They are unlocked with a keyed cylinder, thumb turn or paddle, both disengaging in one motion. A rubber bumper is the standard leading edge but may also have 4 inches [102mm] or 7 inches [178mm] flange.

Intermediate: A middle post in a door located between door sections, containing a spring-loaded stainless steel lock rod that engages a floor or counter socket to keep the door in place and unlocked by a keyed cylinder or a thumb turn. Recommended straight line spacing of all posts is 10 feet [3048mm]. Curves and counter top applications will require closer spacing.

Traveling End: The Traveling End post terminates a door inside of a pocket (storage area). It is free to travel back and forth inside of the pocket. The post self-locks into permanent header and floor stops that prevent the door from fully leaving the pocket. A rear flange attached to the back of the post prevents reaching around.

Fixed End: Simply attaches the end of a door permanently to a wall of structure

G. Emergency Egress Door - Detailed latch type and location on drawing if required. Swing out emergency egress door within the curtain providing a clear opening of 79.5 inches [2019mm] high x 34 inches [864mm] wide.

H. Steel Pocket Door: Made to order from 14-gauge formed steel up to 144 inches [3658mm] height (from finished floor to track support). Covers a standard 8 inch [203mm] pocket opening and has three durable commercial grade 4 inch [102mm] butt hinges placed up one side for maximum support. Specify left-handed or right-handed opening. Finished in silver-grey paint (PPG 301189). Custom colors are available or painted in the field. The Pocket Door comes equipped with a thumb turn lock or optional keyed cylinder lock matched to the security door.

2.04 2.4 FINISHES

A. Aluminum: Clear anodized standard. If required custom anodized detailed on drawing.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install assembly in accordance with manufacturer's instructions.

B. Anchor to adjacent construction without distortion or stress, level and plumb, to provide smooth operation.

3.02 ADJUSTING

A. Adjust grilles for smooth operation throughout full operating range.