Manufacturers Proprietary Specification

SPECIFIER NOTE: This specification should be reviewed by Dynamic Closures as listed in Section 2 .01 below prior to using for construction purposes.

SECTION: 08 35 16
FOLDING GRILLES

PART 1 GENERAL

1.1 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.

1.2 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.

1.3 REFERENCES

A. ASTM International (ASTM) B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

B. AAMA (American Architectural Manufacturers Association):
1. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
2. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.

1.4 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

1.5 WARRANTIES

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

PART 2 PRODUCTS

2.1 MANUFACTURERS

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

B. 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. curtain: EL 525
   1. 7 inches [178 mm] wide, truss-like aluminum, with 4 inches [102 mm] high bottom and 4 inches [102 mm] high top plates. Pattern: 525 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. Curtain and posts have adjustable height of 1/2 inch [13mm] up or down. Clearance width required: 8 inches [203mm] continuous on center of track.
   2. Panels connected with one-piece vertical aluminum hinges.
   3. Stacking depth: 8% of curtain length. Add 3 inches [76 mm] per hook bolt post, intermediate post, top post, bottom post, and traveling post. Add 4 inches [102 mm] per bi-part post.
   4. Curtain and posts have adjustable height of ±0.5 inch [13 mm].
   5. Clearance width required: 8 inches [203 mm] continuous on center of track.

B. Operation: Manual push/pull. Provide pull straps on openings over 9 feet [2743mm] in height and countertop applications.

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.

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

   Hook Bolt Lead: This post has a hook bolt that secures it to the Wall Channel. Additional top locking or double hook bolt locking available.

   Bi-Part: A pair of posts that lock together with a hook bolt 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 inch [102mm] or 7 inch [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 of 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 countertop 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.

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 (Interior use only): Optional; Made from 14-gauge formed steel up to 144 inches [3658mm] in height (from finished floor to track support). Covers a standard 8 inch [203mm] pocket opening and includes three durable commercial-grade 4 inch [102mm] butt hinges located on one side for maximum support. Specify left-handed or right-handed operation.

Finish: Factory-applied polyester powder-coated finish.
Basis of Design: Tiger Drylac Anodized Silver powder.
Additional custom powder-coated colors are available, or door may be painted in the field if required.

The Pocket Door shall be supplied with a thumb-turn lock or optional keyed cylinder lock matched to the security door.

2.4 FINISHES

A. Aluminum Finishes
1. Clear Anodized Finish: Standard.
2. Black Anodized Effect Powder-Coated Finish: Optional; polyester powder-coated finish formulated to visually replicate the appearance of black anodized aluminum.
3. Additional Powder-Coated Finishes:Optional; including Bronze and White powder-coated finishes as indicated in product data sheets.

B. Powder Coating Performance
1. Application: Powder coatings shall be factory-applied by a qualified applicator in accordance with the coating manufacturer's approved written application, pretreatment, and cure specifications.
2. Performance Requirements: Powder-coated finishes shall meet the performance requirements of AAMA 2603 or AAMA 2604, as applicable, based on the selected color and/or effect and the coating manufacturer's published technical literature.
3. Basis of Design Powder Coating: Polyester powder coating system qualified by the coating manufacturer to meet AAMA performance requirements.
Basis of Design: Tiger Drylac. Substitutions are not permitted.
4. AAMA 2604 Limitation: Where AAMA 2604 compliance is specified, the selected color and/or effect shall be one qualified by the coating manufacturer as meeting AAMA 2604 performance requirements when applied in accordance with published specifications.
5. Fallback Performance Standard: Where AAMA 2604 compliance is not achievable due to color or effect limitations, finishes shall meet AAMA 2603 performance requirements.

PART 3 EXECUTION

3.1 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.

3.2 ADJUSTING

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