SECTION 08330
DYNAFLAIR ALUMINUM SHUTTER
ROLLING SECURITY CLOSURE SYSTEM

PART ONE:

1.01 GENERAL

A. Aluminum overhead coiling security grilles.
B. Related sections; Section 08332: Coiling grilles. Section: 16000 Electrical.

1.02 SUBMITTALS

A. Submit manufacturer’s product data, specifications, installation instructions, shop drawings with layout, fabrication and installation details; and samples, including finish.

1.03 QUALITY ASSURANCE

A. Provide components from a single manufacturer with resources to provide consistent quality in appearance.
B. Field measure before fabrication.
C. Use manufacturer approved installers.

PART TWO: PRODUCTS

2.01 MANUFACTURERS:

A. In the United States: Dynaflair
   8147 Eagle Palm Drive
   Riverview, Florida 33569
   1-888-624-2686
   Local: 813-248-8100
   Fax: 813-247-3502
   www.dynaflair.com

B. In Canada: Dynaflair
   100 Voyageur Street
   Pointe-Claire, Quebec H9R 6A8
   1-800-840-3962
   Local: 514-695-2921
   Fax: 514-694-6886
   www.dynaflair.com
2.02 ROLLING SECURITY CLOSURE SYSTEM:

A. Rolling Security Closure System: Shall be Dynaflair Aluminum Shutter model.

B. Curtain: Constructed of 2-1/2” on center interlocking extruded aluminum horizontal slats, ½” deep with centered “V” shaped grooves. Fit both ends of each slat with retaining washers to ensure curtain alignment in guides.

C. Support Structure:

3” x 3” or 4” x 4” steel structural tubes with 14 gauge or greater wall for between jamb site conditions or 2” x 3” steel angles for face-of-wall site conditions are to be provided.

D. End Plates: Furnish steel plates not less than 3/16” thick (with dimensions appropriate to coil size) to support the ends of the barrel assembly with sealed, self-aligning shaft bearings. End plates bolted to support tubes.

E. Barrel: Minimum 6-5/8” diameter x 0.156” wall steel pipe barrel will be designed to carry curtain load with a maximum allowable deflection of 0.03” per foot of closure width. Barrel to house a torsion spring counter-balance assembly to counter-balance the curtain.

   1. Counter Balance: Oil tempered, helical torsion spring(s) pre-lubricated and secured around a continuous, solid, cold rolled steel inner shaft will act as counter balance within barrel. Shaft will bear on self aligning, permanently lubricated ball bearing assemblies. Counterbalance assembly to be designed for a minimum life of 20,000 cycles. Spring to be site tensioned by attached, accessible charging wheel.

F. Manually Operated: Standard closure to be manually operated push up, pull down with removable retrieval rod as standard. The effort to raise or lower the grille shall not exceed 15 pounds force. Optional hand chain hoist, hand crank (with removable crank handle) or electric motor operation is available. Closures over 16 feet wide will be electrically operated.

G. Electric Motor Operator: Motor operator shall be industrial duty, jackshaft hoist type. Primary reduction shall be heavy-duty belt drive with chain-and-sprocket secondary reduction. Mechanism is to be self-locking when torque is applied to output shaft. Operator shall have an adjustable, torque limiting friction clutch.

   1. Motor: Shall be a continuous-duty, high starting torque motor with instant reverse and current sensing or thermal type overloads protection. Standard
motor shall require 115 VAC., single phase, 60 Hz. Motor controller shall be a heavy duty, full voltage, across-the-line, magnetic reversing contactor that is mechanically and electrically interlocked. Electrical components shall be installed in NEMA 1 enclosure integral to the operator. A transformer shall provide 24 VAC. secondary power to the control station(s). Positive chain drive, rotary type limit switches shall be provided to limit full open and close travel of the door. A manual hand chain is provided to enable the grille to opened and closed in case of power outage. The operator shall be capable of right or left hand mounting.

2. Built-in Interlock: The motor operator shall have a built-in interlock that will prevent the grille from being damaged if operated electrically when in the locked position.

3. Electric Key Switch: Control station (when applicable) shall be two position, open/close, constant pressure type for flush mounting, housed in a tamper-proof enclosure.

4. Emergency Egress Device: If required, supply a manually activated emergency egress device to facilitate egress from the space.

H. Guides: Vertical curtain guides are to be of extruded aluminum 1 3/4” wide x 2-1/2” deep.

I. Bottom Bar: Heavy duty extruded aluminum section, bell-shaped to provide reinforcement. Bottom bar to house lock mechanism. Underside of bottom bar shall be removable to allow service or replacement of lock mechanism.

J. Locking: Center lock mechanism to be Adams-Rite 2-point deadlock which activates 3/8” steel lock bars at each end. Standard mortise cylinders operable from both sides, mall side only, or tenant side only. Removal of bottom bar not necessary to change the cylinders.

K. Cylinders: Locking bottom bar (when applicable) to be equipped with standard 1”, 5 pin mortise cylinder.

L. Aluminum Extrusion Finish: Standard anodized finish shall be clear natural anodized. Special anodized and painted finishes are available upon request. Consult manufacturer for pricing and lead times.

M. Aluminum Extrusion Material: 6063-T5

III. PART THREE EXECUTION

3.01 INSPECTION:
A. Verify that the rolling security closure system will not disrupt other trades. The installer shall verify that the installation area is dry, clean, and free of foreign matter. Verify that the opening dimensions are as shown on Dynaflair’s shop drawing(s) prior to proceeding with the installation. Check condition of pre-installed vertical grille guides for damage or pinching by recessing materials or other trade’s fasteners driven into guide extrusions.

3.02 INSTALLATION OF ROLLING SECURITY CLOSURE SYSTEM:

A. Installation shall be by an installer approved and trained by the manufacturer in strict accordance with installation guide.

B. Explain and review the correct locking, operation and maintenance of the rolling security closure system.

C. Installation of any motor operators, control switches and related wiring shall be by a locally certified electrician and shall be in strict accordance with local building codes.

END OF SECTION 08330