

Rolling security closure

Section 08330

## 1. GENERAL

### 1.1 Summary:

#### 1.1.1 Work included

Supply and install model **Roll-Air** by Vrinda Inc (1-877-874-6321) rolling security closure, aluminum overhead rolling security grille. Electric wiring by others.  
Related section: 16000 Electrical.

#### 1.1.2 Submittals

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

#### 1.1.3 Quality assurance

1.1.3.1 Provide components from a single manufacturer with resources to provide consistent quality in appearance.

1.1.3.2 Use manufacturer-approved installers.

1.1.3.3 1 year guarantee on parts and labor.

#### 1.1.4 Site requirement:

1.1.4.1 A 6" (152mm) opening, 7" (178mm) for closures over 22'0" (6,7m), shall be made in the ceiling to allow easy operation. 24" x 24" (610mm x 610mm) access panel shall be supplied by other trade in the ceiling, one under motor and one under charging wheel.

1.1.4.2 Building structure shall be accessible to allow support structure installation.

## 2. PRODUCTS

### 2.1 Manufacturer:

Vrinda Inc.  
Tel: 1-877-874-6321  
Fax: 1-888-335-2104  
[www.GlassEssential.com](http://www.GlassEssential.com)

### 2.2. Rolling security closure

**Roll-Air** (perforated steel panels) model by Vrinda Inc (1-877-874-6321). Curtain shall be constructed of 3" (76mm) on center extruded aluminum sections. Each section framed by continuous, double "C" hinges hold steel perforated panels 20 gauge .035" (.90mm) x 2 1/2" (64mm) high x 15" 3/4 (400mm) wide separated by 2 1/2" (64mm) high x 0,050" (1,3mm) thick aluminum slats.

#### 2.2.1 Support Structure:

Please choose between 2.2.1.1, 2.2.1.2 and 2.2.1.3

- 2.2.1.1 Supports: 3" (76mm) x 3" (76mm) structural tubes with 1/8" (3mm) wall thickness supplied by Vrinda to be pre-drilled and tapped for guides and end plates. Tubes to be attached to the floor slab and joists above. Attachment at top is for lateral support only.
- 2.2.1.2 Provide 2" (51mm) x 3" (76mm) steel or aluminum angles for face of wall installation. (instead of steel tubes).
- 2.2.1.3 4" (102mm) x 4" (102mm) structural tubes (for openings over 250 sq.ft (23m<sup>2</sup>)).

2.2.2 **End Plates:**

Provide steel plates not less than 3/16" (5mm) 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.

2.2.3 **Barrel:**

Minimum 6 5/8" (168mm) diameter X 0.188" (5mm) wall steel pipe barrel will be designed to carry curtain load with a maximum allowable deflection of 0.03" per foot of closure width (2.5mm per linear meter in width). Barrel to house a torsion spring counter-balance assembly to counter-balance the curtain.

2.2.4 **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.

Please choose between 2.2.5 and 2.2.6

2.2.5 **Manually Operated:**

Standard closure to be manually operated push up, pull down with removable retrieval rod. The effort to raise or lower the closure shall not exceed 15 pounds (7kg) force. *(Optional but not recommended, hand chain hoist or hand crank with removable crank handle)*. Motorized operation is recommended for closures with an area greater than 150 sqft (14m<sup>2</sup>).

2.2.6 **Electric Motor Operator:**

Motor operator shall be industrial duty, jackshaft 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. 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.

2.2.6.1 **Emergency Egress Release:**

Supply a flush manually activated emergency egress device to disengage motor in case of an emergency.

*Option*

2.2.6.2 **Electric Key Switch:**

Control station (when applicable) shall be two position, open/close, constant pressure type for flush mounting. Standard electrical enclosure and 24V wiring provided by section 16000. key switch to replace push button set).

### 2.2.7 **Guides:**

Vertical curtain guides are to be of extruded aluminum 1 5/8" (41mm) wide x 2 3/4" (70mm) deep with nylon brush seal to allow smooth operation. Top stoppers to be installed on each guide to stop upward movement of curtain at secured position.

### 2.2.8 **Bottom Bar:**

Heavy duty extruded aluminum section, bell-shaped to provide reinforcement. Bottom bar to house lock mechanism. Center lock mechanism to be 2-point deadlock which activates 7/16" (11mm) steel lock bars at each end. Standard Vrinda cylinders operable from both sides. Removal of bottom bar not necessary to change the cylinders. For counter closures, bottom bar is to be of extruded aluminum 1 1/4" (32mm) wide x 3" (76mm) high.

### 2.2.9 **Cylinders:**

Locking bottom bar to be equipped with Vrinda 1" (2.5mm), 5 pin mortise cylinder. *Please choose:* 1 cylinder (inside or outside) or 2 cylinders.

### 2.2.10 **Material & finish:**

Standard aluminum 6063-T5 shall be clear anodized finish or acrylic paint white or black.

*Option (Please specify if a hood is required)*

### 2.2.11 **Hood:**

Supply a 2, 3 or 4 sides (*please choose*) 0.040" (1mm) aluminum clear anodized hood to cover barrel and rolling grille.

## 3 **EXECUTION**

### 3.1 **Inspection**

The installer shall verify that the opening dimensions are as shown on Vrinda's shop drawing(s) prior to proceeding with the installation. Check condition of vertical grille guides for damage or pinching by recessing materials or other trade's fasteners driven into guide extrusions. The installation will be completed as soon as the site conditions respect the manufacturer's recommendations.

### 3.2 **Installation of rolling security closure:**

- 3.2.1 Installation shall be by an installer approved and trained by the manufacturer in strict accordance with installation instructions.
- 3.2.2 Explain and review the correct locking, operation and maintenance of the rolling security closure.
- 3.2.3 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. Electric wiring shall be excluded from this section.

**END OF SECTION 08330**