

1. GENERAL

1.1 Summary:

1.1.1 Work included

Supply and install model **Counter Shutter** 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 5" (127mm) wide opening full width of the closure shall be made in the ceiling to allow easy operation. A 24" x 24" (610mm x 610mm) access panel shall be supplied by other trade in the ceiling, one under motor or 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

2.2 Rolling security closure

Counter Shutter (solid aluminum slats) model by Vrinda Inc (1-877-874-6321). Curtain shall be constructed of interlocking extruded aluminum slat sections. Each slat shall be made of continuous 0,050" (1.3mm) thick aluminum extrusion, 1 ½" (38mm) high by 3/8" (9.5mm) deep.

2.2.1 **Guides:**

Vertical curtain guides are to be of extruded aluminum 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. Guides to be fastened to wall construction and building framing.
Dimensions: 1 ¼" (32mm) wide x 2" (51mm) deep when manually operated and
1 5/8" (41mm) wide x 2 ¾" (70mm) deep when motorized (tubular motor).

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 plate assembly to be attached to guides.

2.2.3 **Barrel:**

Steel pipe barrel (manual operation: 4 ½" (114mm) and motorized: 4" (102mm)) 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).

2.2.4 **Counter Balance:** *(for closures manually operated)*

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 a 4 ½" (114mm) diameter x 1/8" (3mm) wall 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 crank with removable crank handle).*

2.2.6 **Electric Tubular Motor Operator:**

Tubular motor operator is pre-installed in a 4" (102mm) diameter x 1/8" (3mm) wall barrel. Maintenance free motor with thermal protection to prevent overload is equipped with a compact manual override crank. 120V, 60Hz required to power motor. Torque as recommended by manufacturer. Operator shall be capable of 11 rpm. The mechanic limit adjustment will synchronize the operator with the door in the open and closed positions.

Please choose between 2.2.6.1, 2.2.6.2 or 2.2.6.3

2.2.6.1 **Control station:**

Paddle switch shall be two position, open / close, constant pressure type for flush mounting. Standard electrical enclosure and 120V wiring provided by section 16000.

2.2.6.2 **Electric Key Switch:**

Control station shall be two position, open / close, constant pressure type for flush mounting. Standard electrical enclosure and 120V wiring provided by section 16000.

2.2.6.3 **Remote control:**

Remote control shall be three position, open / stop / close. A single remote can control up to fifteen motors.

2.2.7 **Bottom Bar:**

Tubular extruded aluminum section, 1 ¼" (32mm) wide by 3" (76mm) high. Bottom bar to house lock mechanism. Center lock mechanism to be 2-point deadlock which activates 5/16" (8mm) steel lock bars at each end. Standard Vrinda cylinders operable from one or both sides for manual operation. Removal of bottom bar not necessary to change the cylinders. No locking mechanism provided inside bottom bar when motorized unless requested. An interlock switch will then be provided.

2.2.8 **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 (inside and outside).

2.2.9 **Material & finish:**

Standard aluminum 6063-T5 shall be clear anodized finish.

Option (Please specify if a hood is required)

2.2.10 **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 guide.

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