CORNELL

Rolling Grilles

Practical Design Applications

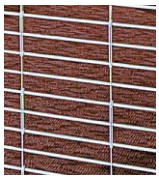
- Mall Storefronts
- Behind Storefront Glass
- School Corridors
- Service Window Openings
- Healthcare
- Airports / Transportation
- Hospitality / Public Space
- Parking Garage Vehicular Access Control

Benefits

- Cornell can manufacture and ship most standard grilles in one to two weeks.
- Size Flexibility - each unit is built to exact opening size requirements.
- Compact Storage - curtain stores in an overhead coil that is totally supported by extensions of the side guides.
- Durability - commercial duty design.
- Maintenance - little to none.
- Repairs - job records are retained and parts are readily available.

Available Options

- Hoods and fascias
- Cylinder locks with or without an interior thumbturn
- Bottom bar sensing edge for motorized units
- Operator covers for exterior mounted units or exposed operators below 8'-0" high
- Emergency manual release system
- Motor mounted interlock device



VisionAire®
Model ESG10

Open air design allows free circulation of air and full visual access of the area being protected. Curtain constructed of 5/16" diameter solid aluminum rods of alloy 5056 H32 (stainless or galvanized optional) at 2" on center supported by vertical chains formed of eyeletted aluminum (stainless optional) spaced at 9" apart. For added security, the chains may be specified to be spaced at 6" or 3" apart.

VisionAire®
Model ESG12

Alternative open air design in a Brick Pattern configuration that provides superior durability in high cycle applications. Curtain constructed of horizontal 5/16" diameter solid aluminum rods of alloy 5056 H32 at 2" centers. Rods supported by heavy duty aluminum links, held in a staggered position by tube spacers throughout the entire curtain assembly. Can also be used in any opening if a brick pattern configuration is desired.

VistaGard™
Model ESG11

Grilles glazed with G.E. Lexan® (or equal) panels in the curtain design. Panel modules are clear 12" x 3", 1/8" thick flame-retardant polycarbonate material that provides additional protection from theft of small articles through the curtain and creates a barrier against refuse, odors and smoke. Panels are secured by bronze color molded nylon links attached to 5/16" diameter solid aluminum horizontal rods of alloy 5056 H32.

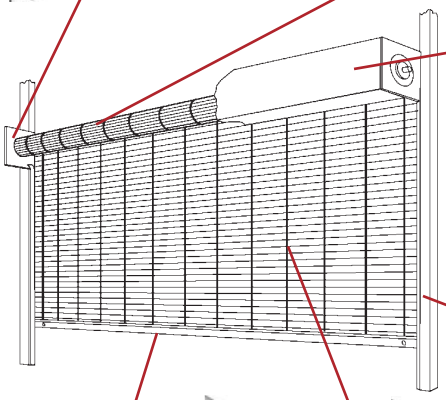
Rolling Grille Components

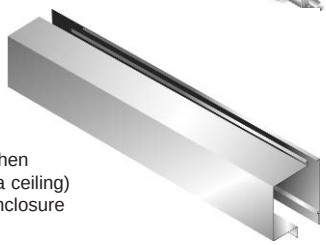
Brackets
Minimum 3/16" steel plates bolt to guide supporting member and support counter balance shaft and curtain.

Standard Material & Finish: steel, with SpectraShield® powder coating 30-7192 gray

Counter-balance Shaft
4-1/2" minimum diameter outer shaft and 1-1/4" minimum inner shaft. This assembly supports the curtain and contains counter-balance torsion springs for assisting operation.

Standard Material: steel





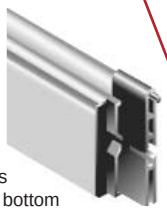
Optional Hood & Fascia
(not normally provided when unit is concealed above a ceiling) Protective sheet metal enclosure for the curtain.

Standard Material & Finishes: ASTM A 653 GalvaNex™ coating system, light gray enamel top coat or aluminumin mill, clear and color anodized or 300 series stainless steel with a #4 finish

Guides
Extruded aluminum sections equipped with polypropylene pile runners and mounting member. Support the entire weight of the unit.

Standard Material & Finish: mill finish aluminum

Optional Finishes: clear and color anodized aluminum



Bottom Bar
2" x 3 1/2" heavy duty extruded aluminum tubular section that houses optional locking mechanisms. For widths greater than 27'-4", the bottom bar is reinforced with 3" x 2" x 3/16" aluminum angle(s).

Standard Material & Finish: mill finish aluminum

Optional Material: stainless steel angles

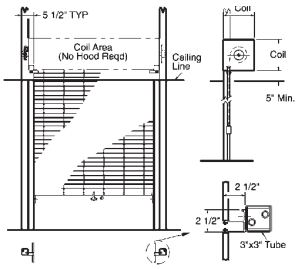
Curtain
A series of: straight pattern horizontal rods and chains OR horizontal rods and tube spacers with vertical links in a brick pattern OR rods with glazed polycarbonate panels between molded nylon links. See complete curtain description on front page.

Standard Material & Finish: mill finish aluminum
Optional Materials: stainless or galvanized steel (VisionAire ESG10 and VistaGard only)

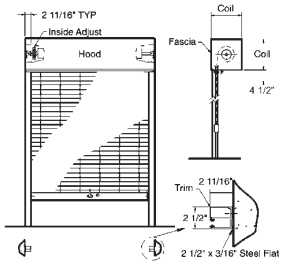
Operation
Push-up operation shown. Hand crank, chain and motors are available. Grilles operate by rotating the shaft gear end. The opposite end of shaft applies spring tension and is equipped with a spring adjusting wheel.

Self-Supporting Installation Option
Many grille installations utilize structural steel tubes for support, which allows for installation prior to the walls and ceiling being built. The tubes are factory prepared for the attachment of all grille components. Tubes are attached to the floor slab below and the joists above, thereby becoming self-supporting.

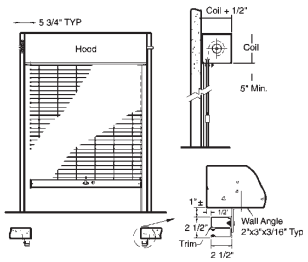
Mounting & Clearances



Between Jambs Self-Supporting
Mounts to structural tubes that are attached to the floor slab and braced to the structure above.



Between Jambs Conventional
Mounts within the opening, fascia (front hood closure piece) required.



Face of Wall
Maintains clearance of full opening, minimal exposed components.

Special Feature Options

- Manual Release System for use with motorized grilles to meet building code exit requirements. Wall mounted pull handle disengages the motor allowing grille to partially open for egress.
- Motor Mounted Interlock - an overload sensing device that prevents damage if motor operation is attempted when the grille is locked. Field wired guide mounted interlocks are no longer necessary.
- EZ Lift Package - extends manual push-up operation by about 33%. Push-up VisionAire® aluminum grilles are available up to 22' wide by 10' high.

Special Applications

- High Cycle Construction - for grilles that will cycle more than 5 times per day, such as parking garages and sally port openings, Cornell recommends Model ESG12 brick pattern configuration. An alternative construction is Cornell's SentryGate® grille.
- High Cycle Springs - heavy duty springs manufactured to withstand cycles of 50,000 or 100,000.
- Combination Doors - combines two different curtains on the same opening. Typically an insulated door is used in conjunction with either an open design rolling grille or a ScreenGard™ door.
- Fixed Panels - grille curtain can be mounted in a fixed frame assembly to be installed near a rolling grille curtain or separately.
- Sloping or Irregular Sills - special bottom bar designs meet odd floor conditions including slopes, curbs or rails.
- Removable Guide Mullions - used for extra wide openings that require full access on a limited basis.

Optional Finishes

- Aluminum in clear or color anodized
- Stainless steel, 300 series #4 finish (VisionAire ESG10 and VistaGard only)
- Hot-dip galvanized steel rods (VisionAire ESG10 and VistaGard only)
- Powder coat finish on perimeter components in selected color (not available on curtains)

CORNELL

SAFE AND SECURE

An ISO 9001:2000 Registered Company

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