

Rolling Steel Features

Description:

ROLLING DOORS & GRILLES FEATURES

1. **Brackets (end plates):** Steel plates bolted to guide assemblies supporting counter-balance shaft and curtain. Entire weight of door curtain and shaft transfers to guides and jambs and there is no load on the lintel as would be the case in the typical sliding door configuration. Cornell uses 3/16" min. powder coated steel plates with pre-lubricated ball bearing to support the rotating shaft.
2. **Curtain:** Assembled of interlocking slats and bottom bar. Top is bolted to rings on counterbalance shaft. Slats are of hot-rolled steel strip 22 ga. (.029") min., G90 galvanized, bonderized for paint adhesion and given a baked-on coat of gray polyester enamel. Endlocks are high-strength nylon, eliminating metal-to-metal contact in the guides. They are double riveted to ends of alternate slats, maintaining slat alignment and preventing wear. Door curtains withstand a minimum 20 psf windload (simulating gusts up to 88 mph) while in the closed, but not necessarily locked position.
3. **Bottom bar (footpiece):** Assembled of two 2" x 2" x 1/8" min., structural steel angles. Can be equipped with weather-seal and lock mechanisms. All door bottom bars are factory powder coated standard.
4. **Guides:** Assemblies of structural steel angles bolted to the wall (masonry shown at RH jamb, steel channel at LH) supporting the entire weight of the door. Cornell uses min. 3/16" structural steel angles for longer life. Compact design fits securely against wall and saves space at both sides of opening. All door guides are factory powder coated standard.
5. **Counterbalance shaft (barrel drum):** Carries the full weight of the door curtain and also contains counter-balance springs. Cornell's shafts are assemblies of steel pipe 4 1/2" dia. min., Inner shafts of 1 1/4" dia. min. and compute-calculated springs to assure the optimum calibrated balance at every door position. Standard design is minimum 20,000 cycles.
6. **Hood:** Protective enclosure for the curtain, adding weather resistance at head of door and serving as a stiffener for brackets. Cornell's hoods are steel, 24 ga. (.024") min. G90 galvanized, bonderized for paint adhesion with baked-on coat of gray polyester enamel.
7. **Operator:** Push-up operation shown. Hand-chain, hand crank or motor drives available to operate door by rotating the shaft end. Shaft through opposite bracket is stationary and equipped with spring adjusting wheel.

