

# CORNELL

## Rolling Fire Doors Model ERD10

### Practical Design Applications (for fire rated walls)

- Industry
- Healthcare Facilities
- Educational Facilities
- Hospitality/Public Space
- Distribution
- Retail
- Highrise Construction
- Hotels

### Benefits

- Cornell can manufacture and ship most standard fire doors in one to two weeks.
- UL Labeled - 4, 3, 1 ½, 1 and ¾ hour labels.
- FM Approval.
- Size Flexibility - each unit is built to exact opening size requirements up to 50' wide, 40' high or 1200 square feet. Consult factory for larger sizes.
- Compact Storage - curtain stores in an overhead coil that is totally supported by the side guides.
- Durability - commercial duty design, little to no routine maintenance.
- Drop Testing / Resetting - simplified systems available.
- Repairs - job records are retained and parts are readily available.

### Available Options

- Firemiser™ Insulated Fire Doors
- SmokeShield® Fire Doors
- Battery Back Up Devices
- Project Specific wind load, seismic and LEED® calculations
- Annunciators
- Fuselink Switch Activation
- Vision windows
- Cylinder or slide bolt locking
- Smoke and heat detectors
- Bottom bar sensing edge for motorized units
- Operator covers for exterior mounted units or exposed operators below 8' H



## M100 FireGard™ Closing Systems

### Common M100 FireGard System Features

**Savings** - Automatic resetting of the auto closing system yields dramatic savings in testing /resetting costs and minimizes opening down time.

**Simplicity** - Activation by fire alarm systems, local detectors or power failure without the need for a separate alarm interface release device. Full functionality without requiring the installation of fusible links, turnbuckles, chains or eyebolts to face of the opening.

**Safety** - Normal or automatic closing speed is consistently controlled not to exceed 12" per second, even on very large units.



**M100 Motor Systems** - Convenient control station activation for normal use. These fail-safe systems will automatically close in response to an alarm signal, even in the event of a power failure. Reset at floor level with the touch of the "open" button. Eliminates the need for mechanical spring resetting, especially on recessed and larger doors.

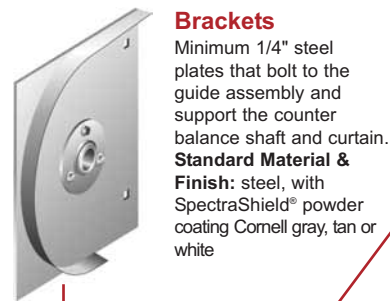
### M100 Chain and M100 Crank Systems

Offer testing simplicity and closing speed safety with the economies of chain or crank operation. These fail-safe systems will close automatically upon alarm or power failure greater than 10 seconds. Reset at floor level without mechanically resetting spring tension or re-engaging the operator. Consult factory for size limitations.

**Also Available: FireGard™ Closing Systems:** Bracket mounted motor, manual chain and manual crank.

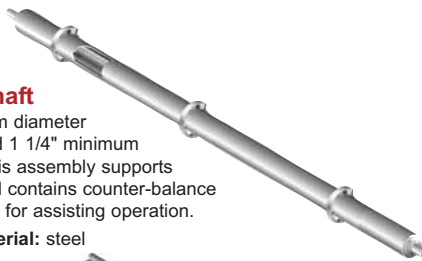
Economical, fuselink activated system close fire rated doors without releasing spring tension, avoiding dangerous resetting process. Available for openings not in pedestrian thoroughfare, if power is unavailable, where connection to a central alarm system or local detectors is not required by local building officials, or where installation of fusible links, turnbuckles, chains and eyebolts is aesthetically acceptable.

# Fire Door Components



**Brackets**  
Minimum 1/4" steel plates that bolt to the guide assembly and support the counter balance shaft and curtain.  
**Standard Material & Finish:** steel, with SpectraShield® powder coating Cornell gray, tan or white

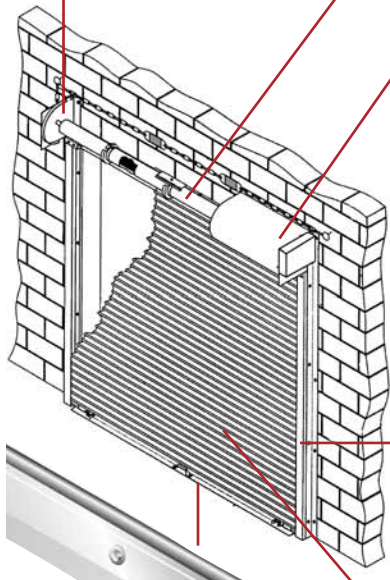
**Counter-balance Shaft**  
4 1/2" minimum diameter outer shaft and 1 1/4" minimum inner shaft. This assembly supports the curtain and contains counter-balance torsion springs for assisting operation.  
**Standard Material:** steel



**Hood**  
Protective sheet metal curtain enclosure provides fire resistance at the head of the door and keeps the brackets rigid.  
**Standard Material and Finish:** Galvanized steel with exclusive GalvaNex™ finish in light gray, tan or white  
**Optional Material:** stainless steel



**Guides**  
Minimum 3/16" angle assemblies fasten to the wall and support the entire weight of the door.  
**Standard Material & Finish:** steel with SpectraShield® powder coating Cornell gray, tan or white  
**Optional Material:** stainless steel



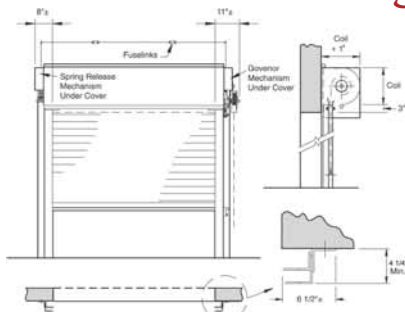
**Bottom Bar**  
Two 2" x 2" x 1/8" back to back structural steel angles. Lock mechanisms available.  
**Standard Material & Finish:** steel with SpectraShield® powder coating Cornell gray, tan or white  
**Optional Material:** stainless steel

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



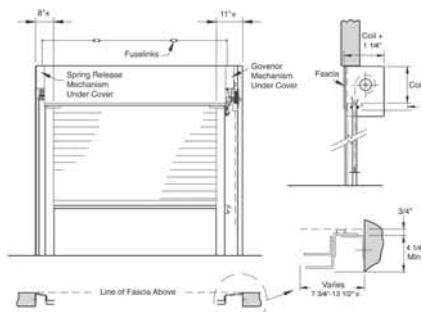
**Curtain**  
Interlocking roll formed slats with metal endlocks riveted to ends of alternate slats to maintain slat alignment and prevent wear.  
**Standard Material & Finish:** Galvanized steel with exclusive GalvaNex™ finish in light gray, tan or white  
**Optional Material:** stainless steel

## Mounting & Clearances



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

Fire doors are built to order to fit specific dimensions up to 50' wide, 40' high or 1200 square feet. Consult factory for larger sizes.



**Between Jambes**  
Mounts within the opening, fascia (front hood closure piece) required.

## Special Feature Options

- Battery Back Up Devices - Prevents the door from closing due to a power failure for a minimum of 4 hours. For M100 FireGard™ Operators also functions as a DC power source for local warning devices and detectors to keep them functioning during a power outage.
- UL 325 Compliant Entrapment Protection Devices for Motor Operated Systems - ELR Electric Sensing Edge or Photo Eyes enable momentary contact to close operation.
- Annunciators - safety devices that provide a visual and/or audible advanced warning when the fire door is about to close. Can be activated upon alarm signal or loss of power when supported by a battery back-up device.
- Firemiser™ insulated curtain construction; see Firemiser™ data sheet.
- SmokeShield® Fire Door - UL "S" leakage rated assembly provides protection against the passage of smoke and fumes. See SmokeShield® data sheet.
- Vision Windows - enhance life safety and convenience by allowing visibility to the other side of the firewall opening. Up to six 10" x 1 5/8" non-wired glass panes are available per fire door curtain.



## Optional Finishes

- Stainless steel, 300 series #4 finish
- Hot-dip galvanizing on steel components
- Powder coat finish in selected color
- Zinc Rich Gray corrosion resistant powder coating

## SpectraShield® Powder Coat Finish

Cornell's SpectraShield® Powder Coat Finish in a choice of over 200 colors adds durability and aesthetic value. Surface preparation and coating process produces a smooth, lasting finish.



**CORNELL**  
SAFE AND SECURE

An ISO 9001:2008 Registered Company

Crestwood Industrial Park  
Mountaintop, PA 18707  
TEL 800.233.8366 • FAX 800.526.0841  
Architect & Design Support: Ext. 551  
**Website:** [www.cornelliron.com](http://www.cornelliron.com)  
Email: [ADS@cornelliron.com](mailto:ADS@cornelliron.com)