

# M100 FireGard™ Closing Systems

## Advanced Fire Product Operating Systems

Cornell answers the call for safe, reliable and simplified fire door closing options with its full line of M100 FireGard automatic resetting fire door systems. These systems close fire rated doors without releasing spring tension or disengaging the operator drive mechanism. M100 operators include tubular and bracket mounted motor operated units and manual chain and crank operated units.

### M100 FireGard Closing System Benefits:

- Automatic resetting of the automatic closing system yields dramatic savings for building owners in testing and resetting costs as well as minimized opening downtime.
- M100 systems are directly wired for activation by fire alarm systems, local detectors or power failure **without requiring connection to a separate alarm interface, fusible link release device.**
- Eliminate mechanical spring release and complicated testing and resetting, especially on recessed and larger doors.
  - System automatically resets to normal operation upon clearing of alarm signal and / or restoration of power.
  - Routine testing of the automatic closing system occurs in minutes from floor level by factory personnel.
  - Required annual inspection by a trained fire door systems technician is simplified.
- Safe, controlled, automatic closing speed will not exceed 12" per second.
- Can be applied consistently on fire door, insulated fire door, counter fire door and SmokeShield® products.
- UL approval allows Cornell to retrofit M100 motor, chain and crank operators to most manufacturer's fire doors while maintaining the door's listing agency ratings.



### Recommended M100 FireGard Closing System Applications:

- Any application where mechanical testing and resetting is impractical or not desired.
- Where fire doors are installed within pedestrian thoroughfares.
- Fire-rated units in recessed applications.
- Units in areas susceptible to frequent power outages.

### M100 FireGard Motor Operated Systems, Bracket Mounted



These systems close the fire door in response to an alarm signal and are fail-safe by design, safely closing the door during a prolonged power failure. When the alarm is cleared and/or power is restored, resetting is done at floor level with the touch of the "open" button. Unlike conventional fire door operators, M100 FireGard Motor Operators do not require an additional mechanical release device to respond to central alarm signals or local smoke detectors. For doors up to 51' wide, 36' high or a maximum 1200 sq. ft.

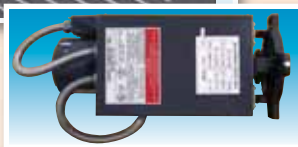
#### Benefits:

- Slower, safer, uniform closing speed of six to nine inches per second.
- 0 or 10 second selectable time delay.

**Recommended Applications:** All motor operated fire doors.

#### Options:

- **Battery Back Up** for M100 FS-Series Operators - Prevents the door from closing due to a power failure for up to 4 hours. A DC power source for local detectors and warning appliances keeping them functional during a power outage. Allows for programming a quantity of cycles should the sensing edge contact an obstruction in the opening during alarm signal AC power closing.
- **Horn Strobe or Voice Warning Module:** For use only with above Battery Back Up. ADA compliant, 24 volt DC warning devices powered by the Battery Back Up provide advanced fire door closing warning, even during a power failure.
- **Sensing Edge** - recommended for all electric operated units used for security in addition to fire protection.
- **Fuselink Activation**
- **Door Locking Mechanisms**
- **Operator Cover**



Note: Photos above are not to scale.

# CORNELL

**SAFE AND SECURE**

## M100 FireGard™ Tube Motor Operated Systems for Counter Fire Doors with or without Integral Frame and Sill



Protected by US Patent #6,155,324

Concealed in the Counter Fire Door's shaft assembly, M100 FireGard Tube Motor Systems are ideal for openings with tight clearances around the coil area or to neatly conceal the operator and drive components, avoiding the need for bulky covers. Safe and reliable Cornell M100 FireGard Tube Motor Operators automatically close Counter Fire Doors without releasing spring tension or disengaging the operator drive mechanism, providing simple automatic closing system testing and resetting.

### Benefits of M100 FireGard Tube Motor Operators:

- Convenience of motor operation in a low profile, concealed design.
- Available for use for full height openings from floor to 9' 0" high.
- Available for use with all Counter Fire Door models including SmokeShield® Counter Fire Doors and Counter Fire Doors with rated countertops or as an integral frame unit.
- Motor drive chain is not required. Auxiliary crank operation standard.

### Recommended Applications:

- Counter Fire Doors that require convenient motor operation in limited headroom conditions.
- Aesthetic motor operation that eliminates the need for a bulky motor cover.
- Low cycle applications, rated for 10 cycles per day, 4 per hour.

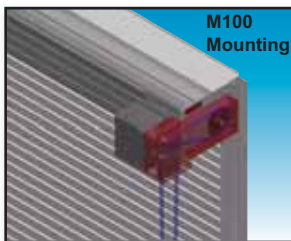
### Product Application Requirements:

- Counter Fire Doors up to 14' 0" wide, 9' 0" high or a maximum of 90 square feet.
- Counter Fire Doors with Integral Frame and Sill Assemblies up to 14' 0" wide, 6' 0" high.
- The tube motor requires 115 VAC power.
- Automatic closing system monitoring is controlled by a field mounted 6" x 10" x 5 3/8" control panel that accepts a 24 VDC, 115 VAC or 24 VAC power supply.

### Options:

- Control Stations
- Sensing Edge
- Fuselink Switch
- Key Test Station

## Manual FireGard M100 Chain or Crank Operated Systems



M100 Chain



M100 Crank

Protected by US Patent #6,155,324

In addition to the M100 FireGard™ Closing Systems benefits listed on the top front, these compact chain and crank operator designs include a built-in, automatic reset release device for connection to a central alarm system or local detectors - **no external release device is required**. Units will close automatically upon alarm or power failure in excess of 10 seconds. Resetting spring tension or re-engaging the operator is not required. M100 Chain and Crank Operators are available for use on all Counter Fire Doors and Fire Doors to 34' wide or 28' high, consult factory for large door size limits.

### Benefits:

- Operator safely stops the curtain in any position; will not excessively back wind.
- Accepts 24 VDC, 115 VAC or 24 VAC power supply.
- UL 864 Listing
- 10 second alarm and power failure time delay
- 24 VDC output for close warning device

### Recommended Applications:

- Use for fire products that do not require the daily operating convenience of a motor operator.
- Clearance and access to the hand chain or crank eye is required.

### Options:

- Electric Key Switch for simplified close operation.
- Battery Back-up to prevent power failure fire door closing for up to 6 hours.
- Fuselink Activation
- Door Locking Mechanism
- Operator Covers
- 24 VDC Horn Strobe

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