

# M100 FireGard™ Closing Systems

## Advanced Fire Product Operating Systems

Cornell answers the call for reliable and simplified fire door closing options with its full line of M100 automatic or floor level resetting fire door systems. These systems close fire rated doors without releasing spring tension or disengaging the operator drive mechanism. M100 operators include a electrically operated units and chain and crank operated units.



### M100 FireGard Closing System Benefits:

- Simplified, less costly testing and resetting of the automatic closing system from floor level, minimizing opening downtime.
- Eliminate mechanical spring resetting and complicated resetting and testing, especially on recessed and larger doors.
- Safe, controlled, automatic closing speed will not exceed 9" 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 operators to most manufacturer's fire doors while maintaining the door's UL and FM ratings.

## Electric M100 Motor Operated Systems



These systems close the fire door in response to alarm signal or fuselink activation 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 a touch of the "open" button. Unlike other fire door operators, M100 Electric Motor Operators do not require an additional mechanical release device to respond to alarm signals from detection devices, such as smoke detectors and central alarm signals. For doors up to 51' wide, 36' high or a maximum 1200 sq. ft.

### Benefits:

- Dependable automatic closing due to simplified design.
- Slower, safer, uniform closing speed of six to nine inches per second.
- Routine resetting is done in minutes by facility personnel, avoiding long opening downtime and costly mechanical resetting of the door. Required annual inspection by a trained fire door systems technician is simplified.
- M100 system fire doors can be tested quickly and easily.
- Versatile: M100 systems can be activated by fire alarm systems, local detectors or power failure without the need for a mechanical release device.

### Recommended Applications:

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



Note: Images above are not to scale.

### Options:

- **Battery Back Up** for M100 F-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 a stationary obstruction in the opening during AC power alarm signal closing.
- **Horn Strobe:** For use only with above Battery Back Up. ADA compliant, 24 volt DC warning devices powered by the Battery Back Up to 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.
- **Locking Mechanisms**
- **Operator Cover**

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# Manual M100 Chain or Crank Operated Systems



M100 Chain - Standard Design



M100 Crank - Compact Design

Both systems feature all of the M100 FireGard Closing Systems benefits listed on the top front. Systems can be fuselink activated alone, or the system can also be tied into local detectors or a central alarm system using an operator mounted release device, see below. Automatic closing system is tested with routine close operation of the unit. Resetting spring tension or re-engaging the operator is not required! M100 Chain and Crank Operators are available in two sizes: Compact for use on all Counter Fire Doors and smaller size Fire Doors, and Standard for use on larger size Fire Doors. Consult factory for size limits.

## Benefits:

- Spring tension is not released for automatic fire door closing.
- Simple testing of automatic closing system from floor level.
- Doors are easily reset to the open position in minutes by facility personnel following alarm or power failure closing. Required annual inspection by a trained fire door systems technician is simplified.
- Operator safely stops the curtain in any position: will not back wind.

## 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:

- Push To Close Station - Simplifies operation and adds aesthetic appeal, replacing the floor level pull-to-close cable that is provided as standard. Designed for surface or flush mounting and includes a shielded cable that runs from the Close Station to the operator.
- Operator Mounted Fail-Safe Release Devices, see below.
- Locking Mechanism
- Operator Covers



## M100 Chain or Crank Operator Release Devices

Electro-mechanical devices enable automatic closing fire doors to respond to alarm signals from detection devices, such as smoke detectors, heat sensors and central alarm signals, permitting doors to close long before high temperatures melt fusible links. Fusible links should always be used as backup to the release device.

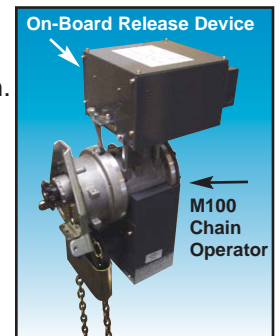
The following release devices are for exclusive use with M100 Chain & Crank operators. They mount directly on-board the operators, require 120 volt AC input power and are fail-safe by design.

### ■ Floor Level Cable Reset Model

Includes a light gauge cable that runs to floor level. Following activation and door closing, resetting of the device is simply done at floor level by pulling on the cable.

### ■ Automatic Reset Model

Following activation and door closing, this release device automatically resets itself once the alarm is cleared and/or power is restored.



Since we opened our doors in 1828, Cornell has led the industry in providing only the highest quality products and unmatched support. Whether seeking quality, performance, reliability or overall satisfaction, customers have always known that they're Safe and Secure with Cornell.

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