

Firemiser™ Insulated Fire Door

Model ERD20

One Door - Many Benefits

Now you can provide UL rated fire protection *plus* security, sound attenuation, environmental separation and smoke control all with the Firemiser insulated fire door from Cornell. Reduce costs by specifying a single Firemiser door to meet multiple design needs, then continue to cash in on the energy savings generated by Firemiser's sealing and insulation.

Achieve **Rolling Steel Security** with up to **4 hours of UL Labeled Fire Protection**, plus:

- **Sound Attenuation** - A Sound Transmission Class rating of STC 27, based on testing a complete, operable curtain, makes Firemiser's mineral wool insulated curtain an excellent choice to maintain fire wall integrity and reduce decibel levels. Use Firemiser in schools, production facilities, hospitals, office buildings or anywhere that the combination of fire protection and sound attenuation is desired.
- **Climate Control** - Firemiser's insulated curtain yields a 5.3 R-value that can be combined with full perimeter seals for use at exterior or interior openings whenever fire protection and environmental separation is required.
- **Smoke Control** - Firemiser is also available with a UL label for smoke and draft control. Specify Firemiser with SmokeShield® construction and gain labeled protection against the passage of smoke and gases through the opening.

Practical Design Applications

- All fire wall openings where the door is to be closed regularly and a sound attenuation need exists.
- Exterior openings that require a fire rating due to the proximity of other structures or combustible materials.
- Buildings designed for future expansion where current exterior wall openings are to become interior fire wall openings.
- Interior fire wall openings where the door will be normally closed to control varying climatic conditions between two areas.



Other Available Features and Benefits

- M100 Chain or available M100 Motor and M100 Crank automatic closing systems provide safe and convenient operation. Spring tension resetting is never required and automatic closing speed is safely controlled not to exceed 12" per second.
- UL Labels available for 4, 3, 1 1/2, 1 or 3/4 hour performance. Factory Mutual Approval
- Flame spread and smoke development index factors for Firemiser's mineral wool insulation are zero as tested per ASTM E84.
- With each unit built to exact opening size requirements, you have size flexibility up to 30' wide and 22' high standard construction. Units up to 34' wide, consult factory.
- Specified Wind Load - doors can be configured to withstand the full range of specific wind load requirements. Third party performance validation. Seismic performance validation available per ASCE 7-05.
- Full range of finish, mounting and locking options.
- Cornell's exclusive 2-Year Quality Warranty, standard.

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SAFE AND SECURE

Firemiser™ Door Components



Brackets

Minimum 1/4" steel plates that bolt to the guide assemblies 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 that provides fire resistance at the head of the door.

Standard Material and Finish: Galvanized steel with exclusive GalvaNex™ finish in light gray, tan or white

Optional Materials: stainless steel

Guides

Minimum 1/4" 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

Curtain

Double skin interlocking roll formed slats filled with 7/8" thick mineral wool insulation.

Combination cast iron endlock/windlocks are riveted to ends of alternate slats to maintain slat alignment, lock curtain into guides and prevent curtain wear. R-value is 5.3 as calculated using the ASHRAE Handbook of Fundamentals. STC 27 rating.

Exterior/Interior slat skins available in: 24/24 or 22/22 gauge galvanized steel, gray enamel or 22/22 stainless steel, #4 finish.

Standard Material & Finish: Galvanized steel with exclusive GalvaNex™ finish in light gray, tan or white. White 24/24 only.

Optional Materials: stainless steel

Bottom Bar

Two 2" x 2" x min. 1/8" back to back structural steel angles. Lock mechanisms available.

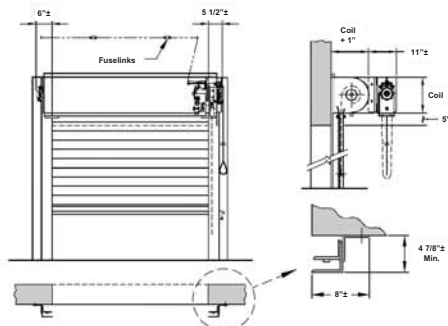
Standard Material & Finish: steel with SpectraShield® powder coating Cornell gray, tan or white

Optional Materials: stainless steel

Operation

M100 Chain operator standard. M100 Motor or M100 Crank operators are available. Fire 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.

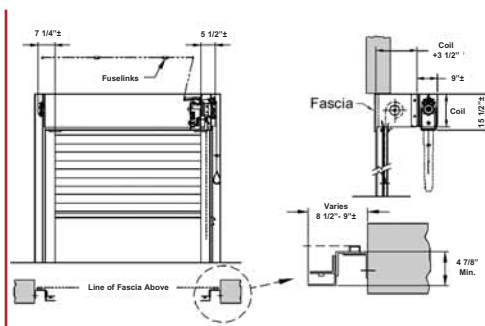
Mounting & Clearances



Face of Wall

Maintains clearance of full opening, minimal exposed components.

Standard construction Firemiser Fire Doors are built to order to fit specific opening dimensions to 30' wide and 22' high. Large openings up to 34' wide, consult factory.



Between Jambs

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

Fire/Smoke Control Options

- SmokeShield® Firemiser - UL listed brush seals applied to guides, bottom bar and door header provide weather resistance and protection against the passage of smoke and gases around curtain.
- FireGard™ Closing Systems - available in addition to advanced M100 line, economical, fuselink activated systems close fire rated doors without releasing spring tension, avoiding dangerous resetting process when connection to a central alarm system is not required or power is unavailable.
- 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.

Optional Finishes

- Stainless steel, 300 series #4 finish, for curtain, bottom bar and hood.
- Hot-dip galvanize on steel components
- Zinc Rich Gray corrosion resistant powder coating
- SpectraShield® Powder coat finish in selected color

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.



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An ISO 9001:2000 Registered Company

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