RAYNOR®
GARAGE DOORS

FireCoil™
Fire-Rated Rolling Doors

FireHoist™
Fire Door Operators

FireCoil™

Where safety and fire protection are crucial, choose FireCoil. Raynor FireCoil doors are the standard for facilities that require a listed fire door, in a rated fire wall. Our innovative design incorporates governed speed control that delivers optimal performance and functionality. FireCoil doors are provided with fusible links that automatically release, to close the door at 165°F. The door closing mechanism can also be released by smoke and heat detectors, a building's alarm system, or solid-state release device. FireCoil doors are UL, C-UL and CSFM labeled with Factory Mutual (FM) label optional.

FireHoist™

Raynor FireHoist™ fire door operators are UL listed for use with Raynor FireCoil™ fire-rated doors, as well as for retro-fit applications where existing fire doors require new operators.

Savings
State of the art design incorporates automatic resetting of the auto closing system. All doors can be easily reset with a single side release which results in dramatic savings in testing and resetting costs, while minimizing down time.

Safety
Doors of all sizes meet NFPA 80 requirements. Closing speed is consistently controlled between 6-12" per second, resulting in a smoother, quieter and safer descent.

FireCoil™

Design Applications

- Interior openings used to separate different areas within a facility required fire doors to close to prevent fire spread.

- Exterior openings that require a fire rating due to the proximity of their structures or combustible materials.

- Buildings designed for future expansion where current exterior wall openings are to become interior fire openings.

- Interior fire wall openings where the door will be normally closed to control varying climatic conditions between two areas.
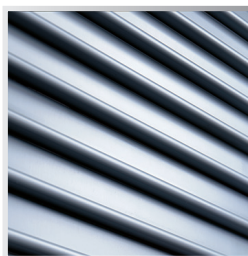
FireCoil Standard Features

Every FireCoil door is built for superior performance and includes the features listed here. For additional options, see your Raynor dealer.

Fusible Link
Automatic door closure is initiated by one of three fusible links that melt at 165° Fahrenheit.

Curtain
All FireCoil door curtains are constructed with heavy-duty steel slats: Flat Slats (UF), Insulated Flat Slats (UI), Large Contour Slats (LL), and Small Contour Slats (US)

Bottom Bar
Curtain bottoms are reinforced with a minimum of two steel angles for maximum durability. A bottom astragal is included on all motor-operated doors.

Guides and End Locks
Steel angle guides provide added support for curtain slats. Zinc-plated, malleable cast-iron end locks prevent lateral movement of the curtain slats.

Counterbalance System
A torsion-spring-operated system, enclosed in a structural steel barrel, effectively counterbalances the door for a minimum 10,000 cycles.
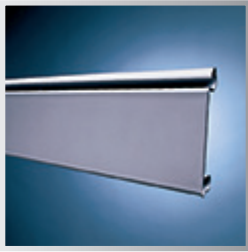
Curtain Hood*
For maximum structural rigidity, curtain hoods feature rolled edges and are formed from 24 gauge, hot dipped galvanized steel.
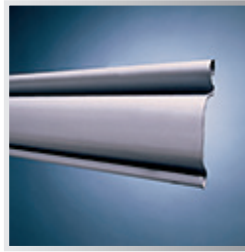
*FireCoil hood include a flame baffle that is activated by a fusible link. Standard on Factory Mutual-approved doors. Optional on UL-approved doors.
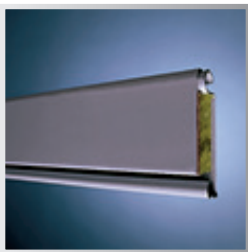
Slat Style Options

Flat Slats (UF)
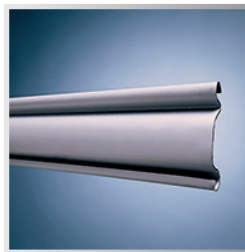The most architecturally pleasing slat profile.

Large Contour Slats (LL)
Available in maximum width of 30'. Large contour slats are typically specified for larger sized openings.

Insulated Flat Slats (UI)
Designed for any application demanding greater thermal efficiency.

Small Contour Slats (US)
An excellent choice for smaller openings widths, small contour slats are the best value for opening sizes up to 14'x24'
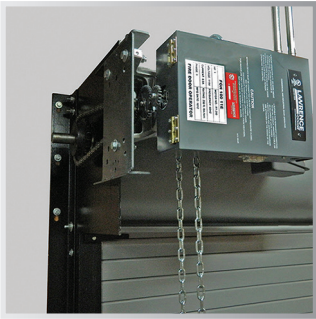
Specifications

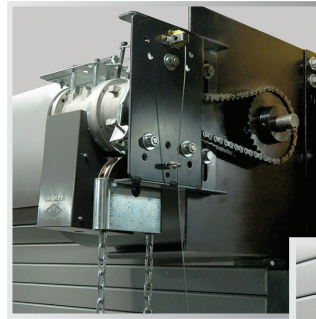| Model	Slat Profiles	Slat Material (Thickness)	Slat Sizes	Fire Ratings	Approvals	Max. Width	Operation	Colors/Finishes
Flat Slat (UF)	Flat	Steel 22, 20, 18 gauge	2-9/16" x 25/32"	4 Hour, 3 Hour, 1½ Hour, ¾ Hour	UL, C-UL, CSFM ISO-3008, BS-476, FM, MEA	30'	Manual, Chain, Crank, Motor	White, Gray, Tan or ArmorBrite™ Painted, Galvanized Finish
		Stainless Steel 22, 20 gauge				19'6"		#4 Finish
		Steel 24 gauge		1½ Hour, ¾ Hour	UL, C-UL, CSFM, MEA	10'		White, Gray or ArmorBrite Painted
Insulated Flat Slat (UI)	Flat	Steel 24, 22, 20, 18 gauge	2-9/16" x 13/16"	4 Hour, 3 Hour, 1½ Hour, ¾ Hour	UL, C-UL, CSFM, MEA	30'	Chain, Crank, Motor	White, Gray, Tan or ArmorBrite™ Painted, Galvanized Finish
Small-C Slat (US)	Curve	Steel 22, 20 gauge	1-7/8" x 17/32"	4 hour, 3 Hour, 1½ Hour, ¾ Hour	UL, C-UL, CSFM, ISO-3008, BS-476, FM, MEA	14'	Manual, Chain, Crank, Motor	Gray
Large-C Slat (LL)	Curve	Steel 22, 20, 18 gauge	2-3/4" x 25/32"	4 Hour, 3 Hour, 1½ Hour, ¾ Hour	UL, C-UL, CSFM, ISO-3008, BS-476, FM, MEA	30'	Manual, Chain, Crank, Motor	Gray

Please note for the FM listing, max width is 24'

Operation Options

Raynor's FireCoil door systems feature specialized construction and automatic closing providing state of the art technology. All doors are easily resettable with a single sided release decreasing reset time after performing specified drop testing. The included governor provides controlled closing speeds of 6" -12" per second resulting in a safer, smoother, and quiet decent. Doors of all sizes are easily controlled and meet NFPA 80 requirements.

Motor Operated
Automatic closing can occur with the door partially open or fully closed without resulting in any damage to the door components.
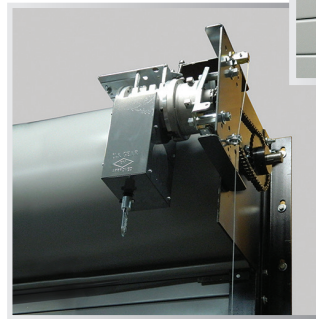
Chain and Crank Operated
Chain (top) and Hand crank (bottom) operation is available on all FireCoil model doors.

Close and Test Cable

Manual Operated
Manual design features a centrifugal clutch governor smoothly controlling descent.

Model Options and Upgrades

187 ArmorBrite™ Colors
Choose your color! Nearly every Raynor fire door component (curtain slats, bottom bars, guides, hoods, and head plates) can be powder coated in any of 187 colors for an attractive appearance and exceptional durability.

Pre-Assembled Option
The pre-assembled option allows for a faster and easier installation by having the curtain, barrel and head plates shipped pre-assembled in one crate. This option eliminates the labor involved in installing spacers, washers, barrel rings, charge wheels and drive gears and speeds up the standard install.

Locks
In applications where control and access are important, choose from a variety of locking options to help keep your building secure. Locks come in either cylinder or slide-bolt (shown) variations. Slide-bolt locks are standard on push-up operation.

Smoke Control
A guide with brush seal (shown) and header seal reduce smoke damage.

FireHoist™

Fire Door Operators

Raynor FireHoist operators provide automatic closing without the loss of spring tension, and do not require a traditional mechanical resetting after testing. Units feature a high efficiency gear reducer and horizontal front of coil installation, the FireHoist offering is versatile and able to withstand the most rigorous environments. Operators feature an internal release device and governor system to control the automatic closing of the door. The compact low profile design ensures that no additional clearance above the top of the door coil is required, saving space. If an approved monitored reversing device is not connected, the operator will require constant pressure on the close button, to close the door. The FGH models are also available for retro fitting existing fire doors by eliminating all the components that typically fail with an operator.

FGH
The only FireHoist operator with an auxiliary chain hoist. Easy-reset provides automatic closing without a loss of spring tension and eliminates the need for traditional mechanical reset.

FSEP
The FSEP is our most versatile operator. With various timers to close, non-resettable cycle counters, on board push buttons and both detector and alarm inputs, the FSEP has all the options you need.

Raynor FireHoist FGH operators offer ½ hp, 1 hp, 1½ hp, 2 hp and 3 hp in line gear reducer option providing for an integrated fire door system. Resetting of the operator is as easy as reconnecting the fusible link release cable and then activating the open control to reset the door. Other release devices can be added to the system for detector/alarm inputs and loss of power.

- Solenoid actuated disc brake
- TENV motor
- 30 cycles per hour
- Fusible link activation of internal release and governor controlled closing
- Auxiliary hand chain (up to 2 hp)
- On board open, close, stop buttons
- On board non-resettable cycle counter
- Optional on board timer to close

Raynor FireHoist FSEP operators offer ⅓ hp, ½ hp, ¾ hp, 1½ hp, and 2 hp planetary reduction gear drive providing an integrated fire door system. Resetting of the operator is as easy as activating the open control to reset the door with the exception of melting a fusible link.

- TENV motor
- 30 cycles per hour
- Safety reverse cycles (0, 1, 3)
- Auto open after alarm clears
- Door releases under a power failure or alarm (delay 10 sec.)
- Detector/alarm inputs
- Non-resettable counter
- On board push buttons
- Timers-mid open, re-close

Operator / Release Technical Guide
This chart can be used to determine technical information for each operator/release device.

Model	FGH	FGH	FGH	FGH	FGH	FSEP
Release Device	Standard Fusible Link	McCabe Link	LM21-XP	LM21-XPBB	LM21-AFCB	None
Activation Devices Alarm Activated	No	Yes	Yes	Yes	Yes	Yes
Smoke Detector Activated	No	Yes	Yes	Yes	Yes	Yes
Key-Test Switch Activated	No	No	No	No	No	Optional
Test Button Activated	No	No	Yes	Yes	Yes	No
Power Failure	None	None	10, 20, 30, 60 Sec.	10, 20, 30, 60 Sec.	10, 20, 30, 60 Sec.	10 Sec.
Power Failure Delay	None	None	10, 20, 30, 60 Sec.	72 Hrs.	72 Hrs.	10 Sec.
Battery Back-Up For Alarm/Smoke (Hrs.)	N/A	N/A	N/A	72	72	N/A
Resettable by Operator	No	No	No	No	Yes	Yes

FireHoist™ Standard Features

- UL listed
- NEMA I enclosure
- 24 volt control circuit
- 3 button control station open/close/stop
- Solid state control board
- Overload protection
- Continuous duty motor
- Adjustable linear driven limit switches
- Optional monitored reversing device and unmonitored reversing device
- Delay on reversing
- Average speed 6" to 8" per second.

Optional Release Devices

LM21XP
- Activated: by smoke detector or fire alarm
- Optional lower limit detection identifies if door is closed (FGH operators)
- Adjustable delay for alarm or power loss (10, 20, 30, or 60 second)
- Test button on unit
- Available in 24 Vdc.
- Can be used on Push-Up, Chain Hoist, Crank operated or FGH operators

Electro-Thermal-Manual (McCabe Link)
- Activated: electrically, heat and manually
- Available in the following voltages and temperatures:
  - 24 Volts- AC/DC-165 Deg., with or without a junction box
  - 115 Volts-AC-165 Deg., with or without a junction box
- Can be used on Push-up, Chain Hoist, Crank operated or FGH operators

AR-C (Auto Reset-Conversion)
- UL, ULC Listed
- UL 864 compliant without the need for an uniterruptible power supply
- Failsafe time delay release (approx. 10 sec.)
- Powered by standard building current
- Initiated by either fire alarm control panel or local detectors
- Resets automatically after alarm is cleared and power is restored
- Eliminates mechanical resetting of the door
- Can be used on ChainHoist (FHC) Crank (FHK), and Motor (FGH)
- Available voltages: 115Vac, 230VAC - 60Hz.

LM21XPBB
- Activated: by smoke detector or fire alarm
- Optional lower limit detection identifies if door is closed (FGH operators)
- Adjustable delay for alarm or power loss (10, 20, 30, or 60 second)
- Test button on unit
- 72-hour battery backup to support the release device, optional annunciator strobe/light, and up to 4 smoke detectors.
- Available with optional Annunciator/Strobe Light
- Available in the following voltages: 24 Vdc, 24 Vac, 120 Vac
- Can be used on Push-Up, Chain Hoist, Crank operated or FGH operators.

LM21AFCB
- UL, C-UL listed
- Vibration resistant and fail-safe operation
- Lower limit detection, which identifies if a door is closed
- 72 hour battery back-up to support the release device and up to 4 smoke detectors.
- Adjustable delay for alarm (10, 20, 30 or 60 second)
- Option between gravity drop on (line) power loss or operate from battery power (not including motor operator)
- Option between auto-open (alarm condition is cleared) or auto-open disabled.
- Option between stop-on-obstruction or gravity drop after 3- time cycling
- Option between 6 minute or 3 minute safety timer for gravity drop if close limit is not detected
- Option between motorized door drop or manual (gravity) door drop
- Remote test button
- Test button on unit
- Auxiliary relay output for accessories
- Motor voltage sensing
- 2 and 4 wire smoke detector capability
- Door obstruction cycle counter
- Annunciator/Strobe light included
- Available in the following voltages: 120 Vac.

Optional Detection Devices

Smoke Heat Detectors
Photoelectric heat
- 115V AC
- 24V DC

Heat Detectors
- 135 degrees
- 194 degrees

Exclusively Distributed by:

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