# FALCON®

# Heavy Duty Exit Devices - 24 Series / 25 Series



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#### FALCON EXIT DEVICES

#### **Architectural Pushpads** Commercial Pushpads 24/25 Series 19- Series 1490/1590 1690/1790 • Patented pending latchbolt for hurricane ratings · Maximum flexibility in a variety of Lowest cost, most dependable, light-duty exit · Steel operating mechanisms Selling features applications · Aluminum push bar and end caps · Wide range of features · Large trim selection • #1 selling exit device · Durable design and options for aluminum doors • Full compliment of electrical options · Surface Vertical and Rim options Patent pending deadlocking technology · Full compliment of electrical options available · Standard deadlocking · Durable design Applications Frequent traffic Moderate traffic Moderate traffic Moderate traffic · Offices, Churches, Hospitality, Retail, · Commercial, Multi-family, Office, · Commercial, Multi-family, Office, · Commercial, Multi-family, Office, Education, Healthcare Retail • Interior, exterior, new construction, retro-fit · Interior, exterior, retro-fit · Interior, exterior, retro-fit · Interior, exterior, retro-fit **Device Options** · Rim, SV, CV, M · Rim, SV • CV = 1490 / Rim = 1590 • CV = 1690 / Rim = 1790 • 6 functions / 9 finishes • 7 functions / 3 finishes • 4 functions / 10 finishes • 4 functions / 7 finishes 4 lever designs • 4 lever designs · 3 length options · 4 length options · 10-year warranty • 10-year warranty · 10-year warranty · 10-year warranty

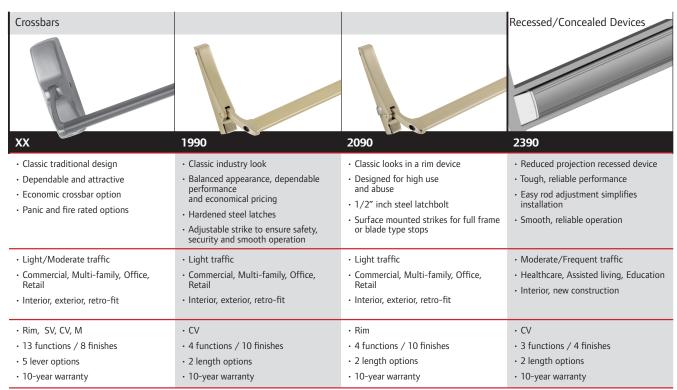
# **FALCON**

# THE FALCON DIFFERENCE

SAFETY, SECURITY AND UNCOMPROMISING VALUE

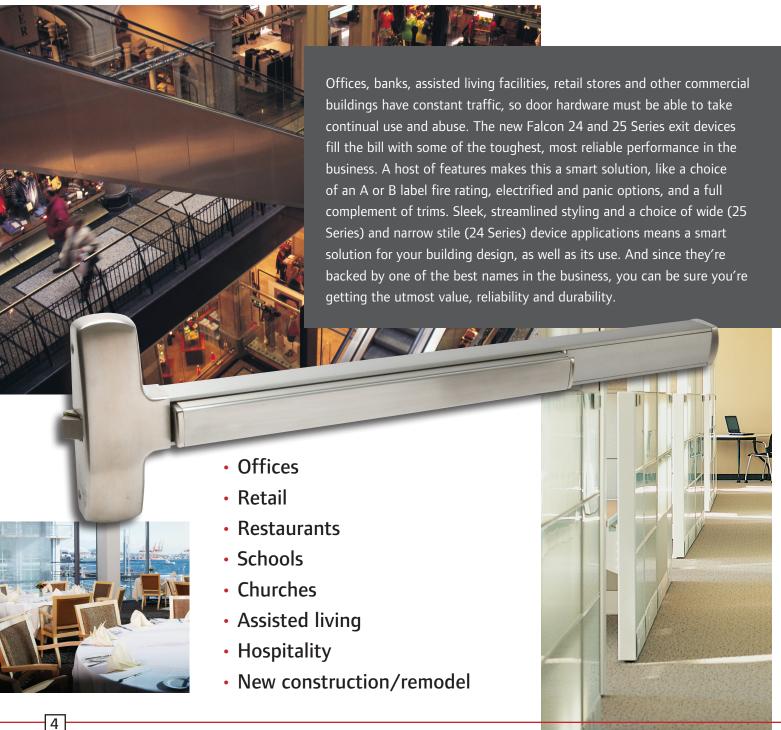
At Falcon, we know that every product you sell not only has to meet local building codes, but also your expectations for performance, style and quality. We take your expectations seriously, and that's why we build our door hardware to deliver durability, convenience and unmatched value. After all, we've built our reputation on the same standards that you have – providing quality door hardware at a reasonable price delivered on time. It's the way we do business and it's what makes Falcon a powerful choice for your project.



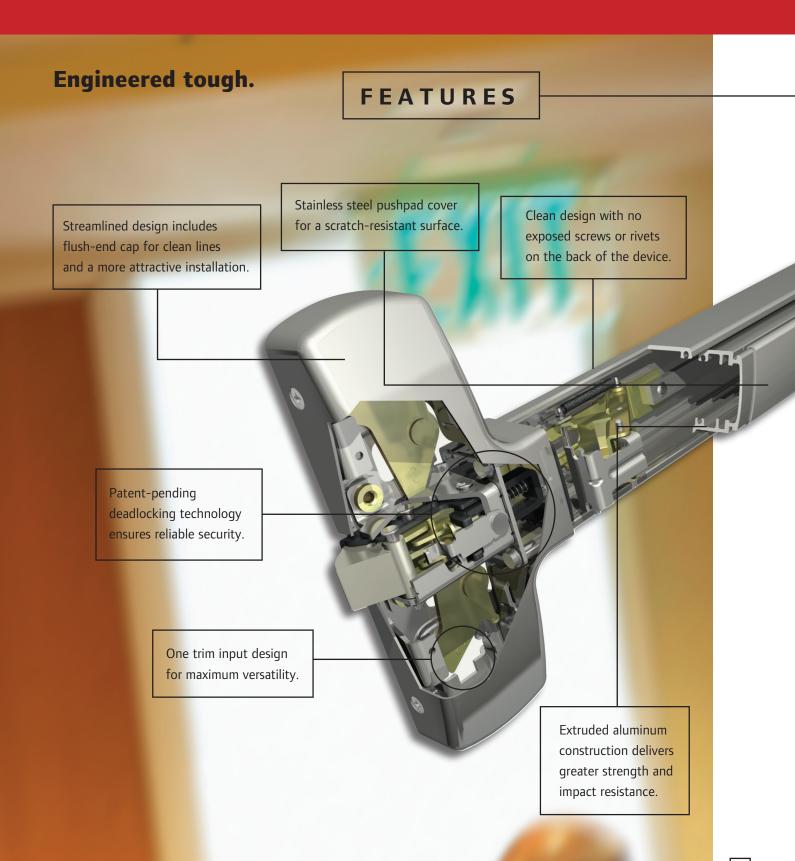


# INTRODUCING THE FALCON 24 SERIES AND 25 SERIES

# The perfectly simple, tougher than nails, costs less than you think, fits anywhere exit device.



# **FALCON**



# **25-R SERIES RIM DEVICE**

# **Panic Exit Hardware**

The Falcon 25-R Series rim device meets the demanding requirements of high traffic installations with a single-point, rim type latch and a streamlined touch bar design. This device can also be electrified for maximum ease of use and accessibility.







		SINC	SINGLE DOOR APPLICATION			
DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width		
25-R	3′	299 264 1439 1606	4" 3 <sup>7</sup> /8" 3 <sup>1</sup> /4" 3 <sup>5</sup> /8"	2′ 7½″ 2′ 7¾″ 2′ 6¾″ 2′ 7½″		
25-R	4′	299 264 1439 1606	4″ 3½″ 3½″ 3½″	3′ 1½″ 3′ 1¾″ 3′ ¾″ 3′ 1½″		

		DOUBLE DOOR APPLICATION		
DEVICE	Door Size	Strike x Mullion	Min Stile (in)	Min Door Opening Width
25-R	3′	299 x 2923 299 x 4023 264 x 2923 264 x 4023 1439 x 2923 1439 x 4023 1606 x 2923 1606 x 4023	4½" 4¾" 4" 4½" 3½" 4½" 4½"	2' 7'/5" 2' 7'/5" 2' 7'/6" 2' 7'/6" 2' 7'/6" 2' 7'/6" 2' 7'/6"
25-R	4′	299 x 2923 299 x 4023 264 x 2923 264 x 4023 1439 x 2923 1439 x 4023 1606 x 2923 1606 x 4023	4½" 4½" 4½" 3½" 4½" 4½" 4½" 4½"	3′ 1½" 3′ 1½" 3′ 1½" 3′ 1½" 3′ 1½" 3′ 1½" 3′ 1½" 3′ 1½"
25-V x 25-R	3′	1609	3½"	2′ 75⁄8″ for 31⁄2″ Min. Stile
25-V x 25-R	4′	1609	31/2″	3′ 1½″ for 3½″ Min. Stile

Specificat	ions
Hand:	Non-handed.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)
Strikes:	299 strike standard. See page 15 for additional info.
Latchbolt:	Stainless steel, 3/4" throw.
Deadlocking Latchbolt:	Standard.
Dogging Feature:	1/2 turn hex dogging standard. No threaded parts to wear out.
Cylinder Dogging:	Specify "CD" prefix. Uses 1-1/8" long mortise cylinder with standard cam.
Stock Sizes:	See chart to left. Cut to size in the field.
Doors:	$1-\frac{3}{4}$ " thick, wood or metal. Specify thickness if other than $1-\frac{3}{4}$ ".
Projection:	2¾" maximum, 2" dogged.
Mounting Height:	401/4" from CL to finished floor.
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 33-40 for details).
Fasteners:	All mounting screws are concealed, sheet metal screws and machine screws standard.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 8 - 425 (#IO-24) SNB. For devices with trim, specify 2 - 425 (#IO-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
Center Case & Working Parts:	Center case is heavy wrought and sintered metal parts.
Shim Kit:	For glass lite applications; 1/4" thick, specify SK25-RM.
579 Strike Retrofit Kit:	Consult factory.

# F-25-R SERIES RIM DEVICE

# **B** Fire Exit Hardware

The Falcon F-25-R Series rim device combines sleek styling and durability with the protection of a fire-rated device. The F-25-R also features a single-point, rim type latch and can be electrified.







		SINC	SINGLE DOOR APPLICATION			
DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width		
F-25-R	3′	299-F	4"	2′ 7½″		
F-25-R	4′	299-F	4"	3′ 1½″		

		DOUBLE	DOUBLE DOOR APPLICATION			
DEVICE	Door Size	Strike x Mullion	Min Stile (in)	Min Door Opening Width		
F-25-R	3′	499-F x F-4023	41/2"	2′ 75//″		
F-25-R	4′	499-F x F-4023	4½"	3′ 1⅓″		

Specifications				
Hand:	Non-handed.			
UL:	"A" label (3 hr.); 4°0" x 8°0"; 8°0" x 8°0" with F-4023 mullion. "B" label (1½ hr.); 8°0" x 8°0"; with KRF4023.			
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)			
Strikes:	299F strike standard. 499F standard for pairs with mullion.			
Latchbolt:	Stainless steel, ¾" throw.			
Deadlocking Latchbolt:	Standard.			
Stock Sizes:	See chart to left. Cut to size in the field.			
Doors:	1 ¾" thick, wood or metal. Specify thickness if other than 1¾".			
Projection:	2 ¾" maximum.			
Mounting Height:	40 1/4" from CL to finished floor.			
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 33-40 for details).			
Fasteners:	All mounting screws are concealed, sheet metal screws and machine screws standard.			
Sex Bolts:	Required for use in EO applications when used with wood, composite or non-reinforced hollow metal doors. For EO device, specify 8 - 425 (#10-24) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.			
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.			
Center Case & Working Parts:	Center case is heavy wrought and sintered metal parts.			
Shim Kit:	For glass lite applications; 1/4" thick, specify SK25-RM.			

# **25-V SERIES VERTICAL ROD DEVICE**

# **Panic Exit Hardware**

High-traffic applications demand the added strength and protection that comes with a vertical rod device. The Falcon F-25-V Series delivers with a surface-applied design that includes standard top latch and deadlocking. The sleek touch bar design ensures an attractive installation.



Specificat	ions
Hand:	Field reversible.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)
Strikes:	3788 top strike is surface applied. 2130 bottom strike is mortised into floor.
Angle Bracket:	Use 4215 angle bracket in flush transom installations. Allows use of standard 3788 strike.
Latchbolt:	Top stainless steel ¾" throw. Bottom bolt, ½" throw.
Deadlocking Latchbolt:	Standard in top latch.
Latch Retention Hold:	Standard with top latch.
Dogging Feature:	$^{1}\!\!\!/_{2}$ turn hex dogging standard. No threaded parts to wear out.
Cylinder Dogging:	Specify "CD" prefix. Uses 11/6" long mortise cylinder with standard cam.
Stock Sizes:	See chart below.
Doors:	13/4" thick wood or metal. Specify if other than 13/4" thick.
Projection:	2¾" maximum, 2" dogged.
Stile:	See chart below.
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details).
Fasteners:	All mounting screws are concealed, sheet metal screws standard, machine screws available, specify AMS.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 12 - 425 (#10-24) SNB. For devices with trim, specify 8 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
25-V:	Latch Retention (LR) top latch and bottom square bolt. 3788 strike top, 2130 flush strike bottom.
Vertical Rods:	Furnished to length based on a $40^{1}$ /4" horizontal CL from finished floor and a 7'0" door standard. Variations from these standards must be specified when ordering.
25-V-LBR:	Less bottom rod vertical device.
Shim Kit:	For glass lite applications; 1/4" thick, specify SK25-V.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
25-V	3′	all	3½"	2′ 71⁄⁄8″
25-V	4′	all	3½"	3′ 1½″
25-V x 25-R	3′	1609	3½"	2′ 7¾″ for 3½″ Min. Stile
25-V x 25-R	4′	1609	3½"	3′ 1¾″ for 3½″ Min. Stile

# F-25-V SERIES VERTICAL ROD DEVICE

# **B** Fire Exit Hardware

When your application requires strength and durability, plus fire rated performance, the F-25-V Series is the total package. This surface-applied vertical rod device includes a sleek touch bar design with top latch and deadlocking standard.



Enocificat	ions
Specificat	IONS
Hand:	Field reversible.
UL:	"A" Label (3 Hr) - 8' x 10' double egress; 90 min. same egress - 8' x 10' Wood Door: 20 min. 8' x 10'; 90 min. 8' x 9'. Consult door manufacturer for maximum rating.
Finishes:	US3 (605); US4 (606); US10 (612); US10B (613); US26 (625); US26D (626); US32 (629); US32D (630), US28 (628), 313AN. (See page 17 for finishes.)
Strikes:	3788 top strike is surface applied. 2130 bottom strike is mortised into floor.
Latchbolt:	Top stainless steel, 3/4" throw. Bottom bolt, 1/2" throw.
Deadlocking Latchbolt:	Standard in top latch.
Latch Retention Hold:	Standard with top latch.
Stock Sizes:	See chart below.
Doors:	$1\frac{3}{4}$ " thick, wood or metal. Specify thickness if other than $1\frac{3}{4}$ ".
Projection:	2 <sup>3</sup> / <sub>4</sub> " maximum.
Stile:	See chart below.
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details).
Fasteners:	All mounting screws are concealed. All machine screws (AMS) standard.
Sex Bolts:	Required when used with wood, composite or non-reinforced hollow metal doors. For EO device, specify 12 - 425 (#10-24) SNB. For devices with trim, specify 8 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
F-25-V:	Latch Retention (LR) top latch and bottom square bolt. 3788 strike top, 2130 flush strike bottom.
F-25-V-LBR:	Less bottom rod vertical device. "A" Label (3 Hr) - 8' x 8'; 90 min. same egress - 8' x 8'.
Vertical Rods:	Furnished to length based on a 40½" horizontal CL from finished floor and a 7'0" door standard. Variations from these standards must be specified when ordering.
Shim Kit:	For glass lite applications; 1/4" thick, specify SK25-V.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-25-V	3′	all	3½"	2′ 71⁄8″
F-25-V	4′	all	3½"	3′ 1½″

# **25-M SERIES MORTISE DEVICE**

# **Panic Exit Hardware**

The Falcon 25-M Series is the only device that pairs a tough, reliable exit device with our strongest mortise lock. The result is maximum safety and security in a single-point, mortise latch type device that also has an attractive touch bar design.



DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
25-M	3′	all	4½"	2′ 7 <sup>1</sup> /2″
25-M	4′	all	41/2"	3′ 2″

Specificat	Specifications			
Hand:	Handed.			
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)			
Strikes:	1279 standard, F1280 and 1281 optional.			
Latchbolt:	Stainless steel, 3/4" throw.			
Deadlocking Latchbolt:	Standard.			
Dogging Feature:	½ turn hex dogging standard. No threaded parts to wear out.			
Cylinder Dogging:	Specify "CD" prefix. Uses 1½" mortise cylinder with standard cam.			
Mounting Height:	40¼" from CL to finished floor. For mortise lock prep per ANSI A115.1-1990.			
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details).			
Stile:	4½" minimum.			
Projection:	2³¼" maximum, 2" dogged.			
Stock Sizes:	See chart.			
Doors:	1¾" thick, wood or metal. Specify thickness if other than 1¾".			
Fasteners:	All mounting screws are concealed, sheet metal screws and machine screws standard.			
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 6 - 425 (#10-24) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.			
ANSI:	ANSI: Certified ANSI A156.3-2001 Grade 1 standards.			
Mortise Lock:	Heavy wrought lock case with investment cast or sintered steel parts. Lock face is forged brass—fits standard cutout. Locks are designed to fit standard ANSI A115.1 preparation for 1¾" doors. Deadlocked when auxilary bolt is depressed ¾6".			
Shim Kit:	For glass lite applications; ¼" thick, specify SK25-RM.			

# F-25-M SERIES MORTISE DEVICE

# **B** Fire Exit Hardware

The Falcon F-25-M Series delivers the safety of a fire-rated exit device with a choice of ratings. The F-25-M can be paired with our strongest mortise lock, assuring a tough and secure lock for any opening requiring a high level of safety and security.





DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-25-M	3′	all	4½"	2′ 7½″
F-25-M	4′	all	4½"	3′ 2″

Specifications			
Hand:	Handed.		
UL:	"A" label (3 hr.); 4'0" x 10"0" single doors; 8'0" x 10'0" pair of doors (F-25-M x F-25-V or F-25-C). "B" label (1-1/2 hr) with F1280 open back strike.		
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)		
Strikes:	1279 standard. F1280 optional, B label ( $1\frac{1}{2}$ hr.).		
Latchbolt:	Stainless steel, 3/4" throw.		
Deadlocking Latchbolt:	Standard.		
Stock Sizes:	See chart.		
Doors:	$1\frac{3}{4}$ " thick, wood or metal. Specify thickness if other than $1\frac{3}{4}$ ".		
Projection:	2³/₄" maximum.		
Stile:	4½" minimum.		
Mounting Height:	40 ¼" from CL to finished floor. For mortise lock prep per ANSI A115.1-1990.		
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details).		
Fasteners:	All mounting screws are concealed. All machine screws (AMS) standard.		
Sex Bolts:	Required when used with wood, composite or non-reinforced hollow metal doors. For EO device specify 6 - 425 (#10-24) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.		
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.		
Mortise Lock:	Heavy wrought lock case with investment cast or sintered steel parts. Lock face is forged brass—fits standard cutout. Locks are designed to fit standard ANSI A115.1 preparation for 13/4" doors. Deadlocked when auxilary bolt is depressed 5/16".		
Shim Kit:	For glass lite applications; ¼" thick, specify SK25-RM.		

# **25-C SERIES CONCEALED VERTICAL ROD DEVICE**

# **Panic Exit Hardware**

Concealed vertical rods add strength to the door, while maintaining an attractive appearance. The Falcon 25-C Series concealed vertical rod device offers great value, clean styling and the security benefits of two-point latching. Falcon's patented center slide mechanism allows easy rod adjustment in the field.



Specificat	ions
Hand:	Field reversible.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)
Strikes:	4188 mortised top, 2130 bottom standard, 4155 and 2126A bottom optional
Latchbolt:	Top stainless steel 3/4" throw. Bottom bolt 1/2" throw.
Deadlocking Latchbolt:	Standard in top latch.
Latch Retention Hold:	Standard in top latch.
Dogging Feature:	$\frac{1}{2}$ turn hex dogging standard. No threaded parts to wear out.
Cylinder Dogging:	Specify "CD" prefix. Uses 1½" long mortise cylinder dogging with standard cam.
Stock Sizes:	See chart.
Doors:	$1\frac{3}{4}$ " thick metal or wood. Specify if other than $1\frac{3}{4}$ " thick.
Projection:	2¾" maximum, 2″ dogged.
Stile:	3½" minimum. (6½" minimum on wood doors.)
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed, sheet metal screws standard, machine screws available, specify AMS.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 6 - 425 (#10-24) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
25-C-LBR:	Less bottom rod concealed vertical device.
Vertical Rods:	Furnished to length based on $40\%$ horizontal CL to finished floor and a 7°0" door. Variations from these standards must be specified when ordering.
Patented Centerslide:	For ease of adjustment.
Shim Kit:	Consult factory.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
25-C	3′	all	3½" (6½" for wood doors)	2′ 71⁄8″
25-C	4′	all	3½" (6½" for wood doors)	3′ 1½″

# F-25-C SERIES CONCEALED VERTICAL ROD DEVICE

# **B** Fire Exit Hardware

The Falcon F-25-C Series device lets you combine the safety of a fire-rated device with the clean aesthetics that come with a concealed vertical rod installation. In-field adjustment is simple thanks to our patented center slide mechanism. Two-point latching ensures optimal security at the door.



Specificat	ions
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Hand:	Field reversible.
UL:	"A" Label (3 Hr) - double egress 8' x 10'; 90 min. same egress - 8' x 10'.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 17 for finishes.)
Strikes:	4188 mortised top; 2130 flush strike bottom.
Latchbolt:	Top stainless steel, ¾" throw. Bottom bolt ½" throw.
Deadlocking Latchbolt:	Standard in top latch.
Latch Retention Hold:	Standard in top latch.
Stock Sizes:	See chart.
Doors:	1¾" thick metal or wood. Specify if other than 1¾" thick.
Projection:	2³¼" maximum.
Stile:	3½" minimum. (6½" minimum on wood doors.)
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, FSA/FSE trim, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed. All machine screws (AMS) standard.
Sex Bolts:	Required when used with wood, composite or non-reinforced hollow metal doors. For EO device specify 6 - 425 (#10-24) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
F-25-C-LBR:	Less bottom rod concealed vertical device. "A" Label (3 Hr) – 8' x 8'; 90 min. same egress – 8' x 8.'
Vertical Rods:	Furnished to length based on $40\%$ horizontal CL to finished floor and a 7°0″ door. Variations from these standards must be specified when ordering.
Patented Centerslide:	For ease of adjustment.
Shim Kit:	Consult factory.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-25-C	3′	all	3½" (6½" for wood doors)	2′ 71⁄%″
F-25-C	4′	all	3½" (6½" for wood doors)	3′ 1½″

# 25 SERIES ACCESSORIES AND OPTIONS



#### **Removable Mullion**

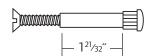
- The 2923, F4023, 4023, KRF-4023 and KR-4023 steel mullions are for use with the 25-R devices on double door openings. Advantage: Increased security and tighter closure. Minimizes door warpage and sag. Regulates the flow of in-and-out traffic.
- · Falcon removable mullions are easily removed and reinstalled for full width access.
- Rim devices are used on both leaves, attaining a perfectly symmetrical opening.
- The mullion assembly consists of a mullion, top and bottom mounting brackets and a screw pack.
- The F4023 and KRF-4023 fire-rated mullions also include four stabilizer blocks as required for labeled installations.
- · Strikes are not furnished with the mullion. Please see page 15 for strike information.
- · Mullions may be cut on the job for doors under stock lengths.
- KR Mullions require 11/4" mortise cylinder with standard A cam.

#### **Mullion Features**

- Mullion fittings ductile iron.
- F4023, 4023, KRF-4023 and KR-4023- 2" x 3" x height.
- 2923 mullion  $1\frac{1}{2}$ " x  $2\frac{1}{2}$ " x height.
- · Prime coat only.
- 7' or 8' door opening standard, other door opening as specified.

# **Cylinders**

- Cylinder supplied only when specified.
- · Cylinders keyed different.



#### **Sex Bolts**

- 325 (1/4"-20 Thread)
- · 425 (#10-24 Thread)

Device	Trim	Cylinder	Cylinder
25 Series Device	Cylinder Dogging	985 - 1 ½" Mortise Cylinder	C987- 1 3/6" Mortise Cylinder (Blocking Ring plus Security collar must equal 1/4" Thick)
25 Series Device Rim & Surface Vertical	Cylinder Only (NL-OP)	951- Rim Cylinder	C953 - Rim Cylinder
25 Series Device Mortise	Cylinder Only (NL-OP)	*986 - 1 1/4" Mortise Cylinder	**C987 - 1 3/6" Mortise Cylinder
		1	3

Mortise Cylinder

Cylinder must be spaced off of the door a minimum of 1/4" via a recessed blocking ring

L, K, TP, NL

Cylinder must be spaced off of the door a minimum of 3/11 via a recessed blocking ring

# **Dummy Touch Bars**

· Active and Inactive models only. Active model offered with RX or RX/KOR. Consult factory for

25 Series Trims

• To order, specify 250DT X finish, or 250DT X finish X active touch bar.

	(F)25-R DOUBLE	DOOR APPLIC	CATION
Strike	Installed With	Min. Stile	В*
299	2923 mullion	4 1/8"	3″
299	4023 mullion	4 3/8"	3 1/4"
499-F	F-4023 mullion	4 1/2"	3 5∕16″
264	2923 mullion	4″	2 1/8"
264	4023 mullion	4 1/4"	3 1/8″
1439	2923 mullion	3 1/8″	2 3/4"
1439	4023 mullion	4 1/8"	3″
1606	2923 mullion	4 1/4"	2 %"
1606	4023 mullion	4 ½"	2 1/8"

2 3/8"

CYLINDER REFERENCE

Mortise Cylinder

1609

Surface 25-V \*Backset to vertical center line on the device.

# 25 SERIES STRIKES AND ACCESSORIES

#### **Strikes**

#### For Rim Devices



264

 $2^{7/8}$ " x  $1^{1/4}$ " x 9/16" ( H x W x D ) Panic device only.



#### 299

 $7^{7/8}$ " x  $1^{1/4}$ " x  $^{13/16}$ " ( H x W x D ) Panic device only.



#### 299F

 $2^{7}/8$ " x  $1^{1}/4$ " x  $^{13}/16$ " ( H x W x D )



#### 499F

 $3^{5/8}$ " x  $1^{1/2}$ " x  $^{16/16}$ " ( H x W x D )



1439 Blade Stop

1<sup>3</sup>/<sub>4</sub>" x 1<sup>7</sup>/<sub>8</sub>" x <sup>1</sup>/<sub>2</sub>" ( H x W x D ) Panic device only.



1606

 $2^{7/8}$ " x  $1^{3/8}$ " x  $^{3/8}$ " ( H x W x D ) Panic device only.



#### 1609

 $3^{1/4}$ " x  $1^{1/16}$ " x  $^{3/8}$ " ( H x W x D ) Requires coordinator.

Panic device only.

#### For Surface and Concealed Vertical Rod Devices

#### 2130

(F)25-V and (F)25-C standard bottom strike for grouting into concrete or masonry floors.



#### 3788

Furnished top of (F)25-V.



#### 4155

Optional strike.

Panic device only.



#### 4188

Top strike for (F)25-C.



#### **For Mortise Lock Devices**



#### 1279

Closed strike used on single doors and on fire exit hardware doors with coordinator.



#### F1280

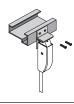
Open back strike used on pairs of  $1\frac{3}{4}$ " doors without astragal or coordinator. Can be used on stock hollow metal doors. F1280 B label ( $1\frac{1}{2}$  hr.) stainless steel strike available.



#### 1281

Open back strike for  $1\frac{3}{4}$ " doors. 8" x  $1\frac{1}{4}$ " face allow use in mortise lock cutout of stock hollow metal door.

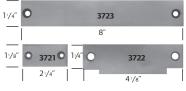
#### **Accessories**



#### 4215

Angle bracket for flush transom applications. Does not require elimination of latch retention feature. Accepts 3788 strike for 25-V device.

#### **Filler Plates**



#### 3721/3722/3723

Steel Filler Plates 3721 Cylindrical Lock Front Filler 3722 Strike Filler - set no. SC for 161 cutout 3723 Mortise Lock Front Filler

3723 Mortise Lock Front Filler 3722 Strike Filler - set no. SM for 86 cutout

#### Surface Vertical Extension Rods

Extension rods are available in 12", 24" and 36" lengths in all finishes. Both ends tapped and all-thread included as connector.

#### Concealed Extension Rods

Extension rods are available in 12", 24" and 36". Both ends have pressed-in, threaded inserts.

# 25 SERIES TRIM DESIGNS

Functionality built into the trim, facilitating easy door preps, easy field retrofit and easy ordering.

# Lever Trims (510L)











Projection: 31/4"



All levers return to within 1/2" of door.

Escutcheon:  $9\frac{1}{4}$ " (H) x  $2\frac{1}{4}$ " (W) (specify handing) brass finish. Protected by easily replaceable shear pin.

Lever is reversible, supplied RHR if not specified. For keyed functions, see page 14 for cylinder requirements.

#### Vandal-Resistant Lever Trims (511L)



Provides resistance to rotation, making damage of trim due to attack from the outside less likely. Designed to operate normally after vandalism attempts without the need for maintenance personnel intervention.

- Heavy duty, vandal-resistant, ANSI AI56.3 Grade 1 security trim
- Lever deflects up to 22 ft-lb for a minimum of 10,000 vandal-resistant cycles
- Vandal resistance is present in both lever rotation directions
- After lever is fully deflected, lever stops rotating and a shear pin breaks at 70 ft-lb to prevent damage to unit
- · Available on 25 rim, vertical, mortise, and concealed devices
- · Retrofits all existing 25 trim without additional door prep
- · Works with all electric lock and unlock functions
- Available in all finishes and designs including Avalon, Dane, Quantum and Sutro

# Pull Trims (512)



Escutcheon: 16" x 2¾" Grip: 6¼" C–C Projection: 211½"

For keyed functions, see page 14 for cylinder requirements.

# **Knob Trims (513K)**



513K-DT 513K 513K-BE 513K-NL

Round Ball Knob Escutcheon: 9¾″ x 2¾″ Projection: 4″ Brass

For keyed functions, see page 14 for cylinder requirements.

# Cylinder Only (NL-OP)

Key retracts latch bolt. Cylinder sold separately (see page 14).

# **25 SERIES TRIM CHART & FINISH CHART**

			FUNCT	ION	
	Lock/Unlock	NL	DT	BE	FSA/FSE
Lever (510)	510L	510L-NL	510L-DT	510L-BE	510L-FSA 510L-FSE
Vandal-Resistant Lever (511)	511L	-	-	-	511L-FSA 511L-FSE
Pull Trims (512)	512TP	512-NL	512DT	512TP-BE	512TP-FSA 512TP-FSE
Knob (513)	513K	513K-NL	513K-DT	513K-BE	513K-FSA 513K-FSE
Delta (717)	-	-	717DT	-	

# **25 Series Finishes**

Color	US Number	BHMA Number
Brass, Bright	US3	605
Brass, Satin	US4	606
Bronze, Satin	US10	612
Chromium, Bright	US26	625
Chromium, Satin	US26D	626
Anodized Aluminum	US28	628
Stainless Steel, Bright	US32	629
Stainless Steel, Satin	US32D	630
Anodized Duranodic	313AN	710

# **25 SERIES TYPES AND FUNCTIONS**

# 25 Series

This page shows all 25 Series device and trim functions.

	Rim Device ANSI Type 1	Vertical Rod Device ANSI Type 2	Mortise Lock Device ANSI Type 3	Concealed Vertical Rod Device ANSI Type 8
Functions (ANSI)	(F)-25-R	(F)-25-V	(F)-25-M	(F)-25-C
EO (01) Exit only, no trim.	25-R-E0	25-V-E0	25-M-EO	25-C-EO
DT (02) Entrance by trim when actuating bar is locked down.	25-R-DT	25-V-DT	25-M-DT	25-C-DT
NL (03)  Entrance by trim when latchbolt is retracted by key. Key removable only when locked.	25-R-NL	25-V-NL	25-M-NL	25-C-NL
TP (05) Entrance by thumbpiece. Key locks or unlocks thumbpiece.	25-R-TP	25-V-TP	25-M-TP	25-C-TP
L or K (08)  Entrance by knob or lever. Key locks or unlocks knob.	25-R-L/K	25-V-L/K	25-M-L/K	25-C-L/K
L(NL) or K(NL) (09)  Entrance by knob or lever only when released by key. Key removable only when locked.	25-R-L/K(NL)	25-V-L/K(NL)	25-M-L/K(NL)	25-C-L/K(NL)

# **25 SERIES DOOR APPLICATION**

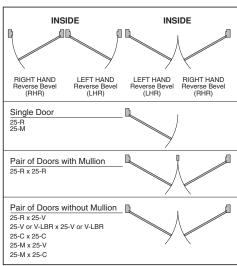
#### **Label Doors**

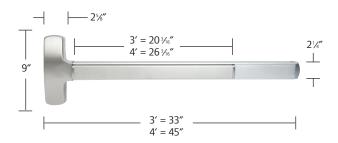
Models F-25-R, F-25-M, F-25-C and F-25-V are labeled for use as ## Fire Exit Hardware.

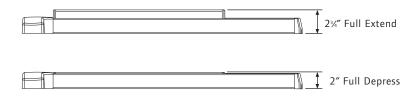
#### **Door Thickness**

All devices and components supplied for 134" doors standard. Specify door thickness if other than 134".

#### **Door Application Chart**







Product information and specifications contained in this catalog are subject to change without notice. Please consult the factory.

# **24-R SERIES RIM DEVICE**

# **Panic Exit Hardware**

The Falcon 24-R Series narrow stile rim device allows for application versatility in high-traffic installations. Standard features include a single-point, rim type latch and a streamlined touch bar design. This device can also be electrified for maximum ease of use and accessibility.





		SINC	GLE DOOR A	PPLICATION
DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
24-R	3′	299 264 1439 1606	3½" 3¾" 2½" 2¾"	2′ 7½″ 2′ 7¾″ 2′ 6¾″ 2′ 7½″
24-R	4′	299 264 1439 1606	3½" 3¾" 2¼" 2¾"	3′ 1½″ 3′ 1¾″ 3′ ¾″ 3′ 1½″

		DOUBL	E DOOR AP	PLICATION
DEVICE	Door Size	Strike x Mullion	Min Stile (in)	Min Door Opening Width
24-R	3′	299 x 2923 299 x 4023 264 x 2923 264 x 4023 1439 x 2923 1606 x 2923 1606 x 4023 4396 x 4423	3 <sup>1</sup> /2" 4" 3 <sup>3</sup> /4" 3 <sup>3</sup> /4" 3 <sup>3</sup> /4" 3 <sup>1</sup> /2" 3 <sup>3</sup> /4" 2 <sup>1</sup> /4"	2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/." 2' 7'/."
24-R	4′	299 x 2923 299 x 4023 264 x 2923 264 x 4023 1439 x 2923 1439 x 4023 1606 x 2923 1606 x 4023 4396 x 4423	3 <sup>1</sup> /2" 4" 3 <sup>3</sup> /4" 3 <sup>5</sup> /4" 3 <sup>1</sup> /2" 3 <sup>3</sup> /4" 3 <sup>3</sup> /4" 2 <sup>1</sup> /4"	3′ 1½″ 3′ 1½″ 3′ 1¾″ 3′ 1¾″ 3′ 1½″ 3′ 1½″ 3′ 1½″ 3′ 1½″ 3′ 1½″ 3′ ½″

Specifications	
Hand:	Non-handed.
Functions:	24-EO (Exit Only) has all functions built in. Order trim with the device, or add it later. See Trim Selection Chart on page 29.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 29 for finishes.)
Strikes:	299 strike standard. See page 27 for optional strikes.
Latchbolt:	Stainless steel, ¾" throw.
Deadlocking Latchbolt:	Optional. Specify "DL" prefix.
Dogging Feature:	$\frac{1}{2}$ turn hex dogging standard. No threaded parts to wear out.
Cylinder Dogging:	Specify "CD" prefix. Uses $1\%$ " long mortise cylinder with standard cam.
Stock Sizes:	See chart to left.
Doors:	$1\frac{3}{4}$ " thick, wood or metal. Specify thickness if other than $1\frac{3}{4}$ ".
Projection:	2³⁄4″ maximum, 2″ dogged.
Mounting Height:	40" from CL to finished floor.
Electric Function:	Can be interfaced with building security systems. Latch retraction, security monitoring, delayed egress and exit alarm available (EL fail- secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 4 - 425 (#10-24) SNB and 2 - 325 (¼-20) SNB. For devices with trim, specify 4 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
Center Case & Working Parts:	Wrought steel with heavy wrought and sintered metal parts.
Shim Kit:	For glass lite applications; ¼"thick, specify SK24-R.

# F-24-R SERIES RIM DEVICE

# **B** Fire Exit Hardware

The Falcon F-24-R Series rim device combines sleek styling and durability with the protection of a fire-rated device. A narrow stile design allows for installation versatility. The F-24-R also features a single-point, rim type latch and can be electrified.





		SINC	SLE DOOR A	PPLICATION
DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-24-R	3′	299-F	3½″	2′ 7½″
F-24-R	4′	299-F	3½"	3′ 1½″

		DOUB	LE DOOR A	APPLICATION
DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-24-R	3′	299-F x 4023	4"	2′ 7¹½″
F-24-R	4′	299-F x 4023	4″	3′ 1½″

Specifications	
Hand:	Non-handed.
UL:	"B" label (1½ hr.); 4′0″ x 8′0″.
Functions:	F-24-REO (Exit Only) has all functions built in. Order trim with the device, or add it later. (See Trim Selection Chart on page 29.)
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 29 for finishes.)
Strikes:	299 F strike standard.
Latchbolt:	Stainless steel, ¾" throw.
Deadlocking Latchbolt:	Standard.
Stock Sizes:	See chart to left.
Doors:	1%'' thick, wood or metal. Specify thickness if other than $1%''$ . (SNB must be specified on wood or composite doors.)
Projection:	2³/4″ maximum.
Mounting Height:	40" from CL to finished floor.
Electric Function:	Can be interfaced with building security systems. Latch retraction, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed. Furnished with all machine screws.
Sex Bolts:	Required when used with wood, composite or non-reinforced hollow metal doors. For EO device, specify 4 - 425 (#10-24) SNB and 2 - 325 (1/4-20) SNB. For devices with trim, specify 4 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
	Certified ANSI A156.3-2001 Grade 1 standards.  Investment-cast ferrous alloy with heavy wrought and sintered metal parts.

# **24-V SERIES VERTICAL ROD DEVICE**

# **Panic Exit Hardware**

High-traffic applications demand the added strength and protection that comes with a vertical rod device. The Falcon 24-V Series delivers with a surface-applied design that includes standard top latch and deadlocking. The narrow stile and sleek touch bar design ensure an attractive installation.



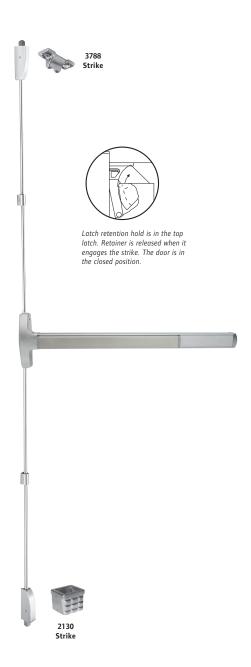
Specification	ns
Hand:	Field reversible.
Functions:	24-V-EO (Exit Only) has all functions built in. Order trim with the device, or add it later. See Trim Selection Chart on page 29.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 29 for finishes.)
Strikes:	3788 top strike is surface applied, 2130 bottom strike is mortised into floor.
Angle Bracket:	Use 4215 angle bracket in flush transom installations. Allows use of standard 3788 strike.
Latchbolt:	Top stainless steel, top latch ¾" throw. bottom bolt ½" throw.
Deadlocking Latchbolt:	Standard with top latch.
Latch Retention Hold:	Standard with top latch. On top latch.
Dogging Feature:	$lac{1}{2}$ turn hex dogging standard. No threaded part to wear out.
Cylinder Dogging:	Specify "CD" prefix. Uses $1\frac{1}{6}$ " long mortise cylinder with standard cam.
Stock Sizes:	See chart below.
Doors:	$1\frac{3}{4}$ " thick, wood or metal. Specify if other than $1\frac{3}{4}$ " thick.
Projection:	2³¼" maximum, 2" dogged.
Stile:	1¾" minimum when used in pairs.
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed, sheet metal screws standard, machine screws available, specify AMS.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 8 - 425 (#10-24) SNB and 2 - 325 (½-20) SNB. For devices with trim, specify 8 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
24-V:	Latrch Retention (LR) top latch and bottom square bolt. 3788 strike top, 2130 flush strike bottom.
24-V-LBR:	Less bottom rod vertical device.
Vertical Rods:	Furnished to length based on a 40" horizontal CL from finished floo and a 7'0" door standard. Variations from these standards must be specified when ordering.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
24-V	3′	all	21/8″	2′ 71/4″
24-V	4′	all	21/6"	3′ 1½″

# F-24-V SERIES VERTICAL ROD DEVICE

# **B** Fire Exit Hardware

When your application requires strength and durability, plus fire-rated performance, the F-24-V Series is the total package. This surface-applied vertical rod device includes a sleek touch bar design with top latch and deadlocking standard, as well as a narrow stile that fits where you need it to.



<b>Specifications</b>	
-	Field reversible.
UL:	"A" Label (3 Hr) – double egress – $8' \times 10'$ ; 90 min. same egress – $8' \times 10$ .' Wood Door: 20 min. $8' \times 10'$ ; 90 min. $8' \times 9'$ . Consult door manufacturer for maximum rating.
Functions:	F-24-V-EO (Exit Only) has all functions built in. Order trim with th device, or add it later. See Trim Selection Chart on page 29.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 29 for finishes.)
Strikes:	3788 top strikes are surface applied, 2130 bottom strike is mortised into floor.
Latchbolt:	Stainless steel, top latch 3/4" throw. bottom bolt 1/2" throw.
Latch Retention Hold:	Standard with top latch.
Deadlocking Latchbolt:	Standard with top latch.
Stock Sizes:	See chart below.
Doors:	$1\frac{3}{4}$ " thick, wood or metal. Specify if other than $1\frac{3}{4}$ " thick.
Projection:	2³/4″ maximum.
Stile:	21/6" minimum when used in pairs.
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed. All machine (AMS) standard.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 8 - 425 (#10-24) SNB and 2 - 325 (1/4-20) SNB. For devices with trim, specify 8 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
F-24-V:	Latch retention (LR) top latch and bottom square bolt. 3788 strike top, 2130 flush strike bottom.
F-24-V-LBR:	Less bottom rod vertical device. "A" Label (3 Hr) – 8' $\times$ 8'; 90 min. same egress – 8' $\times$ 8'. Wood Door: 20 minute minimum – 8' $\times$ 8' openings. Consult door manufacturer for maximum rating.
Vertical Rods:	Furnished to length based on a 40" horizontal CL from finished flo and a 7'0" door standard. Variations from these standards must be specified when ordering.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-24-V	3′	all	21/8″	2′ 7¹/₄″
F-24-V	4′	all	21//6″	3′ 1¼″

# 24-C SERIES CONCEALED VERTICAL ROD DEVICE

#### **Panic Exit Hardware**

Concealed vertical rods add strength to the door, while maintaining an attractive appearance. The Falcon 24-C Series concealed vertical rod device offers great value, clean styling, a versatile narrow stile design and the security benefits of two-point latching. Falcon's patented center slide mechanism allows easy rod adjustment in the field.



Specifications	
	Et II at II at II at
	Field reversible or specify handing.
Functions:	See Trim Selection Chart on page 29. Delta trim only.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 29 for finishes.)
Strikes:	4188 mortised top and 2130 flush strike bottom, optional bottom 2126A and 4155.
Latchbolt:	Top stainless steel 3/4" throw. Bottom bolt 1/2" throw.
Deadlocking Latchbolt:	Standard on top latch.
Latch Retention Hold:	Standard in top latch.
Dogging Feature:	$\frac{1}{2}$ turn hex dogging standard. No threaded parts to wear out.
Cylinder Dogging:	Specify "CD" prefix. Uses $1 \ensuremath{\ensuremath{\%^{\prime\prime}}}$ long mortise cylinder dogging with standard cam.
Stock Sizes:	See chart below.
Doors:	1¾" thick metal or wood. Specify if other than 1¾" thick.
Projection:	2¾" maximum, 2" dogged.
Stile:	2¼" minimum when used in pairs. (6" minimum on wood doors.)
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed, sheet metal screws standard, machine screws available, specify AMS.
Sex Bolts:	Recommended when device is used with hollow core wood, composite or light gauge hollow metal doors. For EO device, specify 2 - 425 (#10-24) SNB and 2 - 325 (½-20) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
24-C-LBR:	Less bottom rod concealed vertical device.
Vertical Rods:	Furnished to length based on 40" horizontal CL to finished floor and a 7'0" door. Variations from these standards must be specified when ordering.
Patented Centerslide:	For ease of adjustment.
Shim Kit:	Consult factory.

24-C 3' all 2½" (6" for wood doors) 2' 7¾" (24-C 4' all 2½" (6" for wood doors) 3' 1¾"	DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
24-C 4′ all 2½″ (6″ for wood doors) 3′ 1¾″	24-C	3′	all	21/4" (6" for wood doors)	2′ 7³⁄⁄8″
	24-C	4′	all	21/4" (6" for wood doors)	3′ 1¾″

# F-24-C SERIES CONCEALED VERTICAL ROD DEVICE

# **B** Fire Exit Hardware

The Falcon F-24-C Series device lets you combine the safety of a fire-rated device with the clean aesthetics that come with a narrow stile and concealed vertical rod installation. In-field adjustment is simple thanks to our patented center slide mechanism. Two-point latching ensures optimal security at the door.



Specifications	
Hand:	Field reversible or specify handing.
UL:	"A" Label (3 Hr) – double egress – 8' x 10' ; 90 min. same egress – 8' x 10'.
Functions:	See Trim Selection Chart on page 29. Delta trim only.
Finishes:	US3 (605); US4 (606); US10 (612); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN. (See page 29 for finishes.)
Strikes:	4188 mortised top, 2130 flush strike bottom.
Latchbolt:	Top stainless steel, 3/4" throw. Bottom bolt 1/2" throw.
Deadlocking Latchbolt:	Standard on top latch.
Latch Retention Hold:	Standard in top latch.
Stock Sizes:	See chart below.
Doors:	$1\frac{3}{4}$ " thick metal. Specify if other than $1\frac{3}{4}$ " thick.
Projection:	2³¼″ maximum.
Stile:	2 <sup>1</sup> / <sub>4</sub> " minimum when used in pairs. (6" minimum on wood doors.)
Door Undercut:	Suggested: 1/4" / Maximum: 3/4"
Electric Function:	Can be interfaced with building security systems. Latch retraction, security monitoring, delayed egress and exit alarm available (EL fail-secure only). Subject to code requirements, state and local. (See pages 32-40 for details.)
Fasteners:	All mounting screws are concealed. All machine screws standard.
Sex Bolts:	Required when used with wood, composite or non-reinforced hollow metal doors. For EO device specify 2 - 425 (#10-24) SNB and 2 - 325 (1/4-20) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 Grade 1 standards.
F-24-C-LBR:	Less bottom rod concealed vertical device. "A" Label (3 Hr) – 8' x 8'; 90 min. same egress – 8' x 8'.
Vertical Rods:	Furnished to length based on $40^{\circ}$ horizontal CL to finished floor and a $7^{\circ}0^{\circ}$ door. Variations from these standards must be specified when ordering.
Patented Centerslide:	For ease of adjustment.
Shim Kit:	Consult factory.

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
F-24-C	3′	all	21/4" (6" for wood doors)	2′ 7³⁄⁄8″
F-24-C	4′	all	21/4" (6" for wood doors)	3′ 1¾″

# 24 SERIES ACCESSORIES AND OPTIONS



#### **Removable Mullion**

- The 2923, 4023, KR4023 and 4423 steel mullions are for use with the 24-R devices on double door openings. Advantage: Increased security and tighter closure. Minimizes door warpage and sag. Regulates the flow of in-and-out traffic.
- Removable mullions are easily removed and reinstalled for full width access.
- Rim devices are used on both leaves, attaining a perfectly symmetrical opening.
- The mullion assembly consists of a mullion, top and bottom mounting brackets and a screw pack. Soffit adapters are available for use with either the 2923, 4423 or the 4023 mullion.
- Strikes are not furnished with the mullion (except 4423).
   Please see page 27 for strike information.
- Mullions may be cut on the job for doors under stock lengths.

#### **Mullion Features**

- Mullion fittings ductile iron.
- 4023 2" x 3" x height.
- KR4023 cylinder removable mullion 2" x 3" x height and uses 114" mortise cylinder not furnished.
- 2923 mullion 1½" x 2½" x height.
- 4423 mullion T shape (1" on latch edge) supplied with 4396 adjustable strike.
- · Prime coat only.
- 7' or 8' door opening standard, other door opening as specified.

	24-R DOUBLE DO	OOR APPLICA	TION
Strike	Installed With	Min. Stile	В*
299	2923 mullion	3 ½"	2 3/16"
299	4023 mullion	4″	2 7/16"
264	2923 mullion	3 3/8″	2 1/16"
264	4023 mullion	3 1/8″	2 5/16"
1439	2923 mullion	3 7/16"	1 ½″
1439	4023 mullion	3 <sup>11</sup> /16″	2 1/8"
1606	2923 mullion	3 5/16″	1 ½″
1606	4023 mullion	3 <sup>11</sup> /16″	2 1/8"
4396	4423 mullion	2 <sup>1</sup> / <sub>6</sub> "	11///"

<sup>\*</sup>Backset to vertical center line on the device.

# **Cylinders**

#### **Control Trim**

- · Cylinder supplied only when specified.
- · Cylinders available keyed alike.

-,	 	
_	1 = 1	

# 121/22"

#### **Sex Bolts**

325 (¼"-20 Thread) 425 (#10-24 Thread)

		CI	LINDER REFERENCE
Device	Trim	Standard Key Cylinder	IC Key Cylinder
24 Series Device	Cylinder Dogging	985 - 1 ½" Mortise Cylinder	C987 - 1 <sup>3</sup> / <sub>6</sub> " Mortise Cylinder (Blocking Ring plus Security collar must equal 1/4" Thick)
24 Series Trims	L, K	986 - 1 ½" Mortise Cylinder	C987 - 1 ¾" Mortise Cylinder (Blocking Ring plus Security collar must equal 1/8" MinimumThick)
24 Series Trims	NL - Rim & Surface Vertical (718C, 718NL)	951 - Rim Cylinder	C953 - Rim Cylinder
24 Series Trims	Concealed 718C, 713NL	986 - 1 1/4" Mortise Cylinder. *4831 cam for trim prior to 2/28/12. B520-295 cam for trim after 2/28/12.	C987 - 1 ¾" Mortise Cylinder (Blocking Ring plus Security collar must equal 1/4" Thick)

CYLINDER REFERENCE

# 24 SERIES ACCESSORIES AND STRIKES

#### **Strikes**

#### For Rim Devices



### 264

 $2^{7/8}$ " x  $1^{1/4}$ " x  $^{9/16}$ " ( H x W x D ) Panic device only.



#### 299

 $7^{7/8}$ " x  $1^{1/4}$ " x  $^{13/16}$ " ( H x W x D ) Panic device only.



#### 1439 Blade Stop

top  $1^{3/4}$ " x  $1^{7/8}$ " x  $^{1/2}$ " (H x W x D) Panic device only.





#### For Surface and Concealed Vertical Rod Devices

#### 2130

(F)24-V and (F)24-C standard bottom strike for grouting into concrete or masonry floors.



#### 3788

Furnished top of (F)24-V.



#### 4155

Optional strike.

Panic device only.

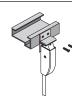


#### 4188

Top strike for (F)24-C.

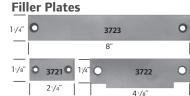


#### **Accessories**



#### 4215

Angle bracket for flush transom applications. Does not require elimination of latch retention feature. Accepts 3788 strike for 24-V device.



#### 3721/3722/3723

Steel Filler Plates
3721 Cylindrical Lock Front Filler
3722 Strike Filler - set no. SC
for 161 cutout
3723 Mortise Lock Front Filler
3722 Strike Filler - set no. SM

for 86 cutout

#### Surface Vertical Extension Rods

Extension rods are available in 12", 24" and 36" lengths in all finishes. Both ends tapped and all-thread included as connector.

#### Concealed Extension Rods

Extension rods are available in 12", 24" and 36". Both ends have pressed-in, threaded inserts.

# **24 SERIES TRIM DESIGNS**

# Lever Trims (712L)













All levers return to within 1/2'' of door. Escutcheon:  $8\frac{1}{8}''$  (H) x  $1\frac{1}{8}''$  (W) (specify handing) brass finish.

Lever is reversible, supplied RHR if not specified. For keyed functions, see page 26 for cylinder requirements.

# Knob Trim (711K)



#### 711K 711-NL

Round Ball Knob Escutcheon: 8½" x 1½" Projection: 3½" Brass

For keyed functions, see page 26 for cylinder requirements.

#### Athena (715)



#### 715DT

Grip overall: 91/8" Width: 111/46" Pull: 61/4" C x C Projection: 21/4"

# **Delta Trims**



# **Cylinder Information**

Key retracts latch bolt. Cylinder sold separately (see page 26).

Brass and/or Plated finishes.

For cylinder information see page 26. When locking function is not required, specify trim by (BE) blank escutcheon.

Specify Handing Escutcheon: 8½" x 1½" Projection: 2½" All Delta pulls: 6½" C x C NL & DT: 14½" x 2½"

# **24 SERIES TRIM CHART & FINISH CHART**

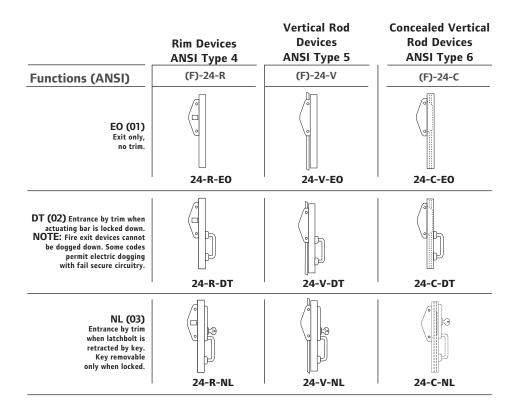
			FUNC	ΓΙΟΝ	
	Lock/Unlock	NL	DT	BE	С
Lever <sup>1</sup> (712)	712L	712L-NL	712L-DT	712L-BE	
Knob (711)	711K	711K-NL	-	711K-BE	
Delta (717)	-	-	717DT	-	
Delta (718)	-	718NL	718DT	-	718C
Athena (715)	-	-	715DT		

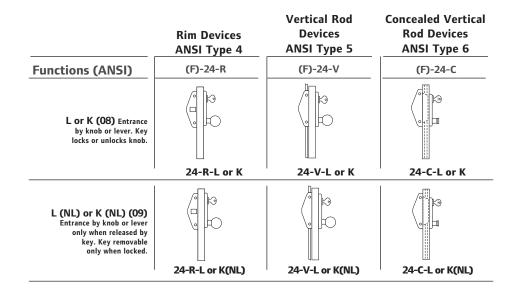
1 Specify hand.

# **24 Series Finishes**

•	Color	US Number	BHMA Number
	Brass, Bright	US3	605
	Brass, Satin	US4	606
	Bronze, Satin	US10	612
	Chromium, Bright	US26	625
	Chromium, Satin	US26D	626
	Anodized Aluminum	US28	628
	Stainless Steel, Bright	US32	629
	Stainless Steel, Satin	US32D	630
	Anodized Duranodic	313AN	710

# 24 SERIES TYPES AND FUNCTIONS





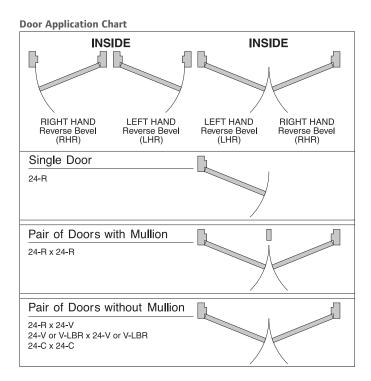
# **24 SERIES DOOR APPLICATION**

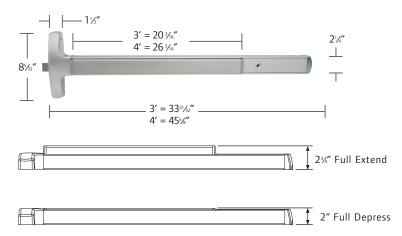
#### **Label Doors**

Falcon models F-24-R, F-24-C and F-24-V are labeled for use as b fire exit hardware.

#### **Door Thickness**

All devices and components supplied for  $1\frac{3}{4}$ " – 3'0" x 7'0" doors standard. Specify door thickness if other than  $1\frac{3}{4}$ ".





Product information and specifications contained in this catalog are subject to change without notice. Please consult the factory.

# **ELECTRIC LATCH RETRACTION**

# Electric Latch Retraction (EL) - for all 24 Series and 25 Series devices.

The Electric Latch Retraction (EL) feature provides control of latch retraction by guard or security system, allowing free entrance from outside or trim side of door. The EL system can be activated to hold the latch open momentarily or for extended peroids of time, and can be interfaced with autmatic doors, card readers, automatic fire alarm systems, etc.



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### **EL System Requirements:**

- The EL application requires the use of the PS914-2RS power supply. See page 39 for more details
- Power transfer hinge or electric power transfer required.
- Solenoid rated for continuous-duty operation with PS914-2RS (required power supply).

### **Functional Options:**

Electric Latch Retraction (EL) can be used in conjunction with Fail Safe/Fail Secure trim and Security Monitoring (DM, LM, RX, LK) features.

# **Common Application Options:**

Battery Backup: For applications that require power even when power is lost the battery backup option will assure power to your EL device. For proper functionality use the PS914 power supply with the -BBK option. Use Suffix "-BBK" for factory installed; example PS914-BB. (See page 32 for more details)

Fire Alarm: This function coordinates the electric latch retraction of one or two devices with the fire alarm. For proper functionality use the PS914 power supply with the -FA option. Use Suffix "-FA" for factory installed. (See page 39 for more details)

Auto Operator: This function coordinates the electric latch retraction of one or two devices, and signals an auto-operator to open a door. Signaling the auto operator can be performed in two methods: by receiving a signal from a monitoriing switch that the lock is unlatched, or upon expiration of a time delay triggered by an "RX" type input switch. For proper functionality use the PS914 power supply with the -4RL option. Use Suffix "-4RL" for factory installed; example PS914-4RL. (See page 39 for more details)

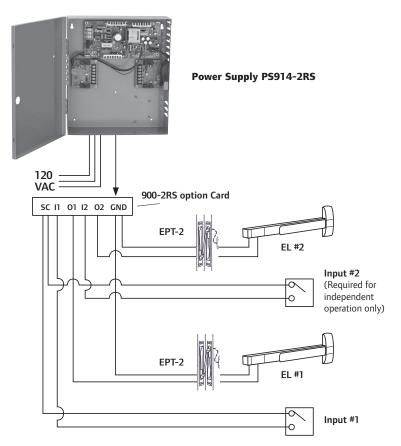
Time Delay: A four zone controller with time delay provides four inputs and four outputs with the time delay. Time Delay is field selectable from 0 to 75 seconds, in intervals of 5 seconds. For proper functionality use the PS914 power supply with the -4RL option. Use Suffix "-4RL" for factory installed; example PS914-4RL. (See page 39 for more details)

#### **How To Order:**

To order the EL feature add "EL" prefix to device designation. (Example: EL-25-R-EO)

# ELECTRIC LATCH RETRACTION APPLICATION AND WIRING / POWER TRANSFER HINGE

# Application and wiring - Electric Latch Retraction (EL)



DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
EL-25-R	3′	299 264 1439 1606	4" 3½" 3½" 35%"	2′ 9³¼″ 2′ 9⁵¼″ 2′ 9³ 2′ 9³½″
EL-25-R	4′	299 264 1439 1606	4" 3½" 3¾" 35%"	3′ 3³¼″ 3′ 3⁵‰″ 3′ 3¹½″ 3′ 3³‰″
EL-24-R	3′	299 264 1439 1606	3½" 3¾" 2¼" 2¾"	2′ 9¾" 2′ 95%" 2′ 9″ 2′ 9¾"
EL-24-R	4′	299 264 1439 1606	3½" 3¾" 2¾" 2¾"	3′ 3¾" 3′ 3¾" 3′ 3¾" 3′ 3¾"
EL-25-V	3′	all	3½″	2′ 9¾″
EL-25-V	4′	all	3½″	3′ 3¾″
EL-24-V	3′	all	21/8"	2′ 9¾″
EL-24-V	4′	all	21/8"	3′ 3¾″
EL-25-C	3′	all	31/2″	2′ 9¾″
EL-25-C	4′	all	31/2″	3′ 3¾″
EL-24-C	3′	all	21/4"	2′ 9¾″
EL-24-C	4′	all	21/4"	3′ 3¾″
EL-25-M	3′	all	41/2"	2′ 9³⁄4″
EL-25-M	4′	all	41/2"	3′ 4¹⁄₄″

# Power Transfer Hinge - Electric Latch Retraction (EL)

An EPT provides a wiring path from the door to the frame. To run power from your power supply to your Falcon 24 or 25 EL device, an EPT can be utilized. Door and frame must be factory prepped.

# **Options**

EPT-2 Used for two 18AWG wires with a max rating of 24VDC, 5A or 120 VAC NEC Class 3.

EPT can be used for:	EPT cannot be used for:	
Door thickness - 1 ¾" minimum	1½" offset pivots	
Note: The following specifications only apply to a 1 ¾ thick door	Larger than 6" butt hinges	
	Pocket Pivots	
0.120	Swing Clear Hinges	
0-130 degree opening with up to 5 1/4" butt hinges	Center Hung Doors (center pivot)	
	Balanced Door	

# **DELAYED EGRESS SYSTEM COMPONENTS**

# Delayed Egress - for all 24 Series and 25 Series

The delayed egress system provides control for limited egress and high security areas which require accident hazard or fire exit hardware.

#### **Delayed Egress Function**

When the Delayed Egress System is armed, the mag lock(s) will remain secure against attempted override pressure and severe impacts. Ingress requires an operational trim, along with access control input (i.e. card reader, key switch, keypad). The system is required to be tied into local fire alarm system.







A complete delayed egress system requires the following components:

**DE5101** is used in delayed exit application and is ideal for controlled areas.

- Key Switch Operator
  - -Arm, disarm, reset and bypass the delayed egress system by the mortise cylinder on the dialogue box.
  - (1-1/4" mortise cylinder sold separately.)
- · LED status indicator
  - -Red LED indicates arm. Disarm and alarm status.
- Alarm Horn
  - -Depression of the Falcon 24 or 25 RX device touchpad initiates a local alarm of 100 db when armed.

#### Falcon 25 Series device with RX switch

#### **PS902 Power Supply**

• **PS902** - The series PS902 power supply is the recommended power supply for use with the delayed egress system. The series PS902 power supply is designed for electric locking or monitoring on single or double door applications. The output power is field selectable for either 24 VDC@1 ampere or 12 VDC@2 ampere. Standard input 120 VAC@0.6 ampere and 240 VAC@3.0 ampere available. The terminal block will accept up to 14 gauge stranded wire. See page 39 for more information.

#### **PS914 Power Supply**

 PS914 - The series PS914 power supply can be safely used with the delayed egress system. See page 39 for more information.

Power Transfer Hinge or Electric Power Transfer - See page 33 for more information.

Magnetic Locks - Schlage electronics M420, M450 or M490 maintains UL Listing.

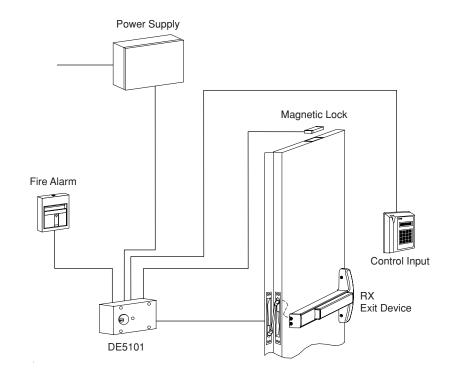
#### **How to Order:**

All components above are sold separately. To order, specify each component to complete a delayed egress system for your application.

# **APPLICATION AND WIRING**

# **Popular Delayed Egress Diagram**

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
25-R	3′	299 264 1439 1606	4" 3 <sup>7</sup> %" 3 <sup>1</sup> /4" 3 <sup>5</sup> %"	2′ 7½″ 2′ 7¾″ 2′ 6¾″ 2′ 7½″
25-R	4′	299 264 1439 1606	4" 3½" 3¾" 3½"	3′ 1½″ 3′ 1¾″ 3′ 1½″ 3′ 1½″
24-R	3′	299 264 1439 1606	3½" 3¾" 2½" 2¾"	2′ 7¹½″ 2′ 7³½″ 2′ 6³½″ 2′ 7¹½″
24-R	4′	299 264 1439 1606	3½" 3¾" 2¾" 2¾"	3′ 1½″ 3′ 1¾″ 3′ 1½″ 3′ 1½″
25-C	3′	all	31/2"	2′ 71⁄⁄8″
25-C	4′	all	31/2"	3′ 11⁄/6″
24-C	3′	all	21/4"	2′ 7¾″
24-C	4′	all	21/4"	3′ 1¾″
25-M	3′	all	41/2"	2′ 7¹½″
25-M	4′	all	4¹½″	3′ 2″



# **ELECTRIC LOCK/UNLOCK TRIM**

### Electric Lock/Unlock Trim (FSA/FSE) - for 25 Series.

The electric lock/unlock (FSA/FSE) feature allows the controlling of trim while still maintaining free egress at all times. The lock/unlock command can be controlled by a security system, fire alarm system, key switch, card reader, push button or touchpad.

**FSA** (Fail Safe–unlocks when power is interrupted) can be used in areas requiring doors to be unlocked due to fire, power failure or emergency situations. (Examples: stairwells, hospitals, fire exits, etc.)

**FSE** (Fail Secure–locks when power is interrupted) can be used in areas requiring doors to be locked for security reasons and only unlocked when energized by authorized personnel. (Examples: banks, inner-office, etc.) With either feature, authorized personnel can gain access utilizing key by overriding or bypassing electric locking function.



#### **Wire Chart**

18 AWG
16 AWG



#### **Specifications**

- · Solenoid rated for continuous duty at 24V DC 0.4 Amps.
- UL Listed devices.
- · Device channel is used as conduit on 25 Series devices.
- Power transfer (EPT-2) hinge 2-wire minimum rated 1/2 Amp.
- See page 35 for more information

#### **How to Order**

To order FSA/FSE feature, add FSA or FSE prefix to device designation. (Example: FSA 25-R-L)

#### Note:

- 1. FSA/FSE can be used on all devices.
- 2. The FSA/FSE feature can be used in conjunction with EL (Electric Latch Retraction), EA (Exit Alarm) and Security Monitoring (DM, LM, RX).

#### **Minimum Power Supply- PS902**

- The series 902 power supply is the recommended power supply for use with an FSA or FSE trim. The series 902 power supply is also designed for electric locking or monitoring of single or double door applications.
- See page 39 for more information

### Exit Alarm (EA) - for all 24 Series and 25 Series devices.

The Exit Alarm (EA) feature provides a battery powered exit alarm to allow for a simple and effective means of monitoring the use of exits while still maintaining means of egress (for code requirements). When the touchbar is depressed the alarm will sound continuously, indicating that the exit has been engaged. The exit alarm can only be reset by way of a standard  $1\frac{1}{4}$  mortise cylinder with standard "A" ( $\frac{5}{16}$ " wide  $\frac{3}{4}$ " long) cam. The design of the unit will allow the single 9V battery to last for at least six months (on standby mode).



#### Minimum door width required for standard devices

DEVICE	Door Size	Door Strike	Min Stile (in)	Min Door Opening Width
EA-25-R	3′	299	4"	2′ 9 1/4″
		264	3 7/8″	2′ 9 1/8″
		1439	3 1/4"	2′ 8 3/8″
		1606	3 5/8″	2′ 8 7/8″
EA-25-R	4′	299	4"	3′ 3 1/4″
		264	3 7/8″	3′ 3 1/8″
		1439	3 1/4"	3′ 3″
		1606	3 5/8″	3′ 2 7/8″
EA-24-R	3′	299	3 1/2"	2′ 9 1/4″
		264	3 3/8"	2′ 9 1/8″
		1439	2 1/4"	2′ 8 3/8″
		1606	2 3/4"	2′ 8 7/8″
EA-24-R	4′	299	3 1/2"	3′ 3 1/4″
		264	3 3/8"	3′ 3 1/8″
		1439	2 3/4"	3′ 2 7/8″
		1606	2 3/4″	3′ 2 7/8″
EA-25-V	3′	ALL	3 1/2″	2′ 8 7/8″
EA-25-V	4′	ALL	3 1/2″	3′ 2 7/8″
EA-24-V	3′	ALL	2 1/8″	2′ 8 7/8″
EA-24-V	4′	ALL	2 1/8″	3′ 2 7/8″
EA-25-C	3′	ALL	3 1/2″	2′ 8 7/8″
EA-25-C	4′	ALL	3 1/2″	3′ 2 7/8″
EA-24-C	3′	ALL	2 1/4″	2′ 9 1/8″
EA-24-C	4′	ALL	2 1/4″	3′ 3 1/8″
EA-25-M	3′	ALL	41/2″	2′ 9 1/4″
EA-25-M	4′	ALL	4 1/2"	3′ 3 1/4″

#### **Specifications**

- Works with rim, mortise, concealed, surface vertical rod
- UL Listed

The EA feature can be used in conjunction with FSA/FSE (Fail Safe/Fail Secure) and Security Monitoring (DM, LM, RX) features.

#### **Features and Benefits**

- · 110 dB Alarm
- · 24 Volt Hardwire Option
- 9V Battery Input
- · External inhibit for card reader
- LED indication
  - Armed
  - Disarmed
  - Low Battery
- EAK retrofit kit avialable for your existing devices

#### **How to Order**

To order EA feature add "EA" prefix to device designation. (Example: EA-25-R-EO)

To order EAK (Exit Alarm Kit) feature order "EAK" plus device length (3' or 4'), type of device (24 or 25 Series) and the finish of your existing device. (Example: EAK-4', 24 Series, US10) (For retrofit application)

#### **Minimum Power Supply - PS902**

The Series PS902 power supply is the recommended power supply for use with the Exit Alarm (EA) option. The series PS902 power supply is designed for electric locking or monitoring on single or double door applications. See page 39 for more information.

# **DEVICE MONITORING**

### Device Monitoring - for most 24 Series and all 25 Series devices\*.

All of the monitoring features available from Falcon provide total flexibility and will interface with any security system. All monitoring switches are dry contact type and are contained within the device, allowing for tamper-resistant operation. Security monitoring features allow monitoring of devices, latches, authorized egress and locking levers. A key override option is available. All of the security monitoring features can be used in any combination with any other Falcon feature. Consult factory for special applications.

#### \*DM, \*LM, RX, Monitoring

- The DM (Device Monitor) feature monitors full latch projection. If the latchbolt is retracted by use of device, or someone tampers with the latchbolt, the switch is activated sending a signal to controlling areas. In devices with the deadlock feature, the deadlatch status is monitored.
- The LM (Latch Monitor) feature monitors full latchbolt retraction. When the latchbolt is fully retracted a signal is sent indicating door (or device) opened status.
- The RX feature monitors the depression of the touch bar or crossbar. Activation of the switch indicates use of a door or that the door is in the dogged condition. This feature is especially useful when used to activate or shunt magnetic locking systems.
- · \*LM/DM not available on F-24-R.

#### **How to Order**

To order any individual or combination of monitor feature(s) add the respective prefix(s) to device designation. (Example: EL-RX-DM-25-V-L-DANE)

#### **Key Override Option (KOR)**

The KOR feature allows authorized personnel to override monitoring features on a door by use of a keyed  $1^{1}/8^{\prime\prime}$  mortise cylinder with  $5/16^{\prime\prime}$  wide x  $3/4^{\prime\prime}$  long standard cam (mortise cylinder not supplied).

Activating KOR feature allows any feature to be disabled for daytime use or when desired by key holder. This is a maintained contact switch. KOR is especially useful for turning on or off magnetic locking systems and electric dogging control (at the door).

This feature is not available with EA feature, cylinder/standard dogging. To order KOR feature add KOR prefix to device designation.

(Example: KOR-DM-24-R-TP)

**Note:** Use of these features may require a power transfer hinge (supplied by others) or additional wires in the power transfer hinge needed for application when combined with other electrified features.

# **POWER SUPPLY**



The PS900 Series is a consolidated line of power supplies and accessories that offer enhanced flexibility and functionality specific to the changing needs of the access control market. The PS900 Series can be used in a variety of applications to convert high voltage AC power into the low voltage DC outputs required by most access control devices. The PS900 Series protects devices downstream by providing Class 2\*, filtered and regulated power. The full line is UL294 certified.

Note: PS906 can provide Class 2 rated outputs when used with 900-8P distribution board.

#### Features:

- Constant output rating at both 12 VDC and 24 VDC provides superior performance; includes field selectable jumper
- Polarized connectors for option boards eliminate need for racks and side connectors
- Flat mounting of option boards provides easier access to terminal blocks for connection of electrified devices
- High voltage protective cover
- Battery back-up board auto-selects voltage
- Fire alarm relay can be configured to provide either switched or un-switched outputs from a power supply
- PS914 designed with high in rush current for powering electrified panic devices
- Universal 120-240 VAC input
- · Low voltage DC, regulated and filtered
- Electronic power limiting foldback circuit for AC current overload protection
- Fused primary input
- · AC status monitor- isolated SPDT contacts
- · AC input and DC output LED status indicators
- Cover mounted AC input indication
- · Hinged cover with lock down screws

#### **Certifications:**

- UL 294 certified—the standard for access control
- · Class 2 rated\*
- \* Except PS906, output rating exceeds Class 2 power limits

Once power is converted to low voltage DC, the PS900 Series offers a variety of distribution options, including basic fuse protection, simple relay, and advanced logic providing complex sequencing and timing functions.

\* PS906 can provide Class 2 rated outputs when used with 900-8P distribution board.

	PS902	PS904	PS906	PS914
Number of Connectors on Power Supply for the following:	2 amps	4 amps	6 amps	4 amps
Distribution Boards	1	2	3	2
Battery Back-up Board	1	1	1	1

Note: One fire alarm board can be connected directly to the PS902. If a fire alarm board is desired for the PS904, PS906 or PS914 it can be connected to a distribution board.

#### **Applications:**

The PS900 Series of power supplies works with many electrified devices including Falcon exit devices, electromagnetic locks, hardwired locks, electrified mechanical locks, electrified strikes and many other products.

#### Accessories:

The PS900 Series features seven option boards for use in a variety of applications. All PS900 Series power supplies option boards are UL 294 certified.

#### **Option Boards:**

**900-4R:** 4 relay controlled output board to power multiple devices

**900-4RL:** 4 relay distribution board with logic is field configurable for time delay function, auto operator, security interlock

**900-8F:** Provides 8 individually fuse-protected outputs, giving the flexibility to power multiple devices and provide another layer of protection

**900-FA:** Emergency interface relay integrates with fire alarm and is used to cut power in case of emergency

900-BB: Battery backup

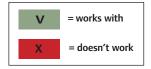
**900-2RS:** 2 relay EL panic device control board (PS914 only)

**900-BBK:** Battery backup kit includes two 7A/hr batteries and provides up to four hours of backup power when cycled every 5 minutes at full load

#### Wire Selection Size / Type

Run Length	EL Device w/ EPT or Door Loop
0-100 ft	14 Gauge Standard Wire
101-200 ft	12 Gauge Standard Wire
Run Length	EL Device w/ Electric Hinge / Pivot
0-75 ft	14 Gauge Standard Wire
76-150 ft	12 Gauge Standard Wire
Wire Selection	Switch Wire Size
1200 ft max.	16 Gauge

# **ELECTRICAL OPTIONS SUMMARY**



# **Electrical Options Matrix - 25 Series**

Option	Electric Dogging	Electric Latch Retraction (EL)	Delayed Egress	Electric Lock/ Unlock Trim (FSA/FSE)	Device Monitor (DM)	Latch Monitor (LM)	Authorized Egress (RX)	Key Override (KOR)	Exit Alarm/ Hard Wire (EA/HWEA)
Electric Latch Retraction (EL)	Х		V	v	V	V	V	x	X
Delayed Egress	V	V		V	V	V	V	V	V
Electric Lock/Unlock Trim (FSA/FSE)	V	v	V		V	V	V	V	V
Device monitor (DM)	V	V	V	V		V	V	V	V
Latch monitor (LM)	V	V	V	V	V		V	V	V
Request to Exit (RX)	V	V	V	V	V	V		V	V
Key Override (KOR)	Х	X	V	V	V	V	V		Х
Exit Alarm (EA)	X	X	V	V	V	V	V	х	

# **Electrical Options Matrix - 24 Series**

Option	Electric Dogging	Electric Latch Retraction (EL)	Delayed Egress	Device Monitor (DM)	Latch Monitor (LM)	Authorized Egress (RX)	Key Override (KOR)	Exit Alarm/ Hard Wire (EA/HWEA)
Electric Latch Retraction (EL)	Х		V	V	V	v	Х	x
Delayed Egress	V	V		V	V	V	V	V
Device monitor (DM)*	V	V	V		V	V	V	V
Latch monitor (LM)*	V	V	V	V		V	V	V
Request to Exit (RX)	V	V	V	V	V		V	V
Key Override (KOR)	Х	Х	V	V	V	V		Х
Exit Alarm (EA)	X	X	V	V	V	V	X	

<sup>\*</sup>Not available on F-24-R

# NOTES

# **HOW TO ORDER 25 SERIES**

How t	to Order Sequ	ience Exam	ıple	EL	F 25	٧	L-DANE	US3	3′	LHR	LBR	SNB	WD
Prefixes CD Cylinder Dogging RX Touchbar Request to Exit DM Latchbolt and Device Monitor Switch EA Exit Alarm KOR Key Bypass Switch LD Less Dogging LM Latchbolt Status Switch EL Electric Latch Retraction FSA Electric Lock or Unlock Trim-Fail Safe FSE Electric Lock or Unlock Trim-Fail Secure													
Rating F Blank	Fire Exit Hardware Panic Exit Hardware												
Device Se		_			_								
	Touch Bar Device, Wide Stile	e											
Device Ty R V C	ype Rim Surface Vertical Rod Concealed Vertical rod		C-WDC		Vertical rod (20 or 90 Min	)							
EO DT NL NL-OP TP	ction (see Trim pages for Exit Only Dummy Trim Night Latch Night Latch Optional Pull Thumbpiece	. da runcuons)	K L C 511-L	Knob Lever (Dan Cylinder Tr VR Trim	e Standard) im Plate								
Finish US3 US4	US10 US26 US26D US32D	US32 313AN	US28										
Door Wid	lth	Door T	hickness										
3′ 4′	Standard Default	1 <sup>3</sup> / <sub>4</sub> " Stan 2 <sup>1</sup> / <sub>4</sub> " Opti	ıdard										
Handing RHR LHR	Right Hand Reverse Left Hand Reverse												
Less Bott	tom Rod Less Bottom Rod												
	•												
Accessori	ies		C D I	h.									
Accessori CYL SK	Cylinder Shim Kit	SNB AMS	Sex Bolt All Macl	hine Screws (fo	or vertical ar	ıd conce	ealed only)						
Other Mi	Cylinder Shim Kit  scellaneous Door Inf	AMS ormation	All Macl	hine Screws (fo		id conce	ealed only)						
CYL SK Other Mi	Cylinder Shim Kit scellaneous Door Inf Hollow Metal Door	AMS	All Macl	hine Screws (fo	nstruction	id conce	ealed only)		Label				
CYL SK Other Mis HMD HMF	Cylinder Shim Kit scellaneous Door Inf Hollow Metal Door Hollow Metal Frame	AMS ormation	All Macl Steel Ch Specify	hine Screws (for nannel Door Co other Door or	nstruction	nd conce	ealed only)	Stile	Nidth	eight			
CYL SK Other Mis HMD HMF WD	Cylinder Shim Kit scellaneous Door Inf Hollow Metal Door Hollow Metal Frame Wood Door	AMS ormation	All Macl Steel Ch Specify Material	nannel Door Co other Door or I information	nstruction	nd conce		Stile ' Fram	Nidth e Stop H	eight			
CYL SK Other Mis HMD HMF	Cylinder Shim Kit scellaneous Door Inf Hollow Metal Door Hollow Metal Frame	AMS ormation	All Macl Steel Ch Specify Material Door He	nannel Door Co other Door or I information	nstruction	id conce	ealed only)  SGL PR	Stile ' Fram Single	Width e Stop H e Door	eight Swinging S	ame Direc	tion	

# **HOW TO ORDER 24 SERIES**

How t	to Order S	Seque	nce Exan	nple	EL	F 24	٧	L-DA	ANE	US3	3′	LHR	LBR	SNE	3
Prefixes CD RX DL DM EA KOR LD LM EL	Cylinder Dogging Touchbar Request Deadlocking Latchbolt and Devi Exit Alarm Key Bypass Switch Less Dogging Latchbolt Status Sv Electric Latch Retra	ice Monitor Sv	vitch												
Rating F Blank	Fire Exit Hardware Panic Exit Hardwar														
Device Se	e <b>ries</b> Touch Bar Device,	Narrow Stile				_									
Device Ty R V	<b>/pe</b> Rim Surface Vertical Ro	od		C C-WDC	Concealed Concealed Wood Door	Vertical ro	d								
Trim Fund EO DT NL C	<b>ction</b> (see Trim p Exit Only Dummy Trim Night Latch Cylinder Trim Less		functions)	K L	Knob Lever (Dan	e Standarc	)								
Finish US3 US4		US26 US32D	US32 US28	313AN											
Door Wid 3' 4'	<b>Ith</b> Standard Default		<b>Door</b> 1 <sup>3</sup> / <sub>4</sub> " St 2 <sup>1</sup> / <sub>4</sub> " Op		ss										
Handing RHR LHR	Right Hand Reverse Left Hand Reverse														
Less Bott	tom Rod Less Bottom Rod														
Accessori CYL SK	i <b>es</b> Cylinder Shim Kit		SNB AMS	Sex Bol	ts hine Screws (fo	or vertical a	and conce	ealed only	<i>'</i> )						
Other Mis HMD HMF WD WDF ALD ALF	AMS  Aiscellaneous Door Information  Hollow Metal Door Hollow Metal Frame Wood Door Wood Frame Aluminum Door Aluminum Frame  AMS  SCDC  AMS  AMS			Specify Materia Door He	Steel Channel Door Construction _ Specify other Door or Frame _ Material information _ Door Height					Door Label Stile Width Frame Stop Height Single Door Pair of Doors Swinging Same Direction					

<sup>\*</sup>Not available for F-24-R



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