7000 Series

Architectural Exit Devices

ASSA ABLOY

introduction

Yale® 7000 series exit devices deliver an unparalleled combination of durability, breadth of line, innovation and aesthetics.

As the most recognized name in the door hardware industry, *Yale* offers a proven selection of hard-working exit devices. The simple, clean lines of our wide and narrow stile devices are visually appealing and bring a gracious totality to the Yale line of locks and hardware.

To meet electronic access control needs, *Yale* 7000 series exit devices come with a full array of electromechanical options and accessories. The 7000 series can be effortlessly integrated into existing security or fire alarm systems to ensure every opening is safeguarded.

Today's architecture stresses the safety and security of a building's contents, the most important of these being people. Reducing the consequences of potential risks is the goal of any designer. By mounting panic and fire exit devices, vandals are deterred, but swift, unobstructed egress is permitted. *Yale* 7000 series exit devices meet life safety codes and fire safety requirements, allowing for local ordinances to be met and allowing peace of mind for the people inside.

contents

7000 series features

Durability
- Steel chassis and heavy-duty components for superior strength, robustness and lower maintenance

Breadth and Innovation
- Full range of mechanical and electromechanical options for security and life safety applications
- Patented security features including SquareBolt® latchbolts (Pat. no. 5,605,362) and delayed egress exit devices (Pat. no. 7,469,942).

Aesthetics
- Clean, modern, sleek design
- High-quality attractive architectural finishes deliver consistency & durability

7100(F) series

A conventional exit device for single swing doors or pairs of doors of metal, wood or composite construction.

7200 series

A narrow stile exit device compatible with the aesthetics and function requirements of contemporary doors of aluminum or metal construction.

7200M(F) series

A narrow appearance exit device designed for wide or flush stile doors of metal, wood or composite construction.

finishes

ANSI/ BHMA Code	Finish Description	ANSI/ BHMA Code	Finish Description
605	Bright Brass, Clear Coated	619	Satin Nickel Plated, Clear Coated
606	Satin Brass, Clear Coated	620	Satin Nickel Plated, Blackened, Satin Relieved, Clear Coated
609	Satin Brass, Blackened, Satin Relieved, Clear Coated	625	Bright Chrome Plated (540F trim only)
611	Bright Bronze, Clear Coated	626	Satin Chrome Plated (trim only) MicroShield®
612	Satin Bronze, Clear Coated	629	Bright Stainless Steel
613	Dark Oxidized Satin Bronze, Oil Rubbed [1]	630	Satin Stainless Steel MicroShield®
613E	Dark Oxidized Satin Bronze - equivalent	693	Black Painted
616	Satin Bronze, Blackened, Satin Relieved, Clear Coated	722	Black Oxidized Bronze, Oil Rubbed [2]

Finishes For Touchbar Covers Only	
BN[3]	Semi-gloss black fused polymer
LUM	Lumi-Lite® Photoluminescence
SS	Stainless Steel

1. New May1, 2010
2. Formerly 613 prior to May 1, 2010
3. Standard for device accent parts and strikes

Finish available with MicroShield® antimicrobial coating, additional finishes by special application. Consult factory for availability.

features

squarebolt® exit device

A revolutionary security and safety exit device from Yale®, the *SquareBolt* patented design (Pat. no. 5,605,362) presents an improved physical barrier over standard rim latchbolts.

Available in wide stile, narrow stile, and narrow appearance designs, the *SquareBolt* exit device locks into place and stays there. Credit cards, crowbars, door rattling and shaking are resisted, significantly reducing the threat of unauthorized entry.

electrified exit devices

The *Yale* 7000 series exit device offers a complete range of electrical options:

- Latch Pullback
- Electric Dogging
- Mortise Device Trim Control
- Touchbar Monitor or Signaling
- Outside Trim Monitor or Signaling
- Latchbolt Position Monitor or Signaling
- Delayed Egress (Pat. no 7,469,942)
- Electric Trim Control
- Exit Alarm

Continuity in appearance, security and functions with the 7000 Series mechanical exit devices is maintained.

7000 series electrified exit devices may be integrated into the security and alarm monitoring systems of most buildings.

windstorm

Certified (refer to local codes). **Hurricane**
Specify suffix "WS" to 7150(F), 7170(F) or 7250M(F) devices.

warranty

- Mechanical exit devices and heavy-duty trim carry a five-year limited warranty.
- Utility-duty trim carries a one-year limited warranty.
- Electrical options and components carry a two-year limited warranty.

microshield®

7000 series exit devices and trim are available with MicroShield® antimicrobial coating. *MicroShield* is a revolutionary hardware finish coating, using a silver ion based technology, which inhibits the growth of bacteria, algae, yeast, fungus, mold and mildew. *MicroShield* is non-toxic and lasts for the lifetime of the finish to which it is applied. To order, suffix option code "YMS".

Note: *MicroShield* coating may vary finish color from architectural standards. *MicroShield* is not intended as a substitute for traditional infection control programs such as hand hygiene or use of disinfectants. Coated products must still be cleaned to insure the surfaces will be free of destructive microbes. Yale makes no representations or warranties, express or implied, as to the efficacy of the *MicroShield* antimicrobial. A copy of the *MicroShield* warranty is available upon request.

lumi-lite®

Lumi-lite uses photoluminescence technology to provide visibility of exit doors in low-light, no light or smokey conditions. *Lumi-lite* absorbs ambient lighting which is then emitted when the light source is diminished or eliminated. This patent pending feature is provided as an option for the touchpad cover for the 7000 series exit devices. To order with device, suffix option code "LUM".

The touchpad cover can also be ordered separately and easily retrofits to existing 7000 series exit devices in the field.

Touchpad cover comes standard with the word "EXIT" centered on the top half in approximately 1" high lettering.

performance standards

UL - cUL Panic Exit Listing: Doors up to 4'0" x 10'0"* (1.22m x 3.05m), single swing or pairs.

UL - cUL Fire Exit Label: Doors up to 4'0" x 10'0" (1.22m x 2.44m), single swing or pairs.

*UL does not set height limitations on panic devices.

Listing Agency	Listing Number			
	Panic Exit Devices	Fire Exit Devices	Windstorm Rated Assembly	Latching Hardware
Underwriters Laboratories, Inc.	(FVSR)	(GXHX)	(ZHLA)	(ZHEM)
California Fire Marshal	4140-0257: 111	3725-0257: 112		
New York City	MEA: 477-91-E MEA: 333-05-M			
B.H.M.A. (ANSI A156.3)	Directory of Certified Exit Devices			
B.H.M.A. (ANSI A156.24)	Directory of Certified Delayed Egress Exit Devices			

Note: Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Yale Locks & Hardware makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.
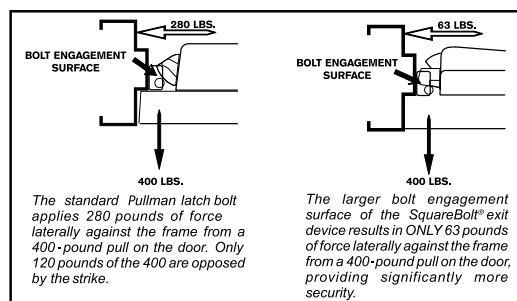
free-wheeling lever trim

All *Yale* exit device trims (except mortise trim) feature the unique Free-Wheeling lever mechanism, similar to our 5400LN cylindrical lock. This Free-Wheeling trim features a clutch mechanism which allows the lever to float down 60 degrees when operated in the locked condition, greatly improving vandal resistance.

SquareBolt®

7150(F)

Just as easy to open as traditional latchbolts, the SquareBolt® exit device's unique construction offers innovative protection. Its patented *SquareBolt* (Pat. no. 5,605,362) design presents an improved physical barrier over standard rim latchbolts. The *SquareBolt* exit device locks into place and stays there. Credit cards, crowbars, door rattling and shaking are resisted, significantly reducing the threat of unauthorized entry.

BOLT ENGAGEMENT SURFACE — 280 LBS. / 400 LBS.
The standard Pullman latch bolt applies 280 pounds of force laterally against the frame from a 400-pound pull on the door. Only 120 pounds of the 400 are opposed by the strike.

BOLT ENGAGEMENT SURFACE — 63 LBS. / 400 LBS.
The larger bolt engagement surface of the SquareBolt® exit device results in ONLY 63 pounds of force laterally against the frame from a 400-pound pull on the door, providing significantly more security.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
GXHX/GXHX7 - Fire exit hardware (F)
(4' x 8' single, 8' x 8' pairs, 3 hr.)
ZHEM - Latching hardware
ZHLA - Windstorm rated assemblies

ANSI/BHMA Certified: A156.3 Type 1 or 28, Grade 1
U.S. Patent #: 5,605,362

BHMA CERTIFIED

features

- Patented *SquareBolt* security deadbolt (Pat. no. 5,605,362) designed for maximum holding power
- Non-handed for easy installation
- Can be retrofitted onto existing 7100 series templated doors
- Fully adjustable surface-mounted 3/8" diameter roller strike complete with positive locking plate and shims
- Available in double cylinder function (handing must be specified)
- Available certified hurricane resistant (refer to local codes). Specify 7150(F)WS **Hurricane**

applications

- Single swing doors
- Pairs of doors with removable mullions
- Metal, wood or composite door materials

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Thickness:	1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness when ordering.
Minimum Stile Width:	4-1/2" (114mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Deadbolt:	Patented 1" (25mm) slide projection bolt with full 3/4" (19mm) projection
Strike:	757F, 793 optional (double door application, panic only)
Fasteners:	Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.
Trims:	620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim, 121NL cylinder only. See pages 27-29.
Dogging:	Hex key dogging supplied standard on panic devices
Options:	Cylinder dogging, shim kit #723, sex nuts and bolts, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

rim

7100(F)

The 7100(F) is a rim exit device to be used with single doors or pairs of doors constructed of metal, wood or composite materials. Designed for application in high-use areas, the 7100(F) comes in a variety of finishes and can be combined with a variety of trims to match any desired style.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
GXHX/GXHX7 - Fire exit hardware (F)
(4' x 8' single, 8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 1, Grade 1

features

- Designed for wide stile doors
- 3/4" throw deadlocking stainless steel pullman latchbolt
- Electroplated ferrous components provide corrosion resistance
- Available in double cylinder function (handing must be specified)

applications

- Non-handed for easy installation
- Single swing doors
- Pairs of doors with removable mullions
- Metal, wood or composite door materials

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Thickness:	1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness when ordering.
Minimum Stile Width:	4-1/2" (114mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	3/4" (19mm) deadlocking stainless steel pullman-type
Strike:	757F, 793 optional (double door application, panic only)
Fasteners:	Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.
Trims:	620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim, 121NL cylinder only. See pages 27-29.
Dogging:	Hex key dogging supplied standard on panic devices
Options:	Cylinder dogging, shim kit #723, sex nuts and bolts, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

surface vertical rod

7110(F)

The 7110(F) is a surface vertical rod exit device to be used on wide stile or flush doors up to 8' (fire) and 10' (panic) where two-point latching is desired.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
GXHX/GXHX7 - Fire exit hardware (F)
(8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 2, Grade 1   **BHMA** CERTIFIED

features

- Designed for wide stile and flush doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

applications

- Pairs of doors
- Double egress
- Metal, wood or composite door materials

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Opening Height:	Standard door height 7' (213cm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights up to 8' (fire) and 10' (panic) available by using rod extensions. For fire rated openings over 8', see 7170F SVR.
Door Thickness:	1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness when ordering.
Minimum Stile Width:	4-1/2" (114mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	Top: 3/4" (19mm) throw, pullman-type with automatic deadlatching Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing
Vertical Rods:	1/2" O.D. tubular brass, bronze or stainless steel with rod guides
Strike:	Top: Roller type 791. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).
Fasteners:	Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.
Trims:	620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim. See pages 27-29.
Dogging:	Hex key dogging supplied standard on panic devices
Options:	Cylinder dogging, shim kit #724, sex nuts and bolts, rod extensions, bottom pullman latch (panic only) MicroShield®, Lumi-Lite®
Warranty:	5-year limited

concealed vertical rod

7120(F)

The 7120(F) is a concealed vertical rod exit device to be used on metal doors only up to 8' (fire) and 10' (panic) where two-point latching is desired.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
GXHX/GXHX7 - Fire exit hardware (F)
(8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 8, Grade 1   **BHMA** CERTIFIED

features

- Designed for wide stile and flush doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

applications

- Pairs of doors
- Double egress
- Metal doors only

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Opening Height:	Standard door height adjustable to 8' (244cm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights up to 10' (panic) available by using rod extensions. For fire rated openings over 8', see 7160F CVR.
Door Thickness:	1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm) optional; specify when ordering.
Minimum Stile Width:	4-1/2" (114mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	Top: 3/4" (19mm) throw, pullman-type with automatic deadlatching Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing
Vertical Rods:	1/2" (13mm) O.D. telescoping tubular rods
Strike:	Top: Roller type 791 (panic and fire). Bottom: Flush mounted 790 (panic and fire). 794 floor strike optional (threshold openings).
Fasteners:	Machine screws standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.
Trims:	620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim. See pages 27-29.
Dogging:	Hex key dogging supplied standard on panic devices
Options:	Cylinder dogging, shim kit #723, sex nuts and bolts, rod extensions, bottom pullman latch (panic only) MicroShield®, Lumi-Lite®
Warranty:	5-year limited

mortise

7130(F)

The 7130(F) is an exit device integrated with the Yale® 8700 Series Mortise Lock for use on single doors or active leaf of a pair of doors where life safety and extra security are required. The 8700 Series Mortise Lock used is modified for use with exit devices only.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
GXHX/GXHX7 - Fire exit hardware (F)
(4' x 8' single, 8' x 8' pairs, 3 hr.)
(4' x 9' single, 8' x 9' pairs, 1-1/2 hr.)

ANSI/BHMA Certified: A156.3 Type 3, Grade 1   **BHMA**
CERTIFIED

features

- Designed for wide stile and flush doors
- Handed; specify hand
- Two-piece mechanical 3/4" throw deadlocking stainless steel latchbolt
- Easily disassembles for maintenance and service
- Available in double cylinder function

applications

- Single swing doors
- Pairs of doors with vertical rod devices or automatic flush bolts
- Metal, wood or compatible door materials

Order as follows, according to function.	
7130-K5(F)	(01) Exit only.
	(02) Entry by pull or rigid knob when dogged.
	(03) Key retracts latchbolt.
	Electrical control for 652F knob trim, w/wo key override.
7130-L5(F)	(02) Entry by rigid lever when dogged.
	(03) Key retracts latchbolt.
	Electrical control for 652F lever trim, w/wo key override.
7130-T5(F)	(02) Entry by pull when dogged. (03) Key retracts latchbolt.
7130-K8(F)	(08) Entry by knob lock/unlocked by key or knob only (passage).
7130-L8(F)	(08) Entry by lever lock/unlocked by key or lever only (passage).
7130-L8(F)-2	(08) Entry by lever lock/unlocked by key either side or lever only (passage).
7130-T8(F)	(05) Entry by thumbpiece lock/unlocked by key or thumbpiece only (passage).

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Thickness:	1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm) optional; specify when ordering.
Minimum Stile Width:	4-1/2" (114mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	Two piece mechanical 3/4" (19mm) deadlocking stainless steel with anti-friction insert and auxiliary deadlocking latch
Strike:	Curved lip, non-handed 798. Optional 712 for door pairs with astragals. Optional 718 open back strike.
Fasteners:	Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.
Trims:	620F/650F series escutcheon trim, 630F/660F/670F series pull/thumbpiece trim, 684F offset pull trim. See pages 27-29.
Dogging:	Hex key dogging supplied standard on panic devices
Options:	Cylinder dogging, shim kit #723, sex nuts and bolts, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

7200 series applications

introduction

7200 Series narrow stile exit devices are designed for aluminum openings and are compatible with the aesthetics and functional requirements of contemporary glass doors. The device features lines chosen by leading architects and is available with the proven SquareBolt® exit device for increased security.
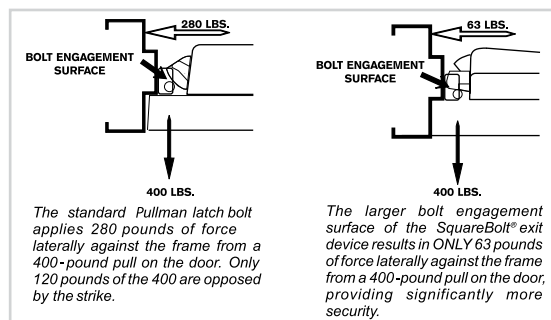
applications

Single Door	UL Listing	Maximum Opening	Application	
SquareBolt®				
7250	Panic	4' x *	Surface applied; single-point latching.	
Rim				
7200	Panic	4' x *	Surface applied; single-point latching.	
Surface Vertical Rod				
7210	Panic	4' x 10'	Surface applied; two-point latching.	
Concealed Vertical Rod				
7220	Panic	4' x 10'	Rods concealed in door; two-point latching.	

Pair of Doors	UL Listing	Maximum Opening	Application	
Surface Vertical Rod				
7210 x 7210	Panic	8' x 10'	Two independent doors with two-point latching, swinging in the same direction.	
Surface Vertical Rod (Double Egress)				
7210 x 7210	Panic	8' x 10'	Two independent doors with two-point latching, swinging in opposite directions.	
Concealed Vertical Rod				
7220 x 7220	Panic	8' x 10'	Two independent metal doors with two-point latching, swinging in the same direction.	
Concealed Vertical Rod (Double Egress)				
7220 x 7220	Panic	8' x 10'	Two independent metal doors with two-point latching, swinging in opposite directions.	

Pair of Doors with Removable Mullion	UL Listing	Maximum Opening	Application	
SquareBolt® x SquareBolt®				
7250 x 7250 x M300	Panic	8' x 10'	Two independent active doors with removable mullion.	
Rim x Rim				
7200 x 7200 x M300	Panic	8' x 10'	Two independent active doors with removable mullion.	

*UL does not set a door height limitation on panic applications.

SquareBolt®

7250

The unique construction of the *SquareBolt* exit device offers innovative protection. The patented square latchbolt design provides an improved physical barrier over standard pullman-type rim latchbolts. It locks into place and stays there. Credit cards, crowbars, door rattling and shaking are resisted, significantly reducing the threat of unauthorized entry, especially in applications that include removable mullions. The 7250 *SquareBolt* is designed for narrow stile doors.

BOLT ENGAGEMENT SURFACE — 280 LBS. / 400 LBS.

The standard Pullman latch bolt applies 280 pounds of force laterally against the frame from a 400-pound pull on the door. Only 120 pounds of the 400 are opposed by the strike.

BOLT ENGAGEMENT SURFACE — 63 LBS. / 400 LBS.

The larger bolt engagement surface of the SquareBolt® exit device results in ONLY 63 pounds of force laterally against the frame from a 400-pound pull on the door, providing significantly more security.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3, Type 4 or 28, Grade 1
U.S. Patent #: 5,605,362

features

- Patented *SquareBolt* security deadbolt (Pat. no. 5,605,362) designed for maximum holding power
- Non-handed for easy installation
- Maintains the look of the Yale® 7200 series architectural exit devices, allowing for continuity in both design and finish
- Fully adjustable surface mounted 3/8" diameter roller strike complete with positive locking plate and shims
- Used with narrow stile trim

applications

- Single swing narrow stile doors
- Pairs of narrow stile doors with removable mullions
- Metal and aluminum doors
- For panic-rated doors only

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Thickness:	1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm); specify when ordering.
Minimum Stile Width:	2" (51mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Deadbolt:	Patented 1" (25mm) slide projection bolt with full 3/4" (19mm) projection
Strike:	Standard: 759. Optional: 793 (double door applications, panic only)
Fasteners:	Machine screws standard for panic hardware
Trims:	500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.
Dogging:	Hex key dogging supplied standard
Options:	Cylinder dogging, shim kit #723NS, sex nuts and bolts, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

rim

7200

The 7200 is a narrow stile rim exit device compatible with the aesthetics and functional requirements of contemporary doors. The 7200 comes in varied finishes and can be combined with a variety of trims to match any desired style.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3, Type 4, Grade 1   **BHMA CERTIFIED**

features

- Designed for narrow stile doors
- 3/4" throw deadlocking stainless steel pullman latch
- Non-handed for easy installation

applications

- Single swing narrow stile doors
- Pairs of narrow stile doors with removable mullions
- Metal and aluminum doors
- For panic-rated doors only

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Thickness:	1-3/4" (44mm) standard. 2" (51mm) and 2-1/4" (57mm); specify when ordering.
Minimum Stile Width:	2" (51mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	3/4" (19mm) deadlocking stainless steel pullman type.
Strike:	Standard: 759. Optional: 793 (double door applications, panic only)
Fasteners:	Machine screws standard for panic hardware
Trims:	500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.
Dogging:	Hex key dogging supplied standard
Options:	Cylinder dogging, shim kit #723NS, sex nuts and bolts, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

surface vertical rod

7210

The 7210 is a narrow stile surface vertical rod exit device to be used on narrow stile, aluminum and metal doors where two-point latching is desired.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
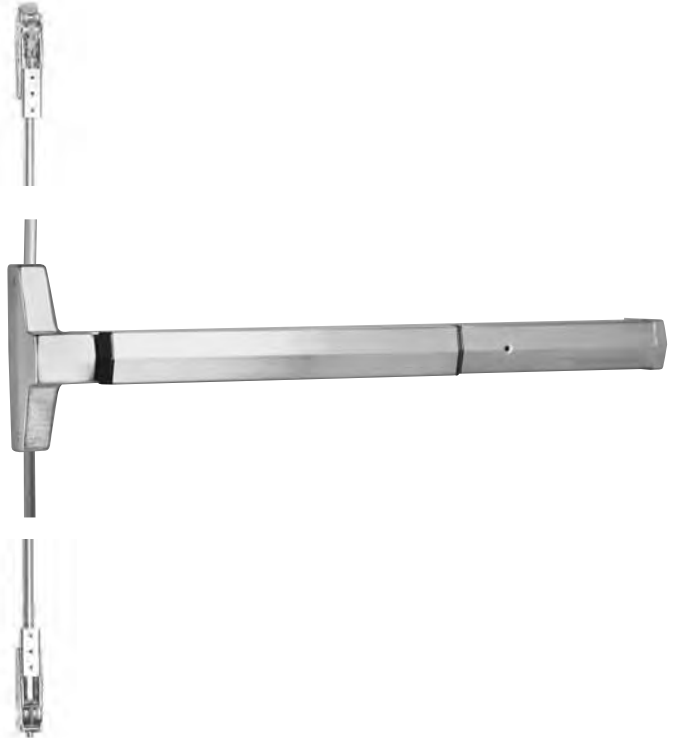
ANSI/BHMA Certified: A156.3 Type 5, Grade 1 **BHMA** CERTIFIED

features

- Designed for narrow stile doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

applications

- Pairs of narrow stile doors
- Metal and aluminum doors
- For panic-rated doors only

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Opening Height:	Standard door height 7' (213mm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights specify suffix -8, -9, -10.
Door Thickness:	1-3/4" (44mm) standard. 2" (51mm) and 2-1/4" (57mm); specify when ordering.
Minimum Stile Width:	2" (51mm).
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	Top: 3/4" (19mm) stainless steel throw, pullman-type with automatic deadlatching. Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing.
Vertical Rods:	1/2" (13mm) O.D. tubular brass, bronze or stainless steel with rod guides.
Strike:	Top: Roller type 791. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).
Fasteners:	Machine screws standard for panic hardware.
Trims:	500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.
Dogging:	Hex key dogging supplied standard
Options:	Cylinder dogging, shim kit #724, sex nuts and bolts, -8, -9, -10 opening height, rod extensions, bottom pullman latch, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

concealed vertical rod

7220

The 7220 is a narrow stile concealed vertical rod exit device to be used on narrow stile, aluminum and metal doors where two-point latching is desired.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware

ANSI/BHMA Certified: A156.3 Type 6, Grade 1

features

- Designed for narrow stile doors
- Handed. Specify hand (field reversible)
- Bottom deadbolt for secure latching
- Fully adjustable roller strike

applications

- Pairs of narrow stile doors
- Metal and aluminum doors
- For panic-rated doors only

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Opening Height:	Standard door height adjustable to 8' (244cm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights specify suffix -9, -10
Door Thickness:	1-3/4" (44mm) standard. 2" (51mm) and 2-1/4" (57mm); specify when ordering.
Minimum Stile Width:	2" (51mm).
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	Top: 3/4" (19mm) stainless steel throw, pullman-type with automatic deadlatching. Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing.
Vertical Rods:	1/2" (13mm) O.D. telescoping tubular rods
Strike:	Top: Roller type 791. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).
Fasteners:	Machine screws standard for panic hardware.
Trims:	500F series escutcheon trim, 510F series pull/thumbpiece trim, 480F series offset pull trim. See pages 30-31.
Dogging:	Hex key dogging supplied standard
Options:	Cylinder dogging, shim kit #723NS, sex nuts and bolts, -9, -10 opening height, rod extensions, bottom pullman latch, MicroShield®, Lumi-Lite®
Warranty:	5-year limited

trim designs for escutcheons

standard

Arcadia AR ♿	Augusta AU ♿	Carmel CR ♿	Jefferson JN ♿
Projection: 3-1/4" (82mm)	Projection: 2-5/8" (61mm)	Projection: 3-1/8" (79mm)	Projection: 2-9/16" (65mm)
Monroe MO ♿	Pacific Beach PB ♿	Pinehurst PN ♿	Virginia VI ♿
Projection: 3" (76mm)	Projection: 3-5/16" (84mm)	Projection: 3-1/16" (78mm)	Projection: 3-1/8" (79mm)
Hampton HA ♿	Copenhagen CO	Litchfield LF	
Projection: 3-3/8" (86mm)	Projection: 3-1/2" (90mm)	Projection: 2-7/8" (73mm)	

Note: Projection dimensions are provided using the 620F series escutcheon plates.

Reflections®   ♿

	TB	UB	TC	UC				
Hudson Projection	3-1/16" (78mm)	3-1/4" (83mm)	3" (76mm)	3-7/16" (87mm)				
	TE	TI						
Danube Projection	3" (76mm)	3-3/8" (85mm)						
	TG	TO	TJ	TK				
Seine Projection	2-13/16" (71mm)	3-1/2" (89mm)	3-1/16" (78mm)	3-1/4" (83mm)				
	TM	TN	TP	TR	TS	TQ		
Thames Projection	3-1/16" (78mm)	3-1/16" (78mm)	3-5/16" (84mm)	3-1/16" (78mm)	3-1/8" (80mm)	3-1/16" (78mm)		
	TT	TU	TV	TW	UW	TX	UX	TU	TZ
Victoria Projection	2-11/16" (68mm)	3-1/4" (83mm)	3-1/2" (89mm)	3" (76mm)	3-7/16" (87mm)	3-5/8" (92mm)	3-7/16" (87mm)	3-5/16" (84mm)	3-7/16" (87mm)

Note: Projection dimensions are provided using the 620F series escutcheon plates.

7100 series trims

620F and 650F series escutcheon trim

- Certified ANSI/BHMA A156.3, Grade 1. **BHMA CERTIFIED**
- Trim through-bolts to exit device for strength.
- Beveled sides improve attack resistance.
- Solid forged escutcheon and Free-Wheeling trim resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.
- 1-3/4" (44mm) door standard. For doors through 2-1/4" (57mm) or shim-mounted devices, specify on order.
- Dimensions: 3" x 10-1/4" x 13/16" (76mm x 260mm x 19mm).
- Cylinders not included. See page 42 & 44 for cylinder options. 1-1/2" mortise cylinder required for mortise trim.

- Available with AR, AU, CR, JN, MO, PB, PN, VI, HA lever designs and CO, LF knob designs. See page 26.
  - Finishes: 605, 606, 609, 611, 612, 613, 613E, 616, 619, 620, 626, 629, 630, 693, 722
- Available with Reflections® lever designs. See page 26.
  - Finishes: 605, 606, 611, 612, 613, 613E, 619, 626, 629, 630, 722
- Trim ordering example: AU626F x 626 x RHR.
- 5-year limited warranty.

Application	Cylinder	Classroom/ Storeroom Cylinder Controls Thumbturn	Exit Only Blank Plate	Nightlatch Access by Key	Classroom/ Storeroom Cylinder Controls Knob	Nightlatch Cylinder by Knob	Passage Active Knob	Dummy Trim Rigid Knob	Classroom Cylinder Controls Lever	Storeroom Cylinder Controls Lever	Nightlatch Cylinder by Lever	Passage	Dummy Trim Free-Wheeling	Dummy Rigid Lever
7100(F) 7150(F) 7110(F) 7120(F) 7160(F) 7170(F)	Rim	603F[1]	620F	621F[2]	622F[1]	623F[2]	624F	625F	626F	626F[1]	627F[2]	628F	628F[1]	629F
7130(F)	Mortise	—	620F	651F	652F[3]	652F	654F	654F	656F	—	656F	658F	—	658F
7100(F)-2 7150(F)-2	Rim x Rim	—	—	—	—	—	—	—	626F	—	—	—	—	—
7130(F)-2	Mortise x Rim	—	—	—	—	—	—	—	656F	—	—	—	—	—
ANSI		11/12	01	03	08/09	03	14	02	08	09	03	14	02	02

[1] 09, 12 and Free Wheeling 02 achieved with single trim modification at installation.
[2] Not recommended for use with vertical rod devices.
[3] 08 only
For 626, 629 & 630 finishes the escutcheon is plated to simulate stainless steel.
For 629 & 630 finishes the standard levers are plated to simulate stainless steel.
Free-Wheeling is not available on mortise trim.
For 620F series trim, optional door thickness available up to 4-1/2", specify on order.

Yale®

7100 series trims

630F, 660F and 670F series pull/thumbpiece trim

- Certified ANSI/BHMA A156.3, Grade 1. **BHMA CERTIFIED**
- Trim through-bolts to exit device for strength.
- Beveled sides improve attack resistance.
- Solid forged escutcheon resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.
- 1-3/4" (44mm) door standard. For doors through 2-1/4" (57mm) or shim-mounted devices, specify on order.
- Plate Dimensions: 2-3/4" x 15-1/2" x 5/8" (70mm x 394mm x 16mm).

- Pull Dimensions: 6-7/16" (164mm) on centers x 2-1/8" (54mm) projection.
- Cylinders not included. See page 42 & 44 for cylinder options. 1-1/2" mortise cylinder required for mortise trim.
- Finishes: 605, 606, 609, 612, 613, 613E, 616, 619, 620, 626, 629, 630, 693, 722
- Trim ordering example: 630F x 630
- 5-year limited warranty.

Applications	Cylinder	Exit Only Blank Plate	Nightlatch Access by Key	Nightlatch Cylinder by Pull	Classroom Cylinder Controls T-Piece	Storeroom Cylinder Controls T-Piece	Dummy Trim Pull Plate	Passage Active T-Piece
7100(F) 7150(F) 7110(F) 7120(F) 7160(F) 7170(F)	Rim	630F	631F[2]	632F[2]	633F	633F[1]	634F	635F
7100(F)-2 7150(F)-2	Rim x Rim	—	—	—	633F	—	—	—
7130(F)	Mortise	630F K5F	661F K5F	662F K5F	673F T8F	—	634F K5F	675F T8F
7130(F)-2	Mortise x Mortise	—					—	—
ANSI		01	03	03	05	06	02	15

[1] **06 achieved with single trim modification at installation.**
[2] **Not recommended for use with vertical rod exit devices.**
For 630F series trim, optional door thickness available up to 4-1/2", specify on order.

For 626, 629 & 630 finishes the escutcheon is plated to simulate stainless steel.

680F series offset pull trim

- 1-3/4" (44mm) door standard. For doors through 2-1/4" (54mm) or shim-mounted devices, specify on order.
- Plate Dimensions: 3" x 10-1/4" x 13/16" (76mm x 260mm x 21mm)
- Pull Dimensions: 7-1/4" (184mm) on centers x 2-13/32" (61mm) projection.
- Trim through-bolts to exit device for strength.
- Beveled sides improve attack resistance.
- Solid forged escutcheon resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.
- Cylinders not included. See page 42 & 44 for cylinder options. 1-1/2" mortise cylinder required for mortise trim.
- Finishes: 605, 606, 609, 611, 612, 613, 613E, 616, 619, 620, 626, 629, 630, 693, 722
- Trim ordering example: 681F x 630 x LHR
- 5-year limited warranty

Applications	Cylinder	Dummy Pull	Nightlatch Access by Key	
7100(F) 7150(F) 7110(F) 7120(F) 7160(F) 7170(F)	Rim	680F	681F*	—
7130(F) 7130(F)-2	Mortise	—	—	684F
ANSI	—	02	03	—

*Not recommended for use with vertical rod exit devices.
For 626, 629 & 630 finishes the escutcheon is plated to simulate stainless steel.

SecureX® electrified options

The Yale® 7000 Series exit devices offer a complete range of electrical options. A continuity in appearance, security and functions with the 7000 Series mechanical exit device is maintained. These electrified exit devices may be integrated into the monitoring security and alarm systems of most buildings.

electrified options

Model #	Exit Device Description	A	B	D	G	H	O	P	S	SAFE	SECURE	690F	691F
7100(F)	Rim Device (Wide)	x	x	x	x	x	x	x	x			x	x
7110(F)	Surface Vertical Rod (Wide)	x	x	x	x		x	x	x			x	x
7120(F)	Concealed Vertical Rod (Wide)	x	x	x	x		x	x	x			x	x
7130(F)	Mortise Device (Wide)	x	x	x	x		x	x	x	x	x		
7150(F)	Rim SquareBolt® Device (Wide)	x	x	x	x	x	x	x	x			x	x
7150(F)WS	Rim SquareBolt Windstorm (Wide)	x	x				x	x	x			x	x
7160(F)	Concealed Vertical Rod (Wide)	x	x	x	x		x	x	x			x	x
7170(F)	Surface Vertical Rod (Wide)	x	x	x	x		x	x	x			x	x
7170(F)WS	Surface Vertical Rod Windstorm (Wide)	x	x				x	x	x			x	x
7200(M)(F)	Rim Device (Narrow)	x	x	x	x			x	x				
7210(M)(F)	Surface Vertical Rod (Narrow)	x	x	x	x			x	x				
7220(M)(F)	Concealed Vertical Rod (Narrow)	x	x	x	x			x	x				
7250(M)(F)	Rim SquareBolt Device (Narrow)	x	x	x	x			x	x				

electrified hardware option descriptions

A	Alarm Option
B	Touchbar Monitor
D	Delayed Egress
G	Electric Dogging
H*	Security Package (DPS)
O	Trim Monitor Switch

P	Electric Latch Retraction
S	Latchbolt Position Monitor
SAFE	Fail Safe Operation (Mortise)
SECURE	Fail Secure Operation (Mortise)
690F	Fail Safe Electrified Trim
691F	Fail Secure Electrified Trim

**Note: Any combination of the following options cannot be ordered together:
1) P, G, or D   2) B or A   3) D, B or A
*Only available for rim and SquareBolt® Devices when used with Delayed Egress option.**

What normally took an hour or more to connect now takes minutes. Yale electrified exit devices and trims are equipped with ElectroLynx® connectors. As a standard feature, these "plug & play" connectors link power from the incoming source to electrified locking products, including hinges, locks, exit devices, magnetic holders and strikes.

Note: Electrified door hardware with ElectoLynx® connectors require a compatible number of lead wires attached to the door hinge.
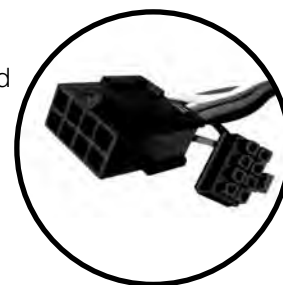
SecureX® electrified options

electric latch retraction "P"

Operation

Allows the latchbolt to be retracted electrically for momentary or maintained periods of time from a remote location. The exit device bolt remains retracted for as long as the device is energized. Removal of power returns the device to the life safety, self-latching mechanical mode. Easy interface with central or local fire alarm systems, automatic door operators, and access control systems. Allows free egress at all times. Manual hex key dogging standard on non-rated devices.

Electrical Specifications

Solenoid Assembly
• Continuous duty
• 9 amp inrush
• Requires a 4-wire minimum pivot or hinge to transfer power from frame to door.
• Requires the 782 controller for operation (USING ANY OTHER POWER SUPPLY VOIDS THE WARRANTY OF THE DEVICE.)

Listings

UL/cUL listed for panic and fire exit hardware. Fire-rated devices must be wired into an automatic fire alarm system.

Applications

Rim: 7100(F), 7200, 7200M(F)
SquareBolt®: 7150(F), 7250, 7250M(F)
SVR: 7110(F), 7170(F), 7210, 7210M(F)
CVR: 7120(F), 7160(F), 7220, 7220M(F)
Mortise: 7130(F)

Ordering

Suffix "P" to the Model Number. Ex: 7100P.
Note: Not available on "D" delayed egress exit devices.

electric dogging "G"

Operation

Provides continuous latch retraction and pushpad dogging simultaneously. When power is applied to the device, depressing the pushpad will retract the latchbolt and continuously hold down the pushpad in the unlock position for push/pull operation. Removal or interruption of power will release the pushpad and the latchbolt will extend and secure the opening. For use in areas that require quiet door operation.

Exit device allows free egress at all times.

Electrical Specifications

2 Holding Magnets
•   .35 amps @ 24VDC
Requires a 2-wire pivot or hinge and a standard 24VDC regulated and filtered power source (Recommended BPS power supplies)

Listings

UL/cUL listed for panic and fire exit hardware.
Fire-rated devices must be wired into an automatic fire alarm system.

Applications

Rim: 7100(F), 7200, 7200M(F)
SquareBolt: 7150(F), 7250, 7250M(F)
SVR: 7110(F), 7170(F), 7210, 7210M(F)
CVR: 7120(F), 7160(F), 7220, 7220M(F)
Mortise: 7130(F)

Ordering

Suffix "G" to the Model Number. Ex: 7150G.
Note: Not available on "D" delayed egress exit devices.

mortise device trim control "safe/secure"

Operation

Allows the outside trim to lock or unlock electrically from a remote location. Exit device allows free egress at all times.

Fail Safe devices are commonly used in stair towers or locations that require the trim to unlock when power is removed or during fire alarm activation.

Fail Secure devices are used to secure openings and are usually integrated into the building security system to allow access control. Fail Secure trims remain locked when power is removed.

Electrical Specifications

Solenoid
•   .35 amps @ 24VDC only (12 volt not available)
•   Continuous duty
•   Requires a 2-wire pivot or hinge and a standard 24VDC regulated and filtered power source (Recommended BPS power supplies)

Listings

UL/cUL listed for panic and fire exit hardware.

Applications

Mortise: 7130(F) - lever functions only

Ordering

"Safe" – Maintains the outside trim in a locked state when energized. Removal of power unlocks outside trim.
"Secure" – Unlocks the outside trim when energized. Remains locked when power is removed.

Suffix "SAFE" or "SECURE" to the Model Number.
Ex: 7130 x L5 x Safe.

SecureX® electrified options

delayed egress "D"

Operation

An exit door is normally closed and latched. The delayed egress device secures the door in the locked mode with the Red LED indicating locked mode status. Depressing the pushpad for less than three seconds will cause the device to beep without initiating the alarm. Depressing the pushpad for three seconds or longer will initiate an irreversible local audible beeping tone and a visual amber indicator. The person depressing the pushpad is denied egress for 15 or 30 seconds while alarm signals unauthorized egress. After the factory-set delay time (15 or 30 seconds), the device releases for egress, the LED changes to Green and the beep changes to a steady tone which continues to alarm until reset. The remote monitoring contact outputs can be used to alert security personnel.

Note: The 15-second time delay is standard. (Optional 30-seconds may be accepted by local jurisdiction.)

Electrical Specifications

- Input Voltage 24VDC (+/- 10%) Power Consumption:
- Standard Device: 500 mA
- Device with Security Package: 750 mA
- Device with Electric Mortise Trim Control: 1.25 Amps

Certifications & Listings

UL/cUL Listed: FUKD/FUKD7 - Controlled Exit Panic Devices
FWAX/FWAX7 - Special Locking Arrangements
GXHX/GXHX7 - Fire Exit Hardware
ANSI/BHMA Certified: A156.3 & A156.24 **BHMA**
CERTIFIED
U.S. Patent #: 7,469,942

Applications

- For use on hollow metal interior or exterior doors.
- Available for 7100(F), 7200M(F) and 7200 series rim, SquareBolt®, surface vertical rod, concealed vertical rod and mortise panic and fire-rated exit devices. For surface vertical rod exit devices, rod and latch guards (provided by other) must be used.
- Complies with NFPA 101 "Code For Safety To Life From Buildings And Structures" by National Fire Protection Association.
- BOCA options available to comply with National Building Code requirements. BOCA option is not suitable for installations in accordance with NFPA 101.
- 1-3/4" door thickness standard; 2" and 2-1/4" optional; specify when ordering.
- Standard 36" device fits doors 35"- 36" Device cannot be cut less than 35".
- Option -48 fits doors 41"- 48". Devices cannot be cut less than 41".

Standard Features

Key Switch Operation:

- Normal: The system is armed by applying power to the device (solid Red LED). Depressing the pushpad for more than the nuisance delay time starts the exit delay cycle.
- Bypass: Turning the key switch clockwise to the bypass position allows immediate egress without alarming. The bar functions as a standard exit device (Red LED flashes slowly).
- Reset/Delay: Used to reset device after the factory-set 15 or 30-second delay cycle has timed out. Rearm: If the device is armed, turning the key counterclockwise to the reset mode will release the device without alarm for egress and will rearm after 10 seconds (Red LED flashes quickly).

Local Visual Status Indicator:

- RED: The exit device is secure and the delayed egress circuitry is energized.
- AMBER: The egress cycle has started, indicated by an irreversible local audible beeping tone.
- GREEN: The exit device is in alarm and has released.

Nuisance Delay Time:

- Depressing the pushpad for less than three seconds sounds an audible beep without activating the irreversible alarm sequence. (Immediate alarm can be selected by removing a jumper on the control board.)

Internal Alarm Siren:

- When armed, depressing the pushpad initiates the internal 85db alarm siren.

Remote Control Inputs:

- Remote Reset: Accepts a momentary contact (keyswitch, pushbutton, etc) to reset the unit during alarm or allows momentary egress (10 seconds) when the unit is armed.
- Remote Bypass: Accepts a momentary contact to put the unit in a maintained bypass operation. The exit device functions as a standard device.

Alarm Outputs:

- Two sets of normally open and normally closed contacts. Contacts change only during alarm status. One set of contacts changes when device delay cycle has started (Alarm). One set of contacts changes when device has released (Secure).

Door Sign:

- Door sign per code included.

SecureX® electrified opions

delayed egress "D"

Options

Security Package "H":

- An internal door position switch that gives added security to the opening and is recommended. When using this option the alarm will sound if the door is not closed and latched when arming the device or if the door is forced open when the device is armed.
- To order, suffix "H".
- NOTE: Available for 7100(F) Rim and 7150(F) SquareBolt® devices only.

Latchbolt Position Monitor "S":

- Used to monitor the positions of the latchbolt or vertical rods (SPDT switch).
- To order, suffix "S".
- See page 37 for more information.

Trim Monitor Switch "O":

- Used when outside trim is desired. This switch will allow Bypass (disarms device) when the trim is used for ingress. The device will need to be reset upon entry by means of the keyswitch on the device or a remote switch.
- To order, suffix "O".
- NOTE: If the security package or external DPS is not used, standard trim will allow entry without affecting the device in an armed mode. The device will only be affected when the pushpad is depressed.
- See page 37 for more information.

NFPA 101 Requirements:

15- & 30-Second Delay

- Upon depressing the pushpad for 3 seconds, the delayed egress device will sound an audible beeping tone and allow the door to be opened after 15 (or 30) seconds. The tone will then change to a continuous alarm until reset. Resetting of the alarm and re-arming of the device is accomplished by manual means only.
- To order, specify NFPA 15-second

or NFPA 30-second.
- Purchase orders that do not have an option noted will default to the NFPA 15-second delay.
- NOTE: Where approved by the authority having jurisdiction, a delay not exceeding 30 seconds shall be permitted.

BOCA Requirements:

15- & 30-Second Delay

- Upon depressing the pushpad for 1 second, the delayed egress device will sound an audible beeping tone and allow the door to be opened within 15 (or 30) seconds. The tone will then change to a continuous alarm until reset. Resetting of the alarm and re-arming of the device occurs automatically once the door has been returned to the closed position for 30 seconds. The 30-second re-arming timer will re-start if the pushpad is depressed or the door is re-opened before actual re-arming of the device occurs. A DPS (Door Position Switch) is required for the BOCA option.
- To order specify BOCA 15-second or BOCA 30-second.
- Purchase orders that do not have an option noted will default to the NFPA 15-second delay.
- NOTE: An increase in the egress delay to 30 seconds shall not be permitted except as approved by the authority having jurisdiction.

Electric Trim Control - "SAFE" or "SECURE":

- The mortise delayed egress exit device can be ordered with fail safe or fail secure outside trim operation. In a fire condition the fail safe trim will release for entry. When access control is used the fail secure trim allows entry by means of a remote card reader, keyswitch, pushbutton, etc.
- To order, suffix "Safe" or "Secure".

- NOTE: The trim will open the door without affecting the device in an armed condition, if a door position switch is not used.

required accessories

Power Supply:

A regulated and filtered power supply with a fire alarm interface is required. 1 Amp minimum @ 24VDC per device. Special options will require more amperage. Consult factory. Recommend: BPS series.

Power Transfer:

Allows the power cable to make the transition from frame to door without pinching or removal of insulation.

Cylinders

Utilizes a 1-1/8" mortise cylinder with a 2160 cam. Cylinder not included unless specified. See page 44 & 45.

Ordering

Suffix "D" after device.
Example: 7150FD

alarm kit & electric trim

alarm kit "A"

Activation: Alarm is armed by turning key clockwise. Low audible chirp indicates alarm has been activated. Alarm will sound when the exit device pushpad is depressed. Factory preset for standard alarm mode which automatically resets after 5 minutes.

Continuous Alarm Mode: Alarm sounds continuous when the exit device pushpad is depressed. Alarm must be manually reset by keyswitch. (This feature is selected by a switch on the circuit board.)

Low Battery Warning: Audible chirp.

Nuisance Alarm: Factory preset for instant alarm. Selectable feature for alarm to sound when pushpad is depressed for more than 2 seconds. (This feature is selected by a switch on the circuit board.)

Arming Delay/Authorized Egress: 10-second delay (after arming) permitting egress (by turning key clockwise).

Alarm Shunt: Ingress shunt alarm input for devices with latchbolt position (S) monitor. NOTE: "S" included with SVR devices.

Power Requirements: One 9-Volt Battery (included).

Loudness: 90db @ 10 feet.

Arm/Disarm: Uses one 1-1/8" straight cam mortise cylinder. Clockwise turn arms the alarm, counter clockwise turn disarms or silences the alarm.

Device Status: A Red LED indicator will illuminate every 30 seconds when the alarm is armed.

Tamper Resistant: Built-in safety monitor sounds alarm when tampering occurs.

Warning Decal: "EMERGENCY EXIT - ALARM WILL SOUND"

Applications: Rim: 7100(F), 7200, 7200M(F); SquareBolt®: 7150(F), 7250, 7250M(F); SVR: 7110(F), 7170(F), 7210, 7210M(F); CVR: 7120(F), 7160(F), 7220, 7220M(F); Mortise: 7130(F)

Kit: Available in kit form for field retrofit.

Bar Length: Available for 36"- 48" devices only. May not be used on bars less than 36".
- Standard 36" device fits doors 35"-36" Device cannot be cut less than 35".
- Option -48 fits doors 41"– 48". Devices cannot be cut less than 41".

How to Order: Specify 7116 for alarm kit. Suffix -"A" when ordering with device. Ex: 7150-A.

NOTE: The 7116 alarm kit cannot be retrofitted in the field to the 7110(F), 7170(F), 7210 or 7210M(F) surface vertical rod exit devices. This option is available as a factory order only for these devices. Any attempt to retrofit the 7116 alarm kit with these surface vertical rod exit devices will void the warranties for these products.

electric trim

The electrified 600 series heavy-duty trim provides electric locking and unlocking of trim. Ideal for door control where increased security is necessary at all times, while meeting life safety codes. Electric trim is ideal for many applications, including stairwell towers, high-security areas, schools, hospitals, and factories.

Functions

690F Trim - Fail Safe
- Lever is locked when power is on (Free-Wheeling)
- Power off allows entry from trim
- Inside device is always active for egress
- Mechanical key override
  (09 Function - Key allows lever to retract latchbolt. Key can only be removed in locked position)

691F Trim - Fail Secure
- Lever is locked when power is off (Free-Wheeling)
- Power on allows lever activation for entry
- Inside device is always active for egress
- Mechanical key override (09 Function - Key allows lever to retract latchbolt. Key can only be removed in locked position.)

Features
- Accepts all standard and Reflections® decorative lever designs
- Plug connector with 4' wire lead (Exit device is used as wire raceway, not door)
- Key Override - Requires rim cylinder (sold separately)

Applications
- 7100(F) Rim Device
- 7150(F) SquareBolt®
- 7110(F), 7170(F) Surface Vertical Rod

Electrical Specifications
- 330 mA @ 24 Volts
  SM - Security Monitor Switch
- 4 AMP @ 250VAC
  Voltage: 24 VAC/VDC only
  BPS series power supplies recommended.

Options
- SM - Security Monitor. A SPDT switch that monitors the position of the solenoid (lock and unlock status).
- EX - Trim gasket for exterior applications.

monitors and signal switches

touchbar monitor "B"

Provides indication of the pushpad being depressed. Used as a Request to Exit switch to shunt alarm systems, release electromagnetic locks or monitor egress.
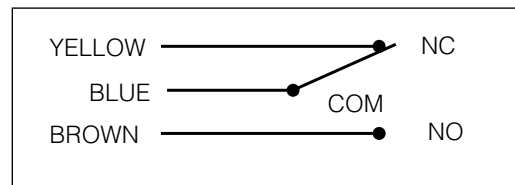
Electrical Specifications: 4 Amps @ 250VAC contacts
Listings: UL/cUL listed for panic and fire exit hardware.
Applications: Rim: 7100(F), 7200, 7200M(F)
SquareBolt®: 7150(F), 7250, 7250M(F)
SVR: 7110(F), 7170(F), 7210, 7210M(F)
CVR: 7120(F), 7160(F), 7220, 7220M(F)
Mortise: 7130(F)
Ordering: Suffix "B" to the Model Number. Ex: 7120B.

Note: Not available on "D" Delayed Egress devices or with the "A" Alarm kit option.

```
YELLOW ————————————●  NC
BLUE ————————●  COM
BROWN ————————————●  NO
```

latchbolt position monitor "S"

Provides indication on the position of the latchbolt. Used with security systems to monitor the latchbolt, also used to activate automatic door operators upon latch retractions.

Electrical Specifications: SPDT contacts rated 5 amp @ 28VDC
Listings: UL/cUL listed for panic and fire exit hardware.
Applications: Rim: 7100(F), 7200, 7200M(F)
SquareBolt®: 7150(F), 7250, 7250M(F)
SVR: 7110(F), 7170(F), 7210, 7210M(F)
CVR: 7120(F), 7160(F), 7220, 7220M(F)
Mortise: 7130(F)
Ordering: Suffix "S" to the Model Number. Ex: 7120S.

```
ORANGE ————————————●  NC
WHITE ————————●  COM
GREEN ————————————●  NO
```
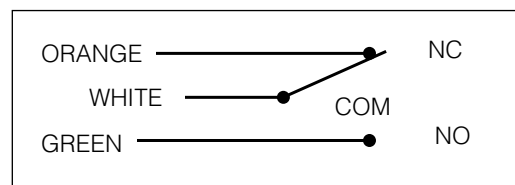
trim monitor switch "O"

Provides indication of the trim being operated from the outside.
Used as a Request to Enter signal switch to shunt alarms, also used to monitor entry.

Electrical Specifications: SPDT contacts rated 5 amp @ 28VDC
Listings: UL/cUL listed for panic and fire exit hardware.
Applications: Rim: 7100(F)
SquareBolt®: 7150(F)
SVR: 7110(F), 7170(F)
CVR: 7120(F), 7160(F)
Mortise: 7130(F)
Ordering: Suffix "O" to the Model Number. Ex: 7150O.

```
TAN ————————————●  NC
GREY ————————●  COM
PINK ————————————●  NO
```
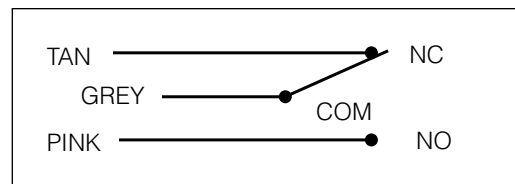
stand-alone door alarm

The SDA16 stand-alone battery operated door alarm is designed to continually monitor the status of a door. When the door is opened without authorization, an alarm is triggered to alert the security violation. This alarm features a Peizo horn which blasts a deafening 105+ decibels to alert the violation.

This unit is ideal for emergency doors as well as stairwell doors and rear exit doors in retail environments. The unit, which can also be hardwired, easily complements existing hardware, making any opening alarmed. The SDA16 door alarm is typically mounted on the interior of the door frame or door and is paired with a magnet mounted on the opposing side of the door gap.

features

- Dimensions: 8.3"L x 3.1"W x 2.0"D (210mm L x 79mm W x 52mm D)
- Non-handed unit (field reversible)
- Unit powered by 9V battery
- Unit can be hardwired by using WH-11 wire harness and 784 power supply
- No battery is required in unit with hard-wire option – if power is lost, optional gel-cell battery in power supply will give approximately 10,000 operations
- Reverse battery protection safeguards the unit if the battery is incorrectly installed
- A low-voltage battery is indicated by an audible signal every 30 seconds
- Piezo horn blasts at 105+ decibels if the door is used with out proper authorization
- The LED will flash every 30 seconds, indicating either the unit is armed or, if under auto reset, that the door has been violated
- Various field-adjustable features by dip switch including automatic alarm reset, REX and passage time delay, and LED color preference
- A tamper switch provides instantaneous signal to sound horn in the event the cover is removed. Horn will sound until the unit is reset by the key or remote reset/arm switch
- Conformally coated electronics for weather resistance
- Cover is held in place by cam lock which protects mounting screws, electrical system and internal sensors
- Accepts external cylinder (not included, must be specified)
- Accepts standard mortise cylinders (not included, must be specified)

remote mounting

The SDA16 can be installed remotely from the door by attaching the contacts to the door and frame. The unit can be installed up to 6 feet from the door. This provides the ideal solution for circumstances where exposure to weather may be an issue. To order specify "SDA16XL".

Frame contact attached to wire

Contact for door
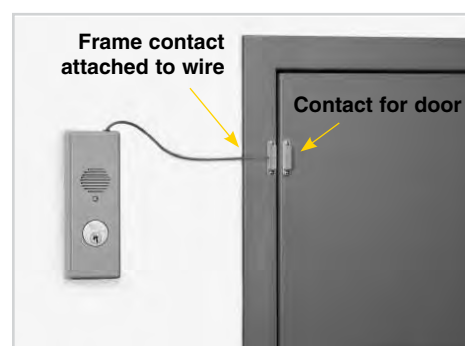
Note: Actual wire length is 6 feet.

cylinders and accessories

- 784 Power supply (9VDC) — includes plug-in wall transformer
- Plug-in wall transformer with 12' cable assembly (part no. 00-0000-3425)
- Gel-cell battery — optional for use with 784 power supply (part no. 00-0000-3426)
- WH-11 Wire harness for remote power and remote unlock
- Mortise cylinder for unit
- Rim cylinder for outside control
- See pages 42 & 45 for cylinder information.

facts and figures

3-1/8 (79)
2-3/4 (70)
8-3/16 (208)
Cover Detail

"A"
"B"
2-1/4 (57)
Pad Extended 3-1/4 (83)
Pad Depressed 2-3/4 (70)

7100 Series (all variables)

Series	"A"	"B"
7100-36	32-7/8" (835mm)	18" (457mm)
7100F-36		
7100-48	44-7/8" (1130mm)	24" (610mm)
7100F-48		

1-5/8 (41)
1-3/8 (35)
8-3/16 (208)
Cover Detail

"A"
"B"
2-1/4 (57)
Pad Extended 3-1/4 (83)
Pad Depressed 2-3/4 (70)

7200 and 7200M Series (all variables)

Series	"A"	"B"
7200-36	34-5/8" (880mm)	18" (457mm)
7200M-36 7200MF-36	32-7/8" (835mm)	18" (457mm)
7200-48	46-5/8" (1184mm)	24" (610mm)
7200M-48 7200MF-48	44-7/8" (1130mm)	24" (610mm)

trim dimensions

620F/650F Series
3"
10-1/4"
Projection: 13/16" (20mm)

630F/660F Series
2-3/4" (70mm)
5/8" (16mm)
15-1/2" (394mm)
Projection: 2-3/4" (70mm)

500F Series
1-5/8"
9-1/2"
Projection: 1/4" (6mm)

510F Series
1-5/8"
15-1/4"
1/4"
6-7/16"
2-1/2"
1-5/8"
Projection: 2-1/8" (54mm)

680F Series
3"
10-1/4"
Projection: 3" (76mm)

480F Series
1-3/4"
*
Projection: 2-7/8" (73mm)

*Length varies by pull, see page 31

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