

CHASSIS

STRIKE TEMPLATE

VERTICAL CENTERLINE

STRIKE No.

BACKSET

DIMENSION "X"

STILE WIDTH

GROUP

2

3

4

STILE WIDTH

VERTICAL CENTERLINE

BACKSET

1200-06 1200-16

2-1/4"

2-3/4"

4-1/4

MINIMUM

DEVICE NO.

1103

1105, 1108

'¥'

1105A. 1108A

1400-42

ALL MAINS IN

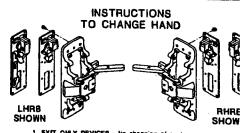
2-1/16"

1-15/161

3-1/2"

MINRALM

HOLE DRILLING SCHEDULE



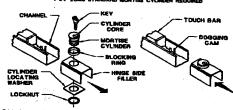
EXIT ONLY DEVICES - No changing of parts necessary.
 Simply apply per door handing requirement.

2. DEVICES WITH OUTSIDE FUNCTIONS:

A. Ramove back plate assembly by removing 4-screws.
9. Rotate book stile chassis 180°

C. Attach back plate assembly with 4-screws

#### OPTIONAL CYLINDER DOGGING CYLINDER METALLATION INSTRUCTION FUR LONG BYANDARD MORTISE CYLINDER REQU



- 1. Slide hinge side filler out of channel

LOCK STILE CASE TEMPLATE

39 15/18 TO FINISH FLOOR

PAIR OF DOORS WITH 811 MULLION

1400-42 NLUMNUK

2-1/16"

2-15/18"

4-1/2" MR/MUN

NO

NO

YES

STILE WOTH

VERTICAL CENTERLINE

PACKSET

1200-06

2-1/4"

3~1/8"

4-5/8" MINIMUM

B, B1, B2 C

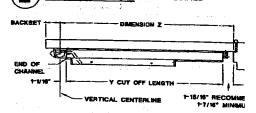
YES

YES YES

NO

- a Insert cylinder locating washer inside the hinge side filler.
   b. Place blocking ring on outside of ninge side filler.
- c. Position cylinder in hinge si filler with cylinder core aw. from touch bar end. d. Fasten cylinder with locknu
- Slide hings side filter into the channel. (Dogging cam must in dogged down position)

# CUT DEVICE - IF REQUIRED

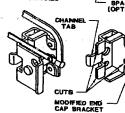


1. Determine cut off length "Y" by subtracting 3" from dimension "Z".

Mark cut off point things side filler must be all the way inside of channels.

Out off channel hinge side filter, spacer (if specified) and deburn

NOTE: When preparing a device for a 216" door to endcap bracket must be modified. Cut the bracket thru the three specified locations. (see illustration) DO NOT cut thru the Channel Tab.



CHANNEL

# APPLY TRIM - WHEN SPECIFIED

SINGLE HOLLOW METAL DOOR WITH PAM DEVICE

TOUCH BAR LEVER

DOOR PREPARATION

role the following.
STRIKE NO., Dimension 'X', and BACKSET in chart for the appropriate Application and strike

B. DEVICE NO. and GROUP NO. in "HOLE DRILLING SCHEDULE".

Close door. Mark horizontal centerline on inside face of door and on nock side door stop 39-15/16" from finish floor as shown. (Continue horizontal centerline to outside face of door if Trim is specified.)

3. Mark vertical centerine at lock side using dimension "X". Wark vertical centerine at lock side using backset dimension on ourside face of door if firm is specified.

CAUTION: Vertical centerines on both sides of the door should be the same dimension from the edge of the door.

Tape Lock Sitie Case Template (and Trim Template if Trim specified) to the door so that centerines on the Template line up with centerines on door. Mark centers for the Holes required per the "MOLE DRILLING SCHEDULE (and Trim Template if Trim specified).

STILE WIDTH

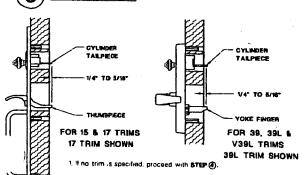
VERTICAL CENTERLINE

5 Fold Strike Template. Place on door stop with smaller flap against the door so that horizontal centerine on template sines up with forizontal centerine on door stop and door. Mark centers for 2-screw holes on door stop.

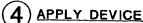
6. Drill holes in door and frame as directed on templates. 7. For 1103 Device less Trim install cylinder with Cylinder Back Plate.
Tailpiece length should be 1/4" to 5/16" (SEE STEP (a)) from inside lace of the Goor

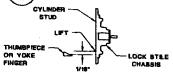
STRIKE 1200-08 STANDARD

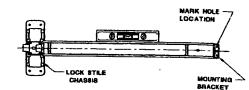
1



- 2 For Devices in GROUP 2 & 3, install cylinder in the frim. Install the firm into the door and check length of cylinder tailblece.
- 3. For Devices in GROUP 3 & 4, check length of THUMBPIECE or YOKE FINGERL







Mount lock stille chassis with 4-screws.

Cor devices with cultilide functions follow A & B below.

A. For devices in GROUP 2 & 3 insert cylinder tailpiece into CYLINDER STUD

in lock stile chassis.

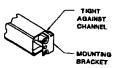
B for devices in GROUP 3 & 4 LIFT appears in lock stile chassis. LIFT must be in locked position. THUMBPIECE DR YOKE PINGER must be under the LIFT with 1/16" gap.

CAUTION - Before proceeding further, unlock the LIFT for devices in GROUP 4.

Insert MOUNTING BRACKET into louch oar assembly tight against the channel tievel device, mark and drill 2 holes for #10 sheet metal screws or #10-24 machine screws. Faster MOUNTING BRACKET to door and attach END CAP to MOUNTING BRACKET with 2-screws.

3. Fasteri strike to frame and adjust strike so that device latches tightly without

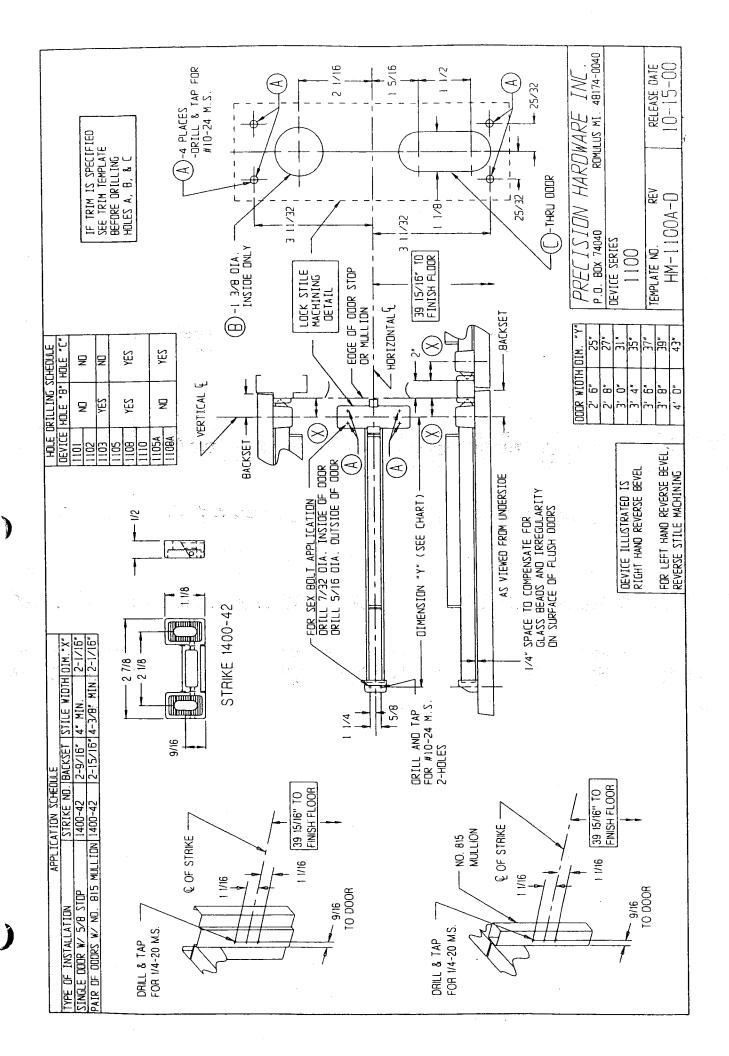
4. Attach cover to lock stile chassis.

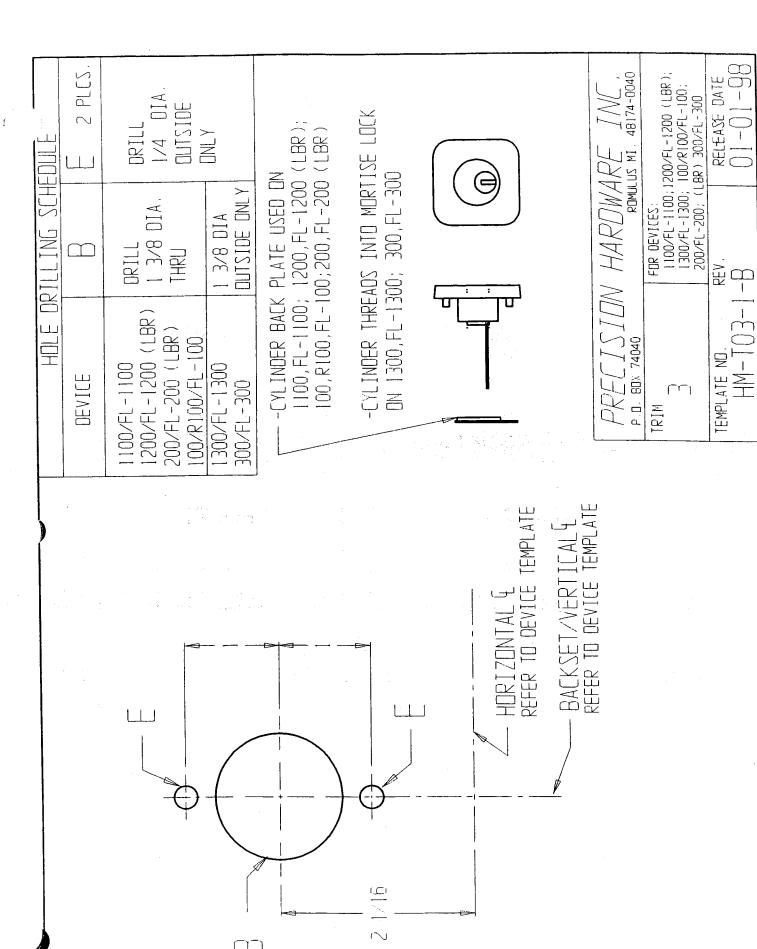




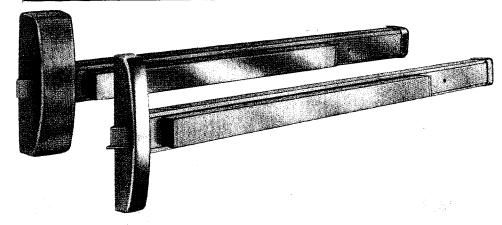
0A75 01-01-89 Precision Hardware, Ir

Manufacturers of Panic Exit Devic and Builder's Hardware





# **ELR DEVICES**





# **ELECTRIC LATCH RETRACTION - ELR**

Available for 1100, 1200, 1300, 1400, 1600, & 1800 Series Devices

The ELR option provides remote Latch Retraction of exit devices. Continuous duty solenoids retract Latchbolts for momentary unlatching or continuously for dogging. The ELR feature can be interfaced with automatic door operators, card readers, push buttons, toggle/key switches, and fire alarm systems.

- ELR Devices REQUIRE 150 Series Power Supply. (See page 3)
- U.L. Listed for Panic and Fire for Class II Circuitry
- ELR is available with Signal Switch (SS) option. (See page 5)

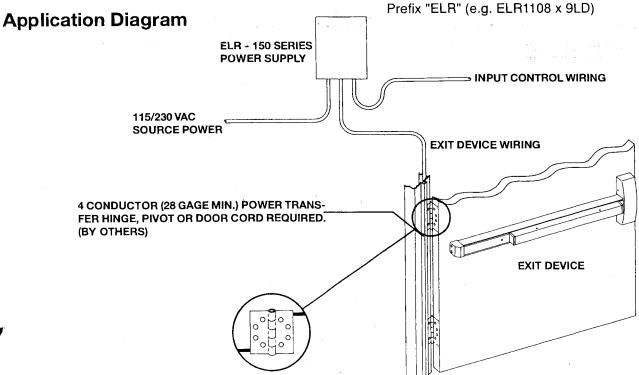
- ELR can be used in combination with all Apex features.
- ELR is available with manual Hex Key or Cylinder Dogging for Exit Devices
- Power may be supplied through 4-wire continuous circuit hinge.

#### Solenoid Specifications:

Door Widths: 3' Device - 2'6" to 3'0" Door

4' Device - 3'1" to 4'0" Door

To order: See Apex catalog for complete device information.



# GENERAL INFORMATION

# **NUMBERING SYSTEM**

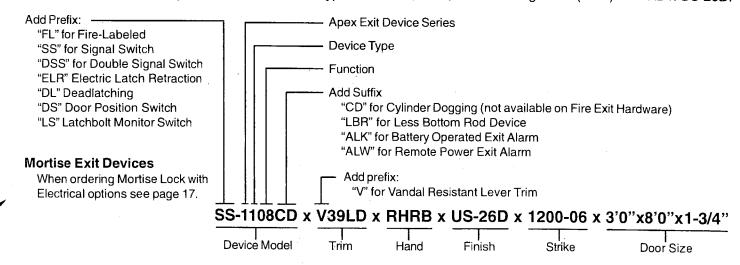
All Device Set Numbers designate Type & Function.

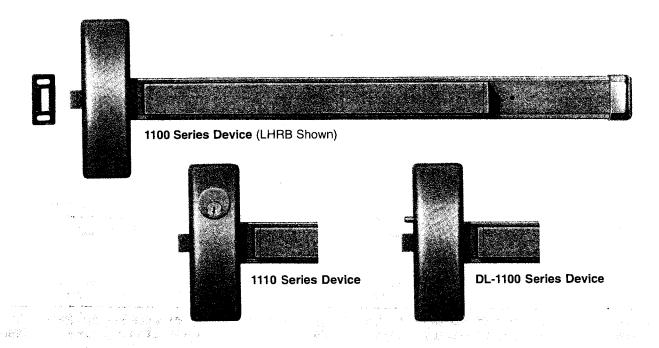
Trim Style must be Specified Separately (for Trim, see pages 10 & 11)

	TYPE DESCRIPTION	TYPE 1 RIM EXIT DEVICE	TYPE 2 SURFACE VERTICAL ROD	TYPE 3 MORTISE EXIT DEVICE	TYPE 7 WOOD DOOR CONCEALED	TYPE 8 CONCEALED VERTICAL ROD
TYPE	DESCRIPTION OF FUNCTION		EXIT DEVICE		VERTICAL ROD EXIT DEVICE	EXIT DEVICE
01	EXIT ONLY - NO TRIM OR EXIT ONLY W/COVERPLATE, SPECIFY STYLE.	1101, FL-1101	1201, FL-1201	1301, FL-1301	1701, FL-1701	1801, FL-1801
02	ENTRANCE BY TRIM WHEN ACTUATING BAR IS LOCKED DOWN.	1102	1202	1302	1702	1802
03	ENTRANCE BY TRIM WHEN LATCH BOLT IS RETRACTED BY KEY. KEY REMOVABLE ONLY WHEN LOCKED.	1103, FL-1103	1203, FL-1203	1303, FL-1303	1703, FL-1703	1803, FL-1803
05	ENTRANCE BY THUMBPIECE. KEY LOCKS OR UNLOCKS THUMBPIECE.	1105, FL-1105	1205, FL-1205	1305, FL-1305	1705, FL-1705	1805, FL-1805
05A	THUMBPIECE ALWAYS ACTIVE. NO CYLINDER.	1105A, FL-1105A	1205A, FL-1205A	1305A, FL-1305A	1705A, FL-1705A	1805A, FL-1805A
06	ENTRANCE BY THUMBPIECE ONLY WHEN RELEASED BY KEY. KEY REMOVABLE ONLY WHEN THUMBPIECE IS LOCKED.	REFER TO FUNCTION "03" FUNCTION "06" NOT REQUIRED IN APEX SERIES				
08	ENTRANCE BY KNOB/LEVER KEY LOCKS OR UNLOCKS KNOB/LEVER.	1108, FL-1108	1208, FL-1208	1308, FL-1308	1708, FL-1708	1808, FL-1808
<b>A80</b>	KNOB/LEVER ALWAYS ACTIVE. NO CYLINDER	1108A, FL-1108A	1208A, 2831.2 FL-1208A	1308A, FL-1308A	1708A, FL-1708A	1808A, FL-1808A
09	ENTRANCE BY KNOB/LEVER ONLY WHEN RELEASED BY KEY. KEY REMOVABLE ONLY WHEN KNOB/LEVER LOCKED	REFER TO FUNCTION "03" FUNCTION "09" NOT REQUIRED IN APEX SERIES				
10	INTERIOR KEY CONTROLS LEVER	1110, FL-1110		1310, FL-1310	N/A	N/A

# **HOW TO ORDER**

**DEVICE with TRIM:** List quantity, device model, trim, hand, finish, strike, and door size including thickness. **DEVICE ONLY:** List quantity, device model w/function, hand, finish, strike, and door size including thickness. **TRIM ONLY:** List quantity, trim model no., device type & function, hand, and finish e.g. 39LD(1108) x RHRB x US-26D.





# RIM EXIT DEVICES

## 100 SERIES - REVERSIBLE

**FOR DOORS** - Available for 1-3/8" to 2-1/4" thick, up to 4'0" wide opening. Furnished standard for 1-3/4" thick 3'0" wide opening. See page 2 for additional details.

**COVER** - Lock Stile Assembly - Cold drawn Bronze, Brass, Aluminum, Stainless Steel.

CHASSIS - Lock Stile Assembly - Cast Bronze or Tenzaloy.

**TOUCHBAR ASSEMBLY** - Heavy Wrought Bronze, Brass, Aluminum, Stainless Steel.

END CAP - Heavy Wrought Bronze, Brass, Stainless Steel.

**LATCHBOLT** - Stainless Steel, 3/4" throw. Deadlatching available as an option (see "How to Order", page 3).

**STRIKES** - No. 1200-06, Investment Cast Stainless Steel, furnished standard. For optional strikes see page 12.

**DOGGING** - 1/4 turn allen type dogging standard. Cylinder dogging available as an option. Specify "CD" as suffix. Cylinder not furnished, unless specified. (Use 1-1/4" long standard mortise cylinder with 5/16" wide cam x 11/16" from centerline of core to end)

**TOUCHBAR HEIGHT** - 39-15/16" from floor standard. May be varied as situation dictates.

**REVERSIBLE** - Not handed. Reversible for all functions and trims. Standard packing RHRB. Devices with Deadlatching or atterior Cylinder option are handed.

**U.L. LISTED** - Panic Hardware. For FIRE EXIT HARDWARE see page 5.

ANSI STD - A156.3 Grade 1.

FINISHES - US3, US4, US10, US10B, US26, US26D, US28, US32D.

**CYLINDERS** - Rim Type, not furnished standard. Specify when required.

STILE WIDTH - See chart on page 18.

INTERIOR CYLINDER OPTION - provides the ability to lock or unlock the outside trim from both the exit device side and trim side of the door. To order specify device model number 1110. (e.g. 1110 x 39L). The device is Handed, specify handing when ordering. Rim type cylinder not furnished standard. Specify when required.

"DL" OPTION - provides dead latching capability to the 1100 Series Device. No. 100-78 Strike furnished standard for devices with deadlatching. To order specify prefix "DL" (e.g. DL1108x39L). The device is Handed, specify handing when ordering.

- NOTE A. All devices can be converted from one function to another simply by exchanging the back plate assembly in the lock stile case and selecting the proper outside trim. See page 14 for back plate assemblies, and pages 10 & 11 for trims.
  - B. Device covers stock hollow metal door cutouts for 86 and 161 on single doors.

No. 15 Wrought Plate Cast Grip No. 17
Wrought Plate
Extruded Grip

No. 17C Wrought Plate 3/4" Tubular Grip

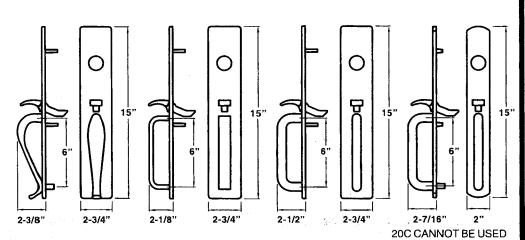
No. 20C Cast Plate 3/4" Tubular Grip ANSI STANDARD - Trims are BHMA certified for ANSI 156.3, Grade 1.

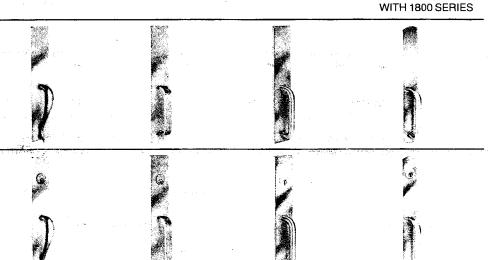
### **NOTES:**

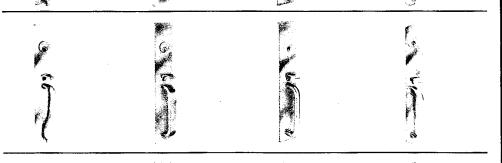
- 1. Trims are through bolted and will cover 161 and 86 cutouts.
- Trims are interchangeable between Apex (wide stile), Olympian and Enduro Series Devices.
- Lever (39L) and Knob (39) Trims are same for Rim, Surface Vertical Rod and Concealed Vertical Rod Devices.
- Lever (39L) and Knob (39) Trims for Mortise Devices are handed, specify handing. Shipped handed but are shop reversible.
- Lever (39L) and Knob (39) Trims with cylinder function for Mortise Devices are not interchangeable with any other types of devices.
- 15, 17, 17C & 20C Trims with Thumbpiece function are handed for Mortise Devices. Specify handing.
- 15 & 17 Trims for Concealed Vertical Rod are not interchangeable with any other type of devices.
- 20C Trim not available for 1800 Series Concealed Vertical Rod Devices.
- The CVR 1803 with "Pull by Others" must be supplied with No.
   Cylinder Attachment Trim to secure the Rim cylinder. Specify finish.

No. 3 Cast Cylinder Attachment
Trim for 1803
"Pull by others"







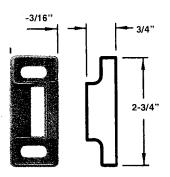






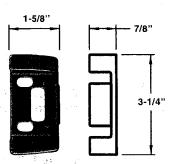


# STRIKES



#### 1200-06

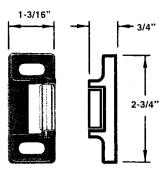
Furnished standard with Series 1100, 1200(LBR) and FL-1200(LBR).



#### 10-78

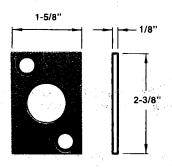
BOREST BOLD COMMON SERVICE

urnished standard with Series FL-1100 and DL-1100. No optional strike available.



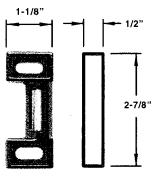
### 1200-16 Optional

Available for use with Series 1100. Must be specified.



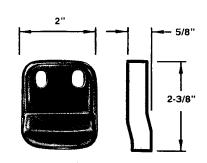
#### 020-97

Bottom strike for Series 1200, FL-1200, 1700, FL-1700, 1800 and FL-1800.



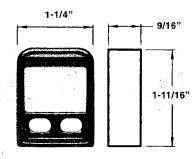
## 1400-42 Optional

w/1400-07 Rub Strip For Series 1100 for single doors with blade stop & 3-1/2" Min. stile.



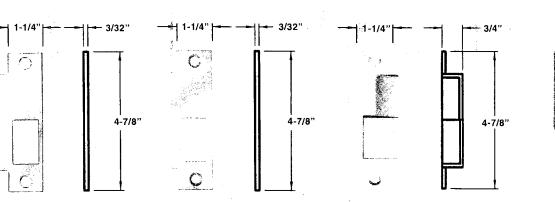
### 100-85

Used with Series 1100 on pair of doors with vertical rod device on inactive leaf.



#### 1600-53

Top strike for Series 1700, FL-1700, 1800 and FL-1800.



AND WITHOUT THE

#### 310-55

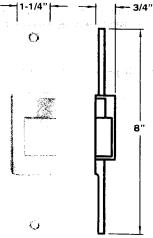
For Mortise Exit Device. Curved lip. Specify handing same as mortise lock. RHRB shown.

### 310-56

For Mortise Exit Device on pair of doors with overlapping astragal. 7/8" lip to center, flat. Specify handing same as mortise lock. RHRB shown.

#### 310-58

Open back strike for Mortise Exit Device on pair of doors. ANSI standard 4-7/8" x 1-1/4". Allows pairs of doors to open and close independently of each other. Specify handing same as mortise lock. RHRB shown.



### 310-57

Open back strike for Mortise Exit Device on pair of doors where inactive leaf is prepared for ANSI 86 (8" x 1-1/4") cutout. Allows pairs of doors to open and close independently of each other. Specify handing same as mortise lock. RHRB shown.

# BACK PLATE ASSEMBLIES







**BP1103** 



BP1105

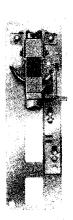
**BP1101** - Back plate assembly for 1100, 1200 and 1800 Series Devices for functions 01 and 02.

**BP1103** - Back plate assembly for 1100 Series Devices to convert from any function to Night Latch (03) function.

**BP1105** - Back plate assembly for 1100 Series Devices to convert from any function to thumbpiece (05, 05A) or knob/lever (08, 08A) functions.



BP1101-F



BP1103-F



BP1105-F

**BP1101-F** - Back plate assembly for FL-1100 Series Devices, function (01), exit only. HANDED (RHRB shown)

**BP1103-F** - Back plate assembly for FL-1100 Series Devices to convert from any function to night latch (03) function. HANDED - specify hand as RHRB or LHRB. (RHRB shown)

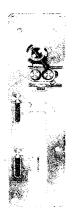
BP1105-F - Back plate assembly for FL-1100 Series Devices to convert from any function to thumbpiece (05, 05A) or knob/lever (08, 08A) functions. HANDED - specify hand as RHRB or LHRB. (RHRB shown)



**BP1203** 



**BP1803** 



BP1808

**BP1203** - Back plate assembly for 1200 and FL-1200 Series Devices to convert from any function to night latch (03) function.

**BP1803** - Back plate assembly for 1700, FL-1700, 1800 and FL-1800 Series Devices to convert from any function to night latch (03) function.

**BP1808** - Back plate assembly for 1200, FL-1200, 1700, FL-1700, 1800 and FL-1800 Series Devices to convert from any function to thumbpiece (05, 05A) or knob/lever (08, 08A) function.

### ACCESS CONTROL DOOR LOCKS

Other manufacturer's push button or electronic access control door locks may be compatible with Precision Exit Devices. Please consult factory for details.

# **ELECTRICAL OPTIONS**

For additional information on Electrical Products see the pex Electrical Products Brochure.

## LECTRIC LATCH RETRACTION - ELR

ELR option provides remote Latch Retraction of exit devices. Continuous duty solenoids retract Latchbolts momentarily for unlatching or continuously for dogging. The ELR feature can be interfaced with automatic door operators, card readers, push buttons, toggle/key switches, and fire alarm systems. ELR Devices **REQUIRE** 150 Series Power Supply.

- U.L. Listed for Panic and Fire for Class II Circuitry.
- ELR is available with Signal Switch (SS) option.
- ELR is available with manual Hex Key or Cylinder Dogging for Panic Exit Devices.
- Power may be supplied through 4-wire continuous circuit hinge. (furnished by others)

#### **Solenoid Specifications:**

- Current Pulse (2 seconds max.) ........... 4.75 Amp.
- Continuous ...... 3.6 VDC / 0.8 Amp.

To order: Prefix ELR (e.g. ELR1108 x 39LD)

## **POWER SUPPLY - EL.R150 SERIES**

The ELR150 Series is an unregulated power supply required to control ELR Devices. The power supply contains a Motherboard that will accept up to four plug in Control Modules. Each Control Module controls one ELR Device and includes a Time Delay Feature. The Time Delay provides variable (0.3 - 155 second) Latch Petraction period in response to a momentary input.

U.L. Listed for Class II Output.

- Circuit breakers provide protection for Motherboard.
- 115 or 230 Volt user selectable switch
- Battery Back-up / Power Tap available

**To order:** The Power Supply model is determined based on the number of devices requiring electrical power and wire runs listed below.

ELR151 - Operates one ELR exit device.

ELR152 - Operates two ELR exit devices.

ELR153 - Operates three ELR exit devices.

ELR154 - Operates four ELR exit devices.

To order power supply with battery back-up specify suffix BT (e.g. ELR151-BT)

#### MAXIMUM WIRE RUN

- 55 ft. with 16 gage wire and 28 gage Power Transfer (by others)
- 75 ft. with 14 gage wire and 28 gage Power Transfer (by others)
- 200 ft. with 12 gage wire and 22 gage Power Transfer (by others)

## **BATTERY BACKUP / POWER TAP**

The Battery Backup is an optional card that can be installed in the ELR150 Series Power Supply to provide temporary power to ELR Devices in case of power shortage or outages. Charges at a 0.8 Amp rate. Uses (3) 12VDC Lead Acid or Gel Cell batteries (not furnished). One Amp hour set of batteries provides approximately 5 minutes of backup to four exit devices. Power tap is also included .o provide power to Card Readers, etc.

Electrical Ratings: 24 VDC, 0.8 Amp. - Power Tap

To order: specify BT-150-07

# **CONTROL MODULE**

The Control Module is a card that is installed in the ELR 150 Series Power Supply and controls one ELR device and includes a Time Delay Feature. The Time Delay provides a variable Latch Retraction period in response to a momentary input.

#### Input:

- · Normally open
- Input Voltage: 5-24VDC or VAC
- Input Current: approx. 0.005 Amp.
- Minimum pulse width: 0.25 seconds

#### Output:

- Current Pulse (2 seconds max.) ........... 4.75 Amp.

#### Time Delay:

User selectable: 0.3 to 255 second delay after input is removed

#### Fire Alarm Terminal:

- Red LED (D3) blinks when Fire Alarm is activated
- Provides immediate termination of output
- Accepts normally closed contacts or 5-24 Volts from a listed fire detecting device.
- Input Current: 0.005 Amp.
- Minimum pulse width: 0.25 seconds

#### Auxillary Contacts:

- Electrically isolated contacts provided for remote signaling (e.g. door operator)
- Normally open or normally closed contacts are rated at 0.5 Amp., 24VDC or VAC
- Contact operation follows successful operation of ELR device

To order: specify CM-150-08

#### SIGNAL SWITCH

An internally mounted switch which monitors the use of the Touchbar. The Signal Switch feature can be used to release mag locks, signal an alarm, actuate door operators, etc. The Signal Switch option is U.L. Listed for Panic and Fire for Class II Circuitry.

Electrical Ratings: 24 Volt, 2 Amp. (N.O./N.C.)

**SPDT** (Single Pole, Double Throw) version allows for interface with one external component. A (2) wire power transfer hinge is required (furnished by others).

To order: Prefix SS (e.g. SS1108 x 39LD)

**DPDT** (Double Pole, Double Throw) version allows for interface with two external components. A (4) wire power transfer hinge is required (furnished by others).

To order: Prefix DSS (e.g. DSS1108 x 39LD)

## LATCH BOLT MONITOR SWITCH

The Latch Bolt Monitor Switch is an internally mounted switch that monitors the position of the latch bolt. The switch can be used to signal an alarm such as the Precision ALK/ALW Exit Alarm.

Electrical Ratings: 24 Volt, 2 Amp. (N.O./N.C.)

To order: Prefix LS (e.g. LS1108 x 39LD)

G H C

# Gabbard Hardware Co., Inc.

12655 Danielson Court, Suite #312 • Poway, CA 92064-6862 • 858-679-1600 • FAX 858-679-751

Guarantee/Warranty	:
Finish Hardware	
We hereby guarantee that the:	
Finish Hardware - Section #08710	
Supplied for the construction of:	
Medical Dental Clinic- Contract	
has been performed in accordance with the Drawings and the Specifications and that the Work as supplied will fulfill the requirements of the Guarantee included in the specifications. We agree to repair or replace any or all of our work, together with any adjacent Work which may be displaced by so doing, that may prove to be defective in its workmanship or materials within a period as detailed below:	e e e e e e e e e e e e e e e e e e e
• FINISH HARDWARE - 1 YEAR	
• WOOD DOORS 1 YEAR	
From the date of acceptance of the above named project by the Owner without any expense whatsoever to the said Owner, ordinary wear and tear and unusual abuse or neglect excepted.	
In the event of our failure to comply with above mentioned conditions within thirty days after being notified in writing by the Owner, we collectively or separately do hereby authorize the Owner to proceed to have said defects repaired and made good at our expense and we will honor and pay the costs to have said defects repaired and made good at our expense and we will honor and pay the costs and charges therefrom upon demand.	
Date: July 16, 2007 Signed	
Date:Signed:	
Local Representative to be contacted for services:	