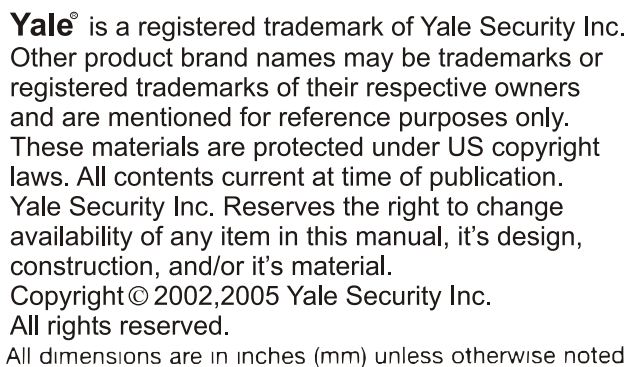


Installation Instructions

80-9470-0010 (Rev. C)

80-9470-0010 (Rev. C)



RHR Device

Remove (4) Screws and Vertical Lifter Assembly. Rotate device to opposite hand (180 degrees). Insert Lifter Assembly under Lift Block and re-install screws.

LHR Device

Lift Block

Under Lift Block

Vertical Lifter Assembly

(4) 8-32 x 3/16" RHPMS

RHR Door

LHR Door

Specify Finish

Device	Quantity	Size	Part Number
All (No Trim)	8	1/4-20	66-0001-1745
All (With Trim)	6		

60-1510-0280: 2" (51mm)
 60-1510-0277: 6" (152mm)
 60-1510-0278: 12" (305mm)
 (Specify Device Finish)

1. Periodically remove covers and coat mechanisms with an appropriate lubricant. This is particularly required in corrosive environment for proper product function.
2. Check mounting fasteners periodically. Retighten if found loose. Apply screw locking compound, or change part fasteners if screws continue to back out.
3. Periodic checks and adjustments of rods may be required to compensate for changes in the opening (e.g.: door sagging, ect...).

100 Yale Avenue
Lenoir City, TN 37771-3226
(865) 986-7511 (Direct)
(865) 986-8630 (Fax)
Website: www.yalecommercial.com

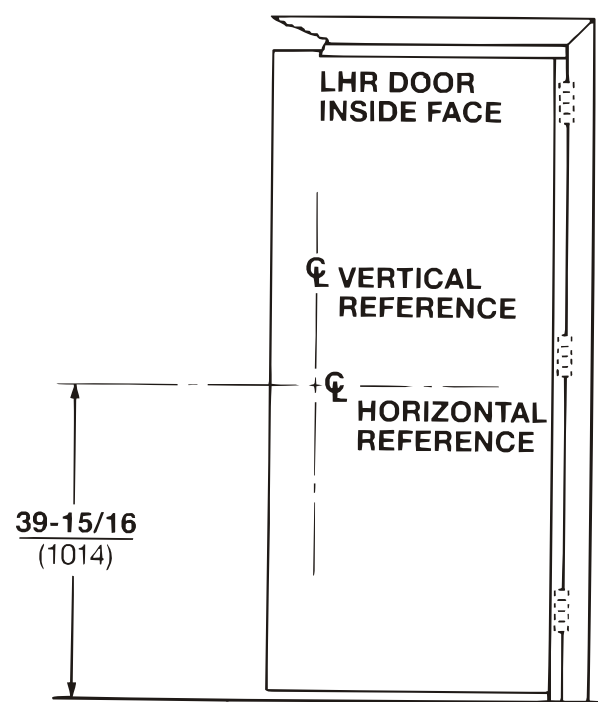
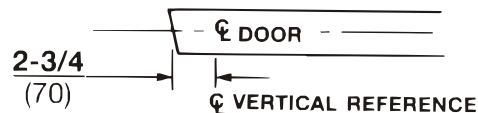
80-9470-0010-000
(Rev. C)

Series Surface Vertical Rod Exit Device

Single Door or Pair without Mullion

Locate and Mark Horizontal and Vertical Reference Centerlines as shown.

LHR door shown,
preparation is typical
for both door hands.



**FINISHED FLOOR
or THRESHOLD**

Note: Bottom Bolt will retract to 1/8" (3mm) above Floor Strike. Floor covering in the door path must be layed out accordingly.

791 Top Latch and Strike Template

LHR Door Inside Face

Rods & Strikes

VERTICAL REFERENCE

Device Template

HORIZONTAL REFERENCE

Bottom Case Template

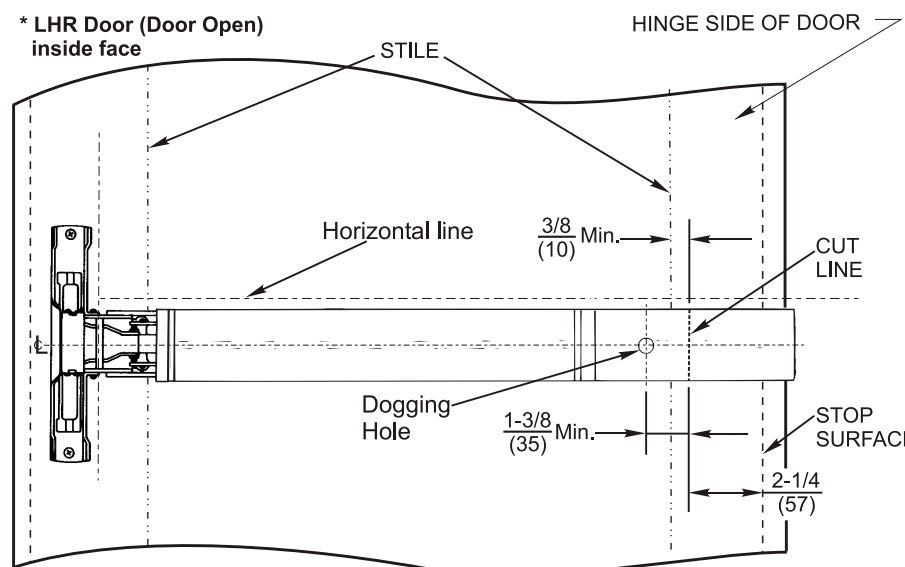
Floor Strike Template

FINISHED FLOOR or THRESHOLD

- THRESHOLD**
- A.** Locate "Device Template" aligning VERTICAL REFERENCE and HORIZONTAL REFERENCE lines on door and template. Tape template to door face.
 - B.** Extend centerline of Rod and Strikes from "Device Template" to door top and bottom, on door face.
 - C.** Locate Top Latch/Strike and Bottom Bolt Case templates in place over centerline of Rods and Strikes on door. Tape templates in place and spot holes.
 - D.** Locate and tape Trim Template to door when required (See instructions packed with Trim).
 - E.** Spot and prepare holes per installation template (exclude 791 strike, holes prepared in Step 7).
 - F.** Locate 790 Bottom Strike Template. Tape in place over Rods and Strikes centerline on door. Tape template in place and mark hole locations. Holes to be prepared in Step 7.
 - G.** Remove templates from door.

Device must be field cut to size, as required

* LHR Door (inside face)



Determine device length

1. Close door. Measure 2-1/4" (57mm) from the Stop Surface on the hinge side of the door, mark Horizontal Reference at this point.

Note: This dimension must be 3/8" (10mm) minimum from edge of the stile on the door.
2. Open door. Align mounting holes in device with Mounting Holes in the door. Mark device where it crosses the mark from Step 1. If mark is less than 1-3/8" (35mm) min. from Dogging Hole, a shorter device is required.
3. Before cutting, make sure the End Cover is in place and there is no gap between it and the Pushpad. Cut device on mark from Step 2.

791 Strike

D

Top Mounting Plate

Top Latch

(2) 1/4-20 x 3/4" (19mm) PFHMS

(3) 10-24 x 1-1/4" (32mm) PPHMS

F Rod Guide

16-3/8 (416)

B

C End Clamp

Device

1/2 (13)

Device Mounting Holes, Rods, & Strikes

F Rod Guide

15 (381)

D

Bottom Mounting Plate

(2) 1/4-20 x 3/4" (19mm) PFHMS

Bottom Bolt Case

(3) 10-24 x 1-1/4" (32mm) PPHMS

Bottom Bolt Case

790 Strike

- A.** Mount trim when required per installation instruction sheet provided with trim pack.
- B.** Fasten Device at the Latch Head using (2) 1/4-20 x 1" (25mm) PPHMS or 3/8(10mm) dia. SNB (Metal Door) or #14 X 1-1/2" PPH"AB"SMS (Wood Door), to door surface.
- C.** Set Device Level. Using the End Clamp as a template locate the end clamp mounting holes. Prepare end clamp holes and mount End Clamp using (2) 1/4-20 x 1" (25mm) PPHMS or 3/8" (10mm) SNB or #14 X 1-1/2" PPH"AB"SMS (Wood Door).
- D.** Attach Top and Bottom Mounting Plates to door surface using (4) 1/4-20 x 3/4" (13mm) PFHMS or 3/8" (10mm) dia. SNB or #14 x 1-1/2" (38mm) PFH"AB"SMS (Wood Door). Attach Top Latch and Bottom Bolt Case to Top and Bottom Mounting Plates using (6) 10-24 x 1-1/4" (32mm) PFHMS. (See Figure 3).
Note: For 7170(F)(LBR) options see supplement Installation Instruction 80-8470-0726-000.
- E.** Check Slide Action. Depress pushpad, slide should move up freely, if not, verify handing (See Front Side for Details). Release touchbar (slide should fall back to original rest position).
- F.** Install Rod Guides, (See Detail).
 1. Locate Rod Guide as dimensioned. Spot (2) mounting holes.
 2. Prepare holes.
 - Metal Door: #28 - .140" (3.5mm) dia. Inside face.
 - Wood Door: #28 - .140" (3.5mm) dia. X 3/4" (19mm) deep.
 3. Mount Guides, fasten with (2) #8 x 1/2" (13mm) PRH"AB"SMS as shown.

Note: Below listed instructions are based on a device mounted 39-15/16" (1014mm) from finished floor or threshold. Any deviation on device mounting height must be accommodated to insure proper device function.

A. Top Rod Sizing

1. For openings under 7' (2134mm), subtract the actual opening height from 7' (2134mm).

Example: 6'8" (2032mm) opening
7'0" (2134mm) - 6'8" (2032mm)
= 4" (102mm)

Top Rod must have 4" (102mm) cut from end with 1/8" (3mm) thru hole. Use attached drill fixture to locate and re-drill 1/8" (3mm) dia. hole thru the top rod. Make sure rod bottoms out inside drill fixture prior to drilling. (See Figure 5a).

2. For opening over 7' (2134mm), subtract 7' (2134mm) from the actual opening height.

Example: 7'6" (2286mm) - 7'0" (2134mm)
= 6" (152mm).

Top Rod must have a 6" (152mm) extension added to length (See other side for available rod lengths).

B. Assemble Top Rod

Insert Top Rod Connector into sized Top Rod and Install 1/8" (3mm) x 1/2" (13mm) Roll Pin thru both pieces until flush on both sides. (See Figure 5b).

Diagram illustrating the dimensions and components of the Bottom Rod Assembly:

- 32-1/4 (812)**: Dimension for the upper section of the assembly.
- 3-7/8 (98)**: Dimension for the lower section of the assembly.
- 1/2 Adjustable (13) (Ref.)**: Dimension for the adjustable section.
- Bottom Rod Assembly**: Label for the upper section.
- Bolt**: Label for the lower section.

- A. Thread Bottom Bolt into Bottom Rod Assembly.
- B. Leave 1/2" (13mm) for adjustment.

Top Strike Detail

A. Install Top Rod and 791 Strike

1. Thread Top Rod Assembly onto Top Latch. Lift rod to fully retract Top Latchbolt. Depress Pushpad and hold depressed. Adjust top rod length until Rod Connector seats into the Slide Assembly in latch case.
- 2a. Position the Top Strike Roller between the Tripping Lever and the Bolt on the Top Latch. Verify hole positions and prepare holes per Installation Instruction Template.
- b. Install Top Strike and Strike Plate using (2) #10-24 x 3/4" (19mm) PFHMS thru outer slots. Adjust and shim strike as needed for zero door rattle. Add third screw (#10-24 x 3/4" (19mm) PFHMS) after final adjustments.
3. If Top Bolt does not remain retracted when door is opened, Top Rod is too short. Pull rod out of the guide and the slide then rotate rod to increase length. Upper Bolt should retract flat.
4. If upper latch will not deadlock, Top rod is too long. Pull rod out of the guide and the slide and rotate to decrease length.

* LBR Installation: Use 726 Strike. For 726 Strike Installation see supplement instruction 80-8470-0726-000 supplied with instruction packet.

B. Install Lower Rod and 790 Strike

1. With door open, actuate Pushpad to retract upper latch. Hang Lower rod from bottom of Slide and adjust bolt so that it clears the finished floor by 1/4".
2. Verify location of pipe strike template. Prepare the strike hole and install the pipe strike. Set in place with appropriate bonding material.
3. With the door open, actuate pushpad to retract upper latch. Adjust bolt height by pulling the rod out of the guide and slide and rotating until the bolt clears the pipe strike by 1/8".

C. Test device action by Touchbar, by Trim, by Dogging.

1. To dog device, turn key 1/4 turn clockwise, while depressing Pushpad.

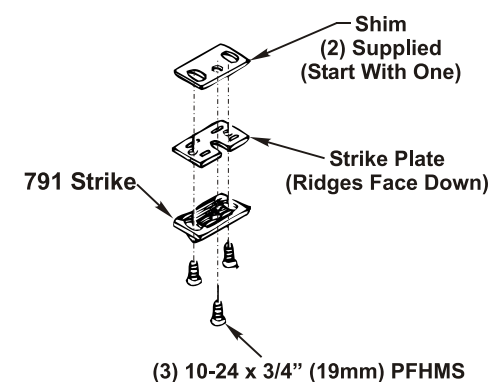
Not for Fire Labeled Device

D. Install covers

Bottom Strike Detail

Note: Bottom Bolt will retract to 1/8" (3mm) above Floor Strike. Floor covering in the door path must be layed out accordingly.

Top Strike Detail



A. Install Top Rod and 791 Strike

1. Thread Top Rod Assembly onto Top Latch. Lift rod to fully retract Top Latchbolt. Depress Pushpad and hold depressed. Adjust top rod length until Rod Connector seats into the Slide Assembly in latch case
- 2a. Position the Top Strike Roller between the Tripping Lever and the Bolt on the Top Latch. Verify hole positions and prepare holes per Installation Instruction Template.
- b. Install Top Strike and Strike Plate using (2) #10-24 x 3/4" (19mm) PFHMS thru outer slots. Adjust and shim strike as needed for zero door rattle. Add third screw (#10-24 x 3/4" (19mm) PFHMS) after final adjustments .
3. If Top Bolt does not remain retracted when door is opened, Top Rod is too short. Pull rod out of the guide and the slide then rotate rod to increase length. Upper Bolt should retract flat.
4. If upper latch will not deadlock, Top rod is too long. Pull rod out of the guide and the slide and rotate to decrease length.

B. Install Lower Rod and 790 Strike

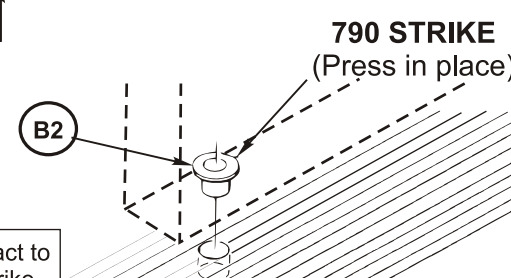
1. With door open, actuate Pushpad to retract upper latch. Hang Lower rod from bottom of Slide and adjust bolt so that it clears the finished floor by $\frac{1}{4}$ ".
2. Verify location of pipe strike template. Prepare the strike hole and install the pipe strike. Set in place with appropriate bonding material.
3. With the door open, actuate pushpad to retract upper latch. Adjust bolt height by pulling the rod out of the guide and slide and rotating until the bolt clears the pipe strike by $\frac{1}{8}$ ".

C. Test device action by Touchbar, by Trim, by Dogging.

1. To dog device, turn key $\frac{1}{4}$ turn clockwise, while depressing Pushpad.

Not for Fire Labeled Device

D. Install covers



Note: Bottom Bolt will retract to 1/8" (3mm) above Floor Strike. Floor covering in the door path must be layed out accordingly.

Bottom Strike Detail