

# 9300/F9300 & 9300FL/F9300FL

Series Rim Exit Device

## Installation instructions

95011756 - 04-2022

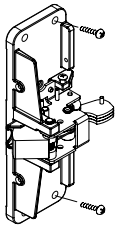
| EN |

dormakaba 

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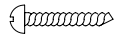
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# SCREW CHART



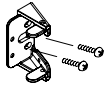
(4) 12-24 x 1" R.H.P.M.S. (Metal or Thru Bolts)

Chassis Mounting



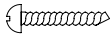
(4) #12 x 1 1/4" R.H.P.T.S. (Wood Door)

Chassis Mounting



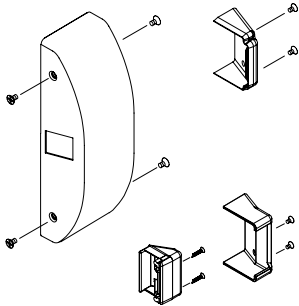
(2) 12-24 x 1" R.H.P.M.S. (Metal or Thru Bolts)

End Cap Bracket



(2) #12 x 1 1/4" R.H.P.T.S. (Wood Door)

End Cap Bracket



(6) 8-32 x 3/8" F.H.P.M.S.

Chassis Cover & End Cap



(2) 8-32 x 1/4" F.H.P.M.S.

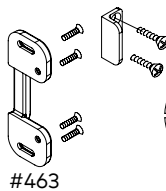
Chassis Cover & End Cap



(2) #10 x 1" F.H.P.T.S.

End Cover Mounting

"FL" Full length touch bar & rail series.



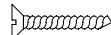
Strike Angle

#463



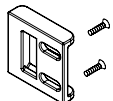
(6) 12-24 x 3/4" O.H.P.M.S. (Metal)

Strike Mounting



(6) #12 x 1" F.H.P.T.S. (Wood Door)

Strike Mounting



#430



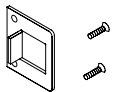
(2) 10-32 x 5/8" F.H.P.M.S. (Metal)

Strike Mounting



(2) #10 x 1" F.H.P.T.S. (Wood Door)

Strike Mounting



#443



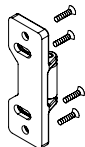
(2) 10-32 x 3/8" F.H.P.M.S. (Metal)

Strike Mounting



(2) #10 x 1" F.H.P.T.S. (Wood Door)

Strike Mounting



#486



(4) 10-32 x 5/8" F.H.P.M.S. (Metal)

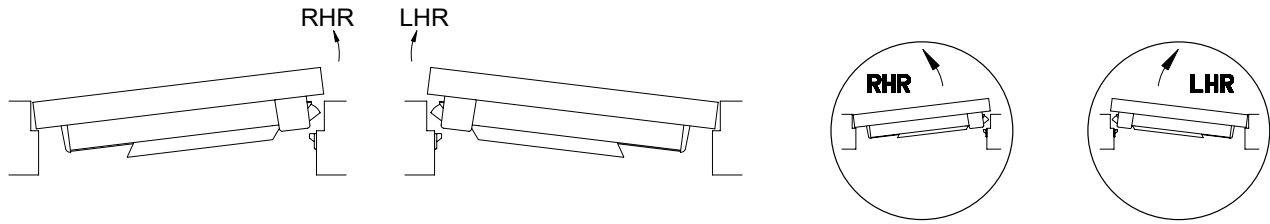
Strike Mounting



(4) #10 x 1" F.H.P.T.S. (Wood Door)

Strike Mounting

## HANDING OF DOOR



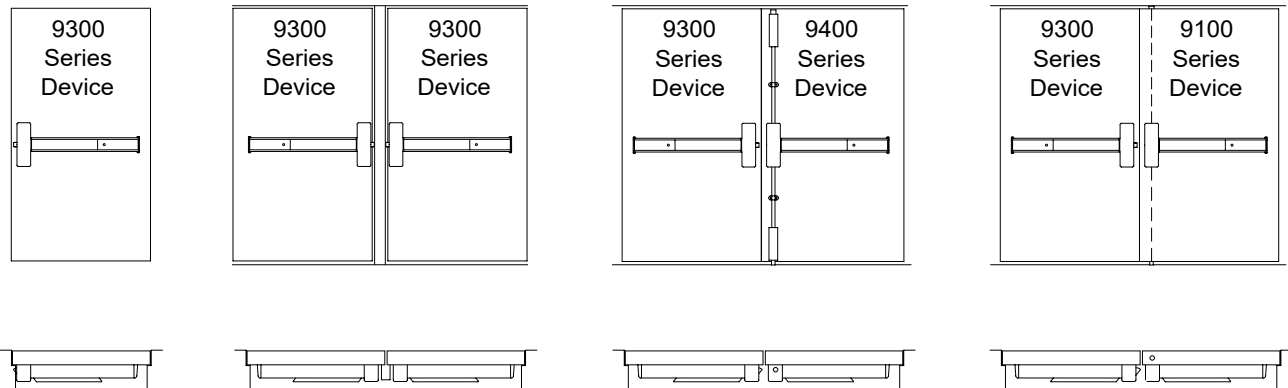
Read the entire instruction sheet prior to installation.

### Before Installing Hardware:

1. Door should be fitted and hung.
2. Verify door width, handing and product with carton label for correct exit device and length. (See Step 7)
3. For hand reversal of outside lever trim see Step 4. Additional instruction sheet also packaged with trim.

**Note:** If device is to be installed over glass lite panels, shim kit may be required, order No. GK9000.

## TYPICAL APPLICATIONS



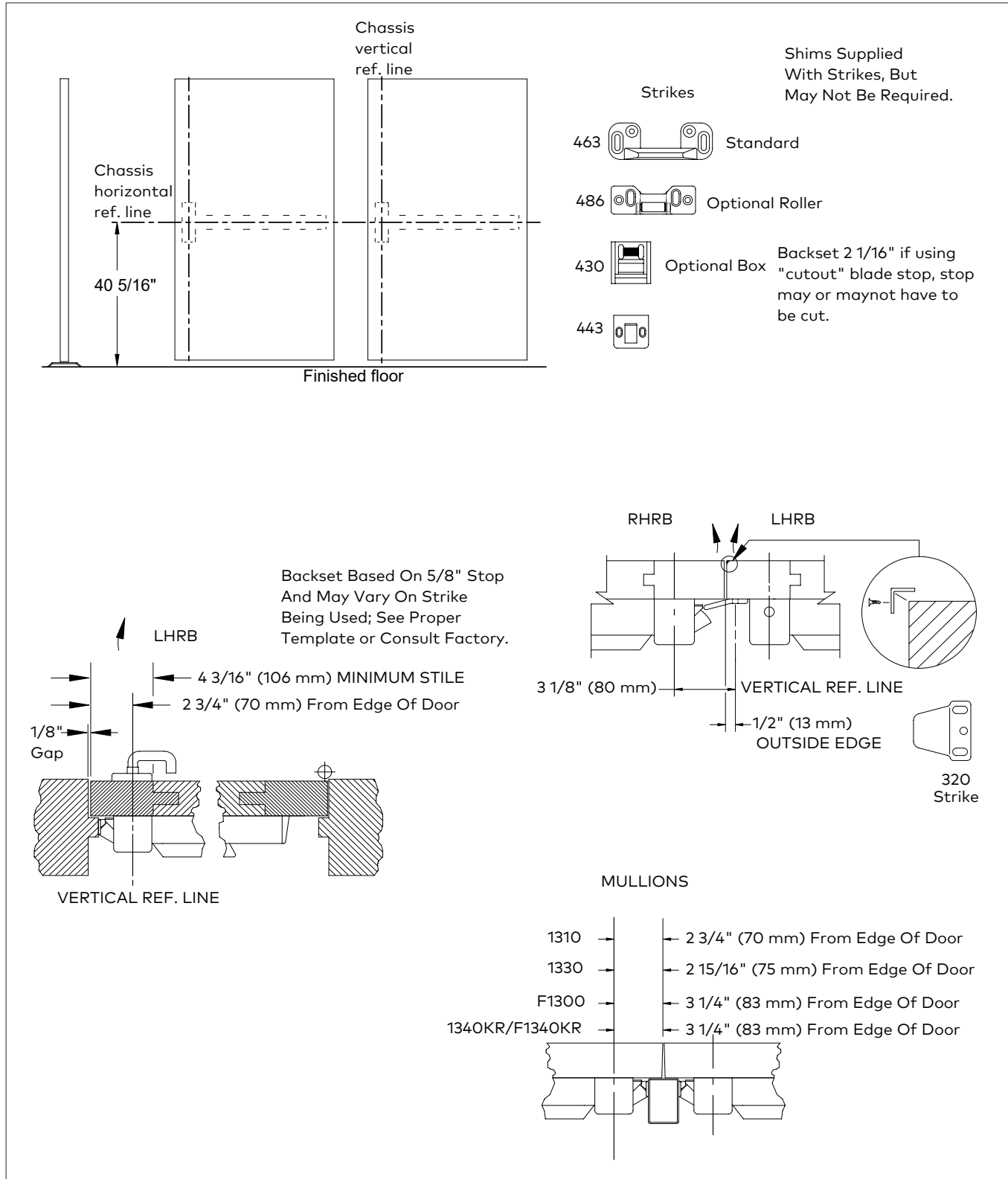
## SPECIAL TOOLS FOR INSTALLATION

12-24 Tap, 10-32 Tap  
 Drill bits: 1/8", #25, #16, #21 & 3/8"  
 Hole saws: 1", 1 1/4", & 2 1/8" diameter for trim (if required).  
 Jig saw or router may be required for thumbpiece trims.

## 1.1 Installation

Open box, layout all parts and verify prior to starting installation. See page (3) three for parts.

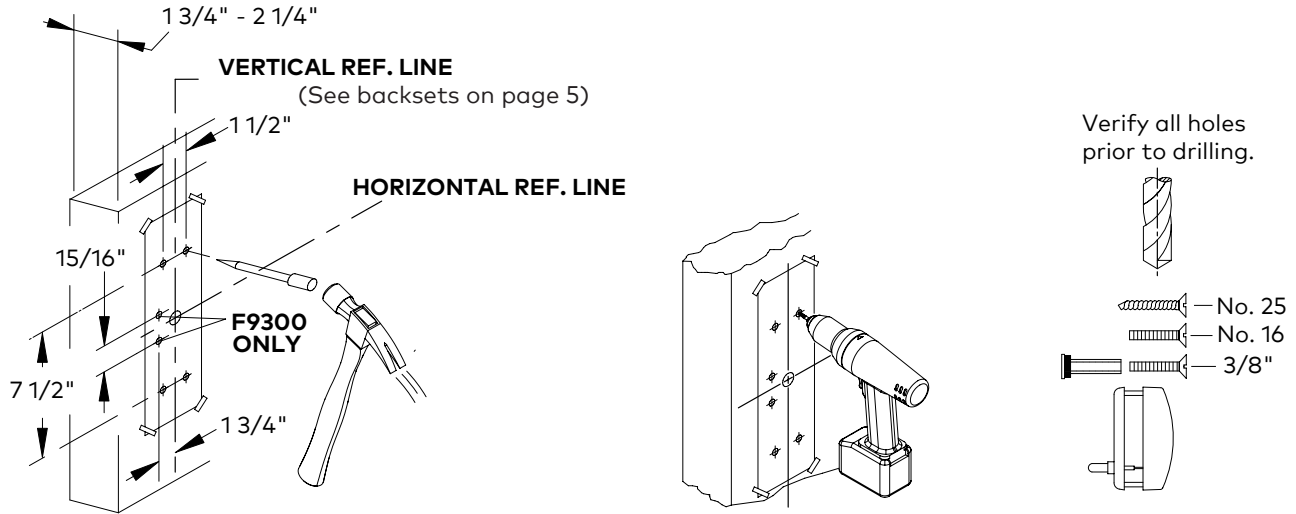
## 1.2 Door preparation



### 1.3 Door templating

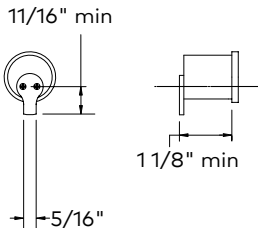
If not done layout device on door using drilling template located at rear of booklet.  
 For additional templates contact technical support at 1-800-392-5209 or visit  
<https://dhwsupport.dormakaba.com/hc/en-us>.

Refer to carton label for model and trim number prior to drilling.  
 Prepare mounting holes and cut-outs per template.



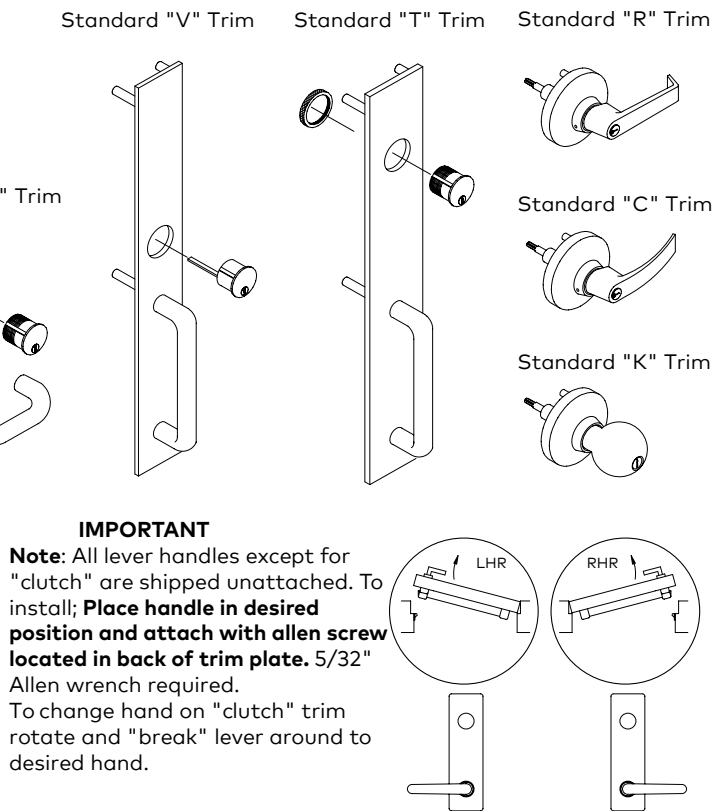
### 1.4 Handing of trim, and cylinder specifications and installation

**Note:** For specific trim functions, cylinder type, and handing information; see additional instructions packed with trim.

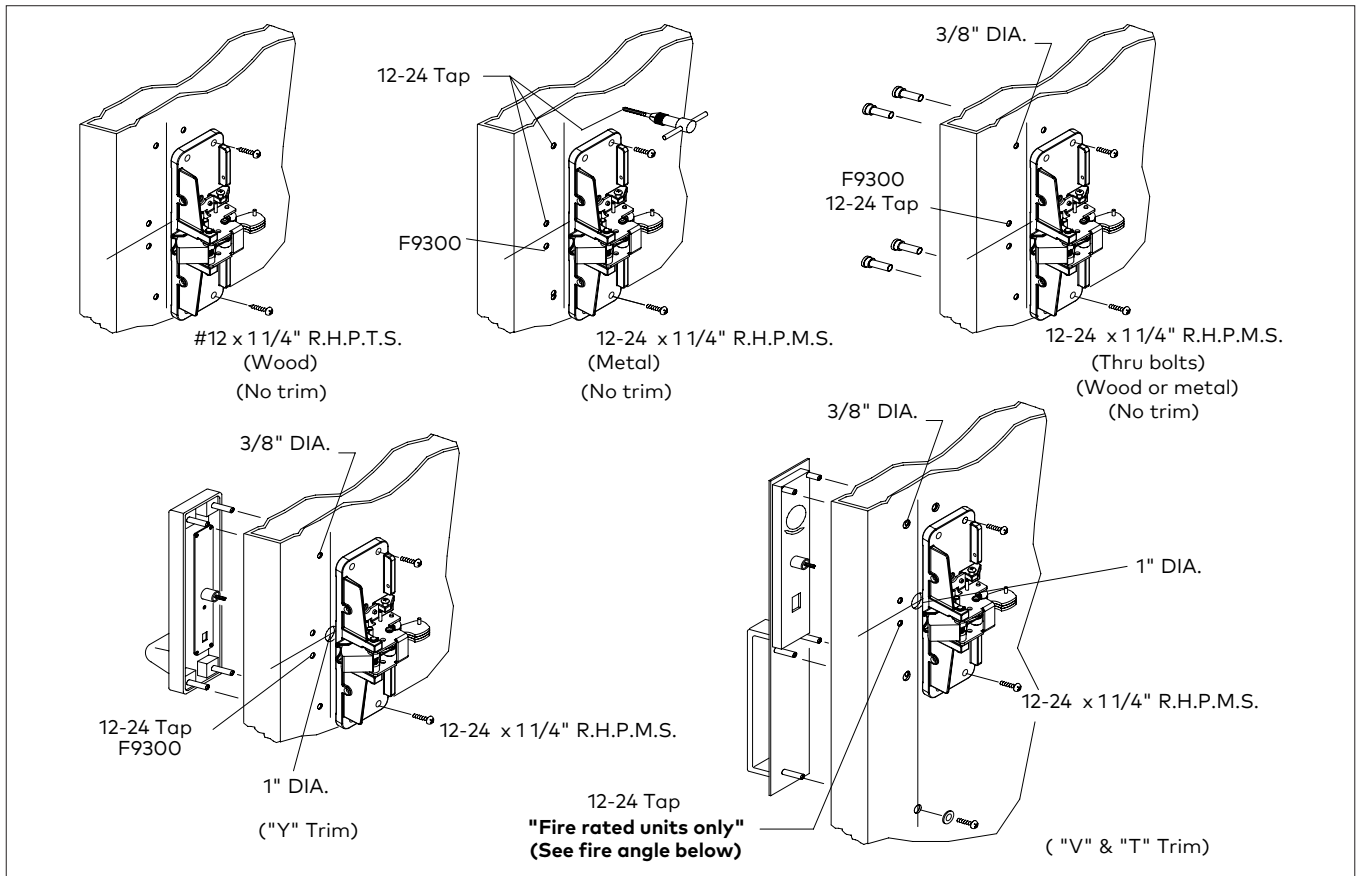


**Note:** Spindle must be installed with pin in the vertical position as shown on 08 & 09 functions.

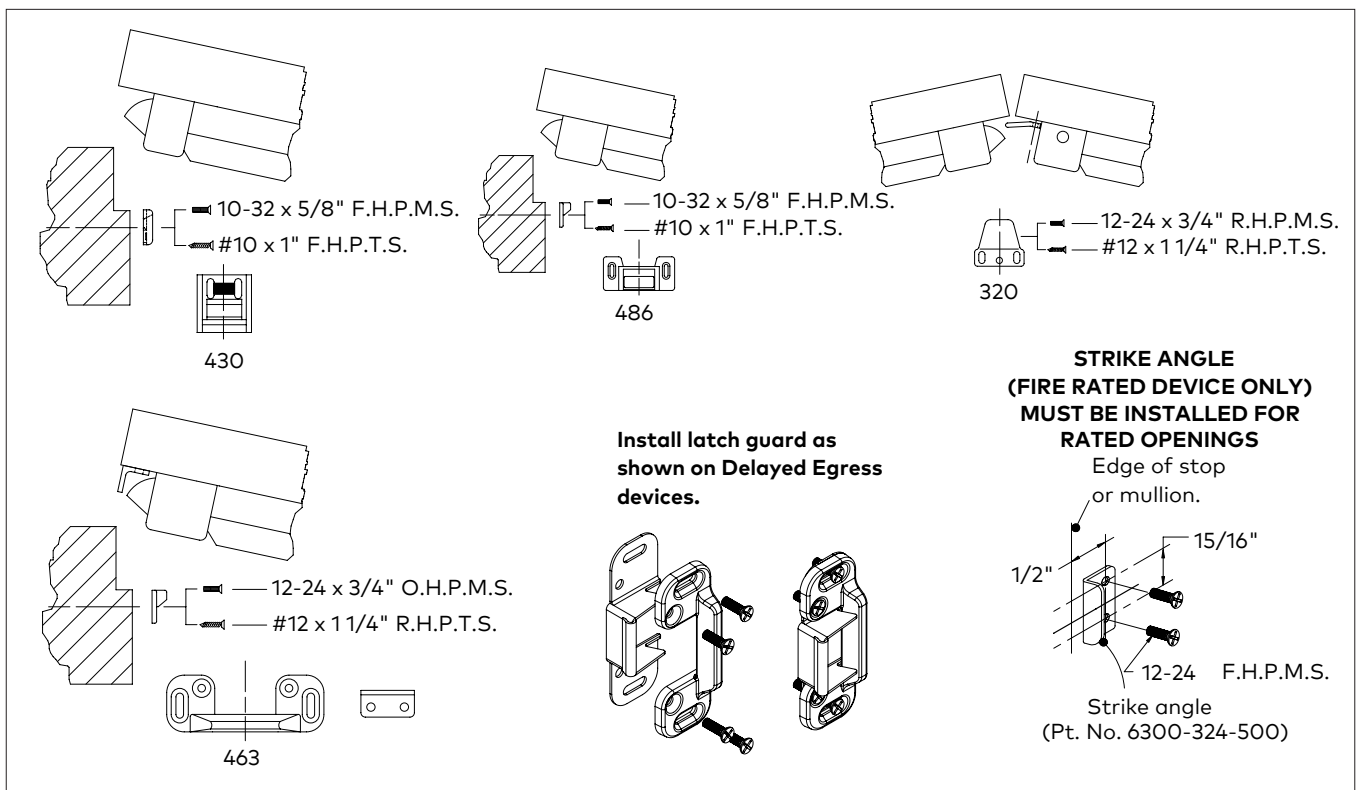
**Tighten Securely**



## 1.5 Chassis installation (if using GK9000 install shims under chassis at this time.)



## 1.6 Install strike per details below using proper fasteners



## 1.7 Prepare to install touch bar and rail on door

**NOTE: All dimensions are based on 5/8" stop height; Verify strikes, stile width, any trim and stop height prior to making any cuts. If cutting is required follow instructions below.**

**Size A:**

Fits 48" door opening without cutting.  
Can be cut to fit a 34" minimum door opening.

**Size B:**

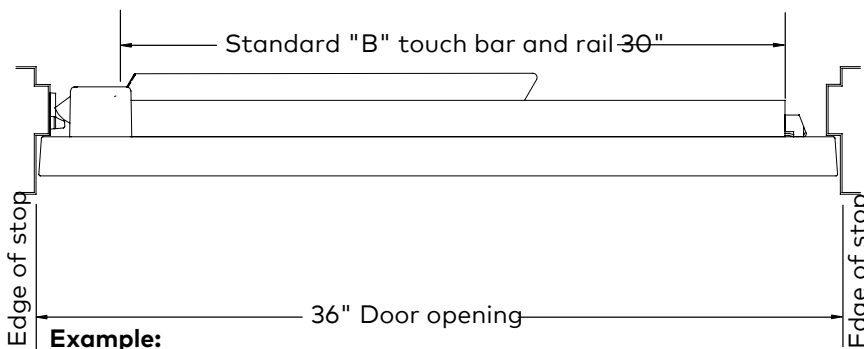
Fits 36" door opening without cutting.  
Can be cut to fit a 28" minimum door opening.

**Size C:**

Fits 36" door opening with out cutting.  
Using a shorter touch pad then the standard "B" size allows it to be cut to 25" door opening.

**Note:** Models with prefix options such as "ES", "DE" etc. may not be cut down to minimums shown to left. Consult factory or catalog for details.

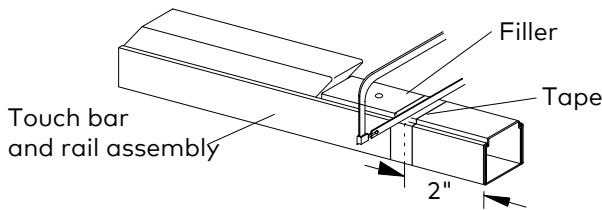
Verify device length with box label; "A", "B" or "C", ie. 9300B



**NOTE:** If carton label list prefix; "ES", "MS", "LM", "BPA", "BPAR", "DWA", "LM/MS/BP" or "CD" prefix see Options pages at rear.

**Example:**

**Note:** If door opening width is less then standard touch bar will have to be cut down. ie: door opening width 34" subtract 2" from rear of touch bar and rail, tape and cut to length as shown.

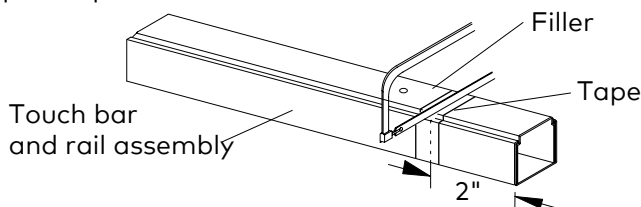


**IMPORTANT**

Use caution when cutting touchbar and rail to size on models with "ES", "MS", "LM" or "DWA" prefix options. These units contain internal wiring. For models with prefix options "BPA", "BPAR" or "DE" remove filler containing electronics before cutting.

## 1.8 Cutting of "FL" type touch bar and rail assembly

**Note:** If door opening width is less or stops are different, then standard touch bar will have to be cut down. ie: door opening width 34" subtract 2" from rear of rail, depress touch bar as shown, tape and cut to length as shown. Touch bar should be approximately 3/16" longer then rail once it is released to upward position.



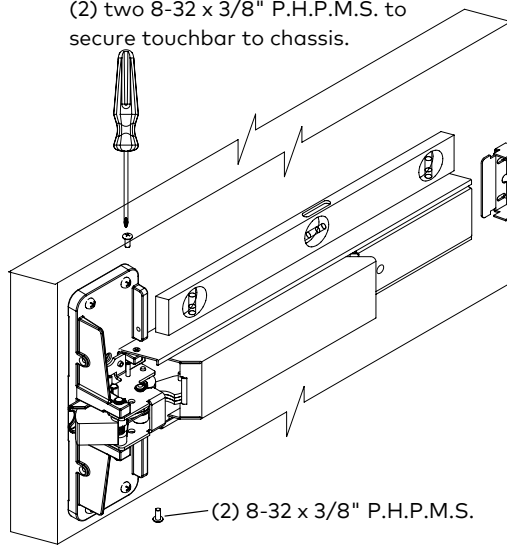
**IMPORTANT**

Use caution when cutting touchbar and rail to size on models with "ES", "MS", "LM" or "DWA" prefix options. These units contain internal wiring. For models with prefix options "BPA", "BPAR" or "DE" remove filler containing electronics before cutting.



## 1.9 Install touch bar and rail assembly and end cap to door

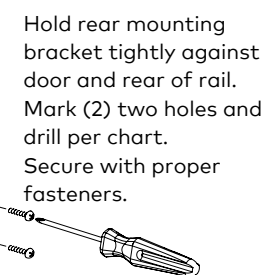
Remove two 8-32 screws from chassis, slide touch bar and rail assembly under rear of chassis. Note: If device has prefix "ES" ensure that pins in lever bolt align with slots in actuator located inside nose of touch bar. See instruction sheet IES-7 packed with device. Install (2) two 8-32 x 3/8" P.H.P.M.S. to secure touchbar to chassis.



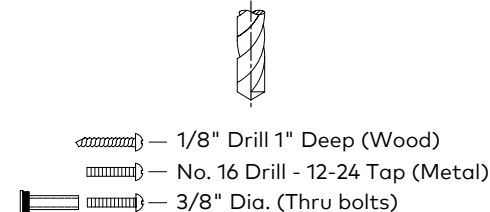
(2) 8-32 x 3/8" P.H.P.M.S.

"Remove protective covering from the touchbar and rail assembly prior to installing on door."

Hold rear mounting bracket tightly against door and rear of rail. Mark (2) two holes and drill per chart. Secure with proper fasteners.



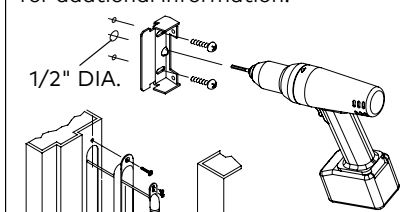
Bracket should be flush against door and tight against rear of rail.



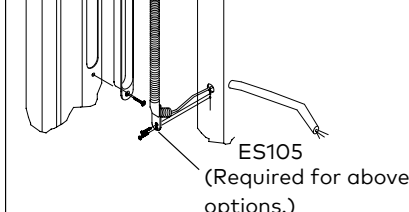
1/8" Drill 1" Deep (Wood)  
 No. 16 Drill - 12-24 Tap (Metal)  
 3/8" Dia. (Thru bolts)

Metal/thru-bolts - (2) 12-24 x 1" F.H.P.M.S.  
 Wood - (2) #12 x 1 1/4" F.H.P.T.S.

For the following models prefixes: "ES", "MS", "LM" or "DWA" drill an additional 1/2" diameter hole as shown. See options pages at rear for additional information.



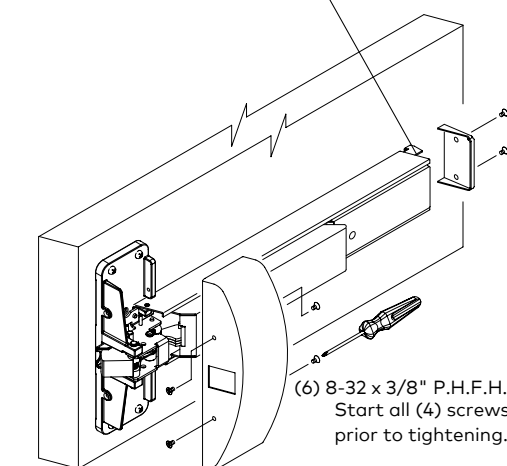
1/2" DIA.



ES105  
 (Required for above options.)

## 1.10 Install center case cover and end cap

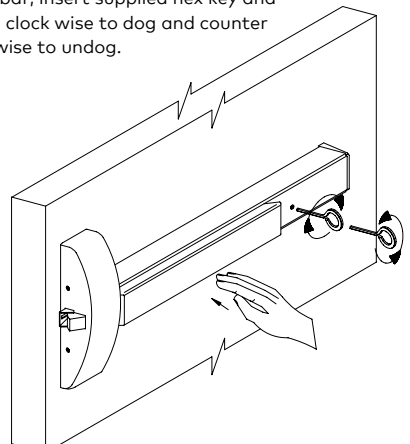
"FL" Full length touch bar & rail series.  
 (2) 8-32 x 1/4" P.H.F.H.U.C.M.S.  
 (2) #10 x 1" F.H.P.T.S.



(6) 8-32 x 3/8" P.H.F.H.M.S.  
 Start all (4) screws prior to tightening.

## 1.11 Check dogging operation (if equipped)

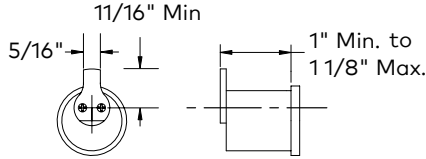
Standard hex key dogging, depress touch bar, insert supplied hex key and rotate clock wise to dog and counter clock wise to undog.



**General Maintenance Notes:**  
 The dormakaba 9000 series exit devices are designed to give years of trouble free service, however depending on installation, location, climate conditions etc.: routine maintenance is recommended in all latch bolt locations. The device should be periodically cleaned and re-lubricated with Dura-Lube to ensure proper function and operation of all moving parts.

## 1.12 Options: Cylinder dogging

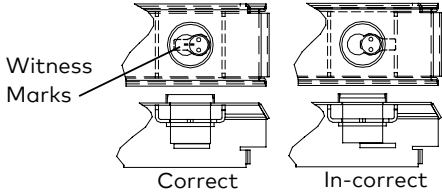
Cylinder specifications and cams;



11/16" Min  
5/16"

1" Min. to  
1 1/8" Max.

Note: When using IC core cylinders, ensure that cam is in proper position prior to installing the new core.

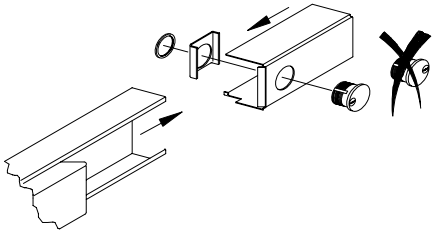


Witness Marks

Correct In-correct

Brand	Model	Manufacturer	Part Number
Arrow	001	Ilco/Unican	SC1
Assa	Std. (Yale)	Lori	SC1 4200-82-2002 Std.
Best	C136	Sargent	13-0664 or 13-0660
Corbin	A02	Schlage	001
Falcon	12667-3	Yale	2160

Cylinder dogging option on standard touch bar and rail;

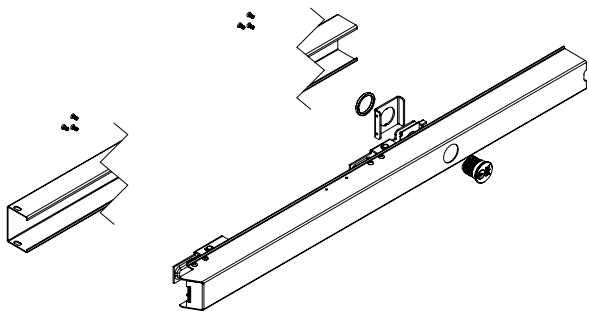


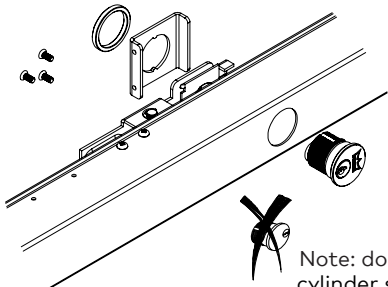
Note: dormakaba mortise cylinder supplied. To use other manufacture cylinders, "L" less cylinder is available.

To change cylinder:

1. Dog down touch bar.
2. Remove end cap and end cap mounting bracket.
3. Slide out filler from rear of rail.
4. Remove cylinder nut on underside of filler.
5. Remove cylinder and mounting plate.
6. Insert new cylinder facing as shown in detail.
7. Install mounting bracket and cylinder nut.
8. Slide filler back into rear of rail.
9. Install end cap mounting bracket and end cap.
10. Undog touch bar.

Cylinder dogging option on full length touch bar and rail; (See cam specifications above.)






Note: dormakaba mortise cylinder supplied. To use other manufacture cylinders, "L" less cylinder is available.

To change cylinder:

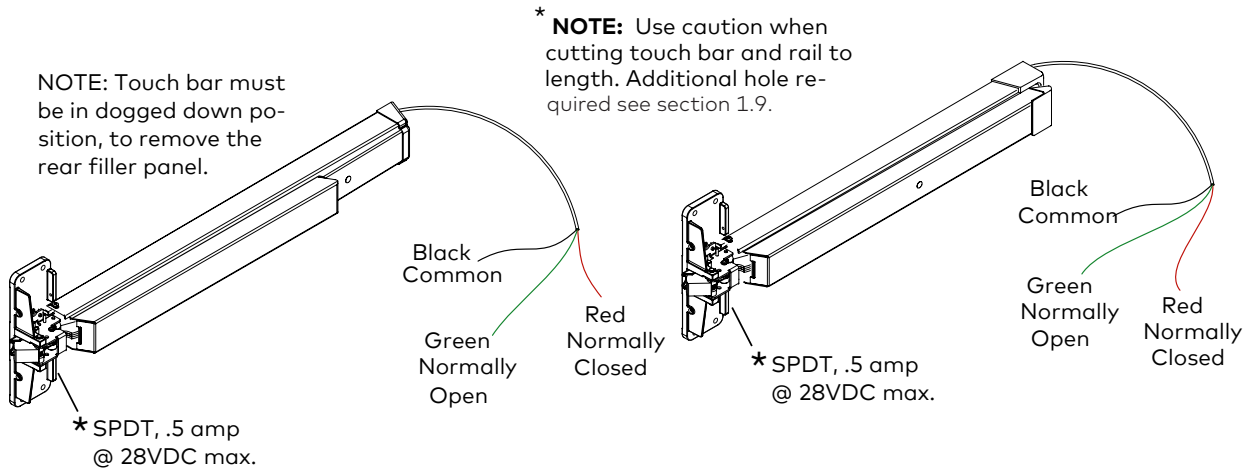
1. Remove end cap, end cover & end cap mounting bracket.
2. Remove cover from chassis and two chassis to touch bar mounting screws.
3. Remove (6) touch bar to rail mounting screw from underside of rail.
4. Flip rear arm assembly outward from underside of touch bar.
5. Remove cylinder nut on underside of touch bar.
6. Remove cylinder and mounting plate.
6. Insert new cylinder facing as shown in detail.
7. Install mounting bracket and cylinder nut.
8. Flip rear arm assembly back under touch bar.
9. Re-install touch bar to rail with (6) screws.
10. Install touch bar & rail back on to chassis with (2) screws.
11. Re-install end cap mounting bracket.
12. Re-install end cap, end cover & chassis cover.



### 1.13 Options: LM

Latch monitor; monitors movement of latch bolt with or without depressing of touch bar. May be wired either normally open or normally closed.

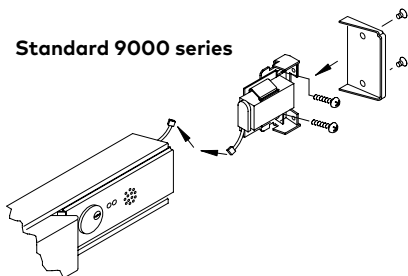
NOTE: Touch bar must be in dogged down position, to remove the rear filler panel.



### 1.14 Options: BPA, BPAR, DWA

"BPA" Battery powered alarm, sounds continuous until reset. "BPAR" alarm sounds for 4 minutes then will automatically reset. **Alarm mode set at factory.**

**Note:** On either the standard 9000 alarm or the 9000"FL" versions caution must be used when cutting touch bar and rail to length due to the wires running inside of the assembly. A standard dormakaba cylinder is supplied on both units, to change to a customer supplied cylinder follow steps under "cylinder dogging". Refer to additional instruction sheet packed with device for operational instructions etc.



Standard 9000 series

**To change battery:**

1. Prop open door.
2. Remove (2) end cap mounting screws.
3. Remove (2) end cap mounting bracket screws.
4. Remove mounting bracket & replace battery.
5. Re-install in reverse order.

**Size A:**

Fits 48" door opening without cutting.  
Can be cut to fit a 37 1/2" minimum door opening.

**Size B:**

Fits 36" door opening without cutting.  
Can be cut to fit a 31 1/2" minimum door opening.

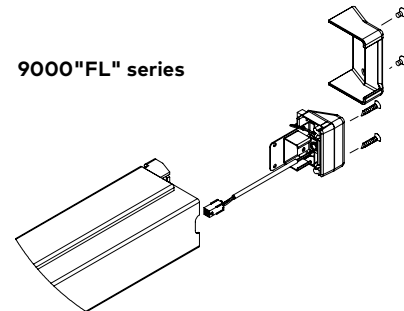
**Size C:**

Fits 36" door opening with out cutting.  
Using a shorter touch pad then the standard "B" size allows it to be cut to 28 1/2" door opening.

**"DWA" OPTION:**  
Battery Eliminator

White  
Green  
(Non-polarized)

Connected to outside power source; 12-24V AC/DC supply. ie: dormakaba ES-100 etc.  
Contact technical support at 1-800-392-5209 or visit <https://dhwsupport.dormakaba.com/hc/en-us> for other supplies available.



9000"FL" series

**To change battery:**

1. Prop open door.
2. Remove (2) end cover mounting screws.
3. Remove (2) end cap screws.
4. Remove end cap & replace battery.
5. Re-install in reverse order.

### 1.15 Options: ES

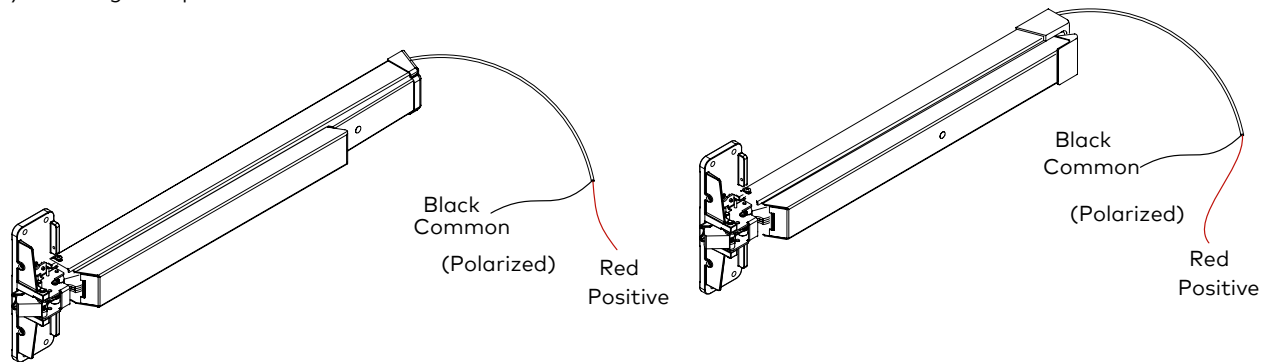
Electric latch retraction: Electrically retracts latch bolt(s) when energized by power supply.

Electrically retracts latchbolt(s) when energized by power supply.

REQUIRES DORMA PS501 POWER SUPPLY AND ES105 POWER TRANSFER.

PS501 Will operate (2) "ES" 9600 exit devices, but is capable of powering (2) additional devices by installing the optional "ES-2" card.

**\*NOTE:** Use caution when cutting touch bar and rail to length. Requires additional hole see section 1.9.



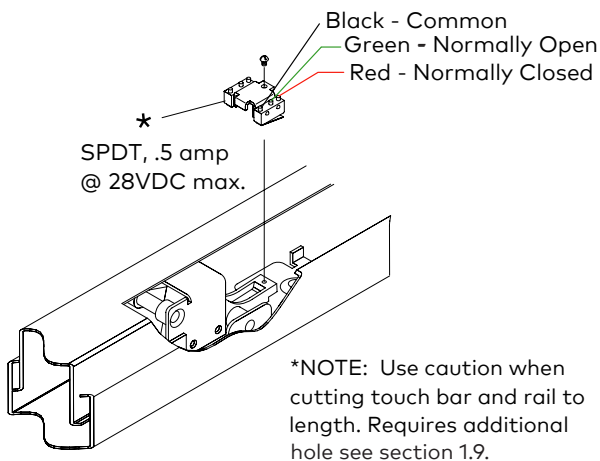
### 1.16 Options: MS

Monitor Switch: Monitors movement of touch bar.

Located on the rear arm assembly as shown; Comes standard with (2) two micro switches. Both can be wired normally open or normally closed.

On the standard 9000 series it can be added in the field by removing rear filler. On the "FL" series it can be added, however the touch bar must be removed completely from the rail to install switch assembly.

**Note:** Normal switch position shown, once installed normally open and closed positions are reversed.

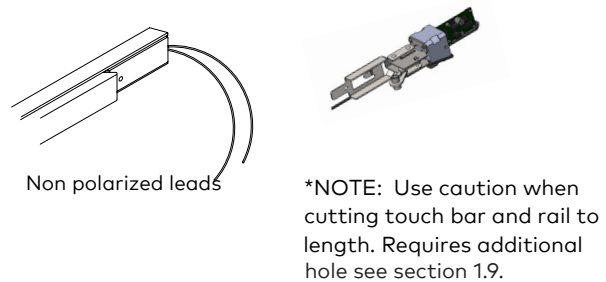


### 1.17 Options: MLR

Motorized latch retraction Specifications:

Electrical input requirements:  
24Vdc +10% Filtered and regulated power supply; ie: dormakaba PS610RF or PS532RF.  
The unit may also be powered by the dormakaba ED900 operator.  
Current: .888A max. inrush, 400mA max. hold

**Provides simultaneous electric latch retraction and dogging (depressed touch bar).**



## 1.18 Options: DE

Note: Refer to DE9000 Series Installation Instructions for additional instructions for installation and operation of the "Delayed Egress" exit device.

Specific project or custom wiring diagrams available on request, consult the dormakaba technical service department at 1-800-329-5209.

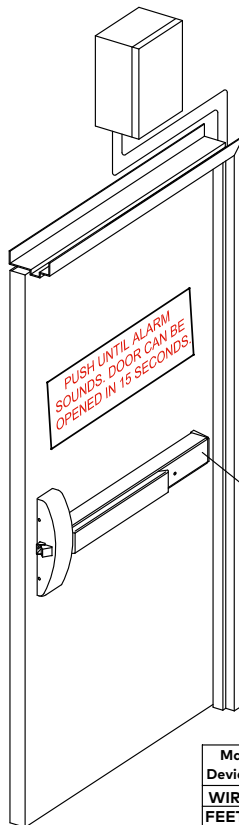
**NOTE: Always disconnect power prior to making any connections or service.**

It is recommended that the 120VAC power be supplied from an Uninterrupted Power Supply (UPS) to ensure proper operation during a power failure.

Always observe proper static discharge grounding procedure's when installing or servicing the DE device.

Wires that interconnect the remote authorized egress and remote by-pass/rearm must be located within the same room as the panic hardware (DE), or outside the door at no more than 10' feet of distance.

**For ULC installations:** Some "Authorities Having Jurisdiction" also require an illumination level of 100' feet at the door, to be provided by the emergency power supply system.

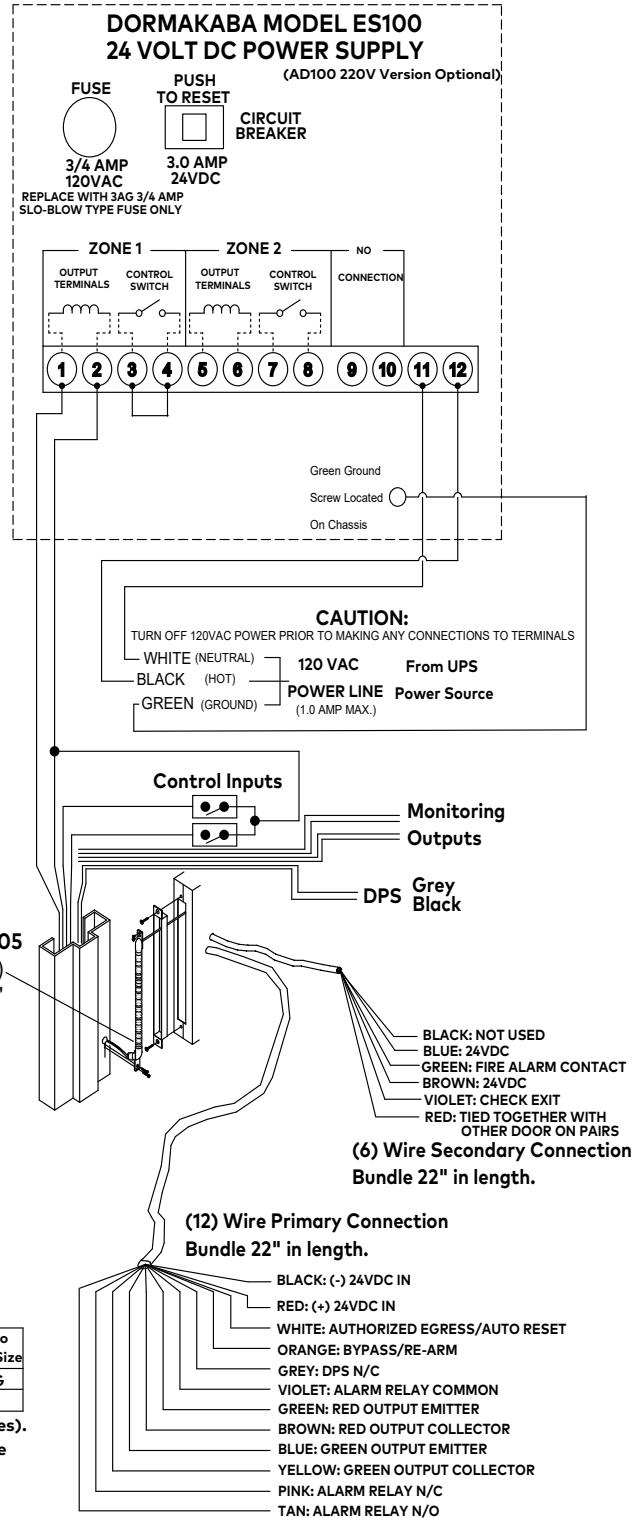


Minimum 18 AWG wire recommended for 24VDC inputs (red & black) leads.

DORMAKABA ES105 (Power Transfer) "Recommended"

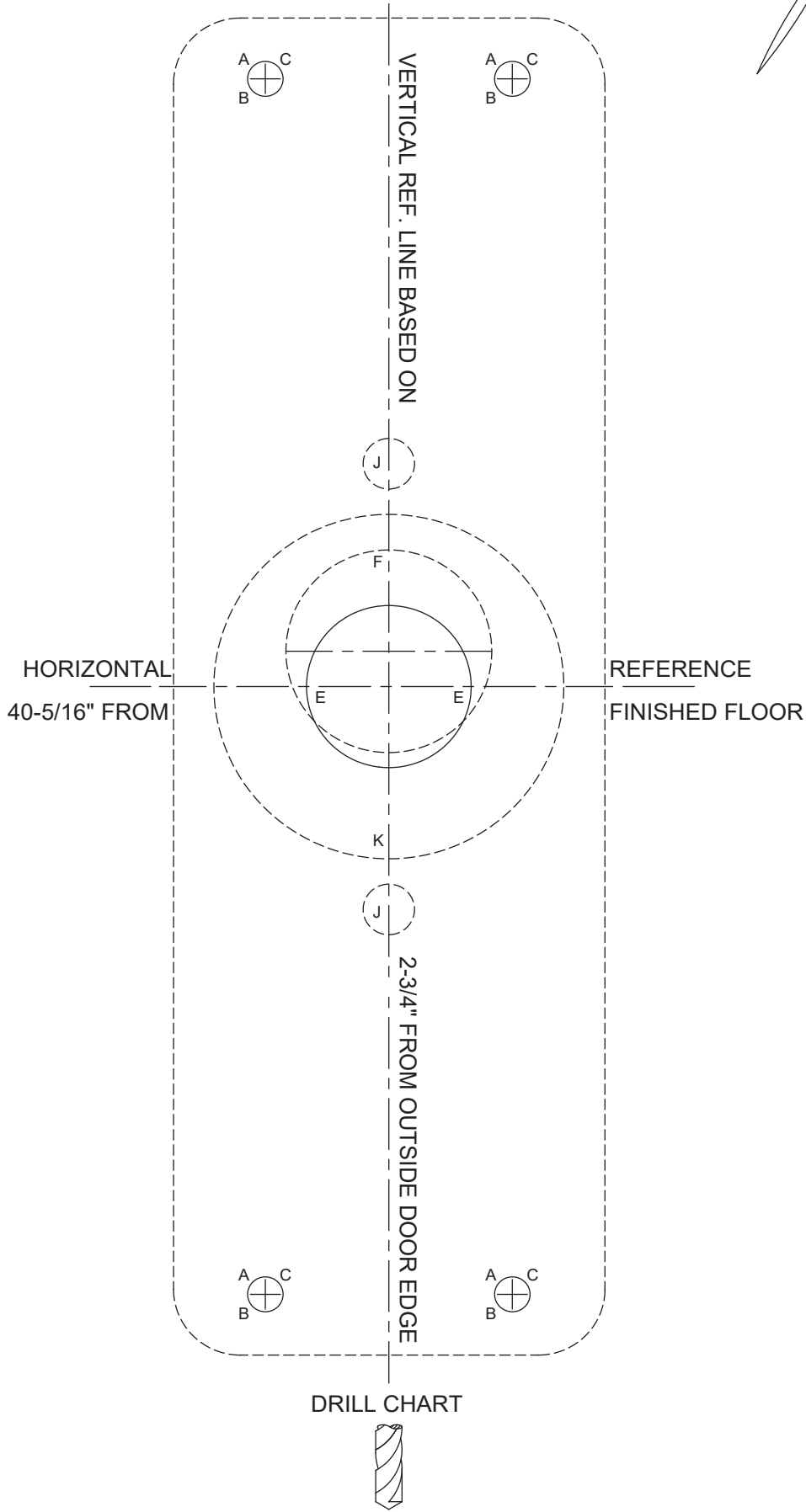
WIRE	18AWG	16AWG	14AWG	12AWG
FEET	25	50	75	100

\* For 24VDC inputs only (red & black wires).  
Note: Wire run is from supply to device and back to the supply.

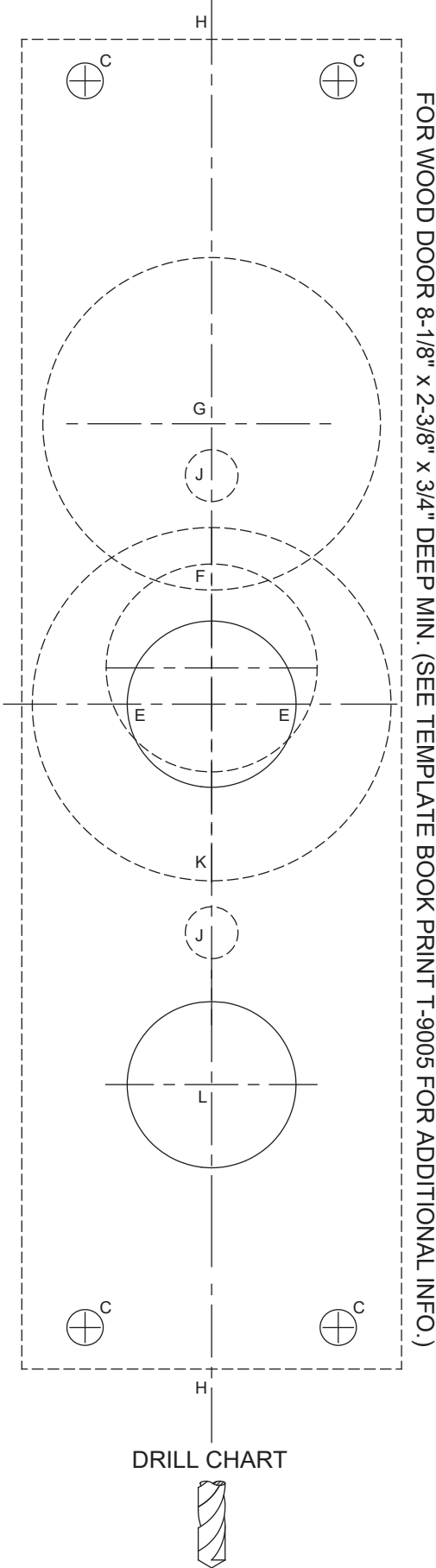


1.19 9300 Series template

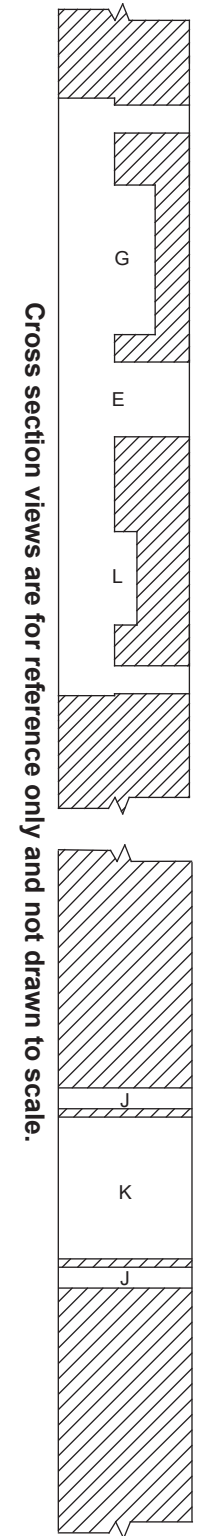
INSIDE DOOR PREP  
(VERTICAL REFERENCE)



OUTSIDE DOOR PREP  
(VERTICAL REFERENCE)



For Wood or Composite Doors:  
8-1/8" x 2-3/8" x 3/4" Deep Min. Cut  
Out. (Outside Face)  
**DO NOT CUT THROUGH DOOR!**  
(G) 2-1/8" Dia. Min. Hole x 1-1/4" Deep As Shown  
(E) 1" Dia. Min. Hole Thru As Shown  
(L) 1-1/4" Dia. Hole x 1" Deep As Shown



- A 1/8" [3] DIA. DRILL 1" [25] DEEP
- B NO. 14 DRILL 12-24 TAP
- C 3/8" [10] DIA. THRU
- C 3/8" [10] DIA. THRU
- E 1" [25.4] DIA. THRU FOR "08" FUNCTION
- F 1-3/8" [35] DIA. THRU FOR "03" FUNCTION
- C 3/8" [10] DIA. THRU
- E 1" [25.4] DIA. THRU FOR "05" FUNCTION
- F 1-3/8" [35] DIA. THRU FOR "03" FUNCTION
- D 3/8" [10] DIA. INSIDE FACE
- J 5/16" [8] DIA. THRU DOOR - C08, R08 & K08
- K 2-1/8" [54] DIA. THRU DOOR - C08, R08 & K08
- B NO. 14 DRILL 12-24 TAP

- C 3/8" [10] DIA. THRU
- C 3/8" [10] DIA. THRU
- G 2-1/8" [54] - 2-1/4" [57] DIA. OUTSIDE FACE "08" FUNCTION
- E 1" [25.4] DIA. THRU FOR "08" FUNCTION
- F 1-3/8" [35] DIA. THRU FOR "03" FUNCTION
- C 3/8" [10] DIA. THRU
- F 1-3/8" [35] DIA. THRU FOR "03" FUNCTION
- H 2-3/8" [60] x 8-1/8" [206] CUTOUT OUTSIDE FACE ONLY FOR "05" & "22" FUNCTION
- L 1-1/4" [32] DIA. FOR THUMBPIECE CLEARANCE
- D 1/2" [13] DIA. OUTSIDE FACE
- J 5/16" [8] DIA. THRU DOOR - C08, R08 & K08
- K 2-1/8" [54] DIA. THRU DOOR - C08, R08 & K08

