HANDEDNESS

TYPICAL INSTALLATIONS

9500 Series Device

9500 Series Device

9500 Series Device

9100 Series Device

SCREW CHART

All Screws Are Phillips Head

F.H.P.T.S. —————— Flat Head Phillips Tapping Screw
R.H.P.T.S. ———— Round Head Phillips Tapping Screw
R.H.P.M.S. ———— Round Head Phillips Machine Screw
R.H.P.M.S. ———— Round Head Phillips Machine Screw x Thru Bolt
F.H.P.M.S. ———— Flat Head Phillips Machine Screw
O.H.P.M.S. ———— Oval Head Phillips Machine Screw
1 Installation

Read the entire instruction sheet prior to installation.

Before installing hardware:

1. Door should be fitted and hung.

2. Verify door width, with carton label for correct exit device length. (See Step 7)

3. For hand-reversal of chassis assembly see Step 3.

4. For hand reversal of trim assembly see Step 4.

Note: If device is being installed over glass lite panels, shim kit may be required. Order GK9000.

2 Door preparation

![Diagram showing installation of a door with reference lines and dimensions.](image)

No. 465 Strike (Standard)

No. 565 Open Back Strike (Handed)
If hand reversal of chassis is required follow steps below in alphabetical sequence.

RHRB (Right Hand Reverse Bevel)

Rotate chassis 180 Degrees

LHRB (Left Hand Reverse Bevel)

NOTE:

Longer leg down.

Vertical adjusting arm

NOTE: Vertical adjusting arm is handed. Requires new part.

Handing change of trim, and cylinder specifications and installation.

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

Standard "VM" Trim 1 1/8" (29 mm)

Standard "TM" Trim 1 1/8" (29 mm)

21/32" (17 mm) min

See Details Above Sketches

5/16" (8 mm) - 11/32" (9 mm)

Remove screw thru rear of trim plate to reverse handle.

Nylon plug used on earlier models faces sideways.
5 Refer to carton label for model and trim number prior to drilling.

Refer to Template T9500, located at rear of instruction booklet for specific hole locations, drill size and screw sizes.

NOTE: Holes must be parrell on opposite side of door.

6 Mortise lock installation

e Install mortise cylinder thru trim and thread into lock body. Loosen cylinder retaining screw prior thru front face of lock body. Once cylinder is installed tighten retaining screw to secure cylinder. Due to cylinders being different length's the cylinder may have to be backed out a bit so cam does not interfere with rear of lock body case. Also, if door is not reinforced properly or screws of device are tightened to tight cylinder and lockbody may have interference with cam.

a Install mortise lock in door.

c Install face plate with screws supplied.

d Install strike in frame with screws supplied.

1 3/4” - 2 1/4”
(44-57 mm)

1 1/2”
(38 mm)

7 1/2”
(191 mm)

25” - 48”
(635-1219 mm)

HORIZONTAL REF. LINE

VERTICAL REF. LINE

12-24 Combintaion screws
Chassis installation. If using GK9000, install shims at this time.

#12 x 1 1/4" R.H.P.T.S.
a1 (Wood)  
(No Trim)

12-24 x 1 1/4" R.H.P.M.S.
a2 (Metal)  
(No Trim)

3/8" DIA.  
(10 mm)
a3 (Thru Bolts)  
(Wood or Metal)  
(No Trim)

12-24 x 1 1/4" R.H.P.M.S.
a4 ("Y" Trim)

12-24 x 1 1/4" R.H.P.M.S.
a5 ("V" & "T" Trim)

Cutting touch bar to length

SIZE A:
Will fit 48" (1219 mm) door opening without cutting.  
Can be cut to fit a 34" (864 mm) minimum door opening.

SIZE B:
Will fit 36" (914 mm) door opening without cutting.  
Can be cut to fit a 28" (711 mm) minimum door opening.

SIZE C:
Will fit 36" (914 mm) door opening without cutting.  
Can be cut to fit a 25" (635 mm) minimum door opening.

IMPORTANT

NOTE: Use caution when cutting touchbar to size on units with "ES", "MS", "BPA", "BPAR", "LM", "MD", "DWA" options. "DO NOT CUT WIRES."
Installation of touch bar to chassis

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

NOTE:
Chassis screws are shipped in chassis assembly.

a1

a2 8-32 x 3/8" P.H.P.M.S.

NOTE:
For optional "Filler" installations see "Options" pages 11 & 12 at rear.

Standard installation of end cap mounting bracket

NOTE:
An additional screw may be installed if door is warped or bowed. (Not supplied)

1/8" (3 mm) Drill 1" (25 mm) Deep (Wood)
No. 14 Drill - 12-24 Tap (Metal)
3/8" (9 mm) Dia. (Thru bolts)

OPTIONAL INSTALLATIONS ADDITIONAL HOLE REQUIRED:
ES(Electric Latch Retraction)
MS(Micro Switch)
LM(Latch Monitor)
MD (Magnetic Dogging)
DWA(Direct Wired Alarm)

See "OPTIONS" pages for additional information.
Loosen screw in adjusting arm (Do not remove). With bellcrank all the way down adjust lifting arm until latch bolt moves slightly inward. Tighten adjusting screw. Depress touch bar slowly, watching latch bolt. With touch bar fully depressed, bell crank should be all the way up and latch bolt should be fully retracted. If latch bolt is not completely retracted, adjust lifting arm upward.

Release touch bar, latch bolt should extend fully. Push inward on guard bolt, then push inwards on latch bolt. Latch bolt should deadlatch and not retract. If latch bolt does not deadlatch, re-adjust adjusting arm. (Move it down slightly.) Re-check operation as above. Check outside trim functions if installed.

Allow door to close and check for proper alignment of strike and latch bolt.

NOTE: Adjusting arm on chassis assembly may have to be cut down on doors under 1 3\(\frac{3}{4}\)" in thickness or on composite and wood doors to allow clearance for travel. If cutting is required measure inside face of door to outside edge of latch case. With adjusting arm installed on chassis assembly; Use this dimension to measure from rear edge of chassis, mark and cut adjusting arm to this dimension.

On assemblies using thumb piece type trim, adjusting arm will have to be cut down so it does not interfere with thumb piece bracket on rear of trim. Remove approximately 1\(\frac{3}{4}\)" material from rear of lifting arm on 1\(\frac{3}{4}\)" thick door. See detail to right.
Installation of covers

NOTE:
If carton label list: "ES", "BPA", "BPAR", "DWA", "CD", "MS", "LM", "MD" or "LM/MS-BP" prefix, see "Options" pages 11 & 12, prior to installing the end cap.

Wire transfer or electric hinge may be required for above options.

Standard hex key dogging

NOTE:
Depress touch bar fully retracting latchbolt, then dog down.

General Maintenance Notes:
The DORMA 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 to ensure proper function and operation of all moving parts.
OPTIONS

"CD" (CYLINDER DOGGING) OPTION:
Cylinder dogging installation instructions & cylinder specifications.

Note: DORMA cylinder supplied.

Useable Cams

Arrow 001
Assa Std. (Yale)
Best C136
Corbin/Russwin A02
DORMA 10
Falcon 12667-3
Ilco/Unican SC1
Lori SC1 4200-82-2002 Std.
Sargent 13-0664 or 13-0660
Schlage 001
Yale 2160

5/16" - 11/32" (8 mm) - (9 mm)
23/32" Min (18 mm) to 1 1/8" (29 mm) Max.

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

"LM" (LATCH MONITOR) OPTION:
Latch monitor: Monitors movement of latch bolt, with or without depressing of touch bar. Can be wired normally open or normally closed.

NOTE: Use caution when cutting touch bar and rail to length.

Black Common
Green Normally Open
Red Normally Closed

SIZE A:
Will fit 48" (1219 mm) door opening without cutting. Can be cut to fit a 39" (991 mm) minimum door opening.
SIZE B:
Will fit 36" (914 mm) door opening without cutting. Can be cut to fit a 33" (838 mm) minimum door opening.
SIZE C:
Will fit 36" (914 mm) door opening without cutting. Can be cut to fit a 30" (762 mm) minimum door opening.

"BPA" & "BPAR" (ALARM OPTION) (STANDARD INSTALLATION)
BPA: Battery powered alarm, sounds continuous or until disarmed.
BPAR: Battery powered alarm, sounds for 4 minutes, automatically resets.

"Alarm mode set at factory."

"NOTE: Use caution when cutting touch bar and rail to length.

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

To install customer supplied cylinder, see cylinder dogging option at top of page.

(DORMA mortise cylinder supplied.)

Refer to additional sheet IAL900, packaged with

8-32 x 1/4" F.H.P.U.C.M.S.
12-24 x 3/4" R.H.P.M.S.

To replace battery remove endcap.
**OPTIONS**

**"DWA" (DIRECT WIRED ALARM) OPTION:**

Connected to outside power source.
i.e. DORMA Step down transformer,
Contact DORMA for other power supplies available.

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

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DWA Battery Eliminator

*NOTE: Use caution when cutting touch bar and rail to length.
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Refer to additional sheet IAL900, packaged with

**"MS" (MICRO SWITCH) OPTION:**

"MS" option allows monitoring of touch bar during normal operation, or can be used as a signal switch for horn, light etc. Come standard with (2) two micro switches. Both can be wired either Normally Open or Normally Closed. Can be added to device after installation.

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SPDT, .5 amp @ 28VDC max.
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NOTE: Touch bar must be in dogged down position, to remove the rear filler panel.

*NOTE: Use caution when cutting touch bar and rail to length.*
"MD" (MAGNETIC DOGGING) OPTION:

Electrically dogs touch bar when energized by power supply, then depressed. Releases upon interruption of power.

*NOTE: Use caution when cutting touch bar and rail to length.

- Black Negative
+ Red Positive

.25 AMP CURRENT DRAW @ 24VDC

REQUIRES DORMA PS-545 POWER SUPPLY CAPABLE OF POWERING 1 - 4 "MD" DEVICES. THE USE OF A POWER TRANSFER (ie ES105) OR AN ELECTRIC HINGE IS RECOMMENDED.

FITS "STANDARD" TOUCH BAR AND RAIL ASSEMBLIES ON BOTH THE 5000 AND 9000 SERIES EXIT DEVICES. NOT AVAILABLE ON DEVICES SUCH AS "ES", "DE", "AL" ETC.

MAXIMUM HOLDING FORCE 40# - 60#. IMMEDIATE RELEASE UPON REMOVAL OF POWER.

| Maximum Wire Length From Power Supply To Device In Feet x Wire Gage/Size |
|-----------------------------|------------------|------------------|------------------|
| WIRE 18AWG 16AWG 14AWG 12AWG |
| FEET 25 50 75 100 |

* For wiring to electric hinge or power transfer.

"DE" (DELAYED EGRESS) OPTION:

Note: Refer to 9000 Series Installation Instructions for templating and installation of device. These are additional instructions for installation and operation of the "Delayed Egress" unit.

85 decibel Alarm - Standard
LED Status Indicator - Standard
Nuisance Alarm - Standard
Key Switch Control - Standard
Remote Authorized Egress - Standard
Remote Re-arm - Standard
Remote Bypass - Standard
Door Position Input - Standard

DE9500

REQUIRES DORMA PS-510 POWER SUPPLY.

Easily accessible slide in and out electronics. Meets UL & ANSI/BHMA requirements.

SIZE A:
Will fit 48" (1219 mm) door opening without cutting.
Can be cut to fit a 40 1/2" (1029 mm) minimum door opening.

SIZE B:
Will fit 36" (914 mm) door opening without cutting.
Can be cut to fit a 34 1/2" (876 mm) minimum door opening.