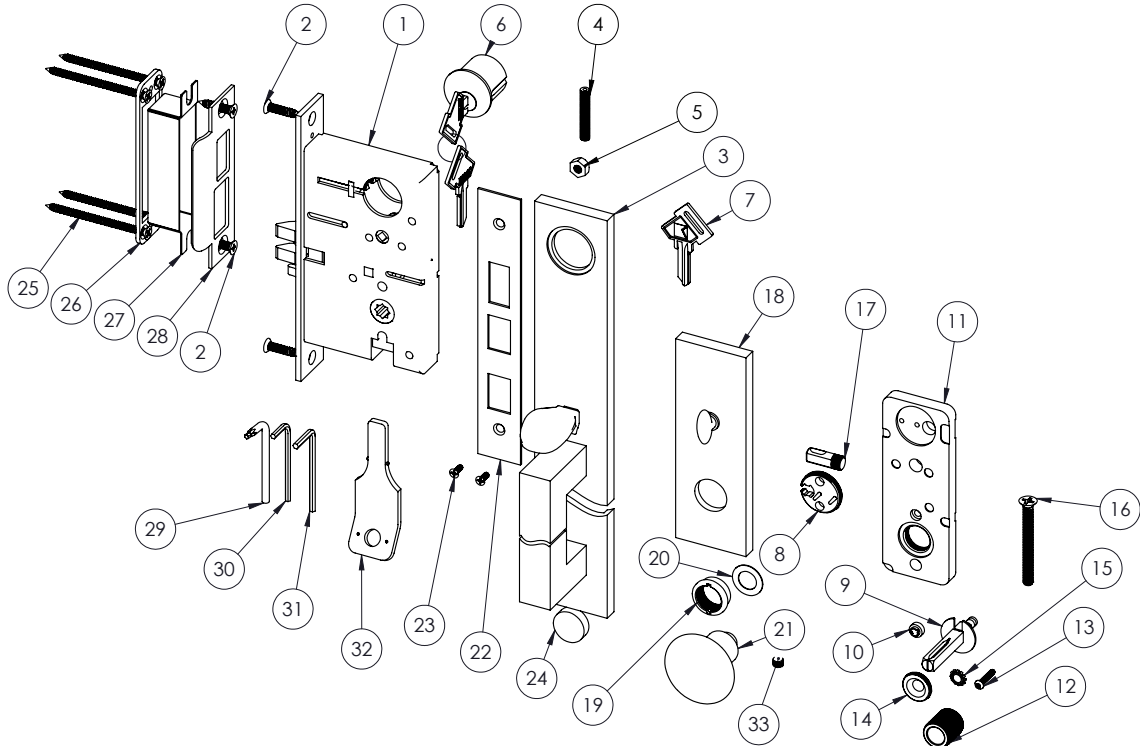


Architectural Mortise Lock Installation Instructions

These instructions are designed to be a guide for assembly. The actual "ORDER" of assembly may be altered by the craftsman. We have included explanations of the design at several intervals so as to assist the installer. The Keeler concept was designed in conjunction with several experienced craftsman in the US, and several of the features are designed to allow proper alignment on the door for a smooth operation.

Installation Sections: Preparing the door, Mortise case installation, Exterior escutcheon installation, Interior escutcheon installation, Armor plate installation, Preparing the jamb and Strike installation

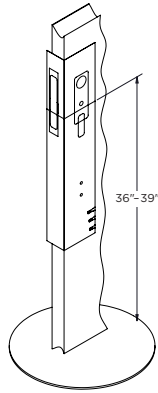


ITEM	DESCRIPTION	QTY.	ITEM	DESCRIPTION	QTY.
1	MORTISE CASE	1	18	INTERIOR ESC ASSY.	1
2	SCREW, #12 WOOD MOD THD	4	19	INT. KNOB NUT, MORTISE	1
3	EXTERIOR ESC ASSY	1	20	KNOB/LEVER WASHER	1
4	CENTERING STUD 1/4-28	1	21	KNOB/LEVER INT.	1
5	STEEL HEX NUT	1	22	ARMOR PLATE 8"	1
6	MORTISE CYLINDER 1-1/8" (WITH CUT KEYS)	1	23	SCREW 6-32 X 3/8" FLAT UC PHIL	2
7	KEY BLANK	1	24	FINISHED SCREW COVER	1
8	CYLINDER BLANK ASSY	1	25	SCREW #10 X 3" WOOD PHIL FLAT	4
9	SPINDLE ASSY.	1	26	SECURITY STRIKE	1
10	CASE BUSHING	1	27	DUST BOX	1
11	ALIGNMENT CHASSIS	1	28	STRIKE PLATE	1
12	THREAD BUSHING GUIDE	1	29	TORX KEY T10	1
13	SCREW, 6-32 X 3/4" PAN TORX	1	30	HEX KEY 1/8"	1
14	THREADED WASHER	1	31	HEX KEY 9/64"	1
15	CSINK STAR WASHER 1/4"	1	32	SPANNER WRENCH	1
16	THROUGH BOLT 1/4-20 X 2-1/2" FLAT HEAD	1	33	POINTED SET SCREWS	2
17	INTERIOR ANCHOR POST 1-3/4" - 2"	1	34*	INSTALLATION INSTRUCTIONS	1
			35*	MECHANICAL LOCK TEMPLATE	1

*not shown

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1



The Keeler template that is provided is designed for doors with a square edge (non-beveled) miter. If you are using a beveled edge, you will need to adjust for the backset distance, on the lead edge.

The red outlined features on the template are for the inside of the door.

The Keeler template is marked with the center line of the knob; position the folded portion as shown 36 to 39 inches from the floor.

WARNING: Before any prep begins, verify the door will accommodate the mortise lock. Verify the trim will not interfere with the door stop, door panel or glass.

2



Porter Cable model number 513

After marking the door edge, it is recommended to use an automatic router similar to the Porter Cable® model number 513 (or an alternate) as shown here to router the door edge.

Follow the Porter Cable instructions for setting the router dimension cuts.

3

PREPARING THE DOOR

Route the door for the mortise case as shown. As always, avoid routing the pocket too deep. The pocket depth should be:

4 $\frac{1}{16}$ "— for the 2 $\frac{3}{4}$ " back set, this allows $\frac{3}{16}$ " clearance behind the mortise case.

The 2 $\frac{3}{4}$ " backset mortise case measures 3 $\frac{7}{8}$ " wide.

3 $\frac{13}{16}$ "— for the 2 $\frac{1}{2}$ " back set, this allows $\frac{3}{16}$ " clearance behind the mortise case.

The 2 $\frac{1}{2}$ " backset mortise case measures 3 $\frac{5}{8}$ " wide.

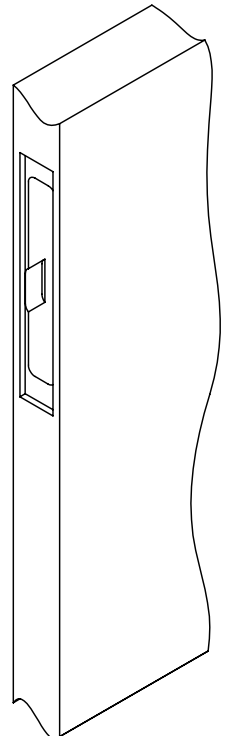
The opening should be routed out to a 1" width and a height of 6- $\frac{1}{2}$ "

Next, route the armor plate opening, as shown. The pocket depth should be .2" or approximately $\frac{3}{16}$ ". Route the opening to 1 $\frac{1}{4}$ " wide and the height should be 8".

Use a squaring chisel to square the corners of the armor plate opening, as shown.

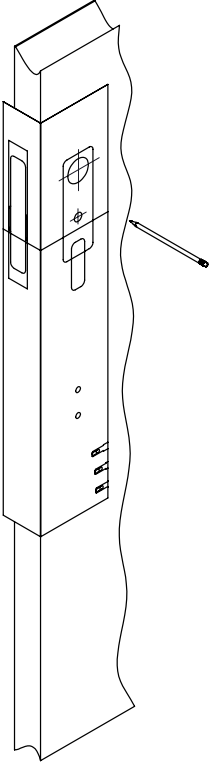
Next, add the small pocket(s) for clearance of the latch pivot as shown. The template indicates the depth .625" ($\frac{5}{8}$ ") and position of the undercut.

NOTE: Only one undercut is needed, depending upon the hand of the mortise case. The template has two (2) to allow for the hand of the lock.



4

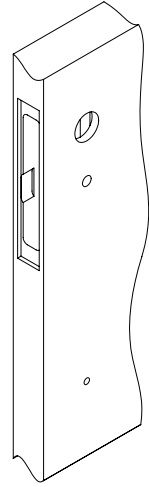
EXTERIOR SIDE OF DOOR



Re-attach the template and mark the center line of the three holes. Caution! The backset shown is for a square (non-beveled) door. If the door has a bevel, move the center line as needed.

1. Mortise Cylinder Hole: Drill $1 \frac{3}{8}$ " Dia.
Intersect the mortise pocket only.
2. Outside Escutcheon Post Hole: Drill $\frac{5}{8}$ " Dia.
Intersect the mortise pocket only.
3. Bottom Through Bolt Hole (for Grip): Drill $\frac{5}{16}$ " Dia.*
To prevent chipping the door, drill this hole half-way the width of the door, starting from the exterior and interior. This hole needs to go through the door completely.

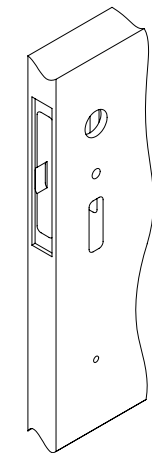
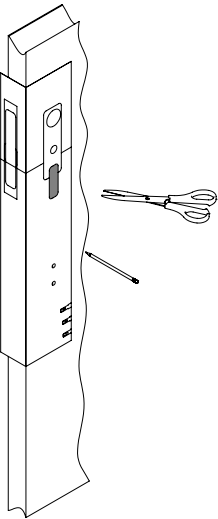
***NOTE:** There are different Through Bolt Hole locations for each lock design. Be sure to select the correct option.



After drilling holes

5

EXTERIOR SIDE OF DOOR



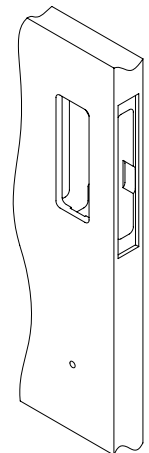
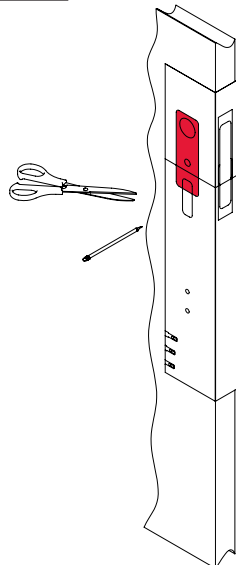
After routing

Cut the shaded area rectangle out of the template using scissors. This area will be used for the thumb-piece of the exterior handle. Mark the outline of the cutout area.

Route the exterior of the door. Route to a depth of $1 \frac{7}{16}$ ". It should resemble the image on the right.

6

INTERIOR SIDE OF DOOR



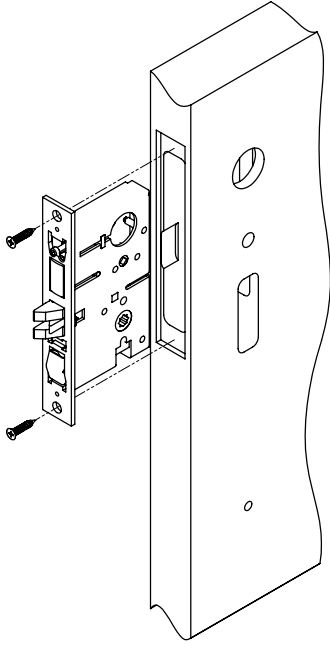
After routing

Cut the shaded area rectangle out of the template using scissors. This area will be used for the alignment chassis of the interior handle. Mark the outline of the cutout area.

Route the interior of the door. It should resemble the image on the right.

7

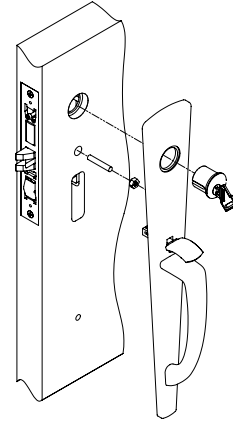
MORTISE CASE INSTALLATION



Next, pre-drill the two pilot holes— $\frac{3}{16}$ " diameter by $\frac{5}{8}$ " deep—for the mortise case screws on the center line of the edge as shown. Slide the mortise case into the opening and thread in the #12 wood screws.

8

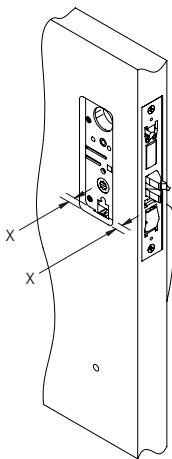
EXTERIOR ESCUTCHEON INSTALLATION



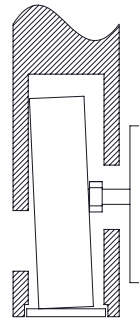
Locate the $\frac{1}{4}$ -28 centering stud and the steel hex nut (A) as shown in the image. The stud has internal threads on one end and a nylon anti-vibration patch on the other end. Screw the end with the anti-vibration patch into the outer escutcheon and hand tighten. Then, install the nut loosely onto the $\frac{1}{4}$ -28 threaded area. Position the nut close to the inner surface of the escutcheon.

Slide the assembly into the mortise case as shown. **The steps above are important for aligning the mortise case parallel (flat) to the door surfaces.**

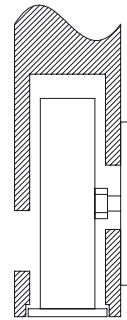
9



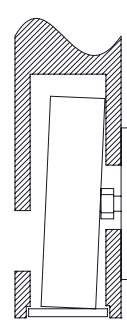
NOTE: The distance "X" should be equal.



Incorrect



Correct

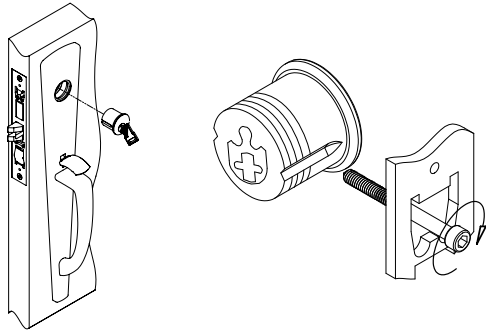


Incorrect

Using the $\frac{1}{4}$ -28 nut on the exterior escutcheon assembly, adjust the nut against the mortise case until it is square to the door surfaces as shown in the center "CORRECT" image above. By removing the exterior escutcheon assembly the nut may be threaded in or out until proper alignment is achieved. The mortise case is designed to swivel and moves inwards and outwards as you push it. This feature allows the armor plate to be tilted for beveled doors. However, the mechanism needs to be squared to the inner and outer escutcheons.

Push the mortise case with your fingers against the $\frac{1}{4}$ -28 nut and do not allow the exterior escutcheon to push away from the door surface. You may need to move the nut a few times to get it aligned properly. The result will ensure the mechanism works smoothly after it's assembled.

10



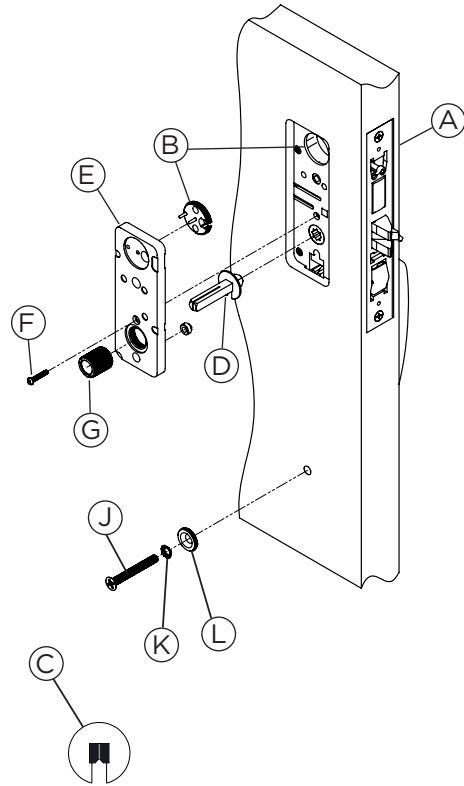
Use an Allen wrench (supplied) to back the Allen screw in the edge side of the door out of the way of the threads in the threaded cylinder area.

Install the lock cylinder by carefully threading it (rotating clockwise) into the mortise case as shown, using the key blank to prevent the tumbler from moving. Make sure the cylinder is in the correct position (keyhole is vertical).

Lock the cylinder in the vertical position with the Allen screw. Avoid over-tightening to prevent damaging the threads on the cylinder.

The ¼-20 threaded bolt may be installed here to hold the exterior assembly in place. See item (J) in step 12.

11



A. Begin by first checking the Allen screw in the edge side of the door and backing it out of the way of the threads in the threaded cylinder area.

B. Install the threaded cylinder block assembly into the mortise case, opposite the key cylinder, as shown. Thread the cylinder block assembly into the mortise case until it is flush with mortise case side surface. Align the two pins on the threaded cylinder block horizontally so the “D” shaped opening faces the door edge.

C. Install the knob/lever spindle assembly (D) into the mortise case as shown.

D. The spindle “V” notch should be oriented down and the slot oriented vertically, as shown (C) (end view).

E. Install the threaded bushing guide (G) for the knob/lever into the alignment chassis (E).

F. Slide the alignment chassis (E) over the two pins of the cylinder block assembly into the mortise case. The mortise case should be flat and hidden inside the pocket of the wood. Test the Thumb Piece to ensure that it works properly.

G. Install the TORX screw (F) through the chassis and into the ¼-28 centering stud from the outer escutcheon. Tighten until snug. Do not overtighten, the lock will stick.

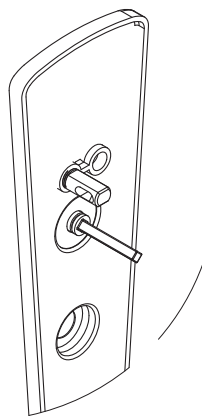
H. Tighten or install the ¼-20 threaded through bolt (J) with the counter sink star washer (K) and the threaded washer (L) through the door into the outer handle bushing in the exterior escutcheon. The washer keeps the decorative nut from spinning.

13

Interior Escutcheon Posts



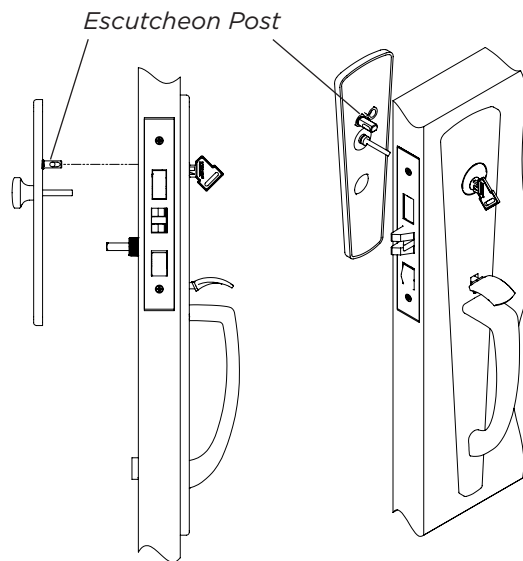
1 3/4" - 2" thick doors



There is one interior escutcheon post provided in your kit. There are two threaded holes on the interior escutcheon, use the threaded hole on the edge side of the interior escutcheon. Screw the appropriate post into the interior escutcheon, using the template, set the distance as shown.

Note: The orientation of the escutcheon post opening should be horizontal to match the alignment cylinder. Also keep the larger of the oblong openings pointing toward the door edge.

14



Install the interior escutcheon by sliding the double "D" escutcheon post into the alignment bushing. It should slip very easily into the bushing. Do not force it.

See image 15 for install orientation.

15

Orientation of thumb turn in **unlocked** mode

Orientation of thumb turn in **locked** mode

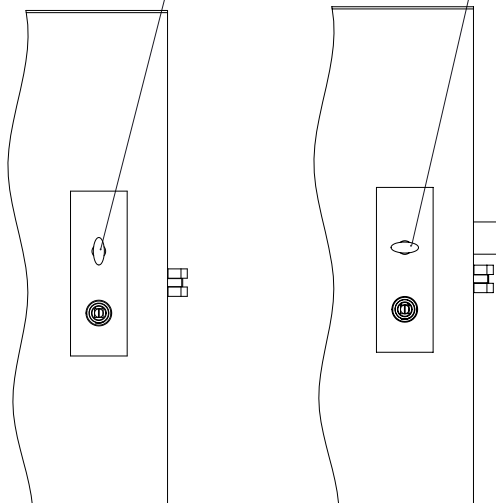
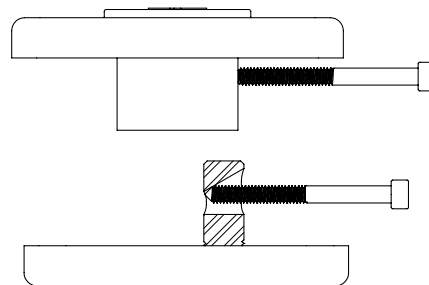


Image A

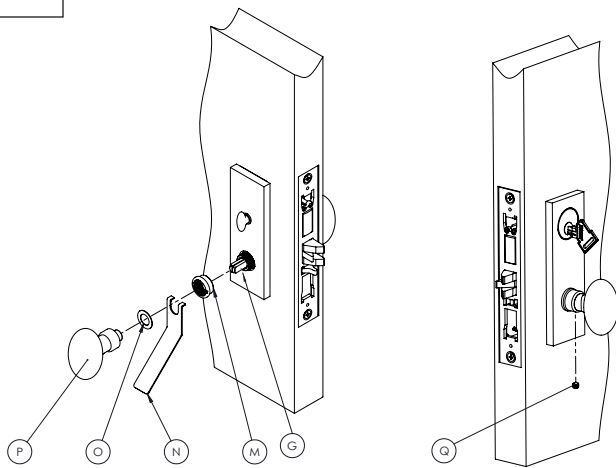
The interior escutcheon thumb turn should be orientated as shown in *Image A* during the assembly.

16



The interior escutcheon is held in place by the hardened Allen screw similar to the screw used to hold the lock cylinder in place. This screw is already assembled inside the mortise case. The screw tightens and "pulls" on the ramp angle in the interior escutcheon post. If the screw does not "pull" the escutcheon in towards the door face, then the interior escutcheon post needs to be screwed in tighter. If the screw misses the angle slot then the opposite is true. The interior escutcheon post needs to be moved outward.

17

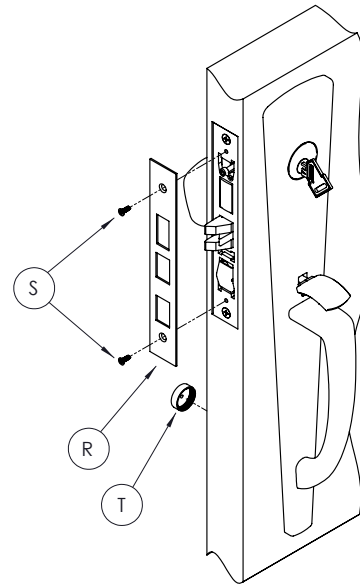


The threads of the bushing (G) now should be protruding through the escutcheon. Locate the decorative nut (M). Using the supplied twin pin spanner wrench (N), tighten the decorative nut.

Next, install the nylon (grey) washer (O) and the knob (P) or lever. Use the supplied Allen wrench to tighten the set screw (Q) from the bottom. Set screw holes should be facing the floor when installing knob or lever.

18

ARMOR PLATE INSTALLATION

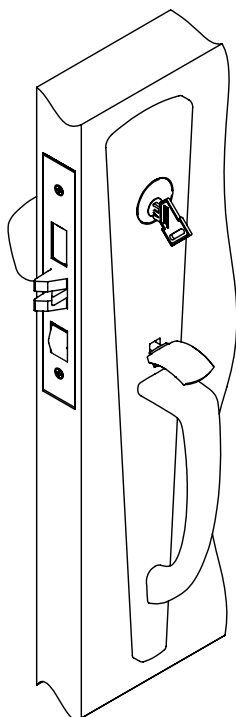


Install the armor plate (R) using the two decorative screws (S) provided.

Install the finished screw cover (T) over the through bolt screw.

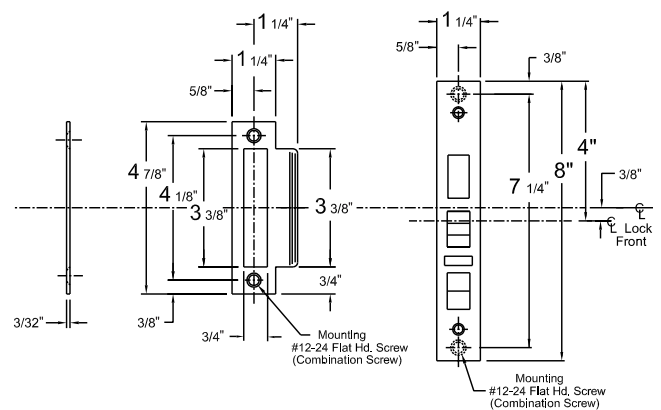
19

THE COMPLETED ASSEMBLY



20

PREPARING THE JAMB AND STRIKE INSTALLATION



Use center lines above to locate the proper height of the strike plate.

NOTE: The strike plates are handed.

21

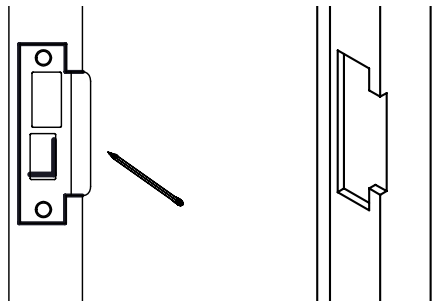


Image A

Image B

Place your strike plate to align with the security strike. Draw an outline around the perimeter of the strike plate. (Image A)

Route and chisel out the pocket for the strike plate as outlined. The pocket should be $\frac{1}{4}$ " deep to allow for the security strike to fit under the strike plate. Your finished prep should resemble Image B.

22

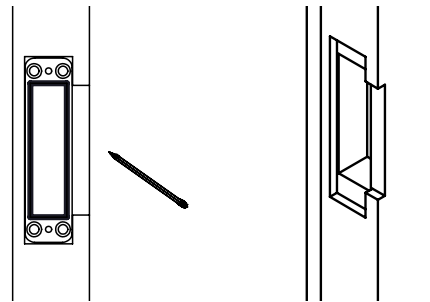


Image A

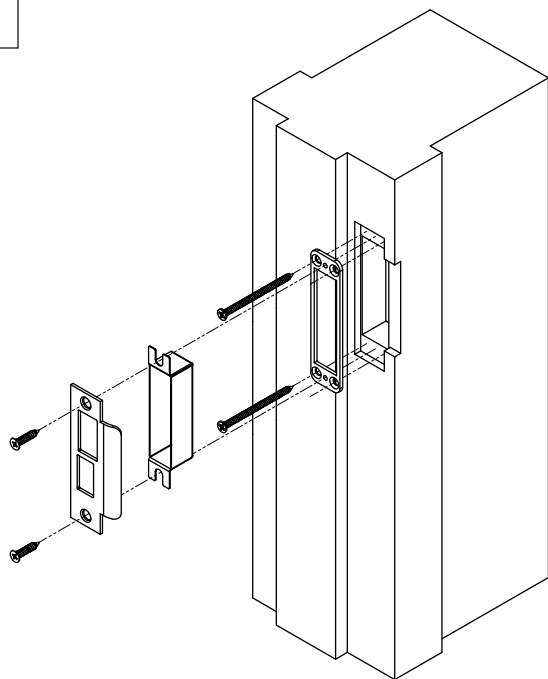
Image B

Using the security strike, place the strike carefully into the $\frac{1}{4}$ " pocket that you just made. Trace the inside rectangle shape onto the wood. This area is to fit the dust box. Also mark the six (6) screw hole positions.

Route the dust box pocket out. The minimum depth is one inch (1") deep. Image B shows what the finished prep should look like. You will need to square off the corners for a proper dust box fit.

NOTE: Be careful not to split the jamb opening of the dust box.

23



Drill two (2) $\frac{3}{16}$ " diameter pilot holes a full 3" deep for the security strike screws. This will help prevent the wood from splitting behind the jamb. Lubricating the screws with wax or soap will aid in smooth installation.

Drill two (2) $\frac{1}{8}$ " diameter holes for the strike plate screws. The finished two #12 flat head screws are threaded into the strike place at the top and bottom.

If you have any questions or comments please feel free to contact Keeler directly at (800) 235-9484. We always strive to improve your experience with our product lines.

Thank you,
The Belwith Design and Management Team