

RDI Flush Bracket System Installation Manual

For Builders and Elevator Installers



Elmira and Heritage Models Only

ELEVATED SAFETY

Our elevators have always been designed and manufactured to the highest of standards. That includes important metrics for both performance and safety.

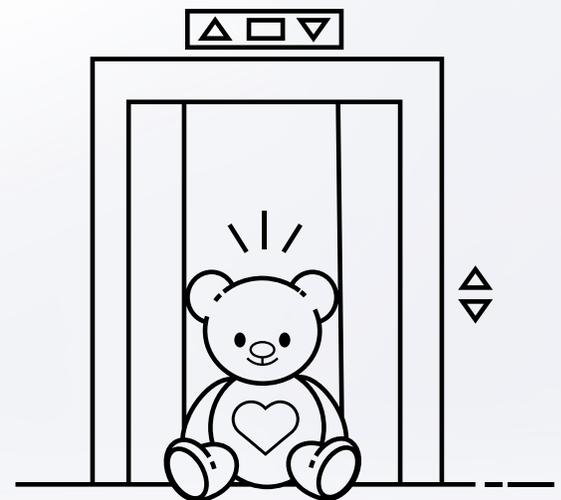
The following guide will provide home builders and elevator installers with the instructions needed to secure the landing door interlock bracket and comply with the 3/4" x 4" rule. This rule is part of a National code that enforces residential elevators known as ASME A17.1/CSA B44 Section 5.3.1.7.2 and is enforced in many jurisdictions. It was developed to eliminate a potentially unsafe gap between the hoist way (landing) door and car gate/door, which could result in serious injury if the space is not protected by some other means. Cambridge Elevating recommends the implementation of these safety measures in every installation.

THESE ELEVATOR SAFETY CODE REVISIONS REQUIRE THE FOLLOWING:

- ▶ The space between a closed hoist way landing door and car gate/door, must reject a 4" diameter ball at all points.
- ▶ The distance between the hoist way landing door and the edge of the landing door sill shall not exceed 3/4".
- ▶ Any car gate/door must withstand a force of 75 lbs. without permanent deformation or displacing the car gate/door from its guide/tracks.

In addition to the above, our models also come equipped with a light curtain designed to prevent the elevator from operating in the event something is detected in the the hoist way (landing) door and car gate/door.

Adopting the above safety measures ensures the safety of everyone who uses one of our elevators and provides them with the comfort of knowing that any risk of having a private elevator in their home has been carefully considered and addressed.

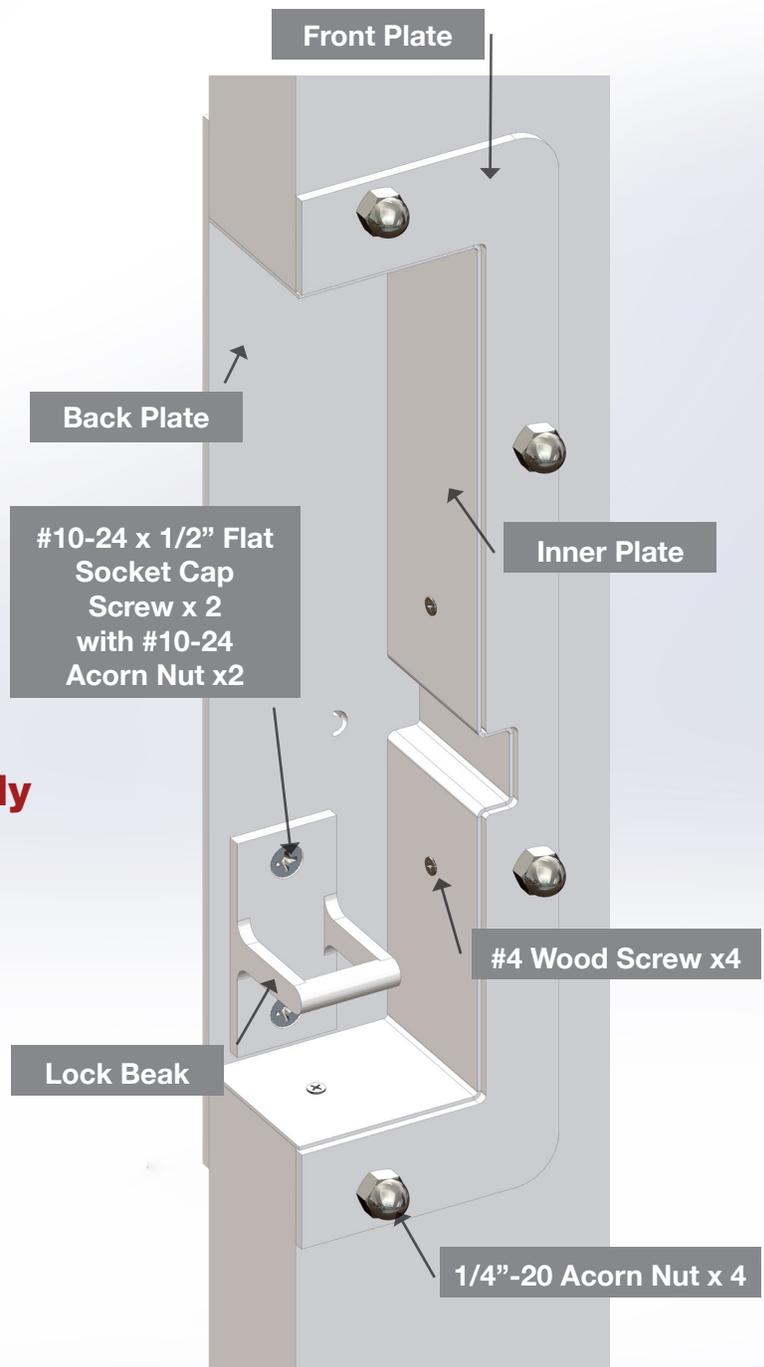


You Will Need...

- ▶ Measuring Tape
- ▶ Clamps (x2) or Tape
- ▶ Pencil
- ▶ Drill
 - ▶ 17/64" Drill Bit
 - ▶ No. 1 & No. 2 Phillips Driver Bit
 - ▶ Step Drill Bit
 - ▶ 3/4" Spade Bit
- ▶ 7/16" & 3/8" Socket & Socket Wrench
- ▶ Oscillating Tool with 1" Wide Blade

Parts Included per Lock Assembly

- ▶ Front Plate x1
- ▶ Back Plate x1
- ▶ Inner Plate x1
- ▶ #10-24 x 1/2" Flat Socket Cap Screw x2
- ▶ #10-24 Acorn Nut x2
- ▶ 1/4"-20 Acorn Nut x4
- ▶ 1/4"-20 Zinc Hex Nut x4
- ▶ #4-22 x 1/2" Flat Head Phillips Drive Wood Screw x4
- ▶ Ethernet Cable x1 (Included with Lock & Elevator)
- ▶ Half Moon Emergency Unlock Tool x1



FOR THE BUILDER

PREPPING THE DOOR

1. Identify the position of the lock. There must be no more than a maximum of 77" to the inside bottom edge of the **front plate** (See [Diagram 1 & 2](#)) and a minimum of 3" between the top of the door to the top of the **front plate** (inside top edge of **front plate**.) This will ensure the unlock tool is not positioned more than 83" off the floor to meet code. (See [Diagram 2](#))
2. With the **front plate** at the correct height, secure it in place to the hoistway side of the door with the 2 **clamps / tape** from your tool kit.
3. With a pencil, trace the notch in the **front plate**. (Dotted line in [Diagram 1](#).)
4. Cut along the pencil inside edge of the plate.
5. Drill the 4 holes through the door with the **17/64" drill bit** using the **front plate** as a template.
6. Remove the **front plate** and complete the notch cutout.

Diagram 1

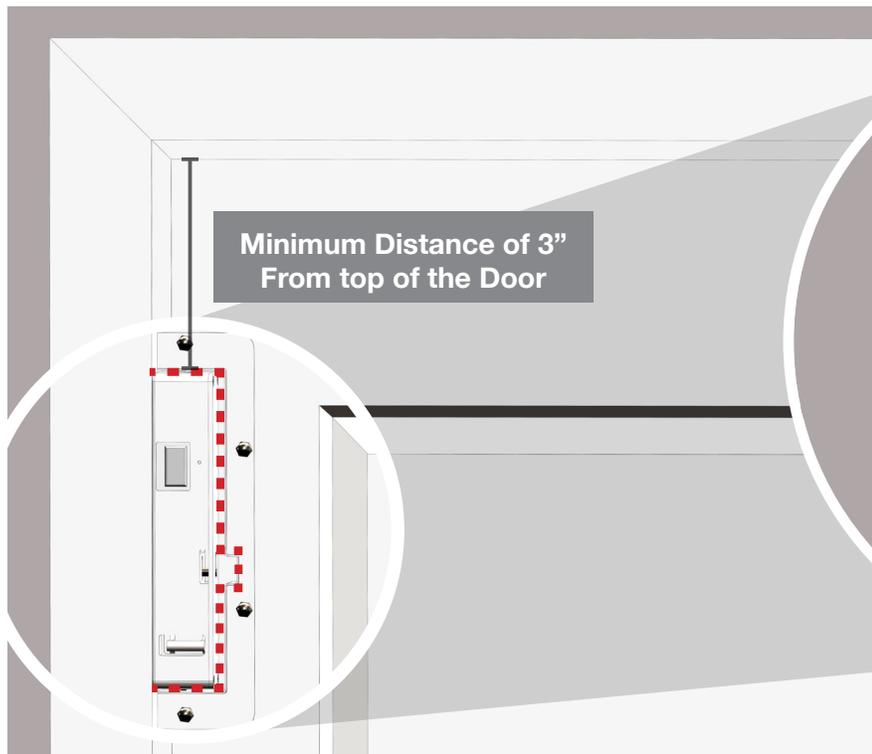


Diagram 2



FOR THE INSTALLER

ASSEMBLING THE LOCK BRACKET

CAMBRIDGE
E L E V A T I N G

1. Fit the **back plate** to the landing side of the swing door by inserting the studs through the drilled holes.

IMPORTANT:

2. Install regular stainless steel nuts provided over the studs. Cut to a length of 3/8" past hoistway side of door. Remove regular nuts to fix any damage from cutting studs.

3. Install the 1/4"x20 Acorn Nuts on the studs.
4. Fit the **inner plate** (Shown in blue in diagram 2c) and attach using the **#4 wood screws (x4)** using a **No. 1 phillips bit**.
5. Install the **lock beak** using the **#10-24 x 1/2" flat head screws (x2)** and the **#10-24 x 1/2" cap nuts (x2)** using the **No. 2 phillips bit and 3/8" socket**. Applying a small amount of thread locker is recommended since the cap nut is exposed to the landing.

Diagram 2a



Diagram 2b



Diagram 2c

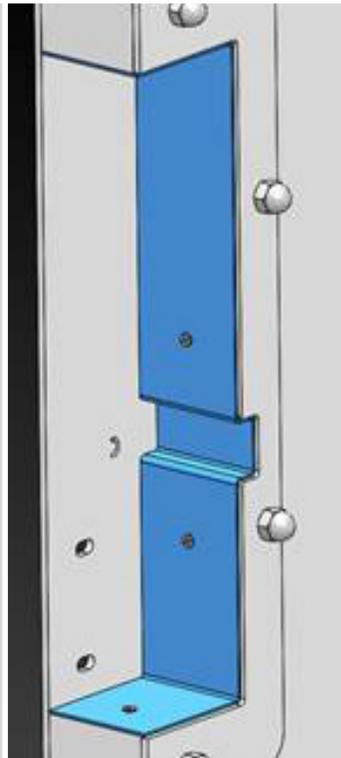


Diagram 2d



FOR THE INSTALLER

INSTALLING THE LOCK

1. Open up the lock and remove the 2 screws from the connection board at the top that the ethernet cable plugs into.
2. Remove cable gland at the top of the lock.
3. Squeeze plunger switch to temporarily protrude from casing. (See Diagram A & B)
4. Move connection board to allow drilling through casing
5. Using the step drill, drill a 3/4" hole through the side of the lock housing. (See Diagram C) and airblow out the casing.
6. Push plunger switch back into original position.
7. Close the door as much as necessary to mark the height the lock will need to be mounted at.
8. Cut the door frame (if necessary) to position the lock to sit accurately for the door to engage it.
9. Using the 3/4" spade bit, drill through the side of the door frame so that it lines up with the hole in the side of the lock casing. (See Diagram D & E)
10. Route the ethernet cable through the door frame and the side of the lock, plugging into the connection board. The other end of the ethernet cable goes into the call station. (See Diagram F)
11. While attached, test the interlock to ensure proper functionality.
12. Screw the lock to the inside of the door frame ensuring proper clearance with the lock bracket and proper engagement with the lock beak.
13. Re-install the connection board to the lock and re-install the lock cover.

Diagram A

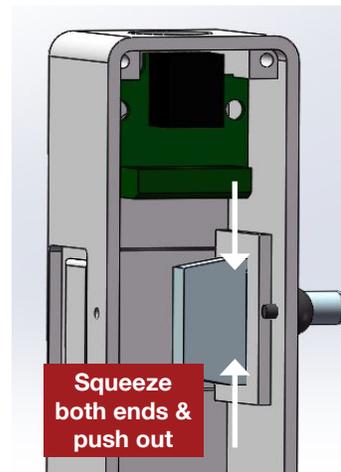


Diagram B

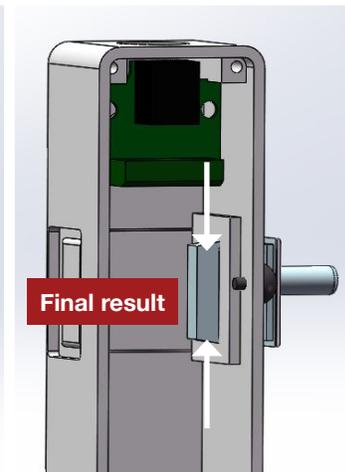


Diagram C

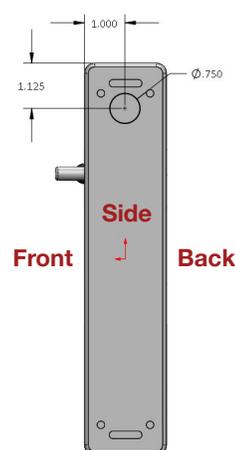


Diagram D

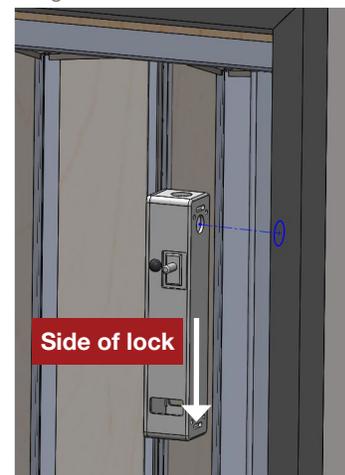


Diagram E

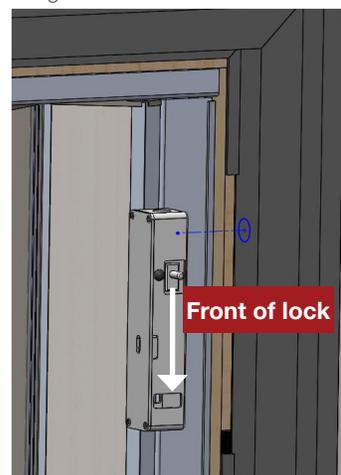


Diagram F

