PaxLock Pro – Latch Installation and Commissioning Guide

Overview

When installing a PaxLock Pro – Latch, it is important to ensure the environment the PaxLock Pro – Latch is to be installed in is fit for purpose.

This application note covers the preparation that should be carried out before, during and after installation to ensure the longevity of the product as well as correct installation.

Checks to make prior to installation

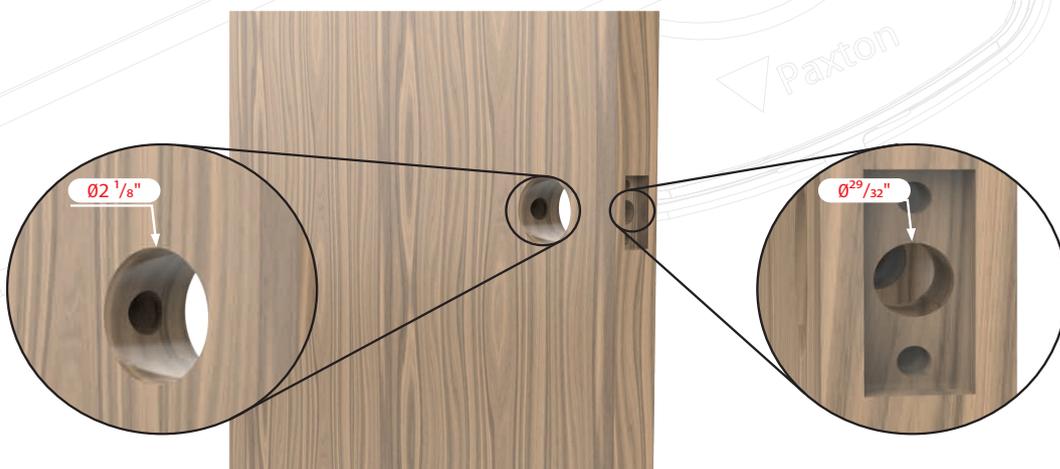When preparing a new door, follow this drilling template: www.Paxton.Info/6489

Before installing the PaxLock Pro – Latch onto the door, it is important to check that the door, frame and any relevant door furniture are in good working order. This is important to ensure both the longevity and the smooth operation of the product once installed.

Door usage

The PaxLock Pro – Latch is recommended for use on doors being operated up to 75 times per day. For usage above this number we would recommend a Paxton hard wired solution.
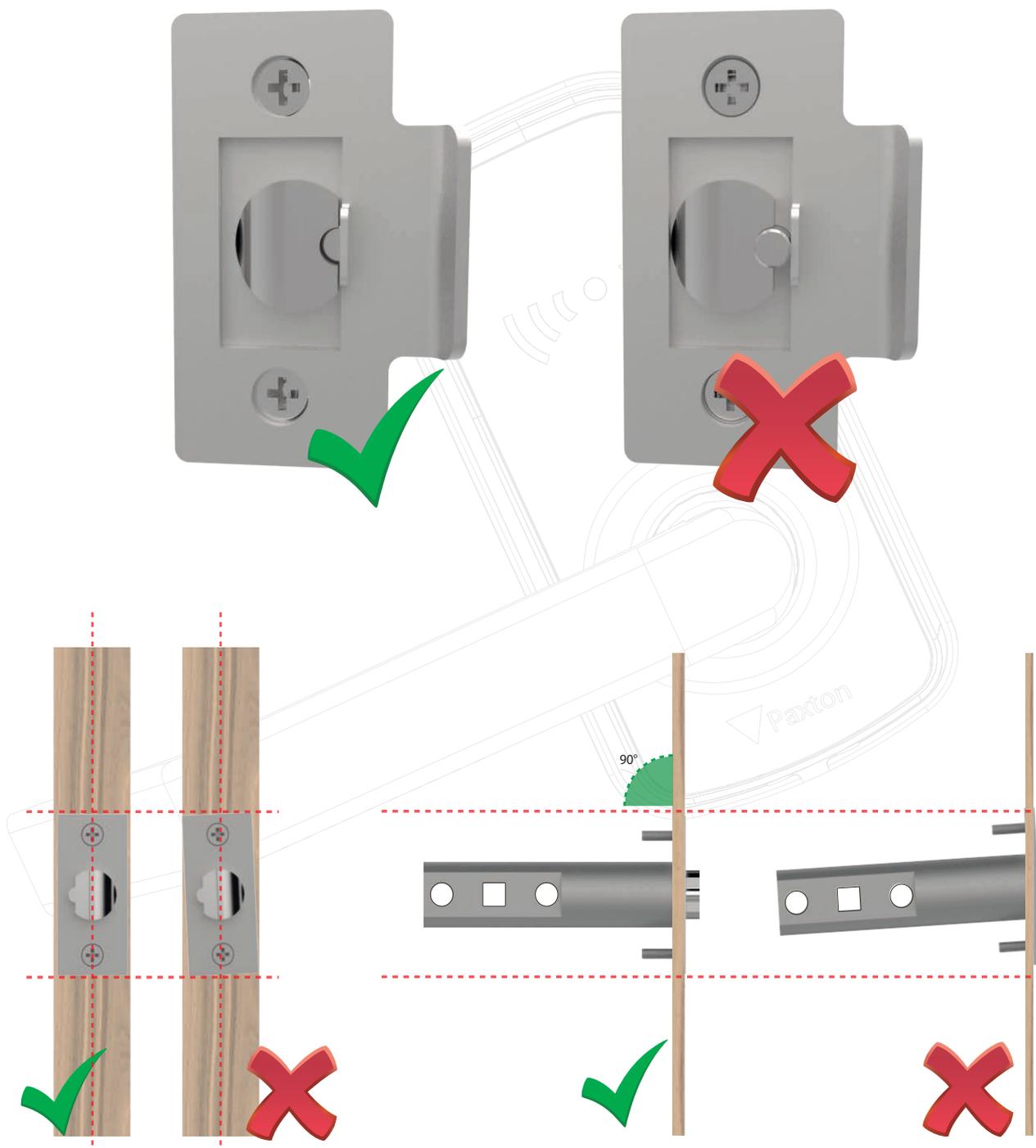
Through door holes

The PaxLock Pro – Latch has been designed to work with the supplied tubular latch. The through door holes must be 63/64" indiameter and the central follower must have at least 15/16" clearance around it.
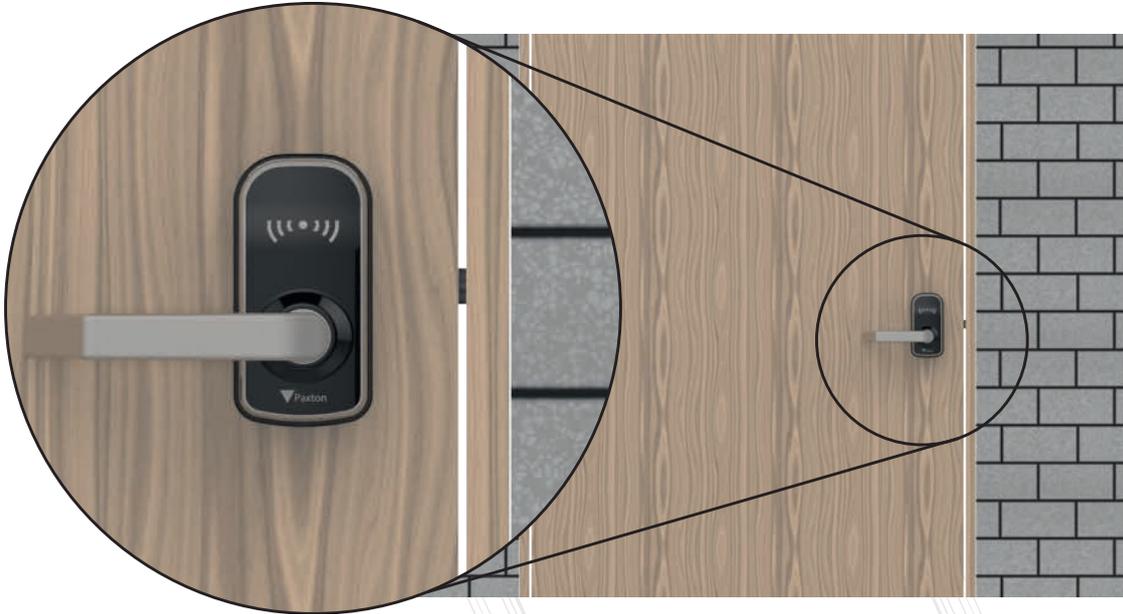
Ø2 ^{1}/$_8$"   Ø^{29}/$_{32}$"

Locking hardware

The anti-plunger pin should be depressed by the latch plate when the door is closed. The hardware must be aligned correctly to activate the anti-plunger pin, this is achieved by ensuring the tubular latch is lined up with the latch plate appropriately.
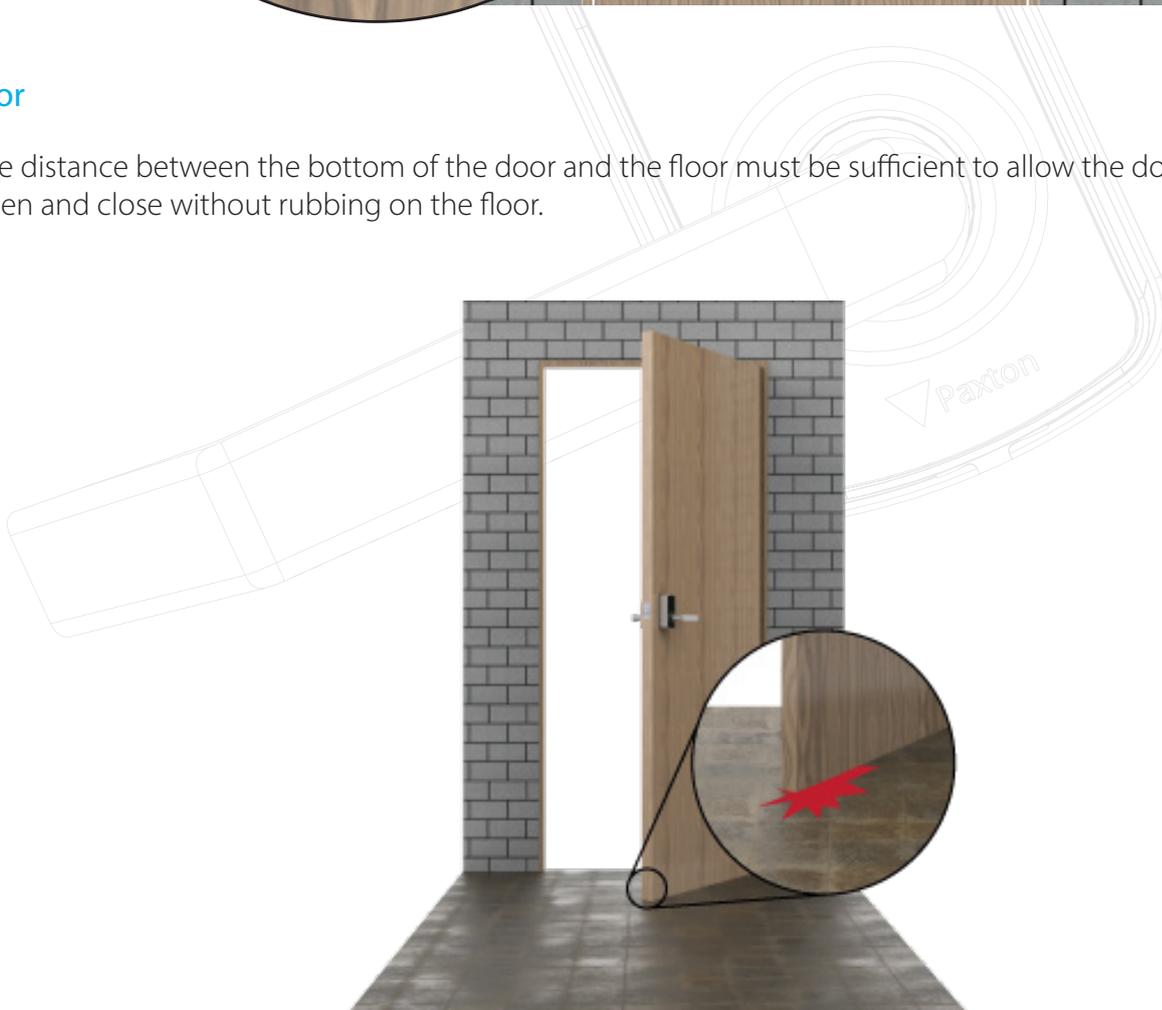
Door Frame

It is best practice to ensure there is a gap of 1/8" from the door edge to the frame. The door strike plate should also be 5/8" to avoid clashing with the PaxLock Pro - Latch when the door is closed.

Floor

The distance between the bottom of the door and the floor must be sufficient to allow the door to freely open and close without rubbing on the floor.
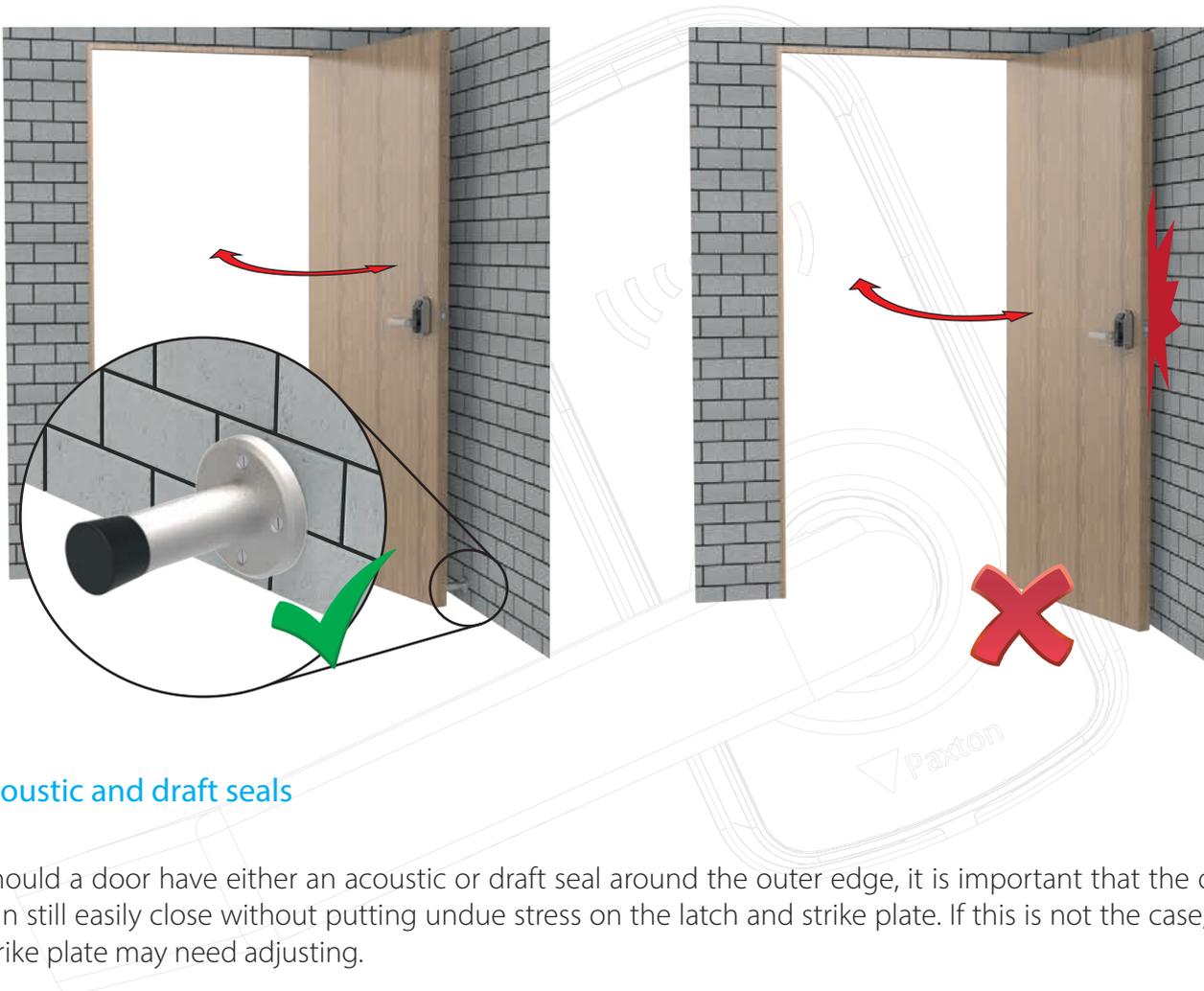
Door Closer

If a door closer is being used, it must be adjusted to ensure the door closes without slamming but does not require excessive force to open.

Doorstop

The use of a doorstop is advised on doors that can hit an adjacent wall when fully opened. This will prevent damage being caused to the PaxLock Pro – Latch.

Acoustic and draft seals

Should a door have either an acoustic or draft seal around the outer edge, it is important that the door can still easily close without putting undue stress on the latch and strike plate. If this is not the case, the strike plate may need adjusting.

Metal doors

The PaxLock Pro – Latch is suitable for installation onto metal doors providing both the width and tubular latch are within the specifications outlined on the PaxLock Pro – Latch datasheet.

To ensure correct operation, the following must be checked:

- If using in online mode, the Net2Air bridge or Paxton10 Wireless Connector may have to be positioned well within the 50ft of range as a metal door will reduce the range of communication. To ensure reliable operation, standalone mode may be more appropriate.
- The anti-rotation tee nut should be replaced with an equivalent M4, self-tapping pan head screw suitable for installation into metal (not supplied).

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Ordering the right equipment

Once you are happy the site is suitable for the PaxLock Pro – Latch, you will need to ensure you have the right information to order the correct products.

There are 4 sales codes to choose from for the PaxLock Pro – Latch. You'll need to know whether you prefer the Galaxy or Eclipse handle and if you would like the black or white fascia.

Door Widths

Notes will need to be taken on the door thicknesses across a potential site, this information will be required when ordering the PaxLock Pro - Latch.

- Out of the box, the PaxLock Pro - Latch will work with 1 19/32" - 1 3/4" door widths.
- Before installing a PaxLock Pro - Latch on a unit that is 1 3/8" - 1 15/16", both the spindle and through door bolts will need to be cut down to the correct length as per the drilling template.
- For door widths of 2" - 2 3/16" or 2 9/32" - 2 7/16", a separate Wide Door kit will need to be purchased.

During Installation

The supplied template (Paxton.info/5578) should be used to check that the holes in the door are in the right location and correctly sized for the PaxLock Pro - Latch.

To ensure the PaxLock Pro - Latch is perpendicular to the door edge, it is important to mark and drill the anti-rotation screw in the correct location, as indicated below.

When passing the PaxLock Pro - Latch through the door to fit it, the unit must sit completely flush against the face of the door. If this is not the case the holes in the door may need adjusting.

After terminating the power and data cables it is important to tuck the cables behind the PCB in the center of the device, as indicated below.

Post installation commissioning

Once the PaxLock Pro – Latch has been installed, there are several checks that can be made to ensure the product has been installed correctly and is functioning correctly.

When the PaxLock Pro – Latch is first powered up it will remain in an unlocked state. This will give you the chance to check the following;

1. Does the latch fully retract when depressing the handle?
2. Does the door open smoothly without rubbing on the frame, latch or floor?
3. When letting go of the handle, does the latch fully return to its natural position?
4. Is it smooth and easy to open the door?
5. When closing the door, does the latch sit within the strike plate?

If the answer is yes to all the above, then the unit can be bound to a Net2 or Paxton10 system, or a standalone pack can be enrolled. If the answer is no, refer to the troubleshooting guide below.

Troubleshooting

To help improve the quality of the installation and the longevity of the product, several common issues and potential solutions are listed below.

Problem	Recommendation
Lockset	
Tubular latch is old, worn or not freely moving.	Applying a silicone-based lubricant may improve this operation. If not, a replacement tubular latch is recommended. A broken or worn tubular latch could cause permanent damage to the PaxLock Pro - Latch which would not be covered under the warranty.
The latch bolt is not fully retracting when the handle is fully depressed.	The turning angle of the tubular latch must be 45° or lower for the PaxLock Pro - Latch to fully retract the latch. If it is over this, the tubular latch will need replacing.
When the door is closed the latch does not sit in the strike plate.	The position of the strike plate should be adjusted so that the latch sits comfortably in the keep when the door is closed. Failure to do this compromises the security of the door.
The tubular latch will not retract the latch when the door is closed, even from the secure side of the door.	Check the distance from edge of door to frame is no more than 1/8". Failure to do this can in some cases cause issues with the locking hardware or compromise the security of the door.

PaxLock Pro - Latch	
The edge of the PaxLock Pro - Latch or handle is clipping the door frame when opening and closing the door.	If this occurs, it may be a result of the backset on the lock case being too low. We recommend a 2 ¾" backset to be suitable for most doors.
The PaxLock Pro - Latch will not sit flush against the door when fitting.	The through door holes must be 5/16" diameter and the central spinde must have at least 25/32" clearance around it. If this is not the case it will need correcting before installing the PaxLock Pro - Latch.
The PaxLock Pro - Latch is not responding when I present a token.	Make sure the secure side chassis is fitted. This is required for the PaxLock Pro - Latch to function.
The through door cables have sheered when fitting the chassis.	This may be because the door is too narrow for the bolts that have been used. Refer to the template for the correct bolt and spindle sizes for each door thickness.
There is free play in the handles.	It is important the grub screws on both handles are fully tightened to remove any free play.
Door Furniture	
The door rubs against the frame/floor when opened.	The door or frame may need shaving down to ensure smooth operation.
The door is hitting the wall when opened.	It is important that a door stop is installed to prevent the handle hitting a wall or object when the door is opened fully. Failure to do this can damage the PaxLock Pro - Latch when swung open.
Door seals installed post install are applying too much pressure to the latch and deadbolt.	Door seals must be routed into the frame to prevent excessive force on the latch when the door is closed. The keep and strike plate may need to be moved if seals have been fitted without routing.
Net2	
Event in Net2: "Handle held down during operation".	This occurs when the handle of the PaxLock Pro - Latch is held down when a token is presented to the reader. For proper use of the PaxLock, present your token, wait for green LED & beep, then depress the handle.