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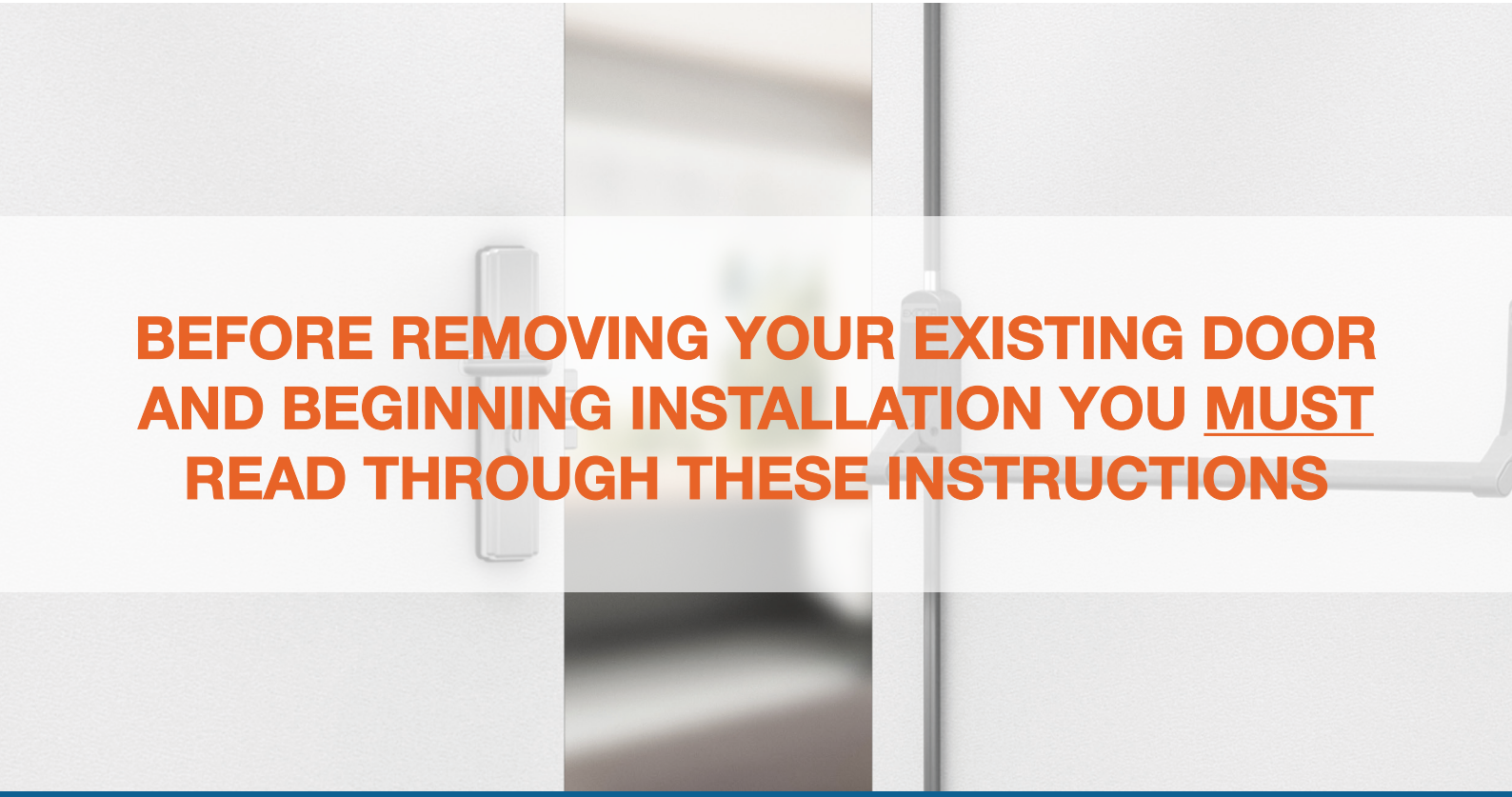
LATHAM'S
STEEL SECURITY DOORSETS



BEFORE REMOVING YOUR EXISTING DOOR AND BEGINNING INSTALLATION YOU MUST READ THROUGH THESE INSTRUCTIONS

PLEASE NOTE: OUR DOORS ARE HANDED FROM THE EXPOSED HINGE SIDE. IF YOU HAVE ORDERED AN INWARD OPENING DOOR, THE HINGE SIDE WILL BE PRINTED ON THE PACKAGING AS THE OPPOSITE SIDE.

Fitting Instructions

Contents

We pride ourselves on our excellent customer service, please don't hesitate to get in touch if you have any questions or issues.

Contact us:

sales@lathamssteeldoors.co.uk
01384 220 050

Guarantee

Latham's Security Doorsets Limited is confident of the quality of its products and offers a 12 month guarantee on our products.

This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.

If a Latham's product becomes defective due to faulty materials or workmanship within 12 months from the date of purchase, Latham's guarantees to replace defective parts, or replace such products unless:

- The product has been subjected to misuse or neglect
- The product hasn't been serviced, as per the O&M Manual
- The product has sustained damage through foreign objects, substances or accidents
- The product has been adapted, changed or modified

Section 1: Equipment / Tools Required

- Masonry drill for drilling fixing holes
- Cordless drill
- Tape measure
- Spirit level
- Disc grinder for cutting down side panels, over panels, rain drips or drop bars
- Hack saw for cutting down security trim
- Pencil or marker pen
- Mastic or similar sealant

Masonry fixing kit contains:

- Fixings and washers
- SDS drill bit
- HSS drill bit

If a side panel has also been purchased:

- T-bar fixing tool
- Fitting shims
- Grommets and dog bolt caps

Also available for fixing into wood or metal. These instructions are set out for fixing into masonry.

Discount any information regarding drilling and fixing if you're fixing into wood or metal & use the alternative fixings provided.

Please note: we have accompanying installation videos on our YouTube channel. QR codes are provided on the relevant pages or you can visit lathamssteeldoors.co.uk

Section 2: Getting Started

2.1 Safety First

General

WARNING: Failure to follow instructions listed below may result in injury and damage of products. For advice on the safety and suitability of this product, please contact us.

Fitting Latham's products should be done by a competent person who has read and understood these instructions.

Work Area

Keep work area clean and well lit. Keep children, animals and bystanders away from the work area. When using power tools do not operate them in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

Personal Safety

Anyone with either a temporary or permanent disability should seek expert advice before commencing work. Many of our products are heavy, in some cases, upwards of 100kgs.

Only physically able bodies should attempt to lift the goods, in line with manual handling (max 25kg per person). Utilise lifting and moving equipment where possible e.g. forklift, trolley, to avoid as much manual lifting as possible.

Use relevant safety equipment and PPE. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

Power Tool Use

Do not force the power tool. Use the correct power tool for your application.

Disconnect the plug from the power source before making any adjustments, accessory changes, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

Store idle power tools out of the reach of children. Do not allow persons unfamiliar with power tools or these instructions to operate them. Power tools are dangerous in the hands of untrained users.

Use the power tools, accessories and tool bits etc., in accordance with the manufacturer's instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.

Use of power tools for operations different from those intended could result in a hazardous situation.

Protecting the Environment

Separate collection of used products and packaging allows materials to be recycled and used again. The re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

2.2 Initial Checks (Pre-Installation)

Before removing your existing door and frame, you must do the following:

- Check the package is complete (check contents against the delivery note).
- Remove all packaging and inspect for damages. **DO NOT TEST THE LOCKING SYSTEM AT THIS STAGE AS YOU WILL RISK PERMANENTLY DAMAGING THE LOCKS (DOES NOT APPLY TO ULTRA OR FIRE EXIT DOORS).**
- If damaged or working incorrectly, do not install the door and contact us immediately. We cannot replace a fitted/ used door.
- Check the door frame supplied fits into the opening, if you have ordered side panels, over panels and/or security trim, factor these into your measurements.
- The work area should be free from debris and the operator should beware of any obstructions.
- Check it is safe to drill around the opening (Electrical cables, gas pipes etc).
- Have all the necessary tools in place and check they are fully functional and there are no signs of damage.

Section 3: How to install Security Doors

3.1 Security Doors

Prefer to watch a tutorial?
Scan the QR code to view our security door installation video

Please note: See Section 5 on how to fit infill panels prior to your door installation if applicable

Step 1: Remove existing door and frame. Make sure your aperture is even and keep uneven surfaces to a minimum by chiselling out anything left prominent e.g. plaster. This will help to keep the use of packers to a minimum.

Step 2: Locate the keys, in a bag, tied to one of the fixing plates.

***IMPORTANT* STANDARD & HEAVY DUTY DOORS ONLY (NOT ULTRA DUTY) DO NOT TEST THE LOCK** until the door leaf is propped up to prevent the bottom shoot bolts from hitting the ground. We recommend inserting a piece of softwood or polystyrene underneath the hinge side to ensure there is a clear gap under the door to allow for the bottom shoot bolts to extend freely.

Test the lock by turning the key in 2 full rotations, then unlock the door ready for the next step.

Step 3: Stand the door set up vertically and open the door to at least 90 degrees by using the key to retract the latch. Lift the door off its hinges with help of another, as the door leaf is heavy. Place a length of softwood or block of polystyrene under the door leaf towards the hinge side so the frame is lifted off the ground. Press your foot down on the threshold which will separate from the door leaf. Once the door leaf is removed from the frame, store it safely, stood up vertically, using packaging to prevent any damage.

For double doors: follow the same instructions, but remove both door leafs.

Step 4: Place the frame into the opening and using a spirit level, check that it's plumb and square. Use packers (provided in the fixing kit) under the frame/threshold meeting point, to prop the door up if not plumb horizontally.

Using the fixing plate holes as guides, drill into the brickwork on the hinge side. Insert the fixings and place the packers over the bolts before tightening loosely; just until they start to 'bite'. Ensure you use the fitting shims provided to prevent the fixings from distorting the frame or moving the frame from its vertical position.

Step 5: Using a spirit level, re-check the door frame is fully plumb and square at the hinge side and tighten the fixings on the hinge side only. Place the door leaf back onto the hinges and check that the clearance between the door and frame is equal all round by gently shutting it to. The door should close without needing to be forced.

If it doesn't shut easily, the frame will need adjusting. To adjust, loosen off the necessary fixing and make adjustments using appropriate shims or packing, before retightening. If the door does not swing or shut correctly, the frame is not fitted square. It may just be a simple case of loosening the fixings, 'shunting' the frame and then retightening.

Re-open the door and turn your attention to the frame on the latching side. If the door can close easily, you can drill and fix this side into place using the same steps as the hinge side.

For double doors: follow the same instructions, but fit the passive door first. Once this is fitted plumb, tighten the fixings on this side, then fit the active door and square it up to the passive door and frame.

Step 6: (PLEASE DISREGARD THIS STEP IF YOU HAVE AN ULTRA DOOR) As previously mentioned in the *IMPORTANT* section, you will need to drill holes through the pre-punched holes in the threshold. This gives the bottom shoot bolts appropriate space to extend fully, with plenty of space around and below. We recommend drilling a 20mm diameter hole, 25mm deep, and removing any debris from the holes, ideally using a vacuum.

For double doors: follow the same instructions, but also drill through the hole for the concealed shoot bolt; the bottom lock in the passive door.

Step 7: Open the door and check that nothing is stopping the bottom shoot bolts from extending freely. Test the locking system by turning the key in two complete rotations. If all shoot bolts throw smoothly, close the door into the frame and repeat.

If the door locks and unlocks smoothly, the door frame has been fitted correctly. If the locking system seems to struggle, do not force the key. Make sure the shoot bolts line up with the holes provided in the frame and adjust using Step 5 if needs be.

A tip here is to identify the fouling part of the locking system i.e. the shoot bolts which are hitting the frame and not lining up with the receiving hole. You can do this by colouring in the shoot bolt ends with pencil, then closing the door and locking gently, so that the shoot bolt leaves a mark where it is hitting the frame. This will allow you to adjust the correct part of the frame. Alternatively, you can enlarge the hole by using a file.

If you have purchased a high security cylinder, security sash lock or code lock, please refer to Section 3.2 now.

Your door installation is now complete. For on-going maintenance and servicing please refer to the O&M manual in section 7.

How to fit handles

Dependant on the handle type, the fitting instructions may differ slightly.

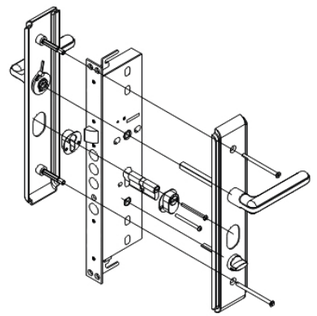
Step 1 - Cylinder Covers: If the handle set comes with cylinder covers, install them first by slotting them onto the cylinder and screw them through the door, into each other. For security purposes, ensure the screw heads are on the internal side of the door. Check the shaft of the key can reach the cylinder – if not, tighten more. Do not overtighten as this will make the lock stiff.

Step 2 - Prepare external handle: (the handle without the privacy thumb bolt). If the external handle has 2 female threads, you will need to install 2 small grub screws (provided) to leave you with 2 prominent male threads to which you fix the gold thread extensions on. If the external handle has 2 male threads, simply fix the 2 gold thread extensions to them.

Step 3 - Install spindle: If the handle fixings contains springs, insert the first spring into the spindle cavity, followed by the spindle. If no springs are contained in the set, simply insert the spindle. If your handle fixings contain an allen key, you may need to unscrew the grub screw (on the lever part of the handle) to allow the spindle to enter the handle cavity.

Step 4 - Gaskets: If your handle set contains plastic gaskets, position 1 over the external handle and locate the handle into place by putting the spindle through the centre of the lock. If your handle set doesn't contain gaskets, you don't need them for your style of handle.

Step 5 - Install internal handle: As per steps 3 & 4, use the spring and/or gasket as mentioned. Pull the thumb turns attached spindle down, and make sure this is inserted through the relevant hole when aligning. Align and screw into the external handle. Do not overtighten, this will bow the steel door leaf skin and could jam the lock.



Step 6 - Secure spindle in place: If your handle fixings contain an allen key, you must now tighten the grub screws on to the spindle. We recommend doing this for added security and for smoother latch retraction.

Section 3: How to install Security Doors

3.2 Security Door Upgrades

Prefer to watch a tutorial?
Scan the QR code to view our security door upgrades install video

High Security Cylinder

Included in Level 1, 2, 3 & 4 Upgrades

Check that you have the following components:

- 1x Cylinder
- 1x Screw – you may disregard this
- 3x Keys

Note: if you have an upgraded sashlock, see next step first!

Step 1: Remove the existing cylinder covers if they are pre-fitted to the door by unscrewing the 2 screws that hold these together.

Step 2: Looking at the latching side of the door, locate the sash lock, the main lock in the centre (as pictured).

Step 3: Remove screw as shown on image circled in blue.

Step 4: Remove existing cylinder that comes pre-fitted.

Step 5: Insert a key into the new security cylinder and turn slightly, centring the 'rotating cam' in the centre.

Step 6: Insert the security cylinder back into the door and using the original screw that was used with the original cylinder, screw the security cylinder into place.

Step 7: Replace the cylinder covers. For security purposes, ensure the screw heads are on the internal side of the door. Check that the shaft of the key can reach the cylinder – if not, tighten more.

Do not overtighten as this will make the lock stiff.

High Security Sash Lock

Included in Level 3 & 4 Upgrades

Remove the sash lock (the main lock in the centre).

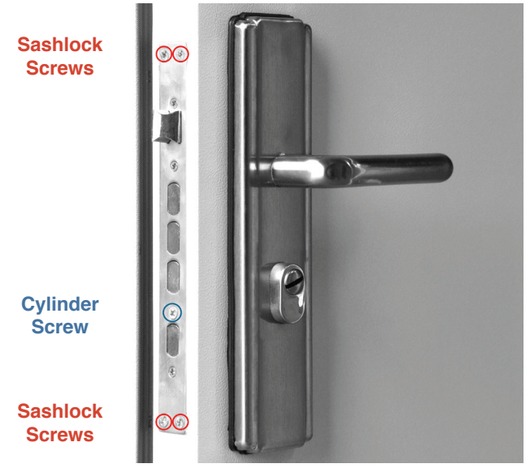
Step 1: Remove the cylinder covers (unscrew the 2 screws).

Step 2: Remove the cylinder, refer to the screw shown in the previous image.

Step 3: Remove the sash lock by unscrewing the 4 screws in the 4 corners only (circled in red on the image).

Step 4: Replace with upgraded version ensuring the hooks go through the 'eyes' in the rods when being refitted.

Step 5: Follow the previous steps in reverse order to screw cylinder and cylinder covers back into place.



Section 4: How to install Fire Exit Doors

4.1 Fire Exit Doors

Prefer to watch a tutorial?
Scan the QR code to view our fire exit door installation video

Please note: See Section 5 on how to fit infill panels prior to your door installation if applicable

Step 1: Remove existing door and frame. Make sure your aperture is even and keep uneven surfaces to a minimum by chiselling out anything left prominent e.g. plaster. This will help to keep the use of packers to a minimum.

Step 2: Stand the door set up vertically and open the door to at least 90 degrees by pushing the push bar to retract the latch. Lift the door off its hinges with help of another, as the door leaf is heavy. Place a length of softwood or block of polystyrene under the door leaf towards the hinge side so the frame is lifted off the ground. Press your foot down on the threshold which will separate from the door leaf. Once the door leaf is removed from the frame, store it safely, stood up vertically, using packaging to prevent any damage.

For double doors: follow the same instructions, but remove both door leafs. Start with the active door (the door with a single point panic bar fitted)

Step 3: Place the frame into the opening and using a spirit level, check that it's plumb and square. Use packers (provided in the fixing kit) under the frame/threshold meeting point, to prop the door up if not plumb horizontally.

Using the fixing plate holes as guides, drill into the brickwork on the hinge side. Insert the fixings and place the packers over the bolts before tightening loosely; just until they start to 'bite'.

Ensure you use the fitting shims provided to prevent the fixings from distorting the frame or moving the frame from its vertical position.

Please note: Do not fully tighten the fixings at this stage.

3.1: For 2 point panic doors only. Just to be sure, re-push the push bar and ensure the top shoot bolt is caught in the shoot bolt receiver. If you try shutting the door while the shoot bolts are extended, the door simply won't shut as the shoot bolts will hit the catch at the top and bottom.

3.2: Using a spirit level, re-check the door frame is fully plumb and square at the hinge side and tighten the fixings on the hinge side only. Place the door leaf back onto the hinges and check that the clearance between the door and frame is equal all round by gently shutting it to. The door should close without needing to be forced.

If it doesn't shut easily, the frame will need adjusting. To adjust, loosen off the necessary fixing and make adjustments using appropriate shims or packing, before retightening. If the door does not swing or shut correctly, the frame is not fitted square. It may just be a simple case of loosening the fixings, 'shunting' the frame and then retightening.

Re-open the door and turn your attention to the frame on the latching side. If the door can close easily, you can drill and fix this side into place using the same steps as the hinge side.

For double doors: follow the same instructions, but fit the passive door first. Pay attention to step 3.1 – the passive leaf is fitted with a 2 point panic bar set. Once the passive door is fitted plumb, tighten the fixings on this side, then fit the active door and square it up to the passive door and frame.

Step 4: To be CE compliant, once the door is fitted, you must close the door and open it using the push bar numerous times to check that in the event of an emergency, the door will open without unnecessary force. You must also affix a 'push bar to open' sticker to the door and a 'fire exit keep clear' sticker to the external side.

Step 5: If you chose to purchase an OAD (outer access device), please see the relevant instructions provided in the box. Once the OAD has been fitted, you must repeat Step 4 and retest the doors ability to open without force.

Your door installation is now complete. For on-going maintenance and servicing please refer to the O&M manual in section 7.

Section 4: How to install Fire Exit Doors

4.2 Fire Exit Door Outer Access Devices & Trouble Shooting

Prefer to watch a tutorial? **Scan the QR code to view our outer access device installation video**

How to fit Exidor 298 / 302 / 322 Outer Access Devices

Please refer to the instruction manual provided with the Exidor 298, 302 or 322 outer access devices.

How to fit Exidor 322 Outer Access Device with security cylinder

If you have purchased an Exidor 322 OAD with security cylinder upgrade, you will need to replace the existing cylinder with the high security version.

Simply remove the back plate, then remove the screw holding the cylinder in place and replace with the higher security alternative also supplied.

Fire Exit Door Trouble Shooting

The door won't close. 2 point fire exit doors and double fire exit doors (not the single point standard duty door)

First, check that the top shoot bolt is engaged in the 'trip' catch by pushing the push bar down. If it isn't engaged, it will be extended into the lock position and will hit the frame.

If the issue persists, check that the shoot bolts at the top and bottom of the door aren't hitting the frame, even though retracted. They are too long and need adjusting.

Unscrew the allen screw either above or below the push bar (as seen in the image) and wind the shoot bolt in or out, then replace the screw.

For further advice you can contact **Exidor Technical Support** (Exidor panic bars and OADs) they are available 9am-5pm Monday to Friday, on **01543 578661.**

Section 5: How to install

5.1 Doors Using Infill Panels

Prefer to watch a tutorial? **Scan the QR code to view our infill panel installation video**

Infill Panels - General

Before installation, remove all packaging and inspect for damages. If damaged, do not install the panel and please contact us immediately.

Please be reminded that the panels come in standard lengths, which in many cases are too long and will need to be cut down to your required size.

It seems our stock door size wasn't perfectly suited to your aperture, so you have purchased a side panel or over panel to bridge the gap between the doorframe and wall or lintel above.

This is a far stronger alternative to using timber or any other form of packing. The side panels and over panels have a lip which clips onto the doorframe, so if you have purchased a 30mm over panel for example, this can be packed under to lift it up using timber or packers, gaining up to another 20mm in height (50mm overall), without jeopardizing security.

This same principle goes for the whole of our side panel and over panel range.

Please note: For added thermal and acoustic values, put insulation inside of the side panel before fitting.

How to fit a side panel

Step 1: Measure the height of your doorframe; in most cases, this will be 2020mm. Using a disc grinder or hacksaw, cut the panel down to length.

Step 2: Smooth off any sharp edges or burrs with a file.

Step 3: Slide the panel onto the side of the doorframe and firmly push the panel onto the frame so it clips on fully. If there is only one side panel being used, we recommend you fit it to the latching side of the doorframe and not the hinge side.

The side panel is now an extension of the frame.

Step 4: Place the doorframe and panel into the opening and see if the added width is enough to bridge the gap. If not, you can add packing between the doorframe and panel to increase the overall width (20mm max).

Step 5: (OPTIONAL) You can run a line of silicone down either side of the frame where the lips clip over, to create a seal. You can also fix the panel and frame together using pop rivets or self tapping screws. This isn't necessary but adds further security and rigidity.

Step 6: Using a metal HSS drill bit, drill through the side panel, using the door fixing holes as a guide. This will leave you a hole large enough to insert the fixings through the panel and into the wall. The diameter of your fixings will determine the size of the drill bit needed.

Step 7: You can now move onto fitting your door following the instructions provided.

How to fit an over panel

Step 1: Measure the width of your doorframe and using a disc grinder or hacksaw, cut the panel down to length.

Step 2: Smooth off any sharp edges or burrs with a file.

Step 3: Slide the panel onto the top of the doorframe and firmly push the panel onto the frame so it clips on fully. The over panel is now an extension of the frame.

Step 4: Place the doorframe and panel into the opening and see if the added height is enough to bridge the gap. If not, you can add packing between the doorframe and panel to increase the overall width (20mm max).

Step 5: (OPTIONAL) You can run a line of silicone down

Section 5: How to install

5.1 Doors Using Infill Panels

Prefer to watch a tutorial?
Scan the QR code to view our infill panel installation video

either side of the frame where the lips clip over, to create a seal. You can also fix the panel and frame together using pop rivets or self tapping screws. This isn't necessary but adds further security and rigidity.

Step 6: You can now move onto fitting your door following the instructions provided.

How to fit both a side and over panel

Step 1: If the aperture is up to a maximum of 2100mm in height, fit the side panel first (continue to step 2). If the aperture is over 2100mm in height, you will have to reverse the steps below and fit the over panel first, then cut the side panel down to fit below the over panel as the side panel is not tall enough.

Step 2: Measure the height of your aperture and using a disc grinder or hacksaw, cut the side panel down to length. Do not cut the panel down to the height of the doorframe, but the actual aperture height (the opening).

Step 3: Smooth off any sharp edges or burrs with a file.

Step 4: Slide the side panel onto the side of the doorframe and firmly push the panel onto the frame so it clips on fully. The side panel is now an extension of the frame. The side panel will be taller than the doorframe. Make sure the side panel is flush with the bottom of the frame.

Step 5: Place the doorframe and panel into the opening and see if the added width is enough to bridge the gap. If not, you can add packing between the doorframe and panel to increase the overall width (20mm max).

Step 6: **(OPTIONAL)** You can run a line of silicone down either side of the frame where the lips clip over, to create a seal. You can also fix the panel and frame together using pop rivets or self tapping screws. This isn't necessary but adds further security and rigidity.

Step 7: Using a metal HSS drill bit, drill through the inner side of the frame, through the fixing plates, then through the side panel, which will leave you a hole large enough to insert the fixings through the panel and into the wall. The diameter of the fixing determines the size of the drill bit needed.

Step 8: Now, fit the over panel. Measure the width from the side of the doorframe without the panel, to the lip of the side panel. Then, using a disc grinder or hacksaw, cut the panel down to length.

Step 9: Smooth off any sharp edges or burrs with a file.

Step 10: Slide the panel onto the top of the doorframe and firmly push the panel onto the frame so it clips on fully. The over panel is now also an extension of the frame.

Step 11: Place the doorframe and over panel into the opening and see if the added height is enough to bridge the gap. If not, you can add packing between the doorframe and panel to increase the overall height (20mm max).

Step 12: **(OPTIONAL)** You can run a line of silicone down either side of the frame where the lips clip over, to create a seal. You can also fix the panel and frame together using pop rivets or self tapping screws. This isn't necessary but adds further security and rigidity.

Step 13: You can now move onto fitting your door following the instructions provided.

Section 5: How to install

5.2 Security Trim

Prefer to watch a tutorial?
Scan the QR code to view our security trim kit installation video

Before installation, remove all packaging and inspect for damages. If damaged, do not install the security trim and please contact us immediately.

Step 1: Once the door is fully fitted, measure the height of the whole opening. The security trim is 2100mm in length and can also cover an over panel up to 75mm on top of the 2020mm door frame.

Step 2: Cut 2 lengths of the security trim to the measurement from step 1.

Step 3: Measure the width of the whole opening width and cut the remaining length of trim to this length.

Step 4: If you have the equipment, cut a 45 degree angle into the tops of the side angle trim and both ends of the top angle trim to leave a seamless finish. If not, cut the top angle trim down to sit inside of the side angle trim, so there is no overlap.

Step 5: Use a file to smooth off any burrs or sharp edges.

Step 6: Away from the doorset, preferably on a bench, mark 4 equal points down the security trim, where you will be fixing the security trim to the doorframe. This must be on the longer 'lip' of the trim. The smaller lip is 15mm and the longer lip is 35mm. For the side pieces, you can use the one side as a template for the other side once the holes are drilled, to make the trim symmetrical once fitted.

Step 7: Drill a pilot hole through each pen mark using a narrow metal HSS drill bit and then enlarge using a 5mm steel HSS drill bit, enlarge the 4 pilot holes.

Step 8: Offer the security trim up to the doorframe and push is into the corner, so it's butted up against the wall and door frame.

Step 9: Use the drilled holes as a template to drill holes through the door frame – in line with the holes drilled in the security trim.

Step 10: Using the pop rivets provided and a pop rivet gun, secure the security trim into place. You can run a line of silicone behind the security trim as an extra form of adhesion, for extra security.

Security Trim Kit

No Security Trim:

- Exposed fixing positions - open to attack
- Exposed packers / shims
- Exposed unlevel or large gaps
- Exposed silicone line - messy

Security Trim:

- Hides fixing positions from attack
- Hides packers / shims
- Hides unlevel or large gaps
- Professional finish with a clean look
- Fast and easy to fit

Section 5: How to install

5.3 Drop Bar Kits

Prefer to watch a tutorial?
Scan the QR code to view our drop bar kit installation video

Fitting to an inward opening door

Brackets should be fitted to the internal side of frame

Step 1: Using a spirit level, place the brackets one at a a time approximately 55cm from the top of the doorframe and central of the frame (equal distances to either edge of the frame). Use a pen to make marks through the holes, to show where to drill.

For the bottom brackets measure a similar distance up from the bottom of the door.

Step 2: Using a 5mm steel HSS drill bit; drill the 4 holes for each bracket using the pen marks as guides. **ONLY DRILL THROUGH THE INNER SKIN OF STEEL OF THE DOOR FRAME**.

Step 3: Ensuring the bracket is the correct way up, using the tek screws provided to secure the bracket into place. You can put a 'blob' of silicone behind the bracket as an extra form of adhesion, for extra security.

Step 4: Continue with the remaining holes until the 4 brackets are secure to the door frame.

Step 5: The drop bars come in 1145mm lengths to suit our largest stock single door or 2000mm for our double doors.

If your door is smaller, using either a hacksaw or grinder, cut the bars down to the width of the doorframe (the external frame size). For example, if your doorset is 895mm x 2020mm, cut the bars down to 895mm.

Using a file, smooth off any burrs on the ends and insert the black end caps.

TIP: If the inner side of the frame is flush with the internal walls, you may want to leave the drop bars wider than the frame, securing the door using the walls.

Fitting to an outward opening door

Brackets should be fitted to the internal side of the door

Step 1: Using a spirit level, place the brackets approximately 50cm from the top of the door leaf and 10cm from either edge of the door leaf. Use a pen to make marks through the holes, to show where to drill.

For the bottom brackets measure a similar distance up from the bottom of the door.

Step 2: Using a 5mm steel HSS drill bit; drill the 4 holes for each bracket using the pen marks as guides. **ONLY DRILL THROUGH THE INNER SKIN OF STEEL OF THE DOOR FRAME**.

Step 3: Ensuring the bracket is the correct way up, using the tek screws provided to secure the bracket into place. You can put a 'blob' of silicone behind the bracket as an extra form of adhesion, for extra security.

Step 4: Continue with the remaining holes until the 4 brackets are secure to the door.

Step 5: The drop bars come in 1145mm lengths to suit our largest stock single door or 2000mm for our double doors.

If your door is smaller, using either a hacksaw or grinder, cut the bars down to the width of the doorframe (the external frame size). For example, if your doorset is 895mm x 2020mm, cut the bars down to 895mm.

Using a file, smooth off any burrs on the ends and insert the black end caps.

Section 5: How to install

5.4 Rain Deflectors

Prefer to watch a tutorial?
Scan the QR code to view our rain deflector installation video

Recommended for inward opening doors

Step 1: Close the door into the frame and measure the width between the frame, then deduct 10mm.

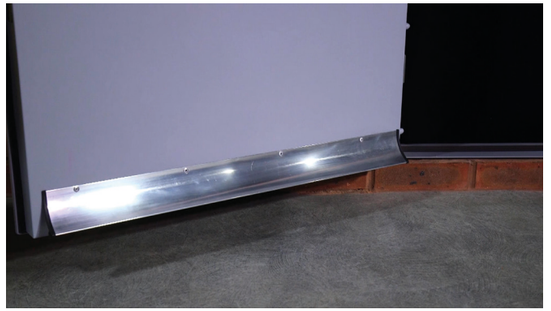
Step 2: Measure the rain drip to the same length and cut it down to the required size. Use a file to smooth any rough edges or burrs.

Step 3: Place a 2p piece either end of the door threshold and place the rain deflector on top. Using a pen to make marks through the fixing positions on the rain drip to show where to drill.

Step 4: Using a small HSS steel drill bit, drill through the pen marks to make pilot holes, then using a 5mm drill bit, enlarge the pilot holes ready for fitting.

Step 5: If your door is highly susceptible to rain, we advise running a small line of silicone between the rain drip and the door. This will ensure that no water will leak through. There are sealing grooves on the back of the deflector where you can apply the sealant.

Step 6: Line up the rain drip and affix using a pop rivet gun. Self tapping screws or Tek screws can also be used if you prefer.



Section 6: Trouble Shooting

6.1 Security Door Trouble Shooting

Multi-point locking system - not correctly working or stiff

6.1.1. Check centre Sash Lock

Remove the sash lock (the main lock in the centre) following the instructions below:

Step 1: Remove the cylinder covers (unscrew the 2 screws).

Step 2: Remove the cylinder (unscrew the 1 screw, in line with the cylinder which goes through the sash lock - on the door latching side).

Step 3: Remove the sash lock (unscrew the 4 screws in the 4 corners only).

The sash lock has two hooks, 1 top and 1 bottom, which slot into 'eyes' in the internal rods. These are the moving parts that work the upper and lower shoot bolts. The bottom hook should be parallel with the top hook.

If it isn't, using pliers gently pull the hook back into position and refit the sash lock into the door. Ensure the hooks go through the 'eyes' in the rods when being refitted.

6.1.2 Check Side Locks

The side locks are the 2 sets of shoot bolts above and below the main sash lock. Remove these (1 screw top and 1 screw bottom) and ensure the 'hook' element of the shoot bolt is located into the 'eye' of the rod.

6.1.3 Check Top and Bottom Shoot Bolts

Check the top shoot bolts and bottom shoot bolts are located into the holes provided in the door. Ensure the plastic shoot bolt hole gaskets aren't obstructing the holes. They can simply be removed.

6.1.4. Check the Cylinder is working correctly

Remove the cylinder (using the steps mentioned in section 3.2) and test the cylinder out of the door.

The key should turn the cam in the cylinder smoothly and without force. If you have the standard ABC cylinder, be sure to use the C Keys if you've set the cylinder with the master key. Refer to the instructions for further information on keys (3.1 Step 2).

6.1.5 Ensure bottom shoot bolts can extend freely

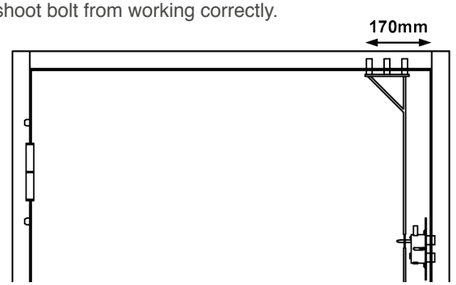
Check the holes are drilled large enough and in the correct position, through the 3 shoot bolt guides in the threshold. If you're unsure, bore these out further in case.

Also, be sure to clear any debris from holes drilled through the threshold using a vacuum. If they haven't been drilled (as previously mentioned in the instructions), the sash lock may be damaged. This can be repaired, see 6.1.1.

6.1.6 Alarm contact sensor fitted to door

If you have an alarm contact fitted to your door, make sure the fixings aren't in line with the top shoot bolts. We recommend leaving 170mm.

The fixings could go through the shoot bolt mechanism, or stop the shoot bolt from working correctly.



Section 6: Trouble Shooting

6.2 Handle Set & Concealed Shoot Bolt Trouble Shooting

Handle Set Trouble Shooting

6.2.1. Lever handle not retracting latch

If the handle is not retracting the latch, chances are, the spindle doesn't reach into either the internal or external handle (usually 1 handle will work if this is the case).

Either a longer spindle is needed, or springs are needed to keep the spindle central (if springs were needed, they would have been provided in the handle set fixings).

6.2.2. Privacy thumb bolt not engaging shoot bolt

The privacy thumb bolt 'turn' is at the bottom of the internal handle. This is not supposed to work the main locking system. This should shoot out a separate shoot bolt, totally separate from the main locking system (which is engaged by using the key).

If the privacy thumb bolt isn't engaging, remove the handle and ensure the 'hinged spindle' is locating into the correct part of the lock.

6.2.3. Cylinder cover issues

If you can see a big oval gap around your euro cylinder, you will have been provided with cylinder covers, which are in screwed in place to protect the cylinder.

Check the packaging that the handles came in. They are atached with the M5 machine screws supplied.

Concealed Shoot Bolt Trouble Shooting

Concealed shoot bolts are not engaging (double door only) The passive door is locked using 2 concealed shoot bolts; 1 top & 1 bottom.

6.2.4. Check shoot bolt isn't bent

Remove the shoot bolt from the door (2 screws) and check the bolt is straight. They can be bent back into shape or replaced.

6.2.5. Check shoot bolt is the correct length

Each shoot bolt is on a thread making it adjustable after your door is fitted. Adjust the length accordingly, then tighten into position with the nut.

Section 6: Trouble Shooting

6.3 General Fitting Issues

6.3.1. How does the ABC Key system work?

The keys have a unique ABC system to ensure optimum security. The 2 loose 'fitters' keys (A KEYS) are to be used for the sole purpose of fitting only. The gold key, skeleton key or key with a slot in the end (B KEY) is the master key.

Once used, the master key sets the lock to reject the fitters' keys, and accept the remaining 5 keys (C KEYS) in the packet. Snap the fitters keys (A KEYS) and dispose of these. The master key (B KEY) may also be used alongside the remaining 5 keys (C KEYS), leaving you with 6 usable keys.

In some instances, the (B Key) is not included; the key manufacturer has taken a slot out of the end of a C key – this is now the key to use to reset the cylinder.

6.3.2. The gap below the door, between the door and threshold seems too large

The gap under the door is designed to be between 5-8mm.

If the gap is larger on one side and uneven, the door frame hasn't been fitted horizontally plumb and adjustments need to be made. Loosen off the fixings on the side where the gap is the largest and lift this side of the frame up.

Put packers underneath to stop if falling back too low again, then retighten.

Alternatively you can do the opposite to the opposite side if possible, and lower the side where the gap is the smallest.

If the gap is too large and even across the door, remove the washers from the hinges (these are only in place for adjustments like this to be made).

If the door is now too low, please get in touch and we can post out some medium size washers.

Be sure to check that the gap at the bottom isn't now too high. Please get in touch if extra or larger washers are required and we'll post some out for you.

6.3.3. The gap at the top, between the door and frame is too large

The gap at the top of the door should be similar to the gap at the hinge side and latching side of the door. If it's too large, additional washers can be fitted to the hinge to increase the height of the door in the frame.

6.3.4. The door won't close flush

If when the door closes, it protrudes at the top, bottom, or either side, the frame needs adjusting.

If the door is not flush with the latching side, simply loosen off the fixings on the latching side, push the frame in the direction towards the door and re-tighten the fixings. The same applies to the hinge side, if this isn't sitting flush.

6.3.5. The door won't close

All of our doors are supplied pre-packed; hung in their frame. Therefore, the door leaf will fit inside the frame: the door isn't too large, nor is the frame too small.

Typically, this happens when the frame is too tight in the opening. Loosen off the fixings, remove some of the fitting shims, and re-tighten the fixings until the door closes without force.

The door may not close if the door isn't fitted square, too. Ensure the gaps around the door, between the door and frame are all equal and adjust accordingly.

Section 7: Operation & Maintenance Manual

General Maintenance For Steel Doors

There are a number of components that make up the door assemblies and each raise their own maintenance issues.

We would recommend that the doors and their associated hardware are maintained on a bi-monthly basis.

Detailed below are the guidelines for the care of door identified by component. It is important to remember that the full door assembly will not last as long as planned and function correctly if all of the components are not maintained correctly.

For example, we recommend that when you check that a door leaf is free of dents and opens, that you also check the panic hardware fitted to it works correctly.

Doors

The door alignment should be checked at regular (2 monthly) intervals to ensure that the door and frame have not settled out of true.

The doors should be free of dents and scratches and they should open freely. Openings should be kept clear of obstructions (internally and externally) to ensure that the door operation is not impeded.

The locks and/or panic hardware should be checked to ensure smooth and correct operation and if necessary adjustments should be made (e.g. tightening of screws).

If the ironmongery is inoperable for any reason then please contact us for assistance (please see individual sections on the following pages).

Hinges

Our hinges are fitted accurately to ensure the most efficient operation and all hinge pins are in vertical alignment.

Hinges should be inspected periodically for wear that may inhibit the free movement of the door and also that may cause the door to drop. All screws should be checked for tightness.

Loosening of hinges is usually caused by poor alignment when fitting the door. Loose screws should be tightened and the problem should be eliminated by realigning the hinges.

Hinges should be lubricated periodically with silicone based grease. Whilst squeaking of hinges is a sign of lack of lubrication, if it occurs frequently then the pin misalignment should be investigated.

Whether supplied in satin or polished finish, stainless steel should be dusted regularly, occasionally washed with warm soapy water and dried with a soft clean cloth. Avoid acid or chloride based cleaning products and abrasive materials. Greasing over all exposed stainless steel once cleaned is a necessity.

Overhead Door Closers

Since all internal parts are completely immersed in oil there is little routine maintenance to be carried out. It does no harm in re-greasing all moving parts on the 2 monthly basis, just to ensure smooth operation. Overhead door closers should be inspected for oil leakage, tightness of fixings and correct operation. Light oil lubricant should be applied to exposed pivot points.

Ensure the door closes smoothly and firmly into the frame overcoming the latch and/or seals if fitted. If it does not, make sure the lock and hinges are correctly fitted and operating correctly before adjusting the closer.

To avoid slamming, the latch action should be adjusted. Where backcheck or delayed action functions are incorporated these should also be checked and adjusted. Similarly with adjustable power units the valve should be adjusted to take

account of the size of door, variable air pressures and the ability of the user to operate the door.

It is recommended that door stops be fitted to all non-backcheck applications to prevent the door opening beyond the limit of the closer.

Ancillary Products: These should be checked to ensure that they are correctly fixed and do not interfere with the correct operation of other ironmongery or the door leaf.

Electro magnetic devices

Any electrical hold open device and its associated sensor or alarm should be checked once a week.

Cylinders

Cylinders should not be lubricated with oil since this will attract dust, which can affect their smooth operation. They should be maintained with a periodic application of powdered graphite into the keyway.

Locks and latches

The correct operation of a lock or latch, assuming correct fitting, is often affected by movement of the door or frame caused by climate conditions or wear on hinges.

The usual result is the inability of the latch and deadbolts to easily engage the striking plate or keep, requiring an adjustment to their position of the frame. The mortise should be checked to ensure that no debris has entered the lock case.

It is also important that the holes in the frame behind striking plates are deep enough and free from foreign matter to ensure unrestricted movement of bolt or bolts.

Multi-purpose grease should occasionally be applied to the side and striking face of latch bolts. Grease should not be applied to the internal lock mechanism, as this will attract dust.

Lever Handles

Backplate and Rose Fixings should be periodically checked for tightness and adjusted if found loose.

Badly fitted and maintained furniture can prevent the lock from operating correctly. Spindle grub screw fixings should also be checked and tightened.

Emergency & Panic Exit Hardware

Regular inspection and maintenance is essential in the interests of safety. Attention must be given to ease of opening and closing with adjustments as necessary to compensate for any door or frame movement.

Floor sockets should be cleaned out to prevent foreign matter impending bolt movement.

Lubrication should be limited to the application of a little light machine oil to the pivots of the top tripper mechanism of panic bolts, to the saddles of panic bolts and to the bolt head of panic latches.

Steel Doors

The doors are normally provided in a powder coated finish, or sometimes stainless steel. These can be cleaned as follows:

General dirt: the door can be washed down with a proprietary non abrasive cleaning solution such as washing detergent diluted in hot water. The Cloth should be wrung out so as not to soak the door or any furniture fitted to it.

Damage to powder coat surface: Over time the powder coat surface may become scratched or dented. Should this occur we offer touch-up spray paint that is RAL or BS colour matched

Section 7: Operation & Maintenance Manual

to our doors. Please contact us to order if required.

Care of Finishes

Surface deposits such as dirt and dust are the main cause of corrosion in metal door furniture particularly when combined with moisture in a damp atmosphere. In hardwearing environmental conditions near the coast or industrial areas acidic or alkaline deposits may build up and attack the surface finish.

It is very important that care is taken to maintain door furniture finishes since many finishes especially anodised, electro-plated, polished and lacquered surfaces are damaged by incorrect cleaning.

Frequent dusting using a soft dry cloth and occasional washing with warm soapy water, followed by a light application of good quality wax polish will provide a good foundation for preserving the appearance of most finishes.

Chemical sprays, cellulose based thinners and silicone based polishes should be avoided.

Ironmongery fitted externally will require greater attention due to increased exposure to atmospheric conditions.

It is strongly advised that solvents, metal polishes, or cleaners containing abrasive powders or abrasive cloths and pads should not be used for cleaning lacquered or electro-plated finishes.

Plated finishes should be wiped clean with soapy water and a soft cloth and wiped dry.

Powder coated finishes should be cleaned with a soft cloth and household furniture polish. Under no circumstances must industrial solvents be used.

Nickel and Chrome door furniture should be dusted regularly. They should be washed periodically with weak detergent solutions and rubbed occasionally with a cloth dampened in paraffin or light oil.

Disposal

The doors and their hardware are constructed from 95% metal and can be recycled. Their disposal does not pose any health or safety risks.

LATHAM'S
STEEL SECURITY DOORSETS

Latham's Security Doorsets Ltd

+44 (0) 1384 220 050
+44 (0) 121 289 3585
sales@lathamssteeldoors.co.uk
www.lathamssteeldoors.co.uk

35-37 Hainge Road
Tividale
Oldbury
West Midlands
B69 2NY