

# ExcluDoor<sup>®</sup> 3, 4, 5 & 6

## Single and Double Doorsets

### Installation & Fitting



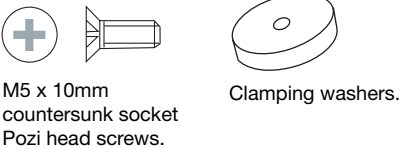
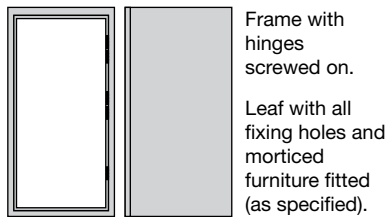
#### Please follow all the instructions carefully

Sunray doorsets are all individually made so check that the ID numbers match on the frame and the doors. Identification numbers are stamped either at the top of each leaf and in the centre of the top of the frame or on the

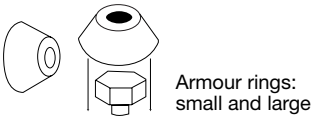
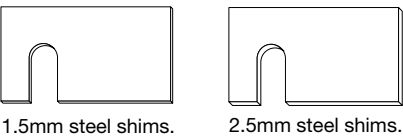
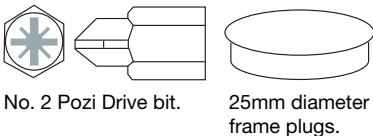
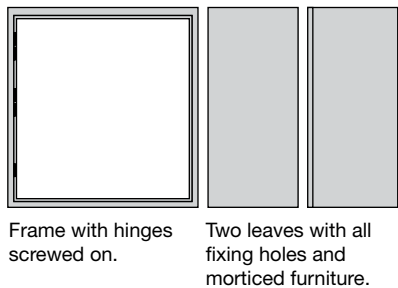
barrel part of the hinges.  
All doorsets supplied by Sunray have been fully assembled and tested prior to leaving the factory including panic bars, if fitted.

#### Components supplied with single and double doorsets

##### Single doorset option



##### Double doorset option



PLEASE CHECK PACKING LIST FOR ITEMISED FIXTURES AND ENSURE ALL PARTS ARE WITH THE DOORSET ON DELIVERY

## Before starting

Doorsets are to be fixed into the following materials in order that they achieve full integrity:

### SECURITY RATING 3

Brickwork/concrete blockwork/steelwork.

### SECURITY RATING 4

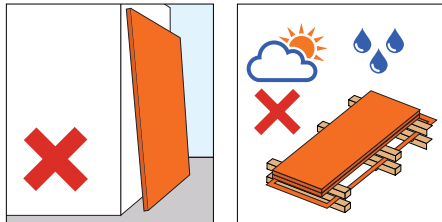
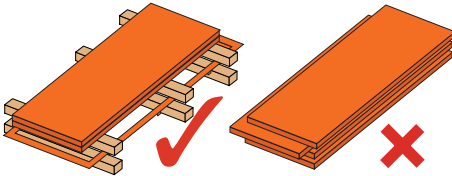
Reinforced brickwork/blockwork, reinforced concrete or steelwork.

### SECURITY RATING 5 & 6

Reinforced concrete or steelwork.

Fixing this doorset to Thermalite or similar lightweight blockwork will invalidate the security ratings.

## Storage



ExcluDoor® doorsets should be stored flat and on even ground, no more than two doors high. Ensure they are stored well away from moving vehicles e.g. forklifts and cranes. Do not store in exposed places for long periods and protect from weather.

## Handling and care

Care must be taken when unloading, especially with a forklift that the forks are positioned correctly and where possible extend past the pallet.

- Do not place objects on the door panels.
- The doors must not be used as a table or seated bench whilst stored on a pallet.
- Take care not to damage any door furniture or anything that protrudes on the surface.
- The protective covering on the doors are for protection against dust and fingermarks.
- Please be aware that these doors are heavy and require two people when moving. They should be lifted in accordance with manual handling regulations.

## You will need:

- Fixings suitable for the structure to be fixed to.

**For reinforced concrete** use M12 x 75mm sleeve anchors or screw anchors size 10 x 85mm (not supplied).

*Note: Equivalent size chemical fixings can be used. ExcluDoor® FR (fire rated doorsets) will require Hilti HIT HY50 or equivalent.*

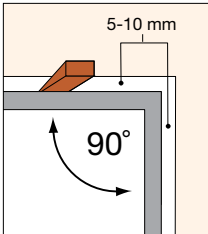
**For fixing to steelwork** use M10 hexagonal head set screws to the length required.

- A 17mm socket.
- Drill and drill bit to suit the fixings and the wall type.
- A spirit level.
- Mastic to fill the gaps around the frame.
- Wedges and blocks.

*Note: For ExcluDoor® FR (fire rated doorsets) you will require intumescent acrylic sealant or similar to BS476 Part 22.*

# Installation

## Structural opening inspection



Ensure that the frame supplied will fit the structural opening. An allowance of 10mm on the width and 5mm on the height are deducted if Sunray are given a structural opening size.

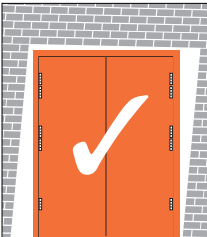
Measure the frame supplied and compare with the structural opening size at its smallest point.

If the hole is too small cut away the supporting structure to suit.

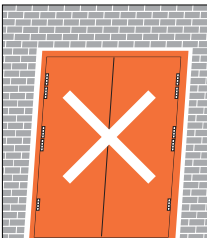
If the opening is larger than 20mm then the opening should be made smaller.

Gaps of 20mm or more will have an impact on security ratings.

## Alignment



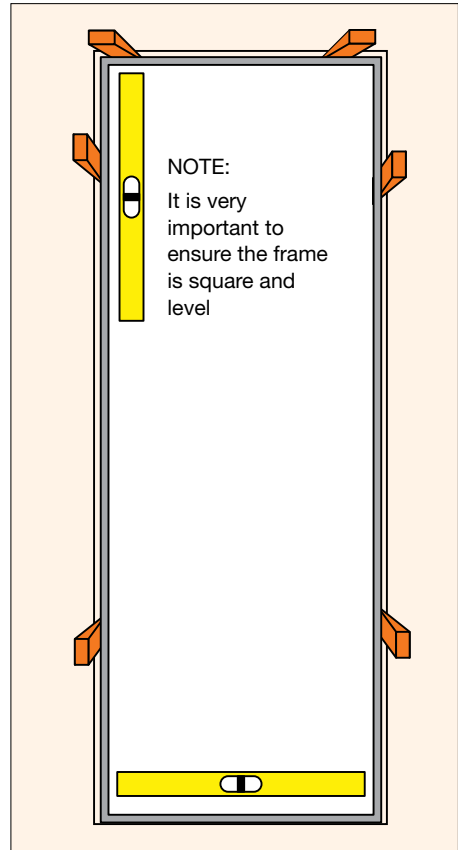
Stand the frame in the prepared opening. The front face of the frame is recommended to be fitted 40mm back from the face of the opening for additional security (Unless 180° opening is required).



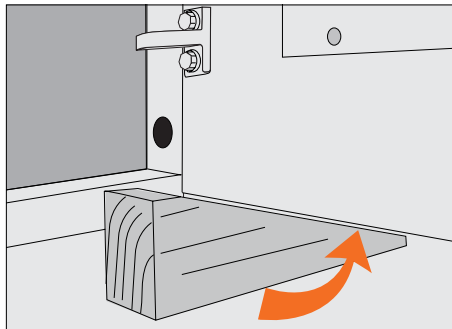
Do not force the frame to fit the opening by applying pressure to it. This will make it go out of square and the leaves will not fit.

## Fitting the frame

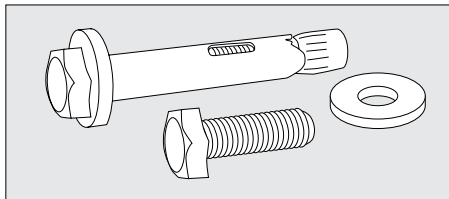
Using a spirit level ensure the frame is square and level in all directions. Wedge the frame into the opening then pack out with shims provided.



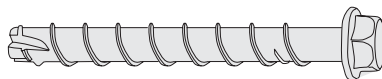
## Installation



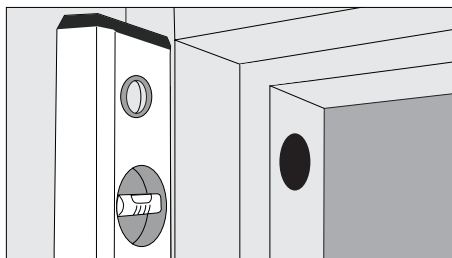
1. Keep the frame supported and held firm until the fixings are secured.



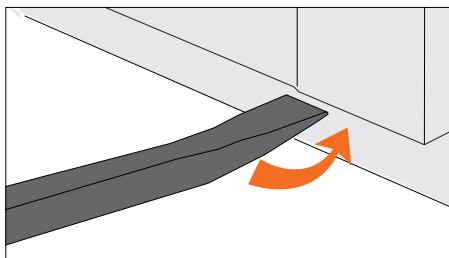
2. Use all the fixings to firmly hold the frame in position.



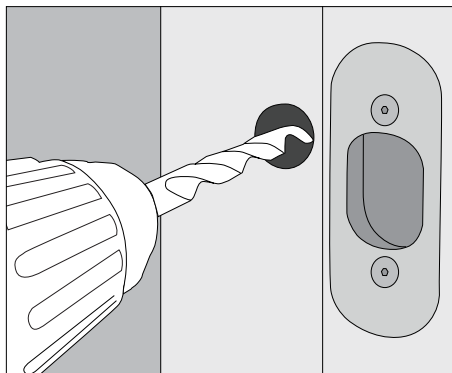
Optional screw anchor, size 10 x 85mm (not supplied).



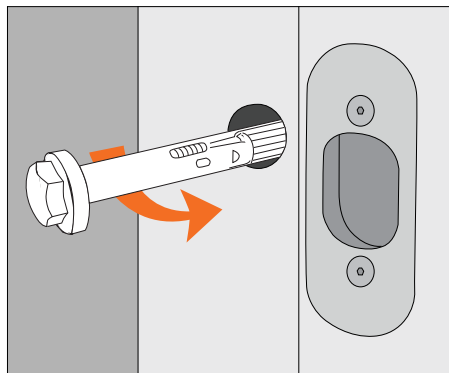
3. Check the level and squareness of the frame.



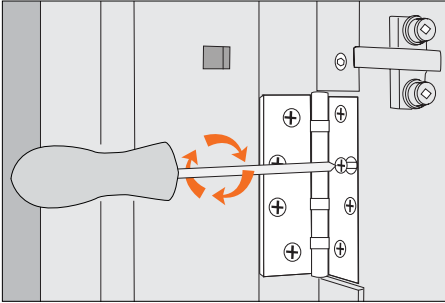
4. If any slight adjustment is needed, adjust the frame from one side by loosening the bolts, adjusting and re-tightening. There is 8mm (approx.) of play at each fixing point.



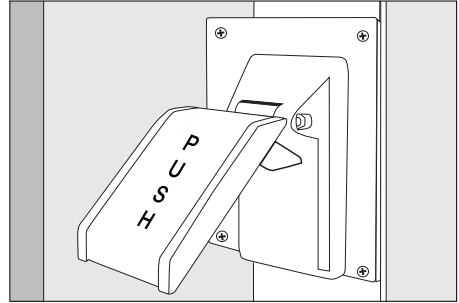
5. Drill the fixing holes through the frame holes into the walls.



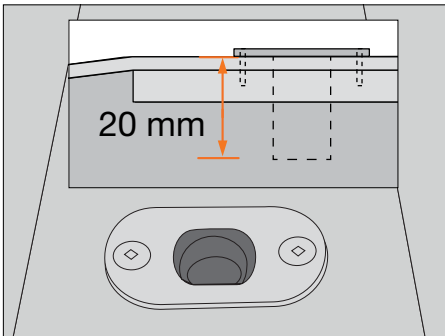
6. Insert the fixings through the frame using the clamping washers provided. The hinge side should be fixed first.



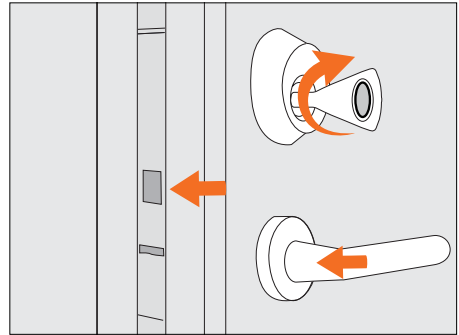
7. Present the leaf to the frame and screw on the hinges with the screws and hexagonal wrench provided.



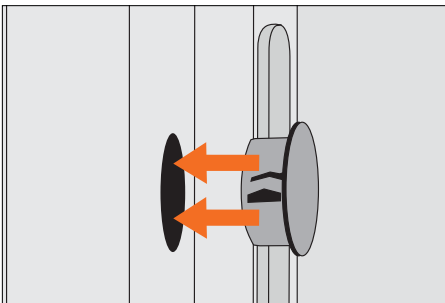
8. Some door furniture is factory fitted. Fix remaining furniture in position according to its instructions.



9. If a low level threshold is fitted, the hole to accommodate the panic bolt must be drilled into the upstand/floor to a minimum depth of 20mm.



10. Ensure the assembly operates correctly, lubricate the hinges and adjust the door furniture as necessary.



11. Fit the frame plugs, provided, to cover the fixing holes.

## Paintwork

Certain types of paint may require an undercoat and it is important to read the paint manufacturers instructions and follow their recommendations to ensure compatibility with an etch primer before applying a finishing coat.

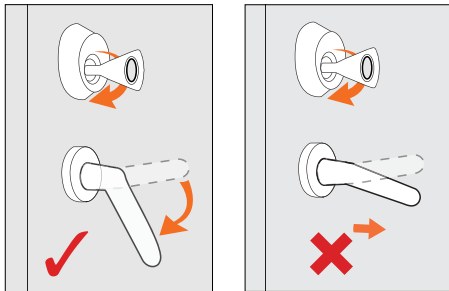
Sunray can accept no responsibility for any problems caused by the use of an incompatible finish coat.

Access instructions

CORRECT PROCEDURE FOR DOOR OPENING

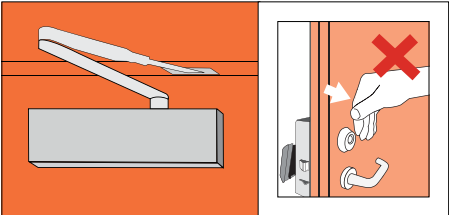
To open the door from the outside, turn the key and push the handle down at the same time. Push the handle down until it reaches a stop. When the handle cannot be pushed down any further, the door can then be opened.

Do not open the door until the handle has reached its stop.



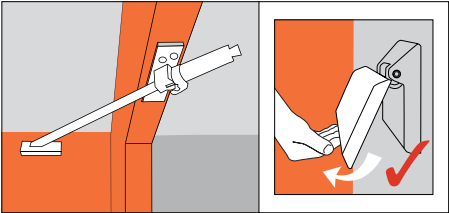
Please note that to open doors, keys and handles turn clockwise on right-hand hung doors and anti-clockwise on left-hand hung doors.

SELF-CLOSER OPTION



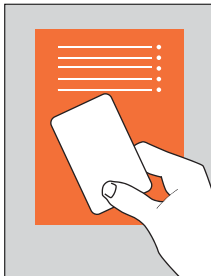
When fitted with a self-closer, there is no need to push or pull the door to shut.

DOOR STAY OPTION



When a door stay is fitted, the door will stop when it reaches 90°. To close, gently pull the push pad until the door is shut.

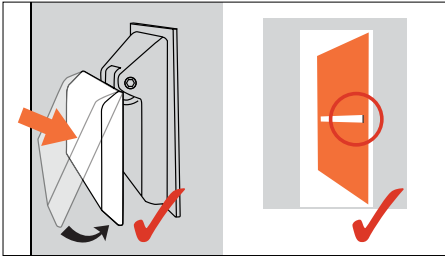
KEY CARD OPTION



Use key card (left) to unlock then push the handle down until it has reached its stop.

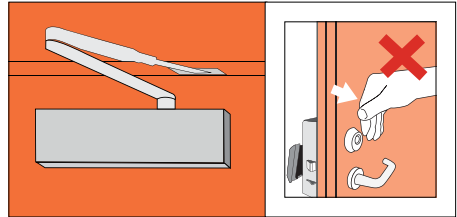
## Exit instructions

### CORRECT PROCEDURE FOR EXITING DOORS



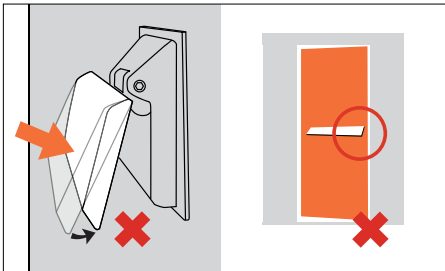
To open the door from the inside, push down on the push pad until it reaches a hard stop. A firm push is required.

### SELF-CLOSER OPTION

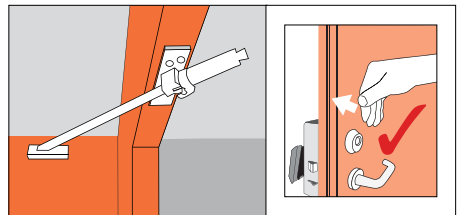


When fitted with a self-closer, there is no need to push the door to close.

### DOOR STAY OPTION

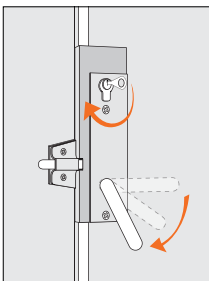


Do not open the door until the pad has reached the stop.



When a door stay is fitted, the door will require a gentle push on the leaf or handle to close.

### KEY DRIVEN LOCK OPTION



To open the door, turn the key and push the handle down at the same time. Push the handle down until it reaches a stop. When the handle cannot be pushed down any further, the door can then be opened.

ExcluDoor® troubleshooting

Fault	Cause	Solution
Leaf clashes with frame at threshold.	Hinge screws loose.	Ensure all hinge screws are tight and that the hinges are properly sealed in the leaf.
	Frame not in square.	Loosen bolts to closing side and lower this side of the frame. Tighten bolts.
Leaf clashes with frame at head.	Hinge screws loose.	Ensure all hinge screws are tight and that the hinges are properly seated in the leaf.
	Frame not in square.	Loosen bolts to closing side and raise this side of the frame. Tighten bolts.
Leaf clashes with frame at closing side.	Frame packed out too much on closing side.	Loosen bolts and remove some packers on either side. Tighten bolts. If there are no packers the opening is too small for the frame. The frame should be removed and opening widened.
Leaf clashes with frame at head and threshold.	Insufficient packing on closing side distorting the frame.	Loosen bolts on the closing side, increase packing until the frame is plumb. Tighten bolts.
Handle not springing back.	Internal lock obstructed.	Realign internal locking and ensure threshold hole is clear of any debris.



## Health and safety

Due note should be taken on the following legislation when handling and fitting these door sets:

Manual Handling Operations Regulations (1992).

Personal Protection Equipment at Work Regulations (1992).

Construction (Health, Safety and Welfare) Regulations (1996).

## COSHH (2002)

These doorsets do not contain items hazardous to health during installation or use.

## Maintenance

Ensure that the fixings and the hinge screws are still tight, do not over-tighten.

Ensure that the finish is giving adequate protection. Touch-in or redecorate as necessary to prevent corrosion. See page 71.

For further technical details of all our locking systems refer to [www.sunraydoors.co.uk](http://www.sunraydoors.co.uk)