SaverDoor[®] Single and Double

Installation & Fitting



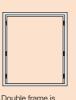


Single door and frame fitted together

Frame with hinges screwed on







fully demountable



fixing holes for lock

Please follow all the instructions carefully

Sunray doorsets are individually made. Check the numbers match on the frame and the door leaf(s). ID is at bottom of door leaf and frame on single and double doorsets.

Before removing the existing doorset, please make sure that the new door will fit the opening by checking the sizes ordered against the new door. Check that the new doorset is correct to what you have ordered.

Tools and accessories required for installation

- Wedges and blocks
- 13mm and 17mm spanner
- Shims/packers
- Set square
 Spirit level
- Drill and suitable masonry bit
 - Mastic
- Pozi screwdriver

Handling and care

Doorsets delivered on a curtain-sided lorry can be unloaded using a forklift truck. Care must be taken when unloading, especially that the forks are positioned correctly and, where possible, extend past the pallet. Lay the pallet on even ground making sure there are no objects on the floor that will damage the door.

- Do not place objects on top of the door.
- The doors must not be used as a table or seated bench whilst stored on a pallet.
- Take care not to damage the handles or anything that protrudes on the surface.
- Do not store in exposed places for long periods and protect from weather.
- The protective covering on the doors is for protection against dust and fingermarks.
- Please be aware that these doors may be heavy and should be moved in accordance with manual handling regulations.

Storage

Doorsets stored for long periods on pallets should be checked regularly that the polystyrene packaging has not been crushed.

Do not stack unprotected doors together.

If storing upright, make sure the doorsets are secure and there is no danger of them falling over.

Ensure they are stored well away from moving vehicles e.g. forklift trucks, cranes or where they are likely to be hit by foreign objects.

Take care not to damage the door hardware.

Frame assembly

To be used in conjunction with bolted and tagged frames.

1. Remove the keys (if applicable) from within the frame.

2. Lay the protected frame on supporting blocks away from dust and debris.

3. Position the first side jamb and the head together. Position the M8 bolt and washer through the elongated hole and tighten with fingers for the time being. Align the second hole and repeat.

4. Lay the second jamb down on the floor and repeat as above.

5. When alignment of the head and the two side jambs is correct, tighten the M8 bolts.

Installation

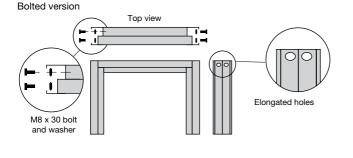
PREPARATION AND FITTING TO THE STRUCTURAL OPENING

Measure the structural opening at several points to check that it is square and level, and is to the correct dimensions as ordered.

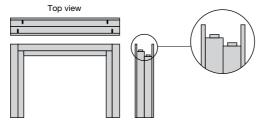
Please observe the correct fixings for the correct structures:

- Timber structures: 10 x 50 coach screws; 7.5 x 80 self rolling fixings.
- Steel structures: 7.5 x 80 self rolling fixings; M10 x 60 hex nuts and bolts.
- Brick structure: 12 x 80, 10 x 92 sleeve anchors or 7.5 x 80 self rolling fixings.
- Brick structure (bolted and tagged frames): 12 x 75 Monti bolts or 8 x 100 Monti screws.

The fixings must be able to support the weight of the door. The wrong type of fixing can cause the frame to not sit securely and bring about future problems.



Tagged version



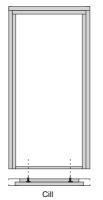
STAGE ONE

1. Remove the door from the pallet and remove all packaging.

2. Offer the frame up to the opening. Position the active leaf hinge jamb to the wall. Level the jamb from front to back until square. Fix the top hole first and then the bottom hole.

3. Position the opposite jamb and fix the top hole only.

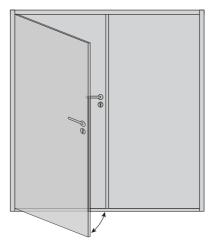
4. Lay the cill on the floor (if applicable). This will have the same internal measurement (depending on the cill) as the head and may therefore aid in the fitting of the frame.



STAGE TWO

1. Hang the door(s) onto the hinges. Close the door(s) and adjust the jamb to suit the door.

2. Make sure the door leaf is free to swing with no obstructions on the floor. If necessary remove the obstruction from the floor or adjust the jamb with shims until the door passes the obstacle.



STAGE THREE

1. When the door is hanging correctly, fix the bottom hole then continue with the rest of the fixings. Ensure all fixings are used.

2. Check all gaps around the door are 3mm to the top of the leaf and 3mm to the hinges and 5mm to the strike side (if fitting a single frame). If the centre gap seems excessive use the hinge packers provided to close the gap.

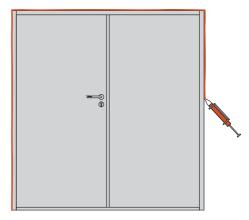
3. Fit the door seal (if needed).

4. Plug the large holes with the grommets provided.

5. Finely tune, if required, by adjusting the hinges with hinge packers.

6. When you are totally satisfied that the door is fitted correctly, apply mastic according to site instructions.

7. Install keeps and carefully file to achieve clearance required between door frame and astragal lip.



Overpanels

Sunray overpanels are supplied factory-fitted within the frame of doorsets. However, in some cases this may not be practical due to weight and size. In these cases the overpanel will be supplied factory prepared for site fixing and delivered separately.

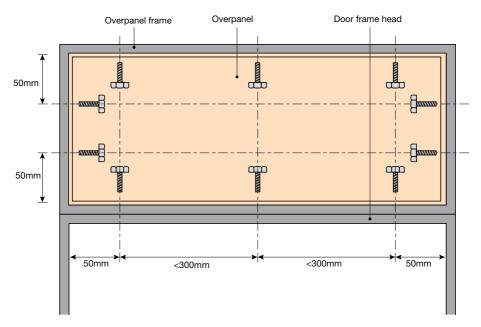
INSTALLATION

Overpanels should be positioned to line through with the door leaf with the rebated face towards the opening side of the frame

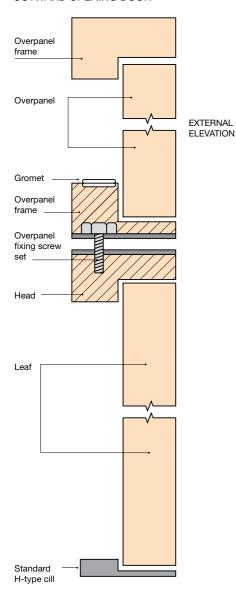
Secure the panel in place by drilling and screwing it through the back of the frame with

fixings 50mm in from the corners then fixing no greater than 300mm apart across the top and sides and across the transom (if fitted). Use a 6mm (approx) diameter screw (screw length must give 30mm of anchorage into the overpanel).

Due to the varying size and weight of removable overpanels/transoms and the height to which they are installed, a risk assessment must be carried out prior to installation work.

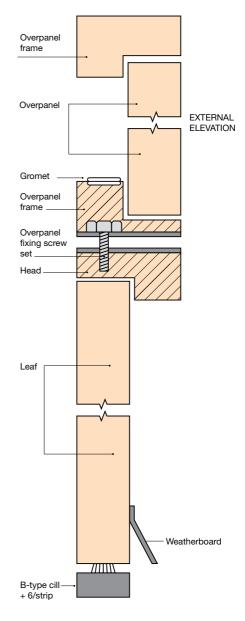


Overpanel fixing points.



OUTWARD OPENING DOOR

INWARD OPENING DOOR



Operation, safety, maintenance and repair instructions

FAILURE TO COMPLY WITH THESE INSTRUCTIONS WILL INVALIDATE MANUFACTURES WARRANTY.

Quarterly maintenance

1. Hinges and all working parts must be lubricated with Lanolin solution.

2. Check door leaf and frame for damage.

3. Check the door leaf alignment. Ensure door leaf does not scrape the ground and has an optimum clearance of 6mm.

4. Check locks, cylinders, latches, handles, panic hardware, closure, friction stays and any other ironmongery for loose fixings, smooth operation and security. Re-tighten or lubricate if necessary.

5. The cylinder should only be lubricated with either Teflon or Graphite based oil.

WD40 or similar penetrative oil must not be used.

ALL IRONMONGERY NEEDS TO BE REGULARLY CHECKED.

Maintenance of ironmongery hinges

Check that there is no visible wear on the hinges. Any dark marks or stains around the hinge knuckle could indicate wear and impending failure, meaning that the hinges should be replaced as soon as possible. Hinges must be lubricated with lanolin every three months.

FAILURE TO DO SO WILL INVALIDATE MANUFACTURERS WARRANTY ON DOOR CLOSURE DEVICES/FRICTION STAYS.

Check that the door-closing device is operating correctly. Ensure that the doors are not being wedged open. Open the door fully and check it closes without binding on the floor. Open the door approximately 5 degrees and again check that it closes fully, overcoming any latch or seal. Check doorclosing speed to be approximately 10 seconds from 90 degrees and ensure that the door does not slam. Adjust speed as necessary.

Friction stays must be checked and tensioned when fitting the doorset. Location and climate must be taken into account when adjusting the resistance level of the friction stay.

FAILURE TO CORRECTLY TENSION THE STAY WILL INVALIDATE THE MANUFACTURERS WARRANTY.

ELECTRO-MAGNETIC HOLD OPEN AND SWING FREE DEVICES Make sure that any electro-magnetic hold open device is operating correctly and releases immediately when power is removed.

LOCKS, LEVERS HANDLES AND CYLINDERS Check that the levers fully return to the horizontal after use and that the latch bolt is engaging smoothly and completely into the strike. Wipe any metal dust deposits off the latch bolt and strike plate. Check cylinder throws the latch/deadbolt smoothly into the receiver. Adjust or lubricate as required.

ALL IRONMONGERY

Make sure that all fixings are secure. Make sure hinges, closers, friction stays, locks and any other hardware are lubricated/maintained at the required intervals. Seal must be fitted correctly to the door frame. Tolerances are calibrated for our seal only.

FAILURE TO DO SO WILL INVALIDATE THE MANUFACTURERS WARRANTY.

For further technical details of all our locking systems refer to www.sunraydoors.co.uk

SaverDoor® troubleshooting

| Problem | Possible cause | Corrective action |
|-----------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------|
| Doors do not fit in frame. | Wrong door being offered. | Check the ID numbers to ensure they are all the same. |
| Doors will not drop onto hinges. | Frame bowed. | Shim frame to bring square. |
| Doors will not close. | Mortar fouling closing surface. | Clean out and re-try. |
| Doors will not shut to frame at top and/or bottom. | Frame out of square. | Correct by shimming as necessary. |
| | Door bent in storage. | Straighten. |
| Draw bolts will not engage in the frame. | Debris fouling receiving hole. | Clean out and re-try. |
| | Frame not level or square. | Correct by shimming. |
| Door leaves not level at centre. | Frame not level or square. | Correct by shimming. |
| Lock furniture not operating properly. | Frame/mullion/transom misaligned causing stress on furniture. | Remove frame section and re-fit square and level. Re-fit panic furniture. |
| Nemef Triple Locks top and/or bottom bolt do not line up. | Frame not level and/or square. | Re-align by shimming as necessary. |
| Unable to lock the door. | Centre strike plate not relieved enough. | File and re-try. |
| Maglocks do not work (SL 500). | No power or wired incorrectly. | Check power supply to Maglock is correct and sufficient. |
| | All other queries refer to manufactures' troubleshooting guide. | |

Safety instructions

- 1. Keep opening clear at all times.
- 2. Do not lean anything on doors or frame.

3. Do not operate a damaged or unsecured door. If the door is found to be damaged, do not use and place a warning notice stating 'Do not use'. Ensure a damaged door is checked by a qualified engineer before operating.

4. Open and close the door using only the handles fitted.

General maintenance

To ensure safe, reliable operation regular inspection and maintenance is essential. Failure to comply with operation, safety, maintenance and repair instructions will invalidate the warranty. Manufacturers warranty of one year is only valid if the above maintenance and professional installation has been carried out.

For further technical details of all our locking systems refer to www.sunraydoors.co.uk