

Installation instructions

Handling and care

Sunray FireLock® Doorsets can be delivered on a variety of different transportation options. Attention should be taken if being unloaded by forklift to ensure the forks are positioned correctly within the pallet. Position the pallet on even ground making sure there are no objects on the floor which could cause damage the doorset.

- 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. Take particular care not to damage the lugs.
- Do not store in exposed places for long periods and protect from inclement weather.
- Please be aware that these doorsets are heavy and should be moved in accordance with manual handling regulations.

Storage

- Doorsets that are stored for long periods on pallets should be checked regularly to ensure the polystyrene packaging has not been crushed.
- Do not stack unprotected door leaves together.
- If storing upright, ensure the door and frame components are secure and there is no danger of them falling.
- 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.

Installation process

Sunray FireLock® Doorsets are manufactured to set sizes to suit the energy providers specific requirements. Prior to assembly, check to ensure the unique door numbers marked on each door leaf and frame component match correctly. The identification numbers are stamped on a top hinge and





on the centre of the frame at the head. Before removing the existing doorset (if applicable), measure the structural opening to ensure the new doorset will fit within the reveals and the handing and ironmongery specification are correct.

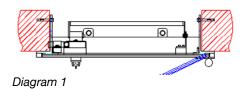
Preparation and fitting within structural opening

Measure the structural opening in various locations to check the width, height, and depth dimensions match those advised as well as being level and square. Ensure the correct fasteners are selected to suit the opening structures and performance requirements.

- Masonry/concrete structures: M12 x 110mm long steel sleeve anchors. (16mm diameter hole required).
- Masonry/concrete threshold fixing CSK M12 x 110 (18mm diameter hole required)

Stage 1 - Frame installation

- Check size of opening against Sunray manufacture drawing.
- Unpack the framework items this will be a fully welded frame, if this is a double doorset then the centre mullion will be fixed in place and should not be removed.
- Offer the door frame up to the opening in a controlled manner.
- If there is a removable panel to be installed into the frame it should be connected prior to fixing of the frame.
- The frame will be fixed equally in the width not exceeding the Max measurement allowed (If any gaps are greater than 20mm the door cannot obtain a 4-hour fire rating) by pining in place by drilling the structure with the correct size drill bit required for fixing and then inserting fixing into hole.
- Level the frame on the active hinge side of the frame and fix in place using appropriate fixings and Metal shims (supplied by others).
- If door leaf has any packaging removed it, manoeuvre leaf into position ready for installation.
- Door is then attached to frame using mechanical lifting device (or by which ever means you determine to be suitable to carry out your installation) to raise to correct level, and then lower onto hinges.



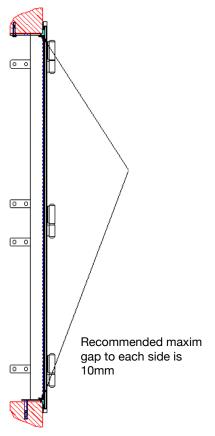


Diagram 2



- Once leaf is hung, level remainder of single frame to suit then fix. If this is a double door repeat the lift and then fix the inactive leaf to the frame with M10 set screws supplied into the prepared holes treaded ready to accept fixing.
- Select the door furniture pack and install as detailed in manufacturers notes supplied.
- Check that all operations are working correctly, and shoot bolts line up and work.
- Apply a bead of 4-hour fire rated mastic to all abutments ensuring the maxim gap of 20mm is not exceeded. The following sealant must be used to meet Sunray certification: EVERBUILD TECNIC® FIRE SEALANT 400.
 www.everbuild.co.uk

Finish

Doorsets are supplied with one coat of red primer ready for on-site painting after installation.

Sunray can offer an on-site painting service for more information call Sunray on 01233 639039 or sales@sunraydoors.co.uk.

Sunray cannot accept responsibility for any deterioration of the doorsets if the finish coats have not been applied by a fully competent person within a reasonable period. The storage location should reflect this. The type of finish paint used must be appropriate for the environment in which the doors are situated.



Operation, safety, maintenance and repair instructions

FAILURE TO COMPLY WITH THESE INSTRUCTIONS WILL INVALIDATE OUR WARRANTIES

Quarterly maintenance

- Sunray's range of steel door assemblies are of robust construction and simple operation. Other than
 good house-keeping, they require minimal maintenance. However, to ensure efficient operation the
 following instructions and guidelines should be followed.
- Annually ensure that the door opens and closes in accordance with the design. Active and inactive leaves should be fully tested.
- Adjustments to the locking mechanism should be made to ensure correct closure.
- Annually apply two shots of grease with a grease gun to the grease nipples on each hinge.
- Annually apply two shots of suitable lubricant to inside and outside of three-way locking system or panic system, whichever is fitted.
- Annually check the paint finish to ensure that it is giving adequate protection. Touch-in or re-paint as necessary to prevent corrosion.



Sunray FireLock Door® troubleshooting

Problems	Possible cause	Corrective action
Doors do not fit in frame	Wrong door leaf selected	Check the ID numbers to ensure they are all the same numbers
Doors will not drop onto hinges	Male and/or female hinges bent	Re-align
	Frame bowed	Shim frame to bring square
Doors will not close	Obstructions fouling closing area	Clear/remove objects
Door leaf(s) will not shut to frame at top and/or bottom	Frame out of square	Correct by shimming as required
	Door bent in storage	Straighten or contact Sunray
	Hinges damaged	Re-align
Barrel bolts or locking bars not engaging fully	Debris fouling receiving holes	Clean out or re-drill holes
	Frame not level or square	Re-shim frame to correct frame alignment
Door leaves not level in centre	Frame not level or square	Correct by shimming
	Nylon spacer missing	Fit new nylon spacer
Panic furniture not operating correctly	External locking not fitted correctly	Remove and refit ensuring square drive fitted correctly
	Panic furniture fitted incorrectly	Refer to manufactures fitting instructions

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 and reliable operation, regular inspection and maintenance is essential. Failure to comply with *Sunray Engineering Limited's* operation, safety, maintenance, and repair instructions will invalidate the product warranty. The manufacturer's warranty of one year is only valid if the above maintenance and professional installation has been carried out. For additional information please refer to our website.



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