

## FITTING INSTRUCTIONS FOR METADOR DEFENDER & METADOR DEFENDER FIRESHIELD STEEL DOORSETS

### Equipment / Tools Required

- Masonry drill and drills to suit fixings
- Pencil or marker pen
- Spirit Level
- Steel tape
- Fixings (7mm SDS/Brown plugs/6mm screws)
- Tools to install fixings i.e. cordless/corded drills
- Mastic or similar frame sealant (for Defender Fireshield doors, use Rockwool FirePro Acoustic Intumescent Mastic)

### General Care

Doorsets are usually delivered on a curtain-sided truck and can be unloaded using a forklift. Care must be taken when unloading with a forklift that the forks are positioned correctly, and where possible extend through the pallet completely. Forks that are positioned only half way through the pallet can damage the face of the door. Lay the pallet on even ground making sure there are no objects on the floor that will damage the door. Nothing should be placed on top of the door, even though the door is made of steel it can still be damaged easily if care is not taken.

There are a few simple points to remember:

- Please be aware that these doors are heavy – we recommend lifting between two people.
- The doors must not be used as a table or seating bench whilst stored on a pallet.
- Take care not to damage the door handles or anything that protrudes on the surface.
- Do not store in exposed places for long periods and protect from weather.

Note: Before the delivery driver leaves the consignment in your possession, ensure that it has not been damaged in transit (check above points). The driver is obliged to wait 15min for the consignment to be checked for damage.

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## Pre-installation checks

- Double-check the opening size to ensure that the door frame supplied will fit into the opening.
- Area to be cleared of all obstructions
- Open packaging and check contents against the delivery note
- Check that components box/bag is present and complete. All necessary keeps/grommets/special fixing screws will be in this box.
- For all double doorsets the frame is supplied in knock-down form for ease of transportation. The hinge jambs will have two M8 bolts at the head and one at the bottom. The head frame will have pre-drilled holes to accept these and the threshold will also need to be riveted underneath (Defender only).
- Check that it is safe to drill around the opening. (Electrical cables, gas pipes etc)
- If there are electric locks (maglocks, strikes, etc), the cables or cable runs will need to be considered before installation.

1. Ensure that the jacking screw adjusters are fitted into the tapped holes in the frame, then insert the door and frame into the opening and place a spirit level parallel to the frame.

Once the frame is sitting in the opening and is perfectly square start screwing the adjusters through the tapped holes, so that the frame is temporarily secure within the opening. Care must be taken not to distort the frame.

A hex tool is supplied to tighten the adjusters. It is important that the top adjusters are fitted first. This will give a firm hold between the frame and the wall. Take care not to distort the frame especially in the middle by over tightening the adjusters. If jacking screw adjusters are not supplied, batten packers will need to be used instead (after the fixing screw has been put in).

2. Once the adjustments are complete, drill and insert a fixing at the top of the vertical posts, starting with the hinge jamb first on a single door. Hang the door next and ensure that it can close against the lock jamb without appearing to be twisted. For a double door, both leaves will need to be hung and closed together to ensure that they meet without appearing twisted. It may be necessary to fix the frame slightly out of square (up to 5mm) to ensure that door leaves meet together properly. Once they close correctly, drill and fix the remaining fixings. (Insert fixings to threshold only if required). Double-check door alignment with spirit level and then tighten fixings. If further adjustment is required after fixing, loosen the fixing slightly and use the hex tool provided to make the necessary adjustments before re-tightening the fixing.

Test the door hardware, and adjust the door closer (if present) to the requirements of its instruction booklet, which will be provided.

Note: The hinge jamb on a single door must be fixed first. Then fix the top hole of the strike jamb. The door must be hung at this stage. The strike jamb can then be fixed using the door leaf to align it. It is imperative when making final adjustments that the hinge screws

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are tightened. Any factory fitted hinges are not fully tightened in case they need to be removed during installation.

3. To fit the bottom sill, drill and fit to the floor.

Fit bungs in frames and install weatherseal (if not pre-installed in the factory). Check that the frame weatherseals are in contact with the door leaves at every point around the perimeter.

Re-check operation of door.

4. Sealing & Firestopping: Defender Fireshield doors have been successfully tested both with and without Rockwool filling to the rear void in the frames. Adding Rockwool will help to improve the acoustic performance and make it easier to apply sealant but preventing it falling into the void.

Ensure the gap between the frame jambs and the substrate is no greater than 7mm, and the gap between frame head and lintel/reveal is no greater than 10mm. If that is the case, seek specialist advice on a suitable non-combustible material to fill the gap prior to applying sealant.

Seal around door frame and bottom sill (inside and out) as required. For Defender Fireshield doors we recommend using Rockwool FirePro Acoustic Intumescent Mastic.

Sealant must be applied to both ends of the threshold where it joins the frame to prevent water ingress.

Inward opening thresholds must not be sealed externally. The weep holes in the threshold will be designed to allow water egress and the lack of silicone at this point will allow water to escape effectively. Special attention is required to the silicone at either end of the threshold and the internal edge. If a cloaking frame sub-threshold is fitted, this will need to be sealed effectively at either end before installing the door.

Lubricate hinges with light machinery oil.

5. If separate overpanels or sidepanels are supplied with the doorset, they can be offered into the position and fixed through the framework in the same way as the door frame, using the self-drilling screws provided.
6. If vision panels are supplied within the doorset, the fixings on the frames will not have been tightened for transport purposes (The glazing gasket needs to allow for more glass movement than would normally be allowed if the screws were tightened). When tightening please DO NOT over tighten as this may result in damage to the glass. These screws will have to be tightened to prevent water ingress.

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## Troubleshooting

Problem	Possible Cause	Corrective Action
Doors do not fit in the frame	Wrong door being offered	Check the identification numbers on the doors
Doors will not close	Mortar fouling closing surface. Foreign object between leaf and hinged jamb. Stone on the floor underneath door leaf	Clean / Clear and re-try
Doors will not shut to frame at the top and/or bottom	Frame out of square.	Correct by shimming as necessary.
Drop bolts will not engage in the frame	Debris fouling receiving hole. Frame not level or square	Clean out and re-try Re-align by shimming as necessary
Door leaves not level at centre	Frame not level and/or square.	Re-align by shimming as necessary
Panic furniture not operating correctly	Frame/Mullion/Transom misaligned causing stress on panic furniture	Remove frame section and re-fit square and level, re-fit panic furniture.

## Maintenance

### Weekly:

- Check for correct operation of the door
- Check for and clear any stones or debris caught between the door and frame
- Ensure that the door is free from obstruction

### Monthly:

- Check all fixings are secure
- Lubricate door hinges – light machinery oil
- Check condition of rubber weatherseals
- Wash surface of door and frame with warm soapy water and wipe dry
- Lubricate locking points and cylinder (if supplied)
- Lubricate panic exit furniture and ensure that all parts are in a satisfactory condition

For spare parts, or many types of door accessories, please contact **Metador** for more information.

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