Caring for your new Composite Door

You have chosen a high-quality GRP Composite Door that is incredibly durable and easy to maintain.

Regular cleaning will ensure it always looks its best. Here is how to care for each part of your new door:

1. Glass
   Clean with glass cleaner, cold or warm soapy water and a soft cloth or sponge. Avoid abrasive pads and solvents.

2. Frames and panels
   These can be easily cleaned with warm soapy water and a soft cloth or sponge. Do not use abrasive pads or solvents as these may scratch or damage the surface. A special, solvent-based UPVC cleaner may be used to remove stubborn dirt and grime.

3. Locks, hinges and hardware
   Hardware can be cleaned with mild soapy water and a soft cloth. Avoid abrasive pads, solvents or strong polish as they may scratch or damage the hardware. For a smooth opening, lightly oil or lubricate moving parts once or twice a year.

NOTE: Composite doors are structurally sound and will not bow as a result of any water ingress. However, in order to maintain the door and prevent your door from bowing throughout its long life, the hook locks should always be engaged in their keeps when the door is closed. Failure to engage the hooks and close the door on the centre latch only can induce a bow over time. Failure to engage the hooks will therefore invalidate the guarantee against bowing.

Locking and unlocking your new door

1. Locking the door
   Close the door and lift the lever upward. This action will project the compression bolts and hooks into their respective keeps.
   Rotate the key one revolution. The door is now fully weathered and secure.

2. Unlocking lever / lever handle door
   Insert the key in the cylinder and rotate one revolution. Next, push the lever down to fully retract the compression bolts and hooks, the latch will automatically retract when the lever is depressed.
   The procedure is the same for internal and external operation.

3. Unlocking lever / lever off-set handle door
   To unlock the door from inside when a lever / lever offset handle is fitted, simply follow the procedure as in point 2 above.
   To unlock the door from outside, insert the key and rotate, the latch will lock the gearing. Depress the lever, which will withdraw the compression bolts and hooks, the latch will not operate at this point.
   To gain access, simply turn the key again in the same direction as to unlock the gearing, the latch will remain withdrawn whilst you hold the key in the rotated position.

Optimum security

Optimum security can only be achieved when both compression bolts and hooks are engaged in their respective keeps and the gearing is deadlocked with the key. Closing the door when using the lever / offset lever handle will provide an instant security benefit, but this does not constitute high security locking of the system.

To ensure the total benefits of the locking system are employed, follow the operation instructions set out above.

Stable Door operation

The below instructions are for stable doors only.

The top half of a stable door operates in the same way as a standard door. However, the cylinder is fitted to both the top and bottom doors as a thumbturn so there is no key.

The top and bottom doors are connected with a rack bolt. This has a thumbturn operation that is turned through two revolutions to lock and two opposite revolutions to release.

When locking the top and bottom doors together it is necessary to hold them both tight against the centre seals so that the rack bolt and keep line up.

Please leave with homeowner
1: Installation/replacement

1.1 Pre-installation checks
Prior to commencing any installation work, the size, type, and condition of all doors should be checked against both the survey data and the actual aperture sizes.

The doors specified, including hardware, glazing and door accessories, should be checked against the order acknowledgment provided by the supplier. Before any packaging for delivery, any ancillary components which may be supplied loose, such as the above, are accounted for.

NOTE: Composite doors must be stored in a dry location prior to installation. Protective packaging to resist mould, may be available from the supplier's UK product guarantee.

1.2 General
The importance of installing doorset outerframes plumb and square is fundamental to the UK's product guarantee.

Prior to commencing any installation work, the sizes, type, and condition of all doorsets should be checked against both the survey data and the actual aperture sizes.

1.3 Positioning of doorsets

As a general rule, only through-frame fixings are recommended for fixing of plastic outerframe composite doorsets.

Through-frame fixings should be plastic sheathed of minimum 100mm length, and shall penetrate a minimum of 50mm into the substrate.

The head of any through-frame fixing must be seated beneath the outer wall of the plastic outerframe member within the hollow frame to prevent distortion or closing of the cavity.

A larger hole than that required for the fixing will need to be drilled in the innermost wall of the plastic outerframe member, into which a cover cap should be inserted.

NOTE: other proprietary mechanical fixing methods are available. Prior to their use, it shall be determined that these are satisfactory by obtaining suitable third party assessment.

1.4 Fixing method

Fixing methods will be influenced by movement:

- The presence or absence of a wall cavity.
- The nature of any cavity.
- The relative positions of the frame and cavity.
- The position of the plaster line, and the need to prevent the interior decorations.
- The design of the reveal.

1.4.1 Fixing positions

Generally, all four sides of this frame shall be secured using the following guidelines to determine the fixing spacing:

- Corner fixings shall be minimum 100mm and a maximum of 200mm in from the external corner.
- Fixings in the panel area (less than 100mm, or better than 200mm from the same side of a mullion or transom).
- Intermediate fixings shall be positioned at greater than 600mm, with an allowance of 5mm on each side - Fig 2 illustrates fixture positioning.

Fig 2: Acceptable positioning of frames

NOTE: it is impossible to find a suitable fixing position, then the nearest possible position should be used.

Fig 2: Acceptable positioning of frames

1.4.2 Foam fixing at the head

Foam fixing with polyurethane (PU) foam products at the head of the frame is discouraged and shall not be used for combination frame doorsets or fire doorsets.

NOTE: foam installation procedures using heads are fixed with mechanical fixing in accordance with these rules.

1.4.3 Use of installation packers

Appropriately sized installation packers shall be used adjacent to fixing positions to prevent outer frame distortion during installation. Installation packers should be incorporated, resistant to rot and moisture, and span the full width of the outer frame profile.

The fixings should be tightened so that the frame is held securely against the packers. Take care not to over-tighten the screws and distort the frame.

Applies a small amount of silicone mastic to the shanks and heads of the framing to ensure that no water penetrate into the frame.

NOTE: packers shall be used adjacent to fixing positions.

1.4.4 Foam fixing at the head

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1.5 Finishing off and making good

1.5.1 General

Eldri must be used during installation to ensure that doors do not obstruct the door frame. Fixtures and fittings in the manner of operation of hardware. Neither sand nor cement, nor plaster shall be used to fill the gap between the frame and the structural opening.

All protectors placed on the outer profile and door fixings shall be removed as soon as the installation is finished, and prior to perimeter sealing.

Fig 3: Final inspection checklist

<table>
<thead>
<tr>
<th>Area to be checked</th>
<th>Visual Appearance</th>
<th>Fire Resistance</th>
<th>Fire Doorset Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Door leaf opens &amp; closes correctly?</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>2. No air gaps between frame seal and door leaf?</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>3. Obscure glasses oriented correctly?</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>4. When doors slam, no mullion bounce, nor outer</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>5. All hardware correctly lubricated?</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>6. Check all internal trims installed correctly</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>7. Threshold drainage channels free from obstructions?</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

1.6 Powerflushing

1.6.1 Fixing

2: Perimeter sealing

2.1 General

The purpose of a perimeter sealant is to prevent water and leakage between the aperture and the doorset.

2.2 Non-fire resisting doorsets

Non-Self-Closing Doors

No joint width shall be designed to be less than 5mm. Local variations in the size of the backgouge may create gaps greater than 5mm, the following examples illustrate common cases for filling these gaps.

2.2.1 Sealing gaps up to 15mm

For non-silicone sealings, gaps up to 15mm wide can be sealed readily with a stick of silicon sealant. In all cases the sealant shall be filled in a depth no less than the width of the gap. A backing strip may be used to limit the amount of silicon sealant.

Backing strips can be either foam, compressible, or expandable strips, or in-situ expandable foam. Any such material must be compatible with plastic outerframes.

The fixing of other materials to the frame is generally unnecessary when using quality sealants. However, if the substrate is timber, the gap may be applied to the aperture surface to ensure adequate bonding.

2.2.2 Sealing gaps between 15mm and 100mm

When sealing gaps between doors and 100mm, the use of a backing material is essential. This is also necessary when the gap varies such that locally it exceeds 15mm.

2.2.3 Sealing gaps over 100mm

Design widths above 15mm are not recommended and should not be necessary in UK conditions. Where this is due to minor irregularities then reduce the gap for the design joint width using packing pieces.

2.3 Drainage

When sealing perimeter joints care taken to ensure any drainage channels are not blocked or obstructed.

3: Final inspection

3.1 Checklist

After installation, a final inspection should be carried out to ensure that the installation is of the highest standard. There should be a formal procedure for checking the installation, which should use a checklist to ensure that all relevant points are checked.

A general checklist is provided in Table 3. (Fig 3)

It is advisable that these checks are carried out in the presence of the client, it is good practice to ensure that the customer is familiar with the method of operation of the installed doorsets.

3.2 Doorset operation and maintenance

Operating features such as key locks, hook-bolts and latches shall be checked and should be demonstrated that the doors and terminators how to use them. This is especially important in the case of exits that may be used in fires.

Back-up with the knowledge base of the installed doors.

Drainage

- All drains must be clearly visible.
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