



# Evolve patio installation guide

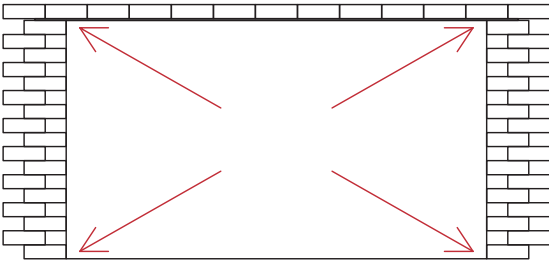
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## Measuring & surveying

The following is intended as a brief guide to determining the width and height of your patio door. Note that it is good practice to view and sketch the door as viewed from the outside.

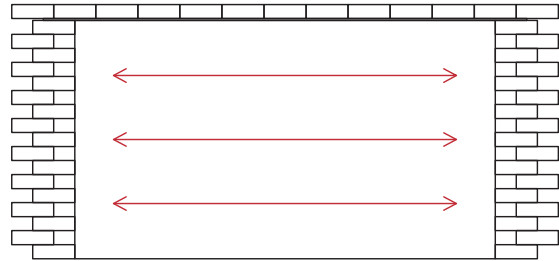
1

Check that your aperture is square by comparing the cross-corner dimensions.



2

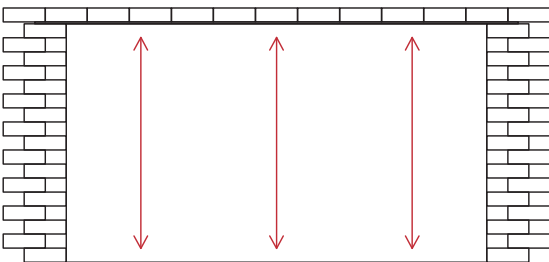
Measure the width of your aperture in three different places. Take the smallest size and deduct 10mm to provide your width dimension. See page 8 for maximum widths.



3

To determine the height of your door you should first decide where your finished floor level will be, including any floor covering. See diagrams on page 3.

Now you have to determine where the sill (or threshold) will sit. You can then measure the height of the door from the underside of the lintel to the underside of the threshold or sill. Take three measurements in different places and use the smallest dimension from which you should deduct 10mm (15mm for woodgrain profile).



4

Decide on the style of your door and the position of the opening. All patio doors slide on external and internal track.

### Please note:

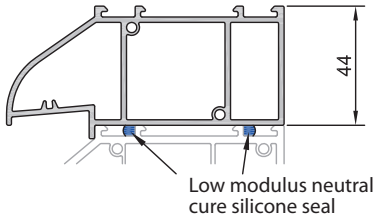
This patio allows 28mm internally beaded glazing only.

If the patio is to be installed into an exposed location, please contact the Technical Department for advice. Additional dust plugs will be required.

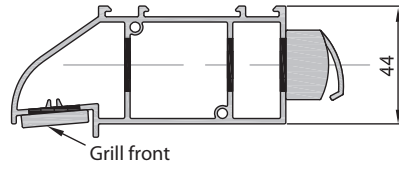
Maximum load 80kg per sliding panel.

# Measuring & surveying

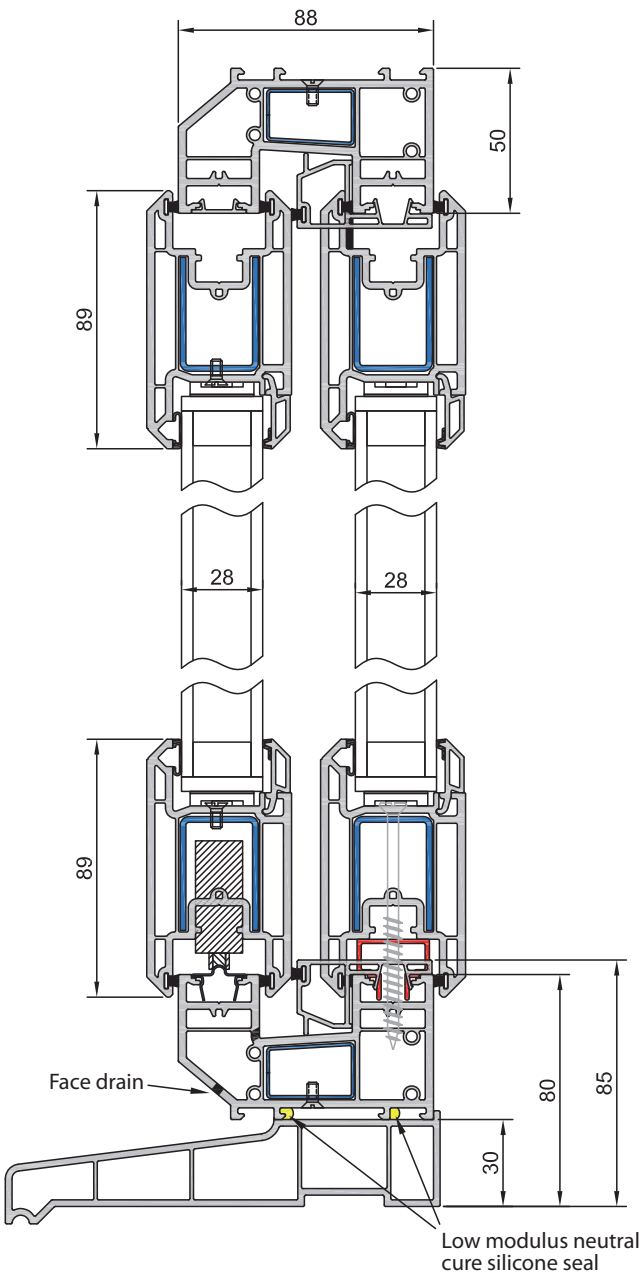
## Optional: HV71 Head Vent



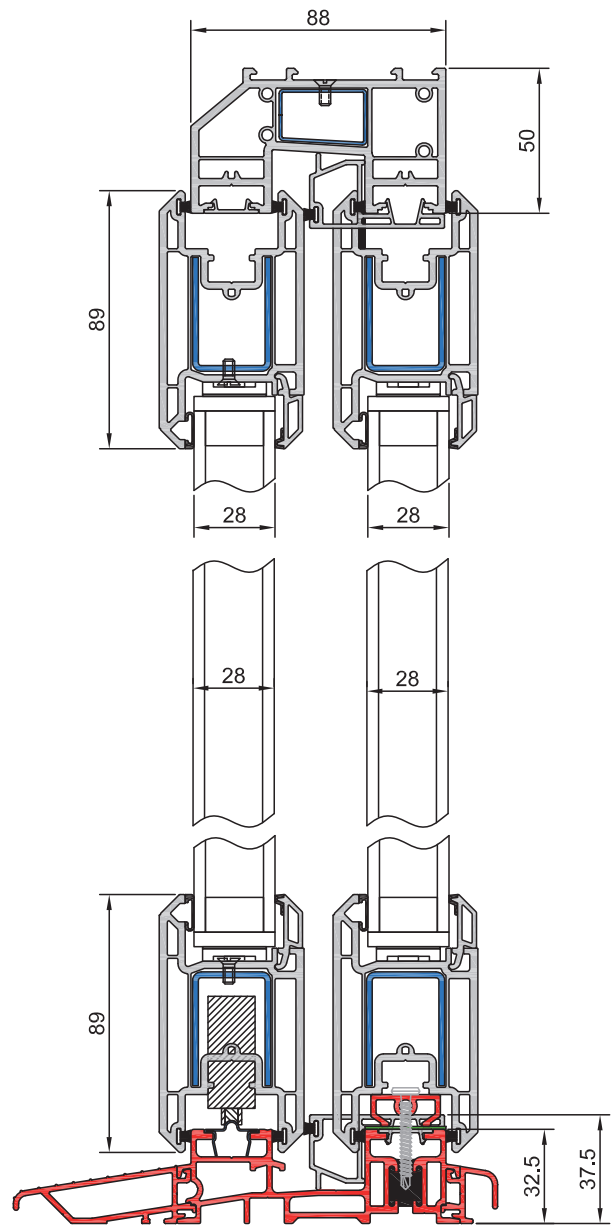
## Trickle Vent detail



**Please note:** If HV71 Head Vent is used ensure the necessary 44mm deduction is made.



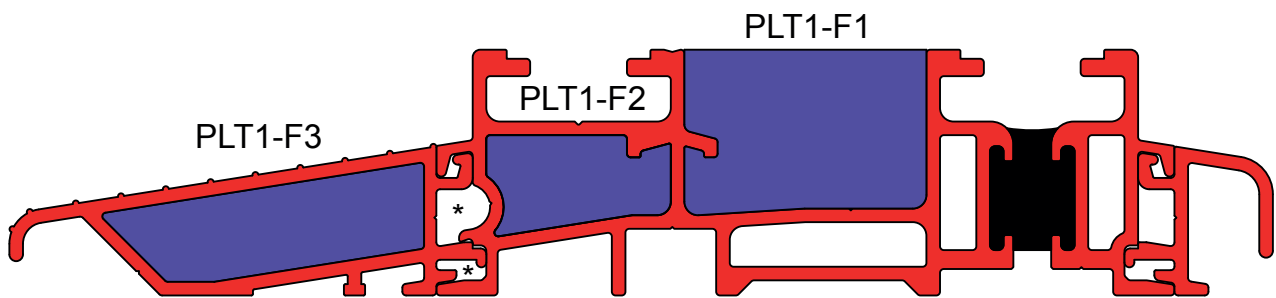
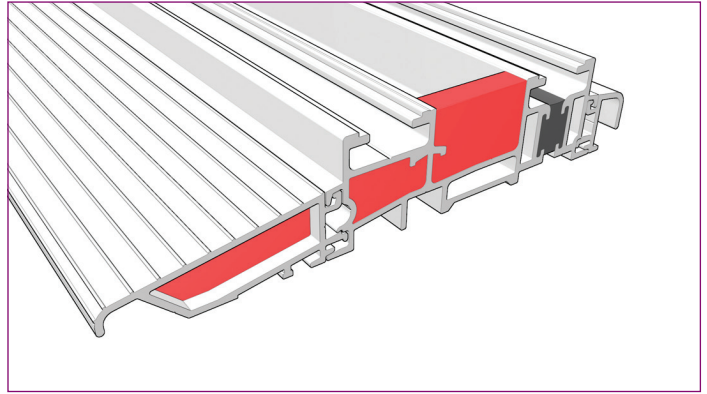
Cross section showing standard threshold and sill



Cross section showing aluminium low threshold

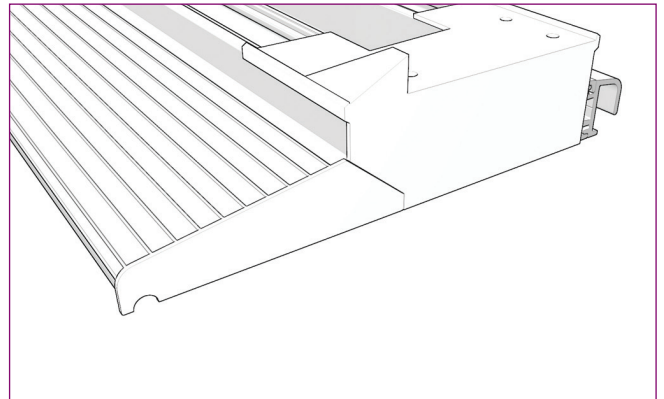
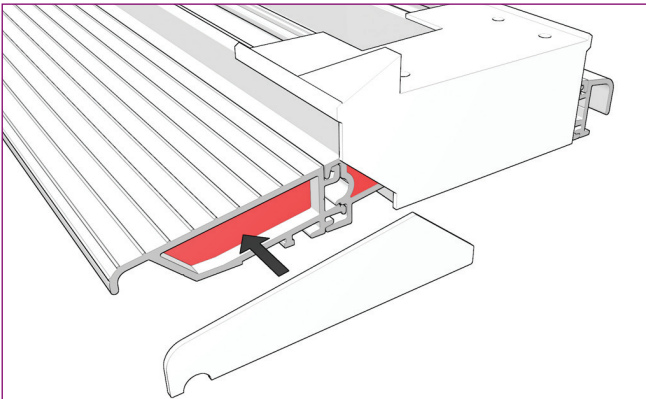
## Measuring & surveying

Ensure foam bungs are fitted and low modulus neutral cure silicone sealed into place to prevent water draining from ends of threshold track.

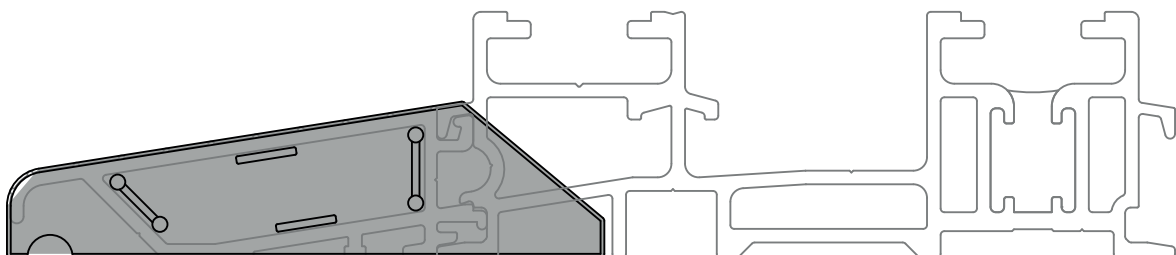


\*Seal with low modulus neutral cure silicone sealant.

Once foam inserts are in place, attach **PLT1-EC1** end caps to threshold.

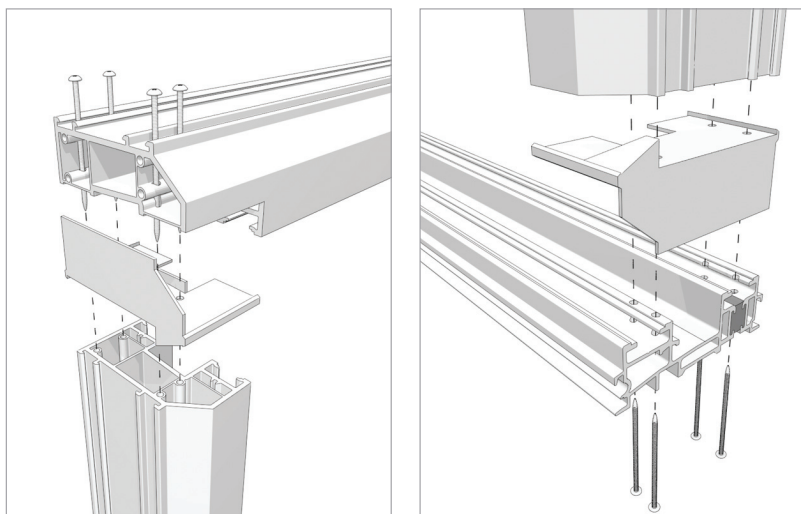


Seal the mechanical joint with low modulus neutral cure silicone.



## Mechanical jointing

Mechanical jointing requires an area 50 x 17.5mm to be notched out of the outer frame profile. Ensure low modulus neutral cure silicone sealant is applied to this notched area before fixing, and to the face of vertical jamb. Remove any surplus sealant. Join profiles using 4.8 x 65mm transom screws (**SH01**) through the horizontal patio outer frame and **PMJ01** joining bracket, and into the screw ports in the vertical patio outer frame.



### Notes

- Mechanical jointing suitable for use in cases of restricted access to property
- Special order necessary
- Disassembly and reassembly of frame on site required
- Is supplied ready prepped for mechanical jointing

## Installation

**Please note:** Check to make sure the patio frame and glass are the correct size before removing the old products.

1

Remove the patio door sashes from the patio door frame.  
Remove infills from the frame and interlocks from the sashes.

2

If a sill or head vent is required, screw and fix into place making sure it is sealed using a good quality sealant.

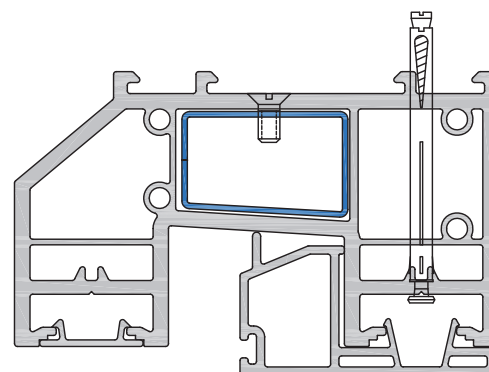
When inserting outer frame into the opening, you must ensure the sill is placed on to a mortar/low modulus neutral cure silicone bed.

3

Using a good quality frame fixing (i.e Fischer or Torx screws), drill the appropriate size holes and fix the frame. Do not fix within 150mm of the corner, and it is recommended to fix at 600mm centres. Ensure screws fix into solid brickwork where possible.

Please follow the recommended GGF Code of Practice when fixing into lintels.

Diagram shows placement for concealed screw fixing into the outer frame.



Infill cloaks screw head from view

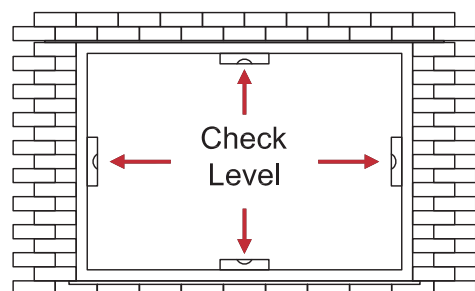


Fig. 1

**Please note:** The outer frame must be level and plumb (see Fig. 1) and not fitted in racked/twisted.

**Please note:** If fixed elsewhere, screw heads may be visible.

## Installation

4

Check the Euro cover trim and anti-lift devices are in place in the head of the outer frame. Check dust plugs are also in place in the centre of the outer frame head, above and below the interlock position.

**It is important to install and glaze the sliding door first so you have access to glaze the fixed door successfully.**

Insert the sliding door sash onto the track and slide into the closed position to prevent the sash moving while glazing. Adjust the rollers if necessary and then glaze the door making sure the glazed unit is packed correctly.

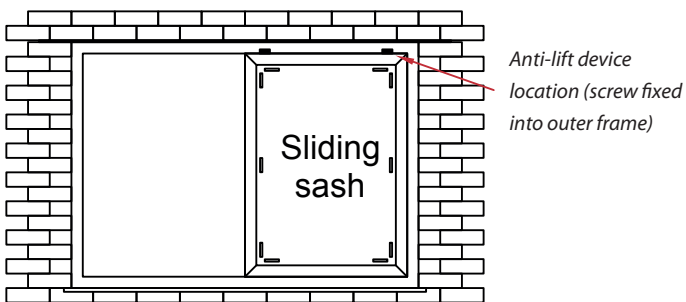
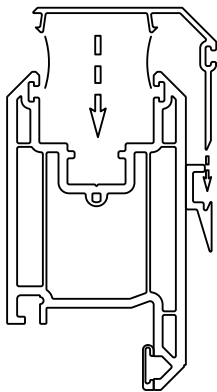


Fig. 2

**Please note:** Glazing bridge packers must be used.

6

When both doors are installed correctly fit the interlock covers to the back of the doors by firmly pressing and hand feeding the legs into the groove on the back of the doors and make sure it is located into the aluminium interlock.



5

Install the fixed door sash and slide the door back to the frame member which will have an aluminium packer attached to give the correct cover. Make sure this is pushed back firmly to the jamb so that interlocks are in line and fully engaged.

Using an appropriate size screw (4.8 x 70mm **SH54** or equivalent), fix through the fixed door sash into the aluminium spacers in the outer frame to secure the sash in position.

Glaze the fixed door making sure it is correctly packed (see Fig. 3).

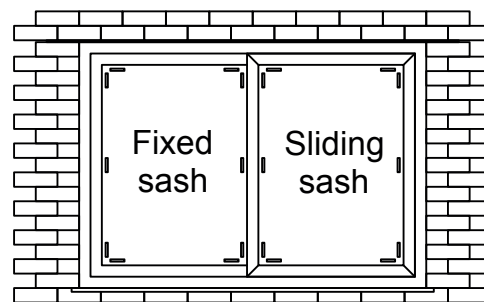


Fig. 3

7

Clip in the top and bottom pre-cut thresholds (marked A and B, see Fig. 4) ensuring that the prescribed end fits around the fixed sash. Clip in the vertical threshold on the side of the fixed (marked D). Make sure they are firmly clipped in. If the threshold needs trimming always trim from the square-cut end.

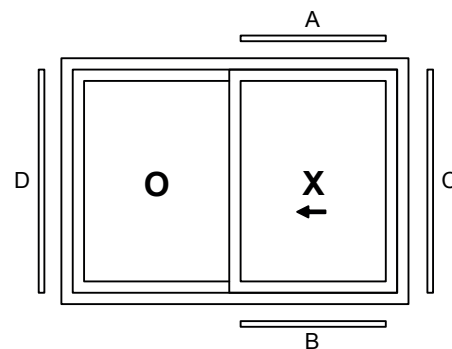
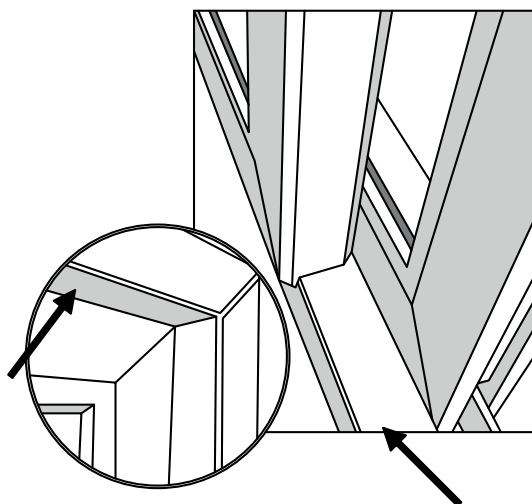


Fig. 4

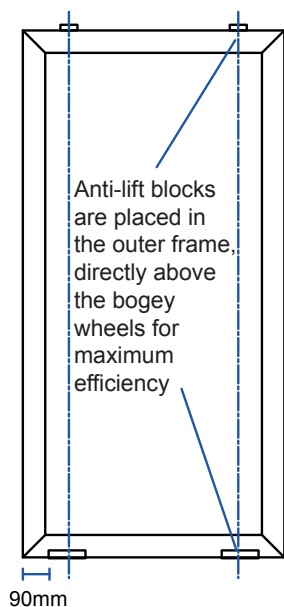
## Installation

**It is very important to make sure the anti-lift blocks are directly above the bogey wheels for maximum efficiency.**



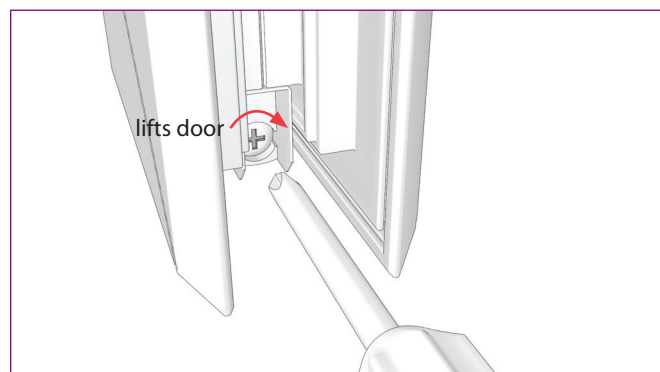
8

Fit the handle set to the sliding door. Fit the lock keep to the outer frame once the door has been levelled by aligning the lock keep and the anti-lift blocks to finish off the patio. With the sliding sash in the closed position, fit the bump stop to the top of the fixed door approximately 140mm from the outer frame, to the centre line of the sash.



## Hardware adjustment

Long Phillips screwdriver required for wheel height adjustment. The removal of the interlock on the sliding sash is needed to access the wheel height adjustment (see diagram below).



## Sealing of outer frame

Use a suitable quality low modulus neutral cure silicone sealant to seal the internal and external outer frame and brickwork. Trim where necessary and wipe off any excess sealant.

## Cleaning

- Clean PVC-U components regularly with soapy water.
- Ensure door locking mechanisms are kept clean and lubricated with light oil.
- Ensure top and bottom tracks are kept clean and clear of obstacles.
- Do not use any solvent cleaning material on any foiled products whatsoever.
- Do not mishandle the gearing when operating. Make sure all doors are fully closed before fully locking.
- Check to make sure all drain slots are clear of swarf and debris.

**Please note:** Make sure that you can operate the handle without trapping your hand when the door is fully open.

**If opposite hand is required:**

1. Remove handle retaining M6 x 15 Csk Pozi screws
2. Turn handle the other way round
3. Rotate thumbturn to other side
4. Refix handle with screws and washers

## Walk through clearances

| 2 PANE PATIO |           |                      | 3 PANE PATIO |           |                      | 4 PANE PATIO |           |                      |
|--------------|-----------|----------------------|--------------|-----------|----------------------|--------------|-----------|----------------------|
| Width        | Sash size | Walk through opening | Width        | Sash size | Walk through opening | Width        | Sash size | Walk through opening |
| 3000         | 1503      | 1265                 | 4500         | 1501      | 1295                 | 5900         | 1497      | 2536                 |
| 2950         | 1478      | 1240                 | 4400         | 1468      | 1261                 | 5800         | 1472      | 2486                 |
| 2900         | 1453      | 1215                 | 4300         | 1434      | 1228                 | 5700         | 1447      | 2436                 |
| 2850         | 1428      | 1190                 | 4200         | 1401      | 1195                 | 5600         | 1422      | 2386                 |
| 2800         | 1403      | 1165                 | 4100         | 1368      | 1161                 | 5500         | 1397      | 2336                 |
| 2750         | 1378      | 1140                 | 4000         | 1334      | 1128                 | 5400         | 1372      | 2286                 |
| 2700         | 1353      | 1115                 | 3900         | 1301      | 1095                 | 5300         | 1347      | 2236                 |
| 2650         | 1328      | 1090                 | 3800         | 1268      | 1061                 | 5200         | 1322      | 2186                 |
| 2600         | 1303      | 1065                 | 3700         | 1234      | 1028                 | 5100         | 1297      | 2136                 |
| 2550         | 1278      | 1040                 | 3600         | 1201      | 995                  | 5000         | 1272      | 2086                 |
| 2500         | 1253      | 1015                 | 3500         | 1168      | 961                  | 4900         | 1247      | 2036                 |
| 2450         | 1228      | 990                  | 3400         | 1134      | 928                  | 4800         | 1222      | 1986                 |
| 2400         | 1203      | 965                  | 3300         | 1101      | 895                  | 4700         | 1197      | 1936                 |
| 2350         | 1178      | 940                  | 3200         | 1068      | 861                  | 4600         | 1172      | 1886                 |
| 2300         | 1153      | 915                  | 3100         | 1034      | 828                  | 4500         | 1147      | 1836                 |
| 2250         | 1128      | 890                  | 3000         | 1001      | 795                  | 4400         | 1122      | 1786                 |
| 2200         | 1103      | 865                  | 2900         | 968       | 761                  | 4300         | 1097      | 1736                 |
| 2150         | 1078      | 840                  | 2800         | 934       | 728                  | 4200         | 1072      | 1686                 |
| 2100         | 1053      | 815                  | 2700         | 901       | 695                  | 4100         | 1047      | 1636                 |
| 2050         | 1028      | 790                  | 2600         | 868       | 661                  | 4000         | 1022      | 1586                 |
| 2000         | 1003      | 765                  | 2500         | 834       | 628                  | 3900         | 997       | 1536                 |
| 1950         | 978       | 740                  | 2400         | 801       | 595                  | 3800         | 972       | 1486                 |
| 1900         | 953       | 715                  | 2300         | 768       | 561                  | 3700         | 947       | 1436                 |
| 1850         | 928       | 690                  |              |           |                      | 3600         | 922       | 1386                 |
| 1800         | 903       | 665                  |              |           |                      | 3500         | 897       | 1336                 |
| 1750         | 878       | 640                  |              |           |                      | 3400         | 872       | 1286                 |
| 1700         | 853       | 615                  |              |           |                      | 3300         | 847       | 1236                 |
|              |           |                      |              |           |                      | 3200         | 822       | 1186                 |

**Please note:** Walk through clearances shown here are for guideline purposes only.

## Minimum and maximum patio door sizes

|              | Minimum width (mm) | Maximum width (mm) | Maximum height (mm) |
|--------------|--------------------|--------------------|---------------------|
| 2 PANE PATIO | 1500               | 3000               | 2450*               |
| 3 PANE PATIO | 2250               | 4500               | 2450*               |
| 4 PANE PATIO | 3000               | 5900               | 2450*               |

\* Height up to 2450mm dependant on width, for further information please call the team on 01435 515001

The information in this document is for general guidance only. It does not constitute legal or professional advice. You should obtain professional advice if you have any specific concerns.