

General Information for Linkline Secondary Glazing White Aluminium Horizontal Sliding System

TWO PANES

You need one width kit plus one height kit of the appropriate length to secondary glaze your window with two sliding panes.

MORE THAN TWO PANES

If you wish to secondary glaze with three or more sliding panes to match your existing window layout, you will also require one Linkline White Aluminium Multi-Pane kit for each additional pane.

SELECTING YOUR GLAZING MATERIAL

Linkline White Aluminium Secondary Glazing may be used with glass of 4mm or 3mm thickness, or alternatively 4mm, 3mm or 2mm acrylic sheet.

4mm glass generally gives the best result, but if your window is within 800mm of the floor or otherwise exposed to impact we recommend you use acrylic or similar material instead of glass, for safety reasons. Acrylic sheet is widely available in 2mm or 4mm thickness.

If in doubt, please consult your stockist who will be pleased to advise.

Do not buy the glazing until you have installed the outer tracks and have taken the required measurements for them.

No single pane should exceed 1.86 sqm

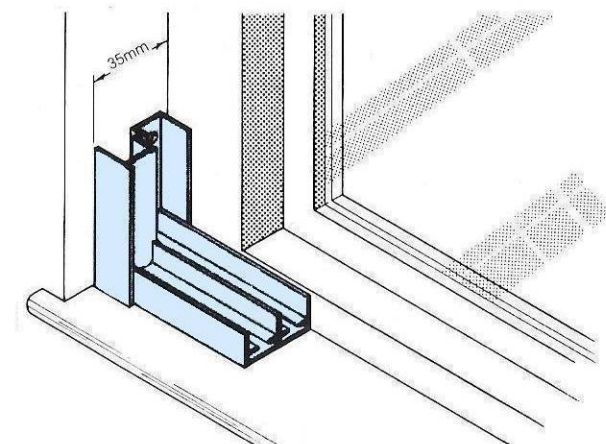
DRILLING THE TRACK SECTIONS

When drilling fixing holes in the tracks always support the section against a wooden batten or offcut. Use a 3.5mm twist drill bit and line up with the marker grooves on the back of each section. Take care not to damage the aluminium.

Mark a hole 100mm in from each end of the section, and then space subsequent holes at about 200mm intervals. In the top and bottom tracks these holes alternate between front and back channels. Once cut and drilled, deburr and cut ends to avoid accidental damage to decoration or aluminium.

FIXING

This system fits to the inside of the window recess. Allow a minimum of 35mm of flat window recess to accept the tracks.



The tracks may be fixed directly to the window recess. However, some windows have surrounds which are difficult to drill and plug, or which are badly out-of-square. In this case it may be convenient to fix battens directly to the wooden face of the window frame and fix the track sections to them.

When fixing the track sections to brick, concrete, plaster etc you will need wallplugs suitable for the 1" No 6 woodscrews supplied.

Mark the fixing holes in the window recess by placing the section in its exact position and marking through the drilling holes.

When fixing the track sections to a soft wooden sill, batten or recess you do not need to drill and plug. Do, however, start the holes before screwing, using a small drill or bradawl, as this makes it much easier to ensure the screw enters straight.

INSULATION

For the best thermal insulation and for normal sound insulation purposes, fit the track sections as close as possible to the main window glass. Ensure that the window catches clear the secondary glazing.

If best sound insulation is required a gap of 150mm between the main window glass and the secondary glazing is recommended

CONDENSATION

Linkline Secondary Glazing will normally reduce condensation considerably. However, in line with other reputable manufacturers Linkline cannot guarantee to completely eradicate condensation in rooms where dampness is a problem.

To minimise condensation ensure that all sections are accurately cut and any air gaps sealed.

SAFETY

When the main window is open the secondary glazing pane should also be kept open to avoid undue pressure in high wind conditions. This is especially important for large exposed window.

Panes of cut glass should always be handled with care. Protect your hands and eyes at all times. Keep glass away from children.

FINISHING OFF

Linkline has specified a particularly tough, smooth and long-lasting coating that requires no maintenance other than normal cleaning.

When cleaning use a damp sponge and a mild detergent. Avoid harsh detergents or abrasive cloths.

If for any reason the coating becomes chipped, you may touch up by using a proprietary brand of touch-up paint (eg from a car accessory shop).

TOOLS REQUIRED

Necessary

Junior hacksaw
Drill (masonry drill bit No 6 and twist drill bit 3.5mm)
Long screwdriver
Small screwdriver
Steel rule
Wallplugs (for 1" No 6 woodscrews)

Desirable

Mallet
File (deburring sections)
Bradawl – or 1/16" twist drill bit for pilot hole
Square, straight edge
Spirit level

WIDTH KIT CONTENTS

All horizontal sections
28 1" No 6 roundhead woodscrews
12 1" No 4 roundhead woodscrews (for bottom track)
8 3/4" No 6 countersunk screws (for fixing corner pieces)
8 corner pieces with steel clips
4 PTFE low friction slides



Section A
Top track:
One length



Section B
Bottom track:
One length



Steel clips:
Eight
Corner pieces: Eight



Section E
Glass carrier with
short brush seals:
Two lengths



Section F
PVC glazing gasket:
Two lengths for
Section E



Section G
PVC insert: Two
lengths for Section B
PTFE low friction
slides: Four

HEIGHT KIT CONTENTS

All vertical sections



Section C
Side track: Two
lengths



Section D1
Glass carrier with
handle: Two lengths

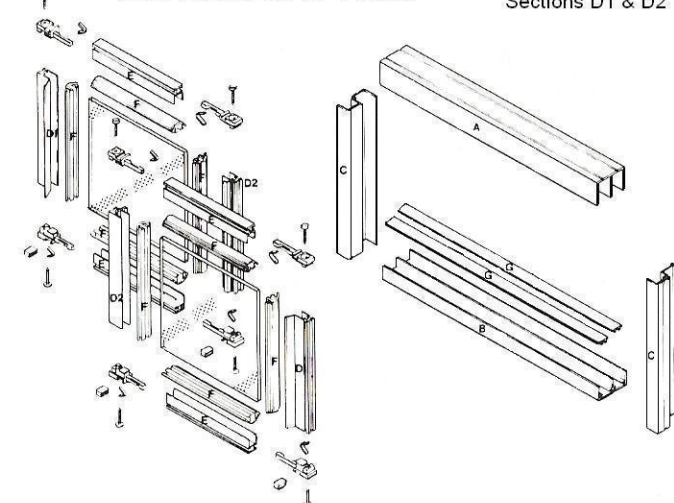


Section D2
Glass carrier with
interlock: Two lengths



Section F
PVC glazing gasket:
Four lengths for
Sections D1 & D2

ARRANGEMENT OF PARTS



Step-By-Step Instructions

1. Cut and fit the tracks sections

IMPORTANT:

If fitting more than 2 panes read Instruction 7 before proceeding.

NOTES:

If your window is not square or level the secondary glazing installation may be adversely affected. During the installation check that the tracks are square and level before finally fixing. If necessary pack out with wood and filler.

For simplicity and clarity these instructions show the front pane on the right hand side of the window. There is no technical reason why the tracks cannot be rearranged to position the front pane on the left hand side.

1.1 SIDE TRACKS (Section C)

a) Measure the full height of the left hand side of the window recess. Cut a length of Section C to this size.

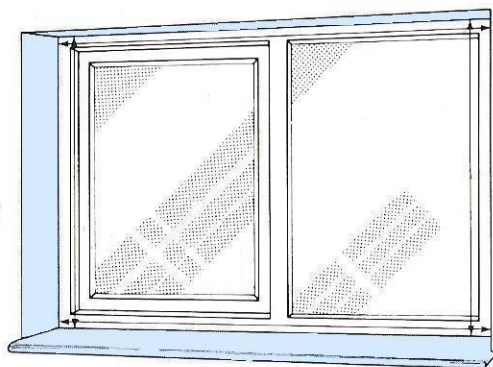


Figure 1

b) Position in the left side of the window recess with the small rib on the room side of the track and projecting towards the centre of the window (Figure 2)

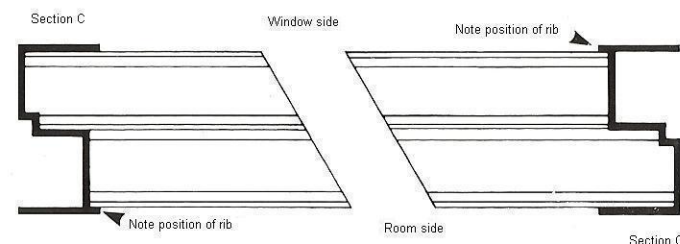


Figure 2

c) Drill the track and fix as described in General Information. Use the larger (No 6) roundhead screws.

d) Cut and fit the right hand side track as above, but with the small rib on the window side of the track (Figure 2).

e) Ensure that the two side tracks are upright in line and parallel before driving home the screws.

1.2 TOP TRACK (SECTION A)

a) Measure the full width of the top of the window recess. Deduct 5mm and cut Section A to this size.

b) Cut out and discard a 13mm corner, including the middle leg of the channel, from the right hand end of the window side channel and from the left hand end of the room side channel (Figure 3). Note the track is fitted flat face upwards.

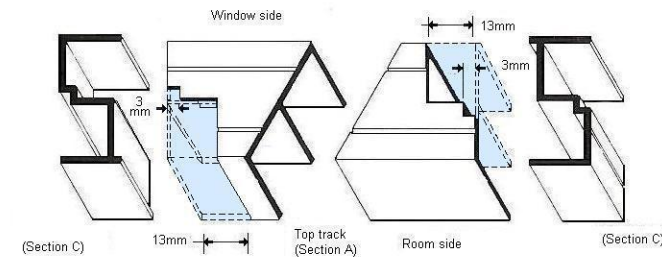


Figure 3

c) Further notch out a 3mm x 3mm corner at each end of Section A to accommodate the small step in each side track (Figures 3 and 4).

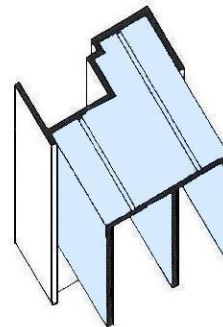


Figure 4

d) Now drill and fix as described under General Information. Insert the top track ends at an angle into the recesses of the side tracks, taking care not to damage the paintwork of the side track. Push the track fully into position before fixing.

1.3 BOTTOM TRACK (SECTIONS B and G)

a) Follow the above procedure for Section B. Note that it is fitted flat face downwards and therefore the cut-outs are not the same as for the top track (Figure 5 and 6).

Figure 5

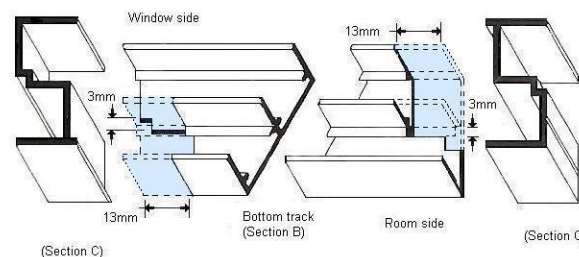
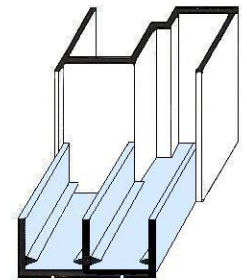


Figure 6



b) Before fixing, cut and notch the PVC inserts (Section G) to match the front and back channels.

c) Ensure that the bottom track is parallel with the top track before finally fixing. Use the smaller (No 4) roundhead screws and a small screwdriver, to avoid damaging the internal lips of the bottom track.

Ensure the screws are fully home, leaving clearance to allow the fitting of the PVC insert (Section G).

d) Fit the PVC inserts. Starting at one end, push them home until they click fully into position.

2. Measure for glass

Important:

For more than 2 panes see Instruction 7.3

Also see **Selecting your glazing material under General Information.**

2.1 HEIGHT

Measure between the inner edges of the top and bottom tracks and deduct 3mm. (Figure 7).

2.2 WIDTH

Make a light pencil mark on the bottom track where you want the two panes to meet. Measure from that mark to the inner edges of each side track to give the width of each piece of glass (Figure 7).

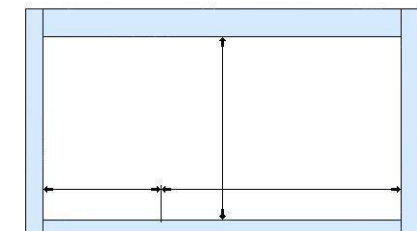


Figure 7

3. Obtain and prepare the glass.

This secondary glazing has been designed to accept 4mm, 3mm or 2mm glazing material.

4mm glass generally gives the best result, but see [Selecting your glazing material](#) under General Information.

Ensure you glazing conforms to British Standards recommendations (+/- 0.2mm of the stated thickness). Check that it has been cut to within 1.5mm of the correct size.

It is essential to remove sharp edges from glass before attempting to fit the glazing gasket (Section F). If this has not been done by the glass merchant you can do it yourself.

a) Lay the glass flat on a steady surface such as a table, with the edge to be smoothed overhanging by about 2cm.

b) Take a sanding block and using a circular motion of the hand, rub the edges thoroughly.

4. Assemble the panes

4.1 GASKET (SECTION F)

a) If using 4mm glazing, remove both wings from each length of Section F (Figure 8).

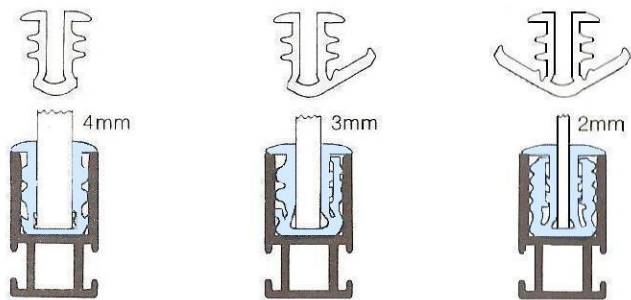


Figure 8

b) If using 3mm gasket remove one wing, and leave the remaining wing on the gasket (Figure 8). Ensure when fitting that the wings always face the same way.

c) If using 2mm glazing use the gasket as supplied (Figure 8).

4.2 BACK PANE

a) Take the width of the appropriate pane. Mark and cut the two appropriate lengths of Section F to this size.

b) Position the glass on its edge on a folded cloth or newspapers with the top edge upwards. Position a cut length of Section F along it.

Starting at one end, press the gasket onto the pane, ensuring it is firmly in position.

c) Now take the width of the pane deduct 16mm. Remove the seal, then mark and cut two appropriate lengths of Section E to this size.

d) Place a cut length of Section E centrally over the gasket, leaving a gap of 8mm at each end. Starting at one end, gently tap it down (Figure 9). Avoid hitting the aluminium with a metal tool.

NOTE: When correctly positioned only the lip of the gasket is visible.

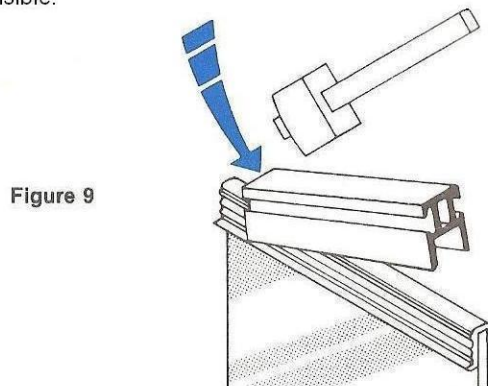


Figure 9

e) Turn the glass over and fit the other cut lengths of Sections F and E exactly as above.

f) Measure the distance between the top and bottom gaskets and cut the other two lengths of Section F to this size. Fit them centrally along the exposed edges of the pane.

g) Measure the distance between the inner edges of the seal slots to the top and bottom glass carriers (Figure 10). Cut one length of glass carrier with the integral handle (Section D1) to this size. Also cut one length of glass carrier with interlock (Section D2) to the same size.

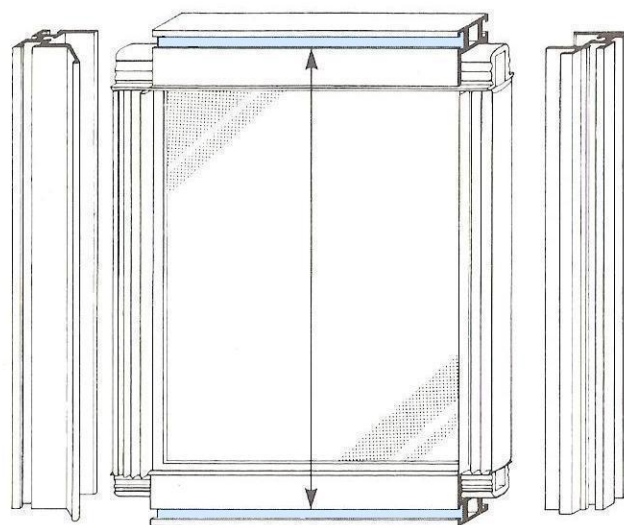


Figure 10

h) Now decide which end of Section D1 will be at the top of the window, and notch back the handle at the end by 13mm (Figure 11a).

Make a straight cut and then use pliers to remove the top piece, deburring with a file. Take care not to damage the visible surface of the aluminium.

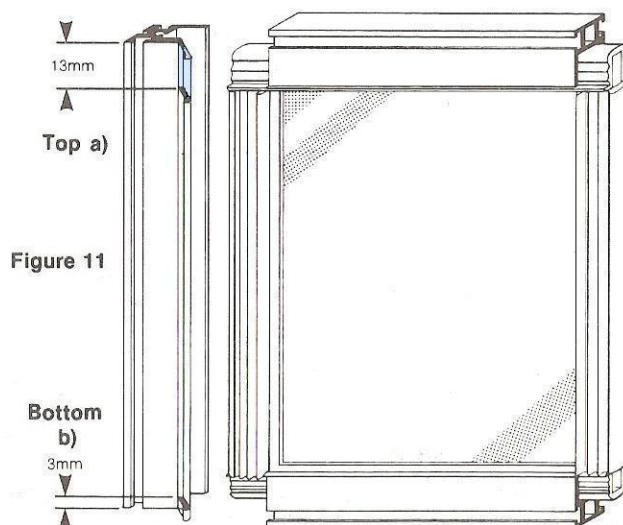


Figure 11

i) Now remove a 3mm piece from the bottom end of Section D1 (Figure 11b).

j) Position a corner piece at each end of Section D1, and fix using the 22mm countersunk screws provided.

k) Now insert a steel clip in each corner piece and offer up Section D1 to the gasket, inserting the corner piece legs with clips into their housing in the horizontal glass carriers (Figure 12).

Ensure that the steel clips are inserted as shown.

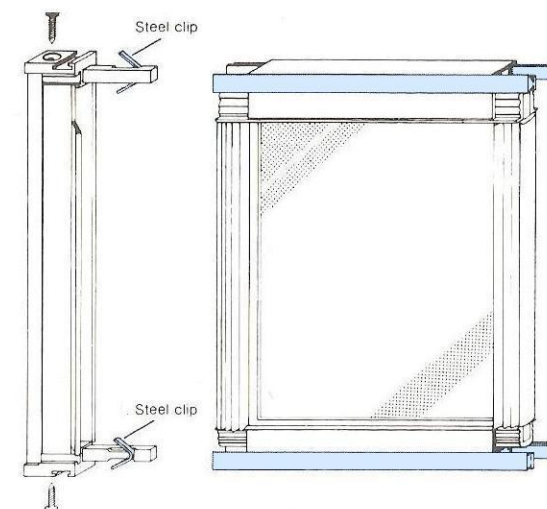


Figure 12

l) Gently tapping along its length, fit Section D1 over the gasket until both corner legs are fully home.

NOTE: When correctly positioned only the lip of the gasket is visible.

m) Refit the seals into each Section E, pushing them fully home into the corner piece slots. Allow an excess of 14mm for the other corner piece, and cut.

n) Now fit a length of Section D2 to the other exposed length of gasket. Proceed as for Section D1, but note;

1. Ensure the seals in Section E locate in the corner piece slots.
2. The interlock and seal of Section D2 must face in the same direction as the handle of Section D1 (ie into the room).
3. Notch Back the interlock as shown in Figure 13, sliding the seal clear to avoid damaging it.

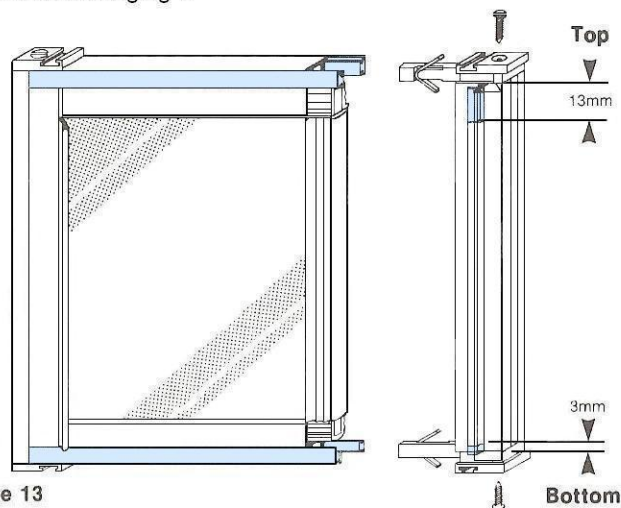


Figure 13

4.3 FRONT PANE

The assembly procedure is similar to that of the back pane, but note:

1. The handle on Section D1 will still face inwards towards the room, but the interlock and seal of Section D2 will face in the opposite direction (ie outwards towards the window).
2. Use Section D2 on the edge that will be at the centre of the window (Figure 14).

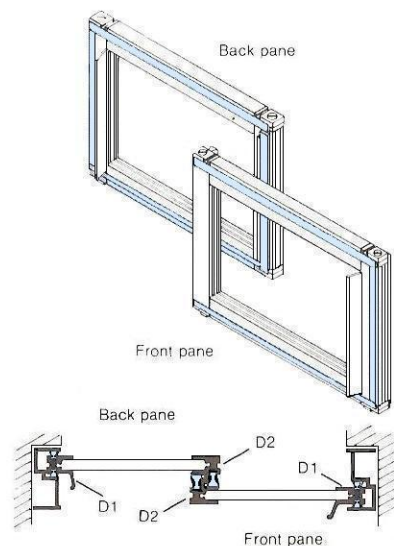


Figure 14

5. Fit the panes

5.1 Before fitting clean the glass and the inside of the tracks thoroughly.

5.2 Push the PTFE slides into the lower corner pieces of each pane (Figure 15).

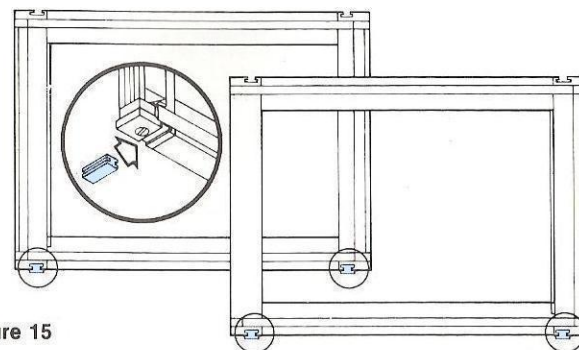


Figure 15

5.3 Fit the back pane into position by lifting the pane upwards into the back channel of the top track. Then lower it into the corresponding channel of the bottom track.

5.4 Repeat this procedure for fitting the front pane into the front channel.

The panes should now slide smoothly from one side of the window to the other. For continued ease of movement keep the tracks clean and free from dust. Sliding may be further improved by polishing the PVC insert with furniture polish.

6. Aftercare: Disassembling the pane

6.1 If you need to replace a pane try to ensure the replacement pane is exactly the same size as the old one.

If it is not possible to measure this directly, adopt the following procedure.

- a) Before removing the pane from the tracks check the secondary glazed pane is square.
- b) Measure the vertical distance between the top and bottom gaskets and add 16mm to give the height.
- c) Measure the horizontal distance between the gaskets and add 16mm to give the width of the glass.

6.2 In disassembling the pane note that the corner piece legs are firmly fixed within the horizontal glass carriers and cannot, once fixed be removed.

To disassemble first unscrew the corner pieces, then gently tap off the horizontal glass carriers, followed by vertical glass carriers and gaskets.

6.3 To reassemble, fit first the gaskets followed by one horizontal carrier. Then fit the two vertical carriers, followed by the last horizontal carrier.

7. Multi-Pane Kit

KIT CONTENTS

The Multi-pane kit contains:
Vertical glass carrier sections and gasket
4 corner pieces with steel clips
2 PTFE low friction slides
4 22mm countersunk screws



Section D2
Glass carrier
with interlock:
Two lengths



Section F
PVC glazing gasket:
Two lengths

7.1 Odd numbers of panes

Both the outer panes must run in the front track channel. (See Figure 16).

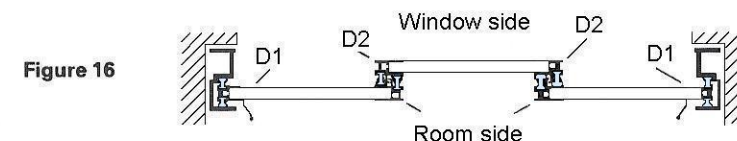


Figure 16

- a) Follow Instruction 1.1 to measure and cut to size the side track sections.
- b) Before fixing, ensure that both side tracks are positioned the same way, with the small rib on the window side of each track, and projecting towards the centre of the window (See Figure 16).
- c) Measure the full width of the top of the window. Deduct 5mm and cut Section A to this size.
- d) Now cut out and discard 13mm corners including the middle leg of the channels, from each end of the window side channel of the top track (See Figure 17).
- e) Further notch out a 3mm x 3mm corner at each end of Section A to accommodate the small step in each side track (See Figure 17).

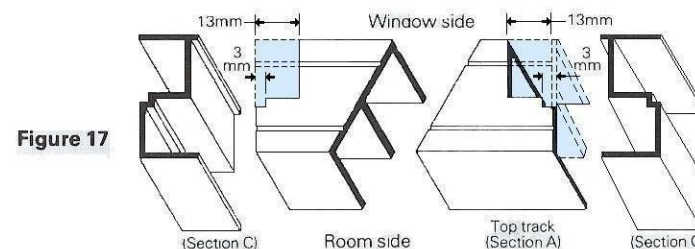


Figure 17

f) Fix as described under General Information

g) Repeat this procedure for the bottom track (Section B), but remember it is fitted flat face downwards, and therefore the cut-outs are not the same as for the top track (See figure 18).

Before fixing cut and notch the PVC inserts to match the front and back channels.

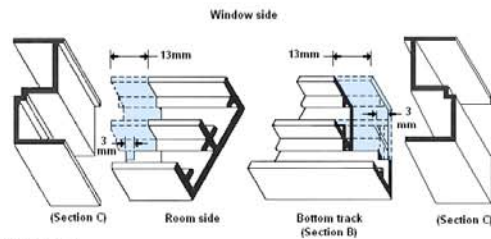


Figure 18

7.2 EVEN NUMBERS OF PANES

The outer panes must run in different channels. (See Figure 19). Follow instruction 1 to cut and fit the track sections.

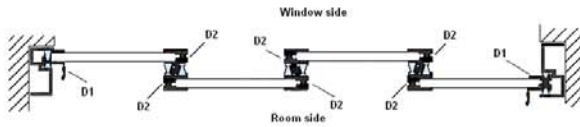


Figure 19

7.3 MEASURE FOR GLASS

Height

Measure between the inner edges of the top and bottom tracks and deduct 3mm to give the height of the glass. (See Figure 20).

Width

Make light pencil marks on the bottom track where you want the panes to overlap.

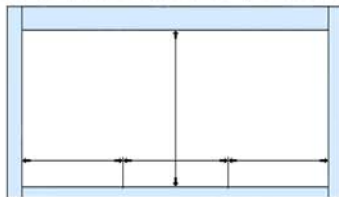


Figure 20

Outer panes

Measure from the appropriate mark to the inner edges of the side track and add 1.5mm to give the width of the glass.

Inner panes

Measure the distance between the appropriate marks and deduct 3mm to give the width of the glass.

7.4 Follow Instruction 3 to obtain and prepare the glass.

7.5 Assemble the panes.

Using the extra lengths of Section D2 provided in the Multipane kit, follow the general procedure given in Instruction 4, but refer to Figure 16 or 19 as appropriate for the positioning of the vertical glass carrier sections.

7.6 Follow Instruction 5 to complete your installation.