Making and fitting your Heavy Duty Framed Window Screen - Kit codes 050.2 to 058.2

Thanks for choosing our screen system.

We double check all orders before despatch, but we would ask you to check that all the components have been received as listed below. If any items are missing please call us on 01628 481919

If you are unsure at any stage please contact us. We are always happy to help.

The first section of these instructions explains how to make and mesh your screen. You then need to turn to the relevant section to provide the contents and instructions for the fixing option you have chosen:

Contents:

Lengths of Premium Frame
4 per screen

Roll of Mesh, type as specified on your order

Corners
4 per screen with 4 screws per corner

Length of Spline

Spline Tool

Mid-bar (included for kits 054.2 – 058.2 only)

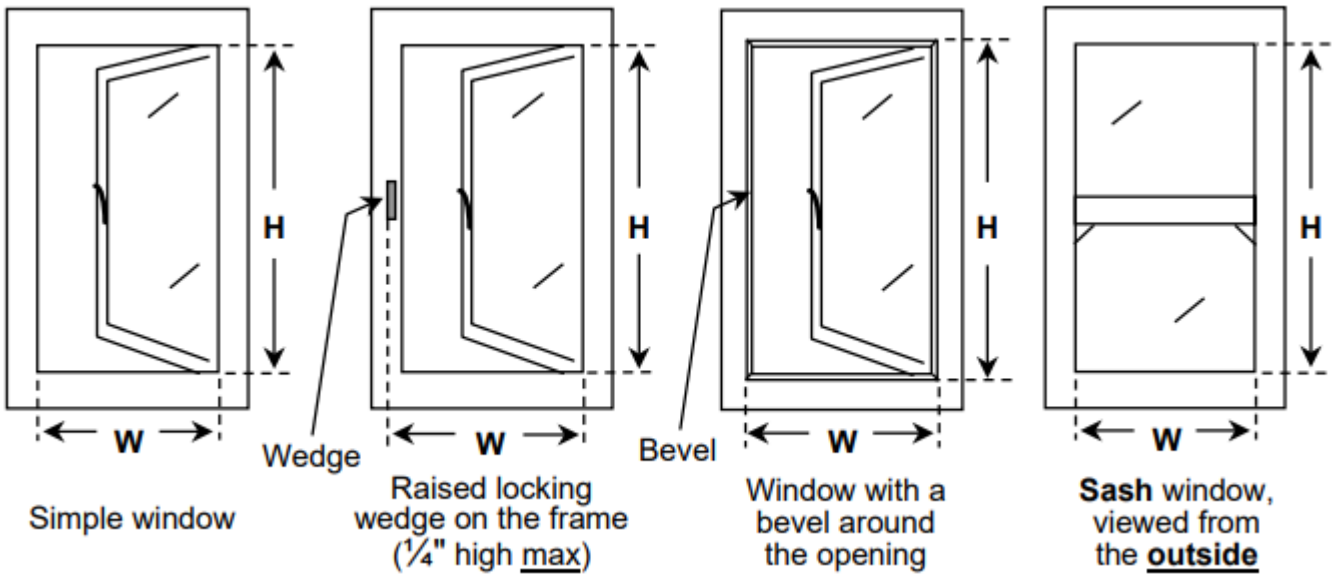
A2 Screws to fit the mid-bar, 4 per screen (included for kits 054.2 – 058.2 only)

Tools required:

- Tape Measure
- Pencil
- Heavy Duty Hacksaw or chop saw
- Mitre Box (if using a hacksaw)
- Flat headed screw driver
- Scissors
- Stanley Knife
- 2.5mm drill bit (for the corners, mid-bar, hinges and magnetic catches)
- 3.5mm drill bit (for mid-bar)
- Countersink drill bit - for mid-bar
- Posi 1 (for corner screws)
- Posi 2
- Phillips 2 bit - (for A2 mid-bar screws)
- Drill

Step 1 – Measuring your window.

Depending on the style of your window select the correct diagram below as a guide to measure your window opening.



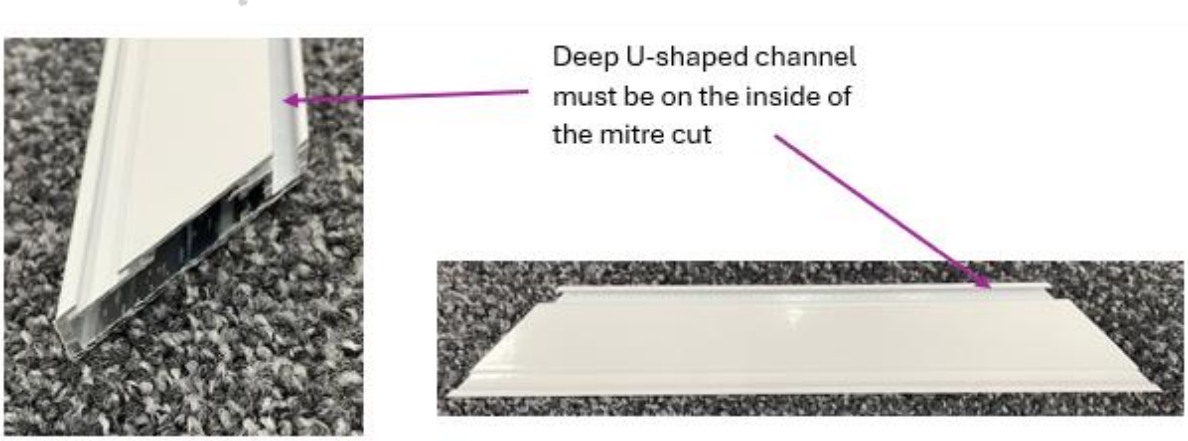
- Measure the width and height of the opening including any bevelled edge going into the opening and add 40mm to each measurement. This will give you a 20mm overlap on the width of the frame either side (i.e. half the width of the screen frame).
- You then need to take into consideration the width of the flat framework around your window and the room required for your fixings and make any adjustments. Depending on your fixing choice you will need to allow for the following next to your frame:
    - Hinges - 16mm.
    - Turn Buttons - 10mm (when using the turn buttons without hinges these can be fitted on all 4 sides of the screen or 2 opposing sides depending on flat space available).
    - Magnetic Strips – No additional space for this option but bear in mind you will require at least 21mm of flat framework behind the screen to attach the magnetic strip .
- If you don't have sufficient room on the window frame to allow for the fixings then reduce the overlap of the screen framework but ideally you need at least 5mm overlap (21mm if using the magnetic fixing option) all the way around

Step 2 - Cutting your frame

To cut your frame you will require a chop saw with a non ferrous blade or a heavy duty hack saw with a mitre box.

- Cut your frame lengths in accordance with your calculations above.
- The frame must be cut at a 45 degree angle.

IMPORTANT: When Cutting the frame the deep U shaped channel **MUST** be on the inside of the frame. See image below.



TIP: Once you have cut your frame lengths it's worth offering them up to your window to double check they are correct before moving on to the next stage.

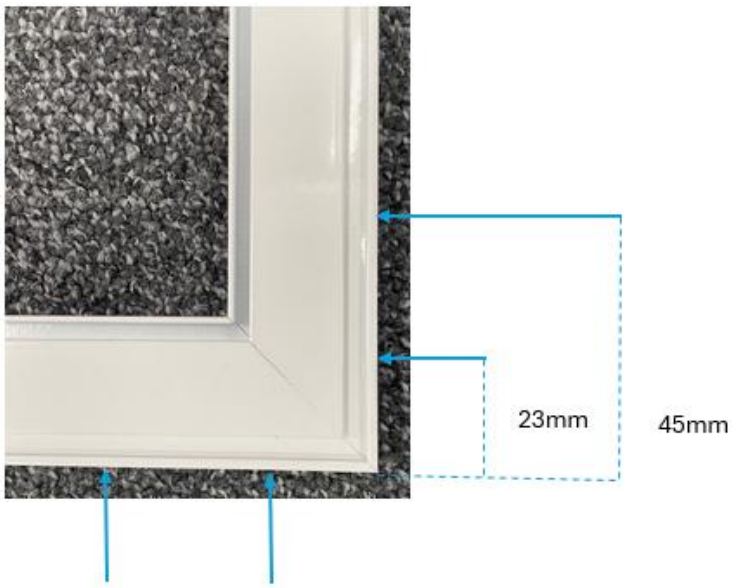
Step 3 - Assembling your frame

Insert the metal corners into the frame and push the pieces of frame together.

Please note: The screen will not stay fully formed at this stage due to flexing of the frame and the fact that the corners are not yet fixed in place.

- Lay the frame flat (on a table, bench or the floor). Working on one corner at a time, pull and screw each corner together as follows:

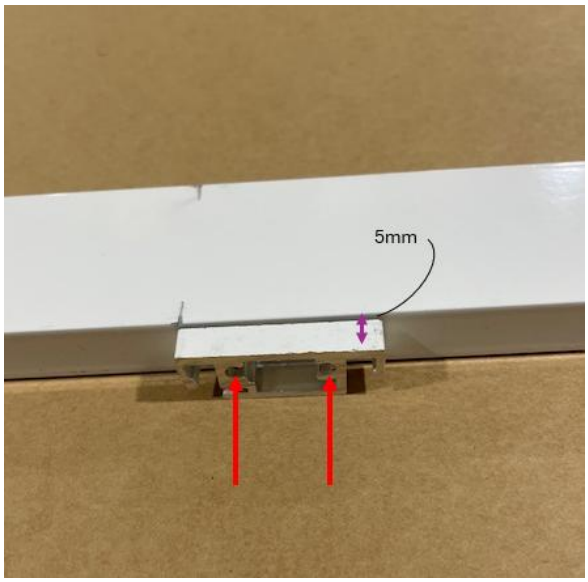
- Once the corner is inserted, using the 2.5mm bit, drill 2 holes through the edge of the frame, one 23mm from the corner and another 45mm from the corner. Make sure the drill bit goes in to a depth of 1". Insert and screw in the No. 4 ¾" screws provided. See image below.



Step 4 – Cutting and inserting the mid-bar (kits 054.2 – 058.2 only)

The larger kits are supplied with an additional length of frame called a mid-bar. This is required on larger screens to provide additional strength and prevent the frame from bowing when meshed.

- With the flat surface of the frame facing upwards, measure in-between the frame lengths on your screen at the point where you wish to position the mid-bar.
- Using a chop saw or hack saw cut the mid-bar to length.
- Position the mid-bar to check it's a snug fit and then mark at the top of mid-bar with a pencil line, both on the inside and outside of your frame as per the image.
- Repeat on the opposite side of your screen.
- Remove the mid-bar



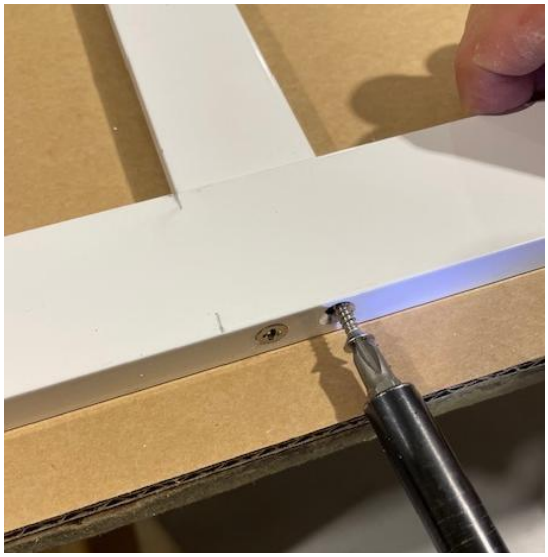
- From the left-over length of mid-bar frame, cut another small piece approx. 5mm long to use as a jig.
- Position the jig up against your pencil line.
- Mark the position of the holes (as per the red arrows) Do this on both the inside and outside of your screen.
- Repeat on the opposite side of your screen.

- Using a drill with a 2.5mm bit, drill where you have marked on the inside through to the middle of the profile.
- Do the same from the outside to the middle. Ensure the hole meets by taking the drill bit all the way through.

> **Tip:** You can drill from just one side all the way through the profile but the above ensures the holes remain straight and will give the best result

- Enlarge the holes with a 3.5mm drill bit.
- Repeat on both sides of the screen.

- Use a countersink on the 4 outer holes.



- Re-position the mid-bar back into place.
- Screw the A2 screws provided into position using the Phillips 2 bit provided.

Step 5 – Fitting the mesh

If you have fitted a mid-bar you will need to treat the top and bottom of the screen as 2 separate screens, meshing each into the channel running along either side of the mid-bar respectively.

- Lay your frame down on a hard flat surface with the channel facing upwards.
- Unroll your mesh and lay it over your frame.
- Cut a piece from the roll which is about 40mm bigger than the screen on all 4 sides.
- Meshing with some of the thicker meshes is a little tougher and you will need to apply pressure to push the mesh and spline into the channel.

- Position the longest side of the frame closest to you, this is the side you need to start with. The aim is to get the mesh as straight as possible on the first 2 sides.
- Try to keep the weave of the mesh in line with the frame, use the concave end of the spline tool first to locate the mesh into the channel.
- Holding the spline tool in one hand and the spline in the other, start to roll the spline down into the channel. Try to keep to one smooth continuous movement.
- When you reach the end of this side, turn the spline tool around and use the convex end to push the spline home.
- Turn your screen around to work on the second side. Loop the spline around the corner leaving a little slack in the loop. Where the frame will not allow you to loop, cut the spline with a pair of scissors and start again on the next side.
- Then mesh the 2nd side as you did the first.

- When you reach the end of the 4th side cut the spline with a pair of scissors and push the end down into the corner.

- Using a sharp Stanley knife, held at 45 degrees over the spline, start to cut the mesh against the outer edge of the frame. Use a smooth continuous movement and ensure your other hand is behind the knife in case it slips. Run the cut into the corner.
- Turn the frame as you cut each side.
- When finished you can run the convex edge of the spline tool round the screen one last time.

Adding your fixings:

In the following pages please find each fixing method with the components you should find in your kit and an explanation of how to fit each one.

Hinge and Turn Buttons

Contents:

2 or more 2 Part hinges with post and 2 washers

4 No. 6 1” countersunk screws per hinge

2 or more Turn Buttons depending on the size of your screen

No. 6 1” Screws to match the number of Turn Buttons

1 Handle per screen

2 No 4 ½” Countersunk screws per Handle

Tools required:

- Spirit level
- Pencil
- Manual or power drill
- 2.5 mm Drill bit
- Posidrive 2 (for the hinge and turn button screws)
- Posidrive 1 (for the handle screws)

Step 1 – Attaching the handle to your screen

- Consider the side and position of the handle on your screen. This should relate to ease of opening the screen. For example, if the window is side hung but high up or over some units you may wish to position the handle towards the bottom of the screen.
- Once the position is determined, use the handle itself to mark where the drill holes are required with a pencil or if you feel confident use the handle itself as a template for drilling but ensure you hold it firmly in place.
- Using a 2.5mm bit suitable for aluminium drill the 2 holes and then screw the handle into position using the No 4 ½” Countersunk screws and a posidrive 1 screwdriver. **Do not overtighten the screws.**

Step 2 – Attaching the hinges to your screen

The hinges usually match the side you have your hinges on your window.

The hinges are in 2 parts. The U-shaped half fits on to the screen and the grooved end of the pin should be at the top (if the screen is side hung).

- Lay the screen down on a hard flat surface with the mesh side facing down.
- Position the start of the top and bottom hinge not less than 100mm from the top / bottom of the frame (to ensure you avoid the corner insert). If you have a third hinge fit it at an equal distance between the other 2 unless the screws of your mid-bar causes an obstruction, then you will need to adjust the position slightly to avoid them.
- Assemble the hinges and lay the U-shaped element up against the frame. This will ensure the hinge is positioned correctly, see image below.

- At this point you can't see the holes to mark them so hold the hinge firmly against the frame and draw around the top and sides of the hinge with a pencil, remove the hinge and stand your frame on its side. Place the U-shaped section of the hinge within the lines you have drawn (you will notice it sits about 1mm from the front face of the screen) and mark the holes for drilling. Remove again and drill with the 2.5mm bit. See images below.

Screw the hinges into place with the No 6. 1" countersink screws provided. **Don't overtighten**

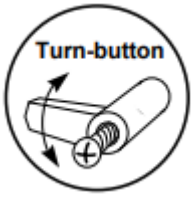
Step 3 – Attaching the hinges to your window frame

- With the complete hinges in place on the screen offer up to the window frame and mark the position of the holes with a pencil. If possible it's helpful to have an additional pair of hands at this point.

  TIP: It's a good idea to fix using 1 screw on each hinge to test you are happy with the position before completing the rest

- Mark the holes with a pencil and drill with the 2.5mm bit.
- Screw the hinges into place with the No 6. 1" countersink screws provided.

Step 4 – Attaching the turn buttons to your framework



- With your screen now hung, decide where you wish to position your turn buttons. The shank should sit up against your screen so that the finger can turn across the frame to hold it closed.
- With the position decided, use your pencil to mark the drilling position around the shank cylinder.
- Using a 2.5mm bit drill a hole in the centre of the mark and then screw the turn button into position using the No. 6 1" screws and a posidrive 2. Do not overtighten.
- Repeat the process for each turn button.

YOUR INSTALLATION IS COMPLETE

Turn Button Fixings

Contents:

6+ Turn Buttons depending on the size of your screen

No. 6 1” Screws to match the number of Turn Buttons

Tools required:

- Spirit level
- Pencil
- Manual or power drill
- 2.5mm Drill bit
- Posidrive 2 screwdriver

Step 1 – Attaching the turn buttons to your framework

- With the window open offer the screen up (a second pair of hands is useful here). You may wish to use a spirit level to ensure the screen is straight but often levelling by eye is the best option.
- Decide where you wish to position your turn buttons on the first side. With your pencil draw a line against the frame at these positions.
- Remove the screen.
- The shank of the turn button should sit up against your screen so that the finger can turn across the frame to hold it closed. Now offer up the turn button next to the pencil line and create a mark around the shank.
- Using a 2.5mm bit, drill a hole in the centre and then screw the turn button into position using the No. 6 1” screw and a posidrive 2. Repeat the process for any additional turn buttons you have marked on this side of the screen.
- Offer the screen up again and turn the fitted turn buttons on to the screen. This will assist you to mark the turn buttons for the remaining side / sides.
- Repeat the marking and fixing process for the remaining sides.

YOUR INSTALLATION IS COMPLETE

Magnetic Fixings

Tools required:

- Lint free cloth
- White Spirit or similar alcohol cleaner
- Tin snips or heavy duty scissors
- Spirit level

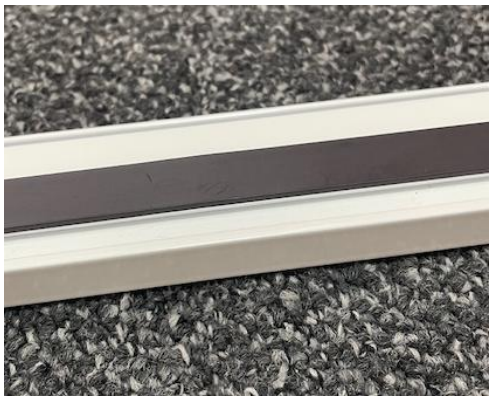
Contents:

Length of Grey Magnetic strip (Magnetic pole A)

Length of Grey Magnetic strip (Magnetic pole B – identified by the groove running down the middle of the strip)

Step 1 – Attaching the magnetic strip to your screen

- Lay your screen down on a flat surface **spline side up**. This is the side to which you attach the magnetic strip. The magnet will run all the way around your frame and will sit 8mm in from the edge of the screen on the flat surface. See image below.



- Take one of the strips. We suggest using the Magnetic strip A for your screen (identified by the totally smooth surface). Peel back about 200mm of the backing tape and starting at a corner stick it to the framework moving along the side and peeling off the backing as you go. Cut with a pair of tin snips or heavy duty scissors when you reach the end of that side. Working around the screen butt the next length up against the last and attach to the second side in the same way. Work your way around the screen until completed.

- Now take the opposing magnetic strip **DO NOT** peel the backing off but match it up, letting it magnetise to the strips you have already positioned and cut to the same length. The peelable backing should face upward. The magnetic pull should allow them to be positioned easily and neatly. Work your way around the screen and cut at the end of each side, butting the next side up to that.

Step 2 – Cleaning your framework.

- It is important that your window framework is totally clean and dry when you adhere the magnetic strips so once you have cleaned your frames we would suggest wiping them over with white spirit or an alcohol cleaner and a lint free cloth.

Step 3 – Positioning the screen and fitting to your window frame.

- You may wish to draw a pencil line round part or all of the screen once you have the positioning correct. You can use a spirit level to ensure the screen is straight but we generally find levelling by eye is the best option.
- Once you are happy with your screen position peel off the backing strips.
- Open your window. Lift the screen up with the strips facing your window and line up your screen. Push the screen firmly on to your framework all around the screen.
- Carefully remove the screen leaving one of the paired strips in place on your frame and further press the remaining strips into place along their length. Leave to ‘cure’ for about 20 mins before you start to use your screen.

YOUR INSTALLATION IS COMPLETE