Making and fitting your Commercial Hinged Door Screen - Kit code 080.1

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.

Contents:

Lengths of Premium Door Frame
4 per screen
(2 short & 2 long lengths)

Roll of Mesh, type as specified on your order

Corners
4 per screen
with 4 screws per corner

Length of Spline

Spline Tool

2 lengths of Mid-bar frame

A2 Screws to fit the mid-bar, 8 per screen,

Kickplate

Handles
2 per screen with 2 screws per handle

Hinges, 3 per screen with 4 screws per hinge

Magnetic Catches, 2 per screen with 4 screws per catch

Brush strip with screws (if this option was selected)

Tool kit:
2.5mm drill bit
3.5mm drill bit
Posi 1
Posi 2
Phillips 2 bit

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 - supplied (for the corners, mid-bar, hinges, handles and magnetic catches)
- 3.5mm drill bit – supplied (for mid-bar)
- Countersink drill bit - for mid-bar
- Posi 1 – supplied (for corner screws)
- Posi 2 – supplied (for hinges, handles and magnetic catches)
- Phillips 2 bit - (for A2 mid-bar screws)
- Drill

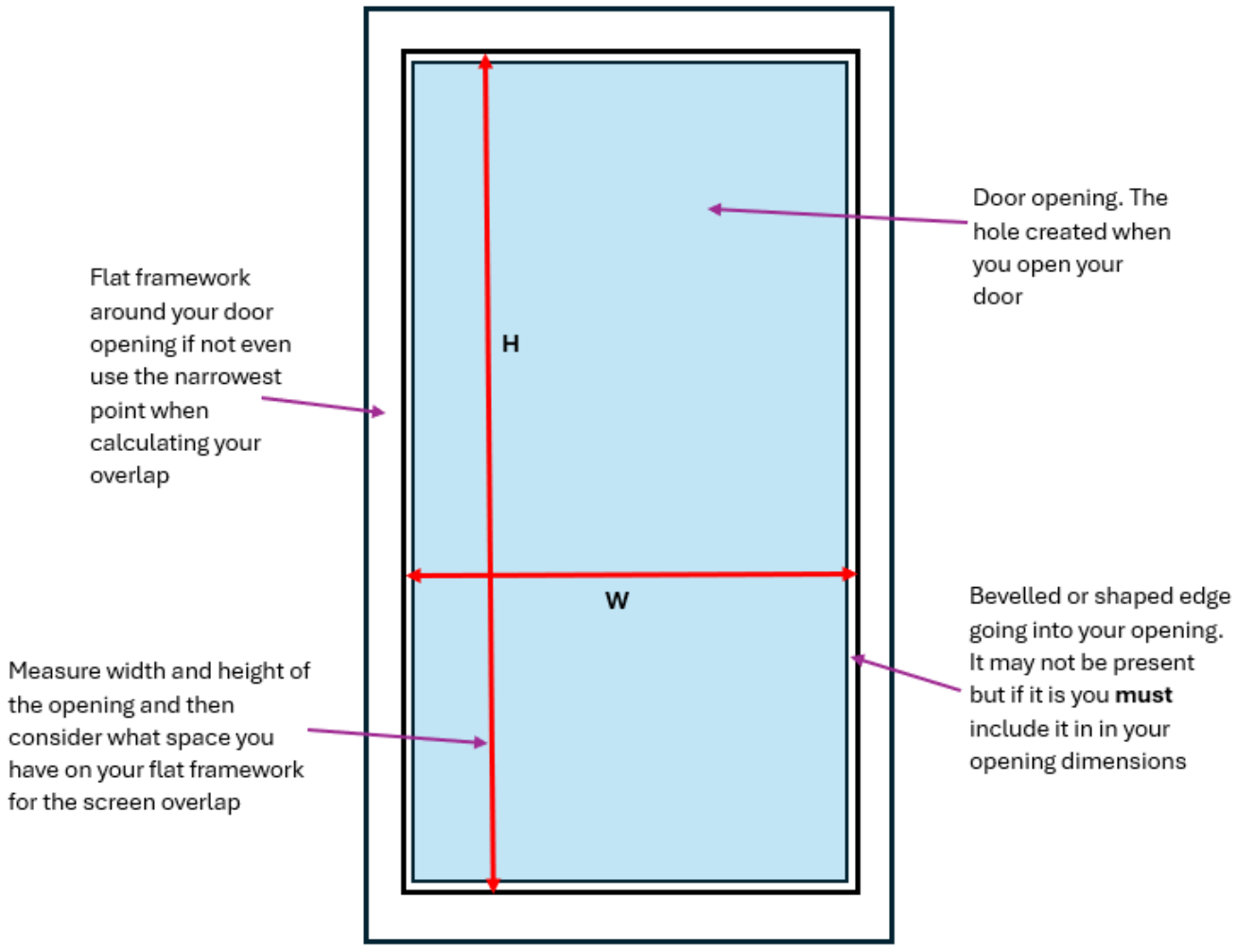
Step 1 – Measuring

The idea is to overlap the screen frame with the door frame to create a seal between the two.

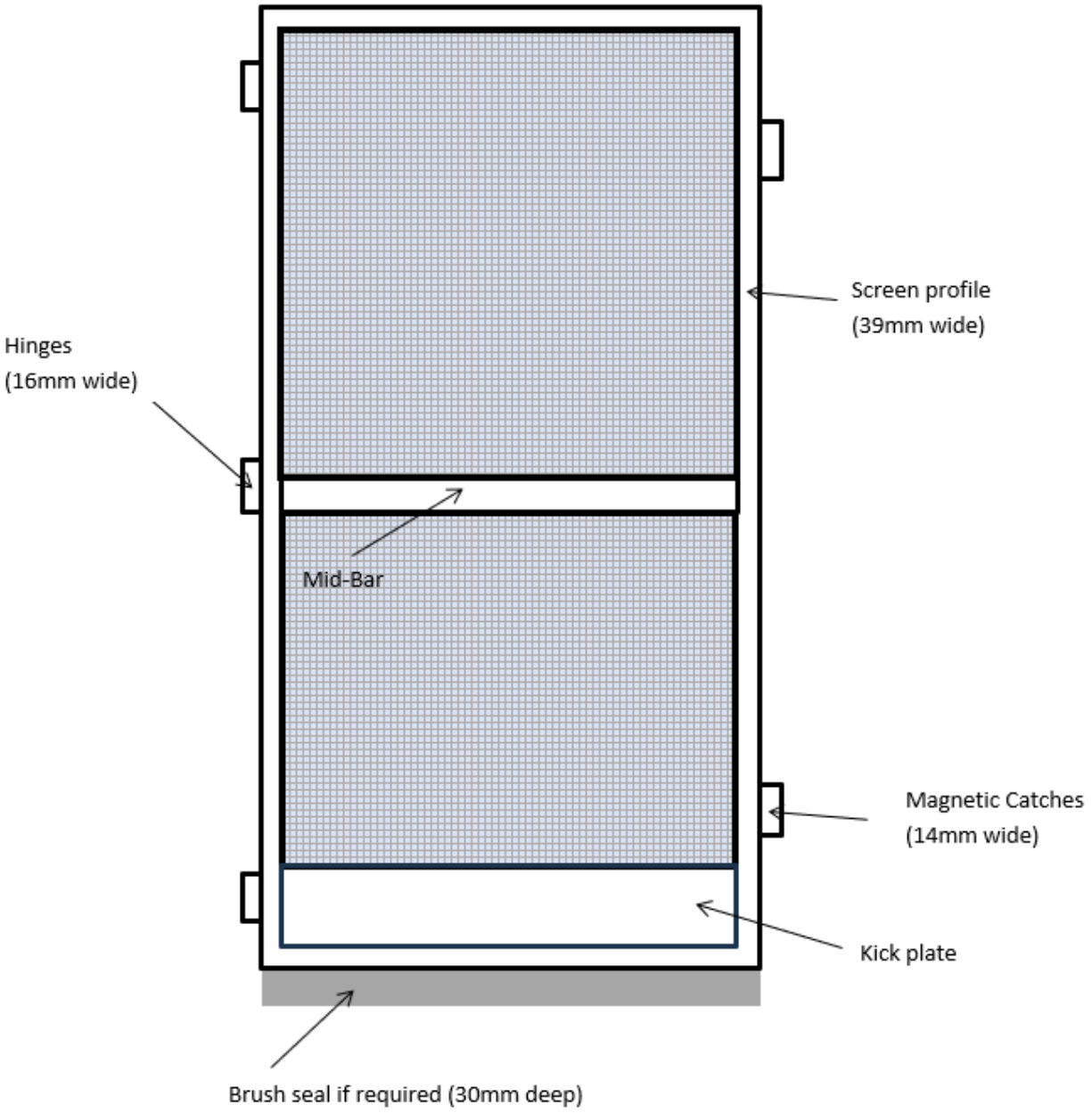
If your handle protrudes past the framework then it may cause an obstruction i.e. it may prevent you from being able to fully close the screen when your door is closed.

Solutions are:

1. If the screen is fitted to the inside of the property, position the mid-bar in line with the door handle and allow the screen to rest against the handle when the door is closed.
2. Fit the screen to the surrounding wall i.e. beyond the reach of the handle so that it closes fully. This may not always be desirable or possible if the surrounding surfaces are not flat or far enough forward.
3. Fit a secondary frame that finishes beyond the door handle and fit your screen to that frame. <u>You can find an attachment at the end of these instruction to explain how to do this.</u>



Measure the width and height of the opening including any bevelled edge on the door frame going into the opening and add 40mm to each measurement. This will give you a 20mm overlap on the door frame either side (i.e. half the width of the screen frame).



Please note:

Width: As you can see from the diagram above, you need to allow 16mm for the hinges and 14mm on the opposing side for the magnetic catches.

Height:

- **Fitting to a door with frame to all 4 sides - Allow 5-10mm clearance from the floor to the bottom of the screen**

- **Fitting to a door with frame to 3 sides, without a threshold – Allow 30mm for the brush strip. When the screen is fitted the brush strip should just touch the floor/sill**

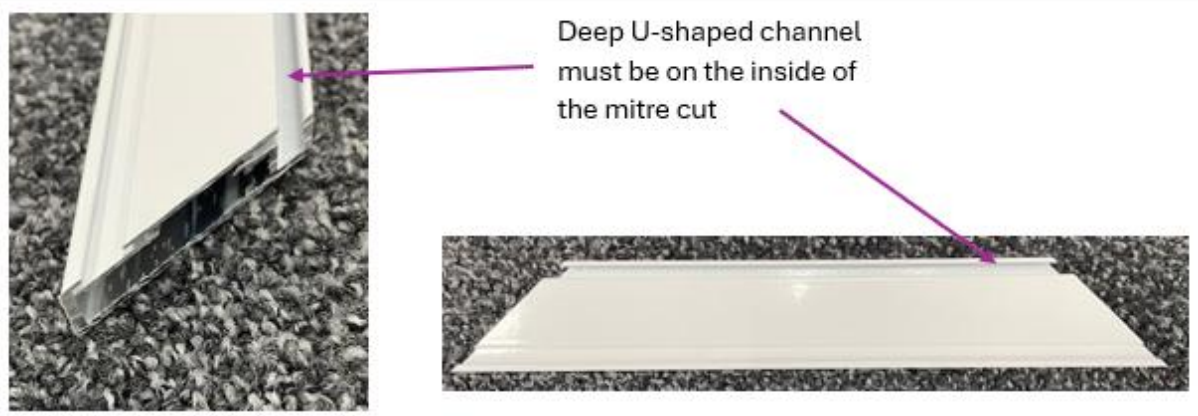
If you don't have sufficient room on the door frame to allow for this then reduce the overlap of the screen but ideally you need at least 5mm overlap all the way around.

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 calcualtions 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 door to double check they are correct before moving on to the next stage.

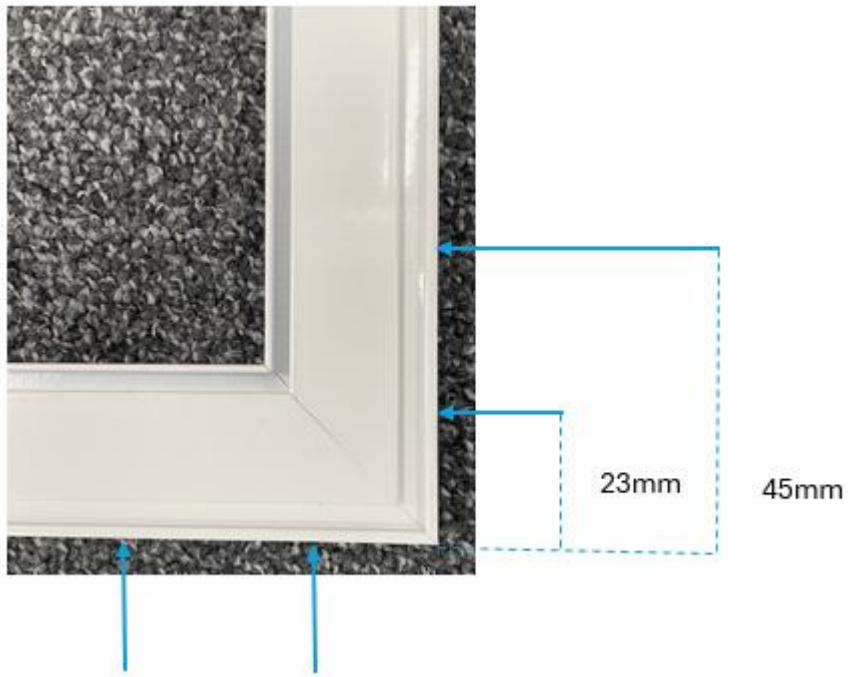
Step 3 - Assembling your frame

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:

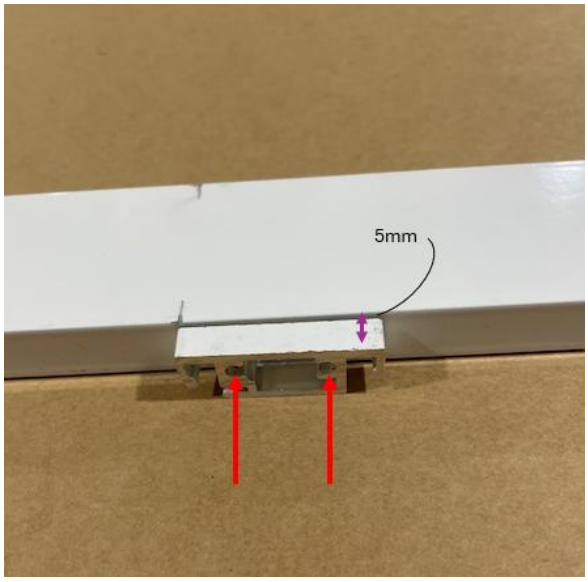
- Once the corner is inserted, using the 2.5mm bit, drill 2 holes through the edge of the frame, one 23mm from the corner and another 45mm from the corner. Make sure the drill bit goes in to a depth of 1". Insert and screw in the No. 4 ¾" screws provided. See image below



Step 4 – Fitting the mid-bar

The mid-bar fits mid-way between the top and the bottom the screen to provide extra strength and provide framework to push against when opening and closing the door. Its position can be raised or lowered if necessary but try to stay as close to the mid-point as possible.

- With the flat surface of the frame facing upwards, measure 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

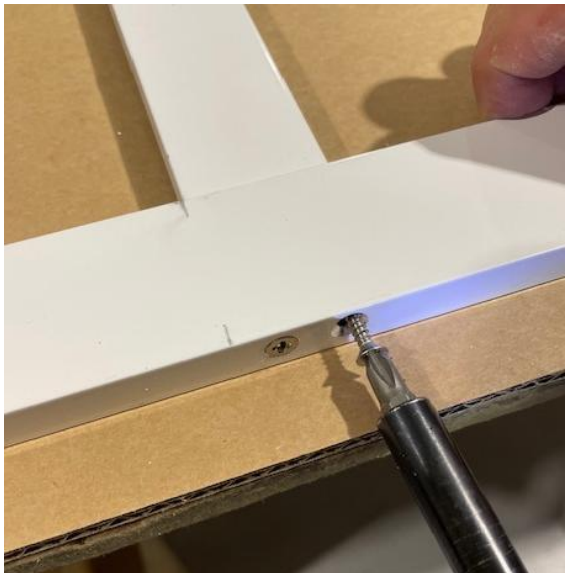


- From the left-over length of mid-bar frame, cut another small piece approx. 5mm long to use as a jig.
- Position the jig up against your pencil line.
- Mark the position of the holes (as per the red arrows) Do this on both the inside and outside of your screen.
- Repeat on the opposite side of your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

Step 5 – Fitting the kick plate

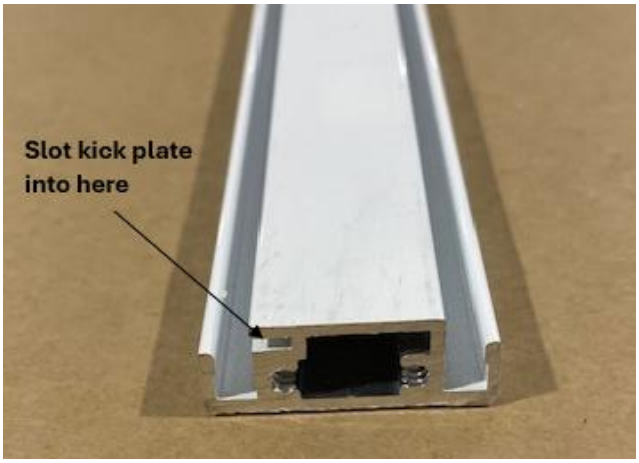
As the name suggests, the kick plate is positioned at the bottom of your screen so that the screen can be pushed open by your feet without causing damage to the mesh.

- Position your screen with the flat frame side downwards.
- You will see a narrow groove running around the inside of the frame. This is for the kick plate to be slotted into position.
- Take the kick plate to one end and slot it into one side of the screen as per the image.

  NB: If you have positioned your mid-bar off centre check you are fitting to the correct end.

- Mark the kick plate with a pencil 3mm beyond the deep channel running around the inside of your screen frame as per the image.
- Extend the pencil mark along the full width and cut with the chop saw or hacksaw at this mark.

- Re-position your plate by again slotting into the groove one side, then flex it so that you can slot it into the opposing side. Push down to the bottom to ensure it's engaged along all 3 sides.



- Your second mid-bar length is going to sit on top of this plate to hold it into position.
- As you did for your original mid-bar measure the internal width of the frame and cut it to size.

- Slot the mi-bar on to the top of the kickplate.

- Turn the screen over and mark and fix the mid-bar length into position as you did previously

Step 6 – Fitting the mesh

You will need to treat the top and bottom of the screen as 2 separate screens, meshing each into the channel running along the top or bottom 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 the 2nd side has been completed you can go back to the corner and using a flat headed screw driver or the end of a pair of scissors push the spline down into the corner.
- Continue in this way around sides 3 & 4. The mesh will naturally start to tension at this point. Try not to over tension as this will bow the framework.

  Tip: If necessary you can put a couple of heavy books in the middle of the screen to reduce the tension as you mesh.

- 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.

Step 7 - Attaching the hinges to the screen frame

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

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 of the hinge

- 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). Position the third hinge equally between the other two. If this is not possible due to the mid-bar screws then position the hinge slightly higher straddling the top mid-bar screw.
- Assemble one of 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 8 – Attaching the magnetic catches to the screen frame

The magnetic catches usually attach to the opposing side to your hinges. They need to be positioned at equal distances from the top and bottom so that the door opens evenly.

- Lay the screen down on a hard flat surface with the mesh side facing down.
- With the strike plate on the bottom of the magnetic catch, position it against the side of the frame at least 100mm from the top / bottom of the frame (to ensure you avoid the corner insert).

- Mark the holes with a pencil and drill with a 2.5mm bit.
- Screw the catches into place with the No 6. 1" panhead screws provided. **Don't overtighten.**

Step 9 – Attaching the handles

- These can be placed on the outer frame, or on the mid-bar, or a mixture of both for either side of the screen. If you choose the same point front and back you will need to offset the front and back positions slightly to ensure the screws on each handle do not obstruct each other. If placed on the outer frame, ensure the handle to the back won't cause an obstruction to closing the screen. If you are at all unsure you can fit the handles at the end once the screen is fitted to your door frame.
    - Once the position of the handles is decided, 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 the 2.5mm bit drill the 2 holes and then screw the handle into position using the No 10 ½" panhead screws and a posidrive screwdriver. **Do not overtighten the screws.**

Step 10 – Attaching the brush strip (if ordered)

The width of your brush strip needs to match the overall width of you screen frame. For best results when cutting the brush strip down.

- Slide the brush out from its carrier.
- Cut the carrier with the chop saw / hacksaw.
- Use tin snips or similar to cut the brush.
- Re-insert into the carrier.

NB: DO NOT attempt to cut through the brush with a chop saw

To attach the brush strip to your screen:

- Lay the screen down on a hard flat surface with the mesh side facing up.
- Butt the top of the brush carrier up to the **bottom** of the screen as per the image below.

- Mark the framework at the point of the screw holes in the back of the carrier.
- Remove the brush strip and drill using the 2.5mm drill bit.
- Drill through the first skin of the profile only.
- Replace the brush strip and screw fix with the No 6 3/8" screws.

NB: don't use any of the screw holes that are very close to either end of the screen as the screw may cause an obstruction to the screen sitting against your door frame.

Step 11 – Fitting the screen to your door frame

Fix your hinges first and then the magnetic catches. You can use a spirit level but often fitting by eye is sufficient.

Hinges:

- With the complete hinges in place on the screen offer up to the door 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 the top hinge and one on the bottom 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.

Magnetic catches:

- With the strike plates in place on the magnetic catches close your screen and mark the holes visible on the strike plate with a pencil.
- Drill with a 2.5mm bit.
- Screw the plates into place with the No 4. 3/4" countersunk screws provided.

YOUR INSTALLATION IS COMPLETE

Door Handle protrusions

Some Doors, particularly UPVC, have handles that protrude beyond the surrounding framework and therefore cause an obstruction if you wish to be able to close the screen and your door at the same time.

One solution is to 'build off' from the door frame using either a wooden batten framework or a UPVC framework. This must be deep enough to lift the screen away from the handle. It can be 4 or 3 sided, the latter leaving the bottom so that a seal can be created by the brush strip to with the floor if appropriate.

We offer a white solid UPVC framework that can be found on the accessories section of our website

https://www.streme.co.uk/product/900mm-length-of-solid-pvc-build-off-50mm-x-25mm

https://www.streme.co.uk/product/2150mm-length-of-solid-pvc-build-off-50mm-x-25mm