

freedom

by Symphony®

Installation
manual

Contents Page

Preparation and Setting out	Page 4-5
Wall Reinforcement	Page 6-8
The Ropox Frame Installation	Page 10-51
Starting the Installation	Page 10-20
Building Ropox Frame (including Spindle and motor)	Page 21-38
Fixing L-shape frame	Page 39-44
Aligning frame	Page 45-46
Packers	Page 47-49
L-shape frame packers	Page 48
Manual Rise and Fall packers	Page 49
Front Fascia Fixings	Page 50-51
Worktop Installation	Page 52-56
Maia Waterfall worktop	Page 52
Fixing worktop to Ropox frame	Page 53-56
Fascias	Page 57-60
Manual Rise and fall	Page 61-65
Installing the Handle	Page 61-65
Electric Rise and Fall	Page 66-79
Wiring the Control Box	Page 70
Safety Strip	Page 71-73
Control Switch	Page 75-76
Sink Installation	Page 77
Testing	Page 78-79
Troubleshooting	Page 80
Kitchen Installation	Page 81-94
Unit Installation	Page 81-82
Concealment Panel	Page 83-91
Extractor	Page 92
Handles	Page 93
Splash back	Page 94

Contents Page

Fixed Height Worktops

Frame

Kitchen installation

Page 95-103

Page 95-97

Page 97-103

Electric Wall Units

Open Corner Display Unit

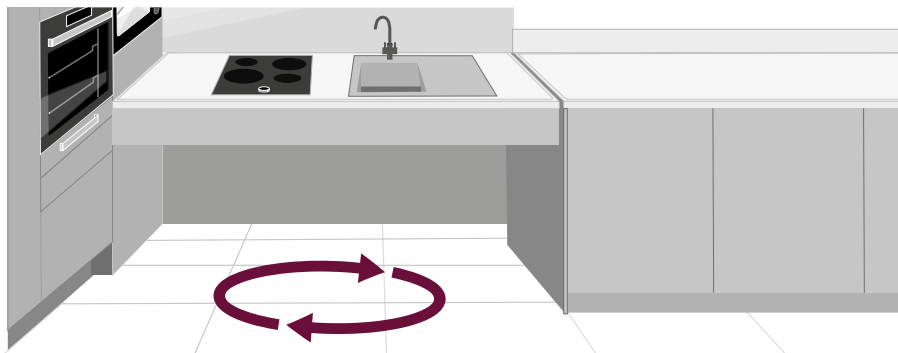
Microwave Dresser Unit

Page 104-106

Page 107-111

Page 112-113

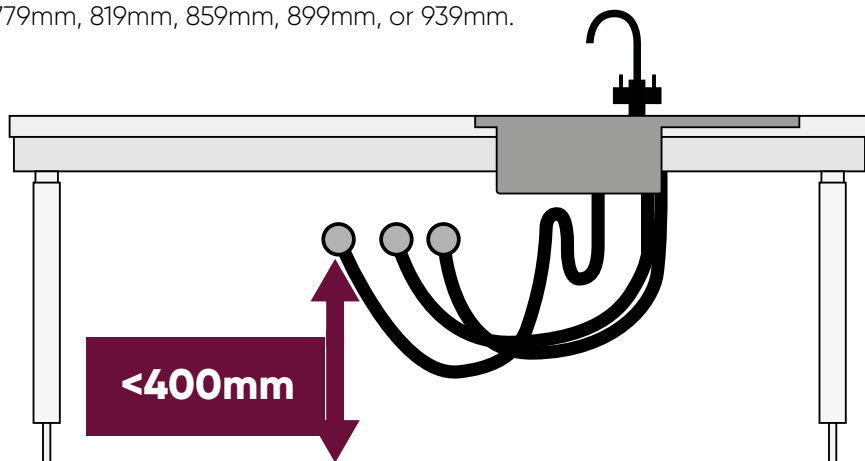
Preparation




- ✓ Check walls are sufficiently reinforced behind electric and manual rise and fall worktops (see page 7-8), worktops on fixed brackets, and electric wall units (see page 102).
- ✓ Floor should be fully tiled before fitting.
- ✓ For rise and fall worktops, do not tile any area of the kitchen wall prior to fitting. When fitting worktops on fixed brackets, finish the wall behind with a suitable material before fitting.
- ✓ Plasterboard is not suitable for worktops on fixed brackets. Ensure the wall is covered with a suitable material e.g. tiles or ply.
- ✓ Drainage height should be below 400mm. For rise and fall worktops, pipework should be fitted against the wall with a maximum depth of 150mm. Drainage should not protrude from the floor.
- ✓ Flexible hoses are required for hot, cold, and waste water.
- ✓ For worktops on fixed brackets, pipework should be fitted within the walls where possible. If this is not possible, the top of the pipework should be a maximum of 233mm from the floor, so it does not clash with the support arms in their lowest position. Ensure there is sufficient fall for water to drain from the sink.
- ✓ Ensure suitable fixings are used.

Setting Out

- Start with the sink and hob worktop area when setting out and fitting.
- Check that a turning circle of 1.5m x 1.5m can be achieved once all units are in place.
- The angle of the tall units can be adjusted in relation to the wall, after the sink and hob worktop is set out. This ensures the sink and hob worktop section is at right angles to the rest of the units. Tall units will be shown on the plan with a 60mm gap behind, to allow for the adjustment.
- 5mm gap required at either end of rise and fall worktops. Ensure this is allowed for when setting out.
- 5mm gap required behind rise and fall worktops, once wall covering is fitted. Allow 13mm gap behind when setting out.
- Base units will be shown on the plan as battened off the wall by 60mm, with 650mm worktops. Ensure this is accounted for when setting out.
- The rise and fall worktops will be 637mm, to allow for a 13mm gap behind. The front of the rise and fall and fixed worktops will be flush with each other. Rise and fall worktop fascia and adjacent unit frontals/blender must also be flush to avoid any trapping issues.
- Fixed worktop brackets should be set at an appropriate height for the user, or as advised by the site manager. Height from the floor can be 779mm, 819mm, 859mm, 899mm, or 939mm.



Wall reinforcement

 Minimum area for reinforcement of wall. Wall material must be suitable for screw mounting

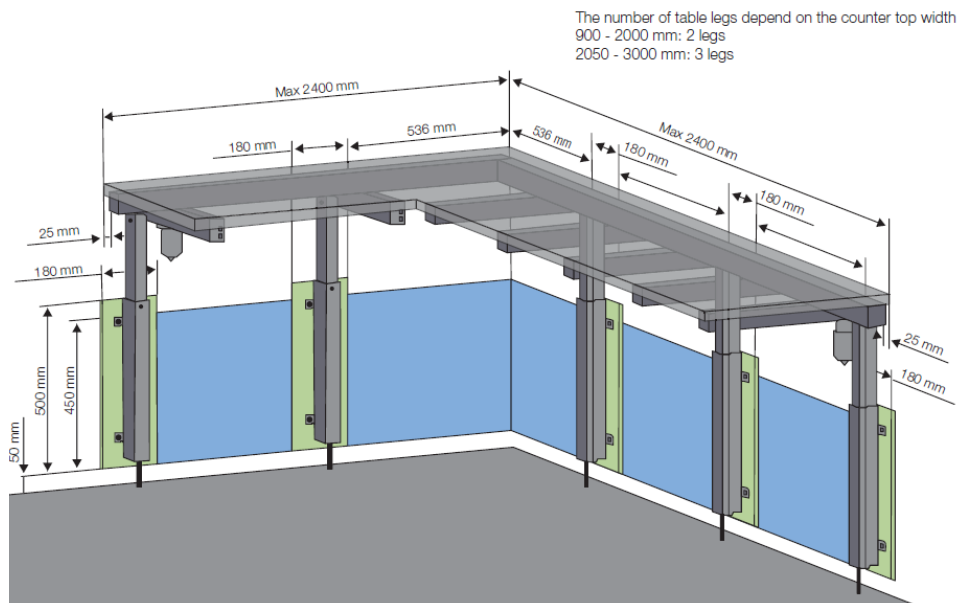
 Area for electric and plumbing installations

Max. load 150kg evenly distributed over the worktop up to 300cm in width, according to DS/EN 12182.

Minimum load Capacity per screw/bolt:


40kg (straight run), 200kg (right angle)

The fitter should always consider the material, condition and strength of the wall and use screws and plugs suitable for the specific wall type.



Please note: the frame should not be fixed directly to the wall. Use the distance brackets supplied to space the legs from the wall by 70mm. See page 22 for more detail.

Wall reinforcement

 Minimum area for reinforcement of wall. Wall material must be suitable for screw mounting

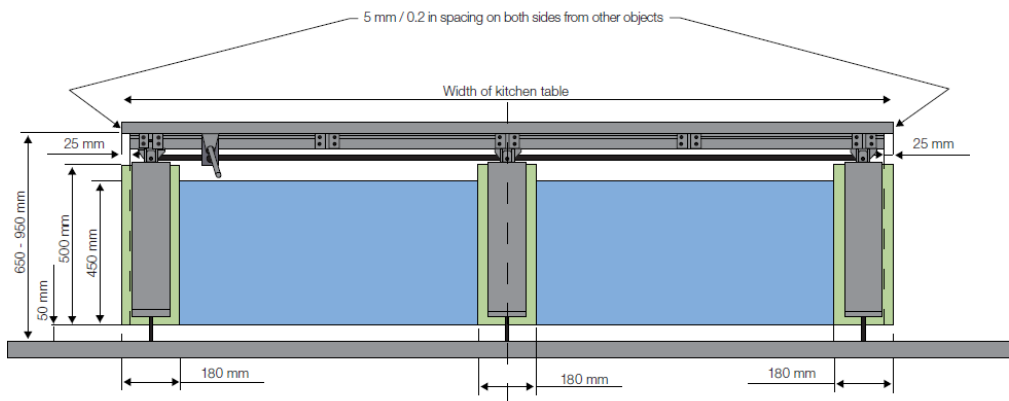
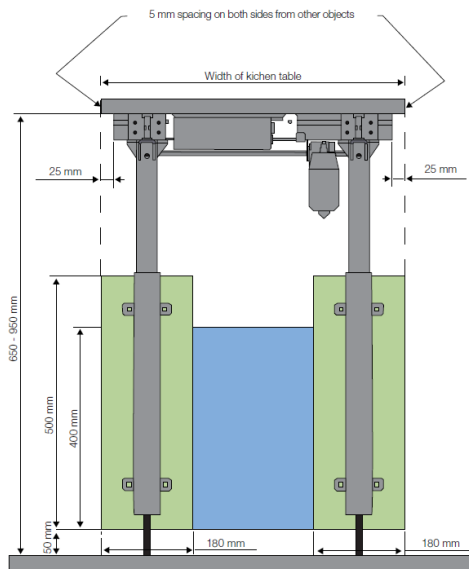
 Area for electric and plumbing installations

Max. load 150kg evenly distributed over the worktop up to 300cm in width, according to DS/EN 12182.

Minimum load Capacity per screw/ bolt:

40kg (straight run), 200kg (right angle)

The fitter should always consider the material, condition and strength of the wall and use screws and plugs suitable for the specific wall type.



Please note: the frame should not be fixed directly to the wall. Use the distance brackets supplied to space the legs from the wall by 70mm. See page 22 for more detail.

**NB: fixed hob/sink
worktop could be
converted to rise and
fall in the future.**

**Set out a fixed worktop in the same way
as a rise and fall worktop, but skip steps
9 – 79 below. Use fixed support arms
instead.**

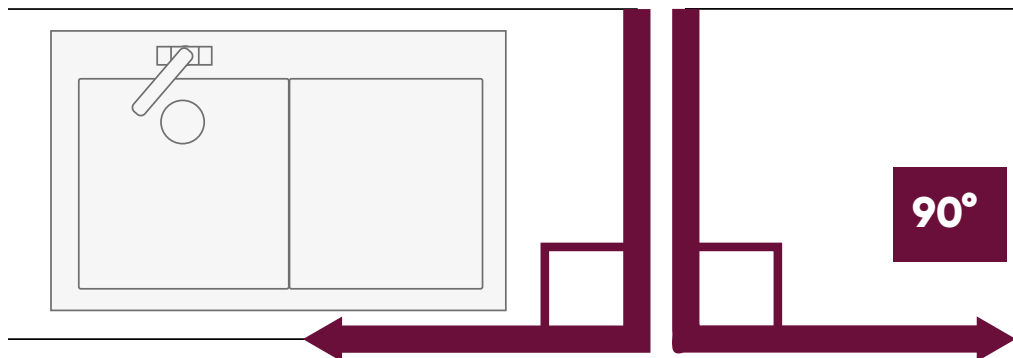
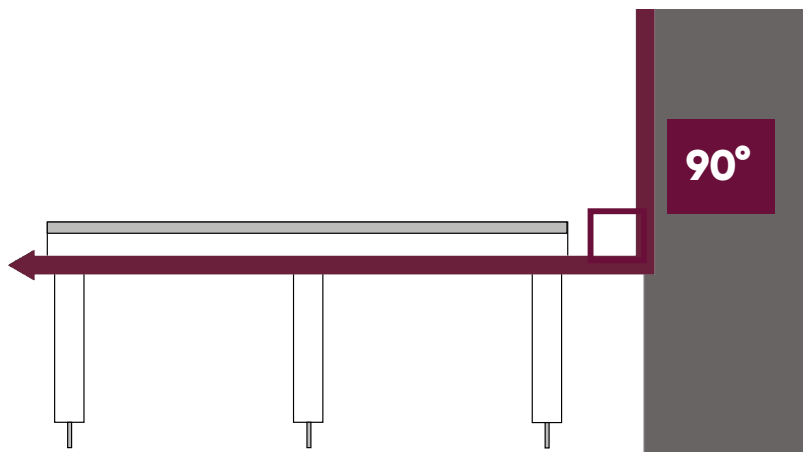
Installation Process

freedom

by Symphony®

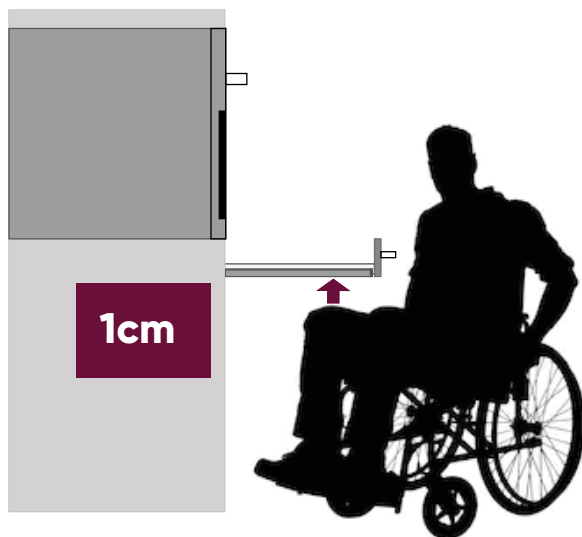
Installation Process 1.

Identify the area for the rise and fall / fixed height worktop which contains the sink and the hob. It must be at right angles to the back wall and to the units either side.



2.

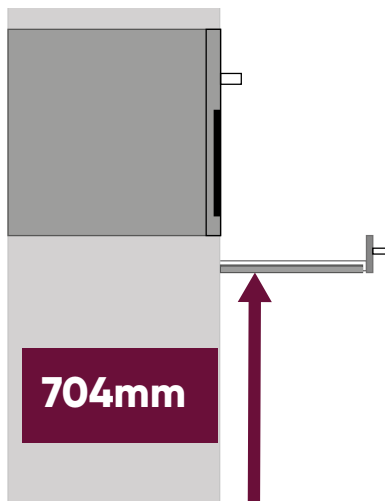
Check the required height of pull out shelf under oven.



If the client is a **wheelchair user**, then the underside of the pull out shelf should finish **1cm** above the client's knees. The height of the shelf should have been calculated by the designer and added to the plan.

For **generic kitchens** or displays, set the plinth at standard height.

When plinths are at standard height, the distance to the underside of the pull out worktop frontal is **704mm**. Reduce or increase plinth height to adjust shelf height.

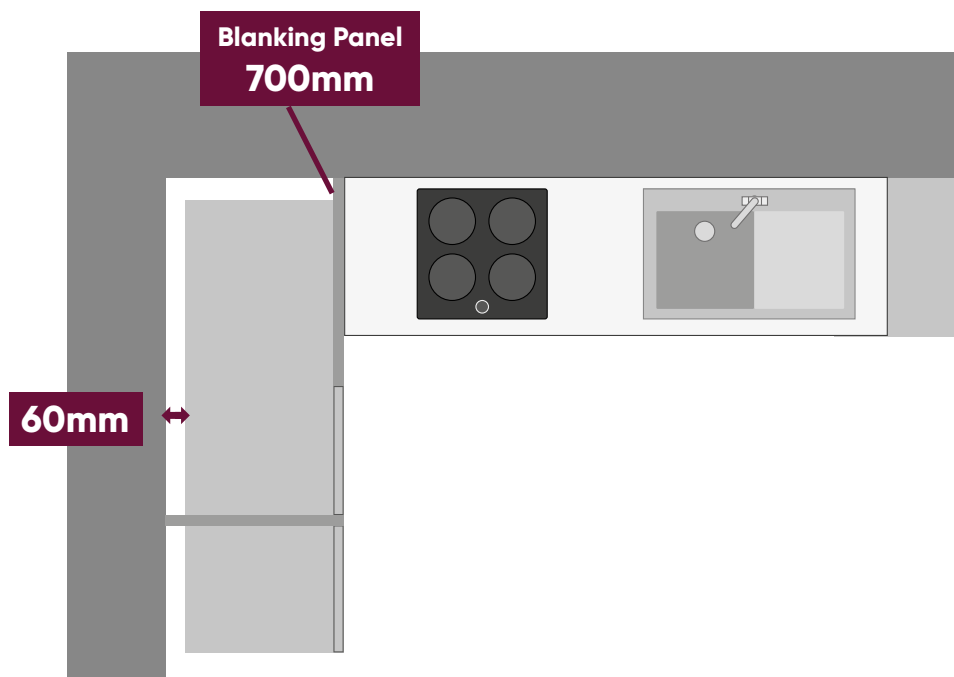


3.

Position the tall bank of units at the appropriate plinth height, with a **60mm** gap between the back of the units and the wall. The 60mm gap allows for the tall blanking panel to sit flush with the frontals, while maintaining an overall depth of 650mm on the tall bank of units.

If the rise and fall is directly adjacent to the tall bank of units, then space the initial tall unit away from the wall by 700mm using the blanking panel provided.

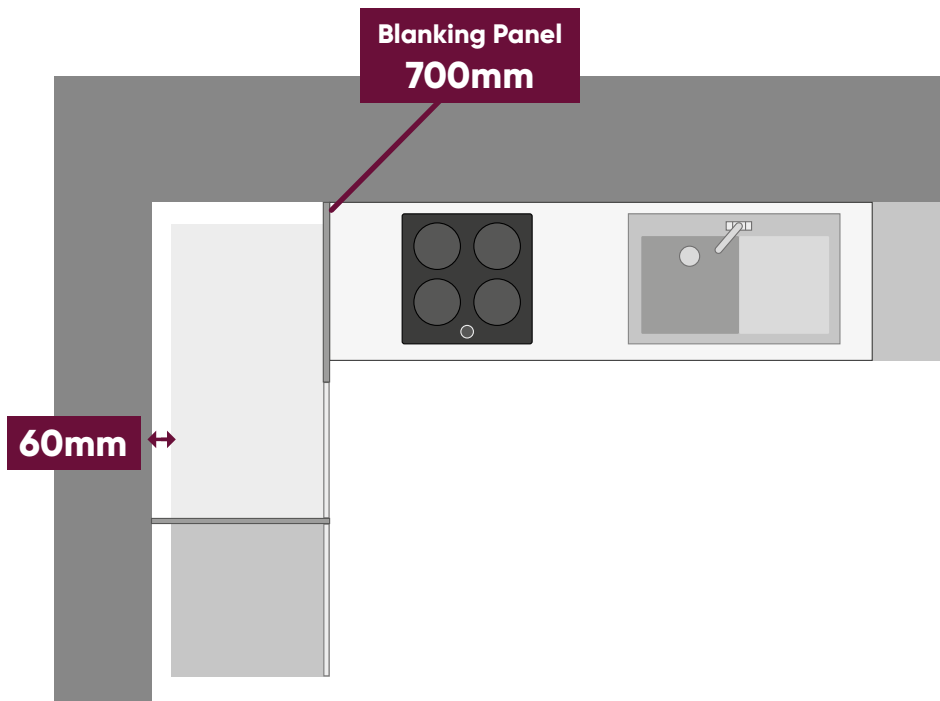
Do not fix in position until after the rise and fall worktop is fitted.



3a.

If the design includes a corner unit in between the rise and fall/fixed height worktop and the tall bank of units, both the corner unit and the tall bank should be spaced off the back wall by 60mm. The 60mm gap allows for the front of the corner unit door to sit flush with the front edge of the worktop, while maintaining a 650mm worktop depth.

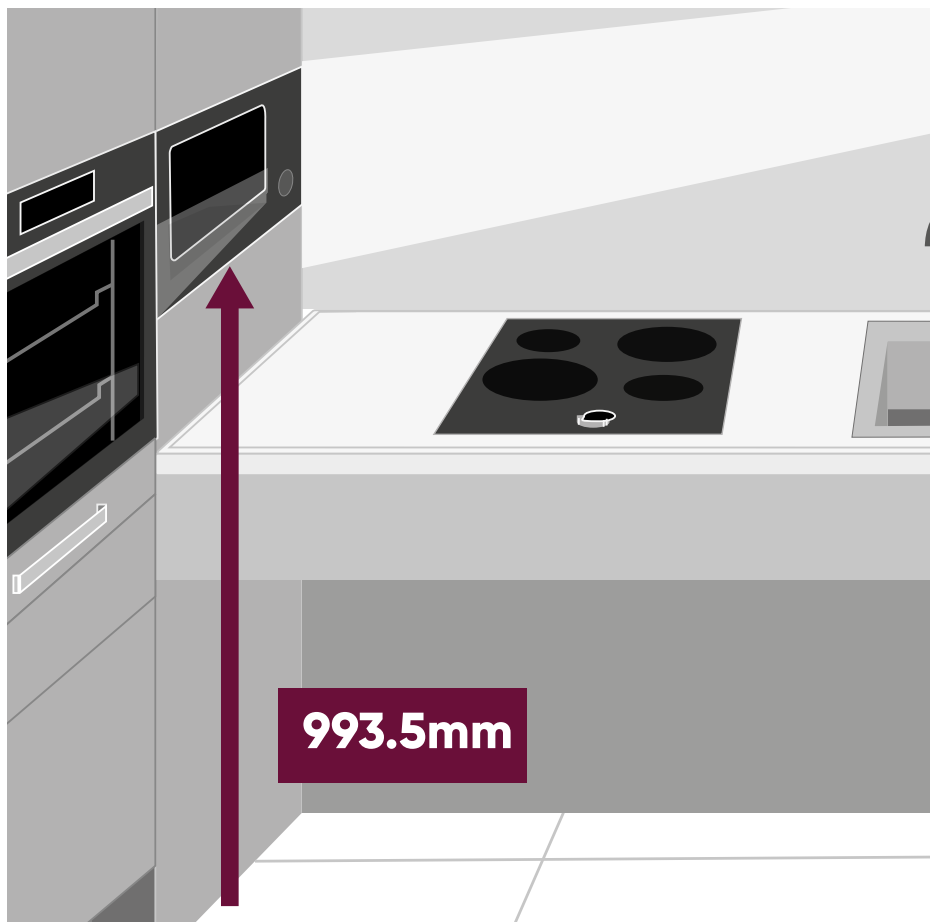
The frontal matched blanking panel provided with the corner unit should be fitted at 700mm wide, and a single piece of 650mm deep worktop fitted across the corner unit. The rise and fall / fixed height worktop should butt straight up to the blanking panel. Do not fit a filler to create a corner post.



4.

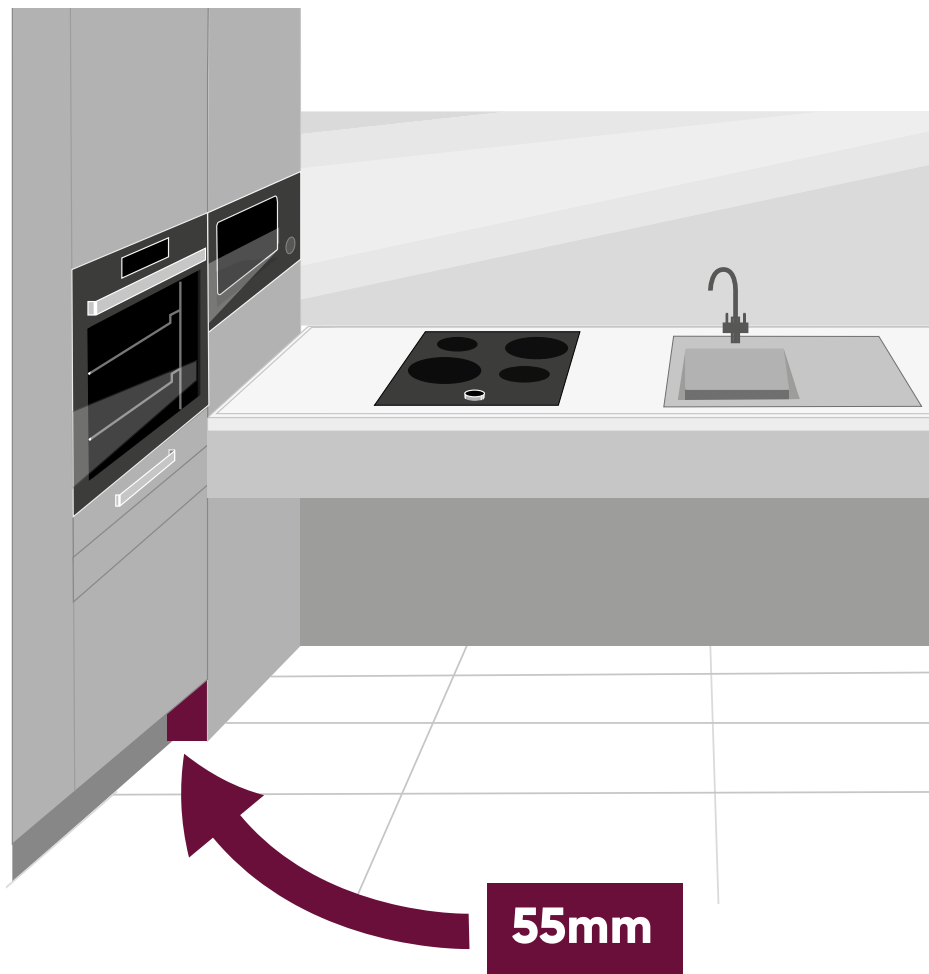
If the design includes a microwave in the corner above the adjacent rise and fall worktop, and a housing is not provided, fit at 993.5mm from floor.

When at its highest position, the top of the rise and fall worktop will exceed the bottom of microwave – **this is ok if microwave with flat control panel (i.e. Neff) is fitted.**



5.

If the design includes a tall unit with a working top door above the adjacent rise and fall, then adapt a tall panel to fit under the working door down to the floor. Use plinth for the 55mm return between the tall panel and the standard plinth under the adjacent tall unit.



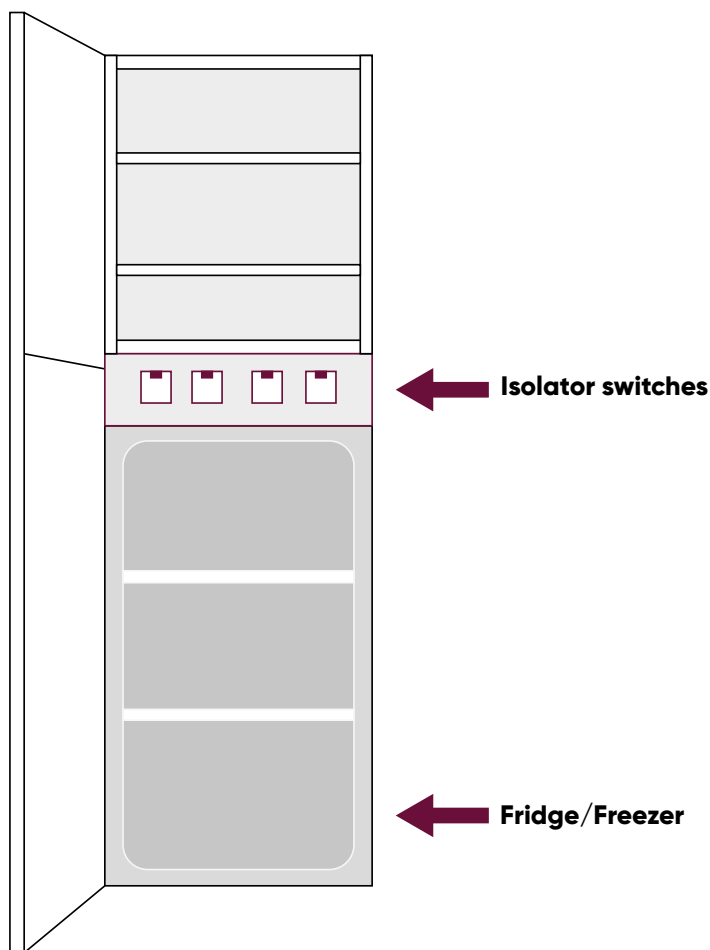
6.

Optional:

Prepare a panel for the **isolator switches** for all kitchen appliances in the cabinet above the fridge or freezer.

If a panel is not provided with the unit, then adapt the separate panel supplied.

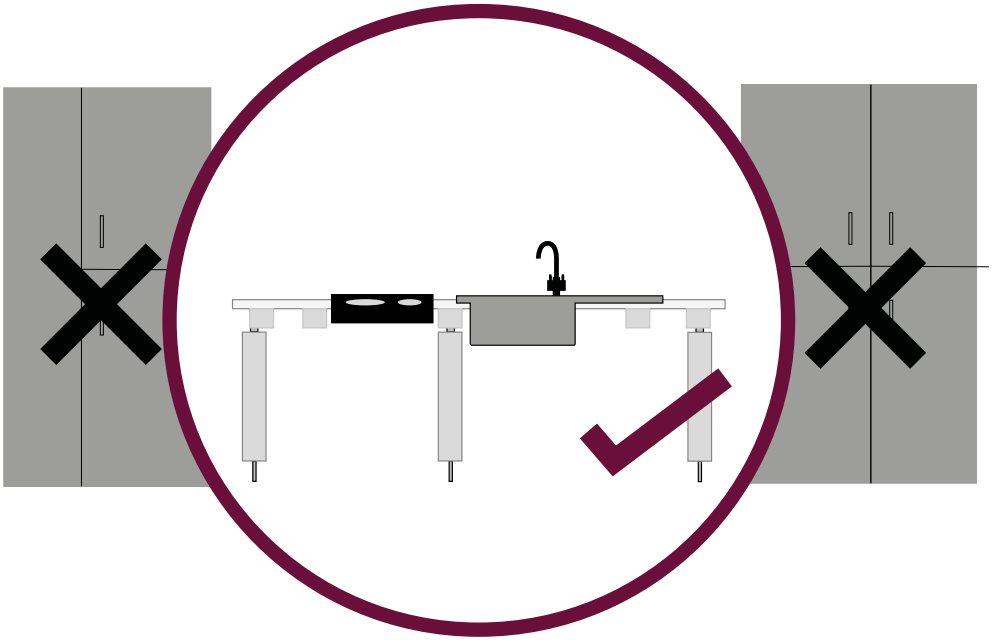
Use a grid switch if required for multiple appliances.



7.

Do not fix any of the tall units in position,

finalise fillers or blender panels, or fix any plinth, until after the rise and fall has been fitted correctly.



8.

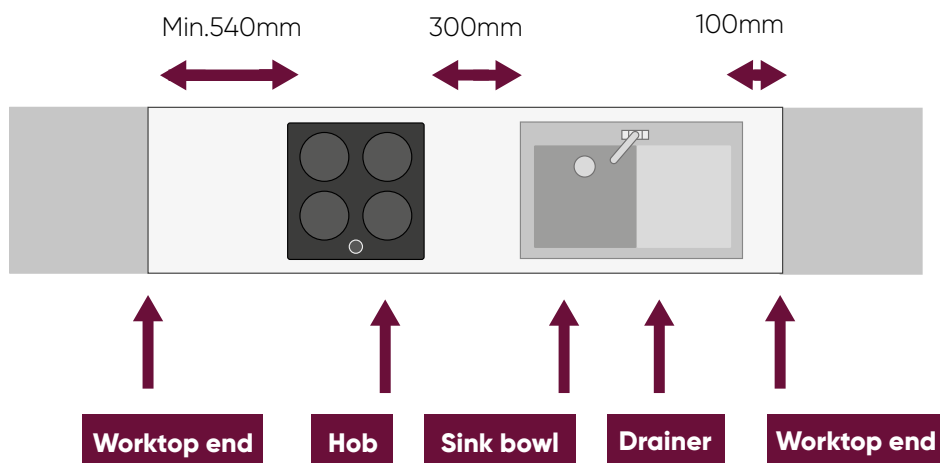
Using the plan, the minimum distances below, and the diagrams shown, calculate the position of the hob and sink.

Cut outs must be 100mm minimum from ends.

Minimum distance between sink bowl and hob = 300mm.

Minimum prep space on other side of hob = 540mm.

Distances must be calculated between the appliance edge, not the appliance cut out.

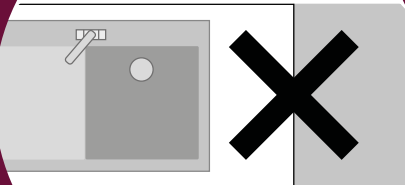


Left to right or right to left.

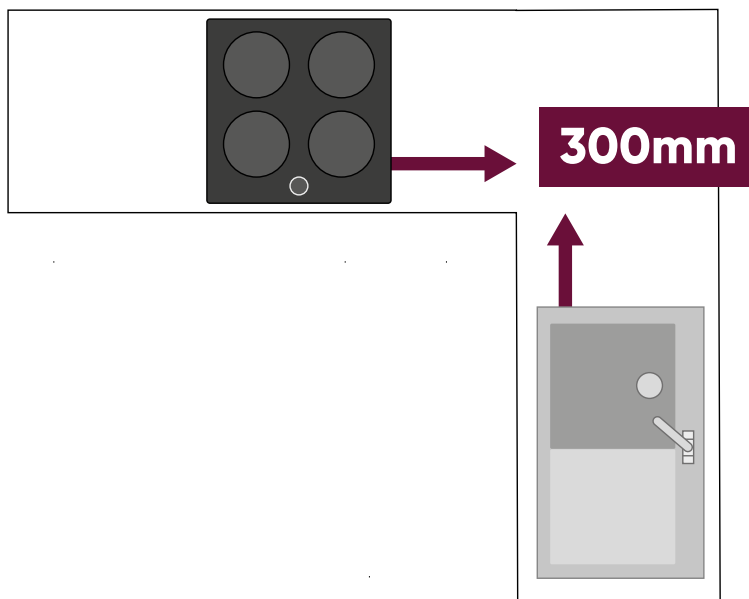
If these distances cannot be achieved, contact the designer for advice.

Do not put sink bowl next to worktop end.

Sink should always be handed with the drainer closer to the worktop end.



Minimum distance between sink / hob and worktop corner = **300mm**.



For fixed height worktops on brackets, go to step F1 on page 94.

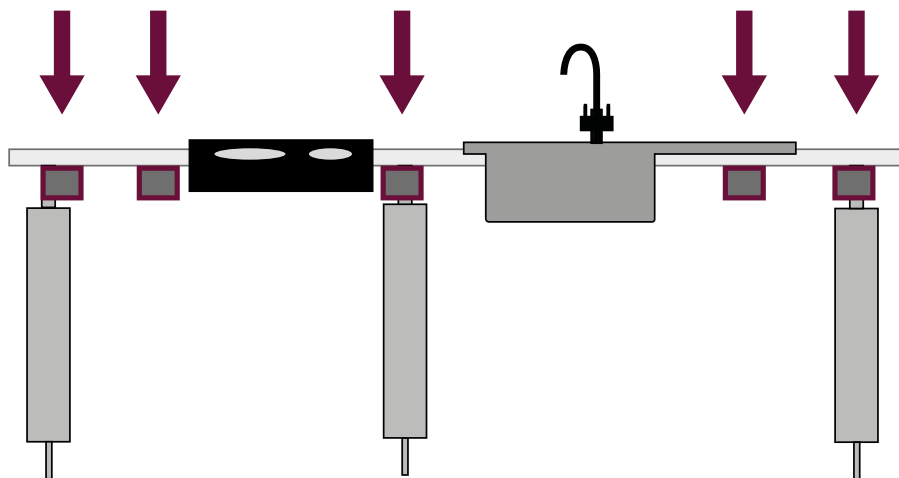
9.

Based on the hob and sink cut out positions, calculate the position of the support arms. This will then dictate the position of the legs.

On straight runs, one arm will sit on top of each leg at each end of the worktop.

Two arms should be positioned either side of the hob, as close as possible to the cut out.

One arm should be positioned under the drainer, as close to the sink bowl as possible.



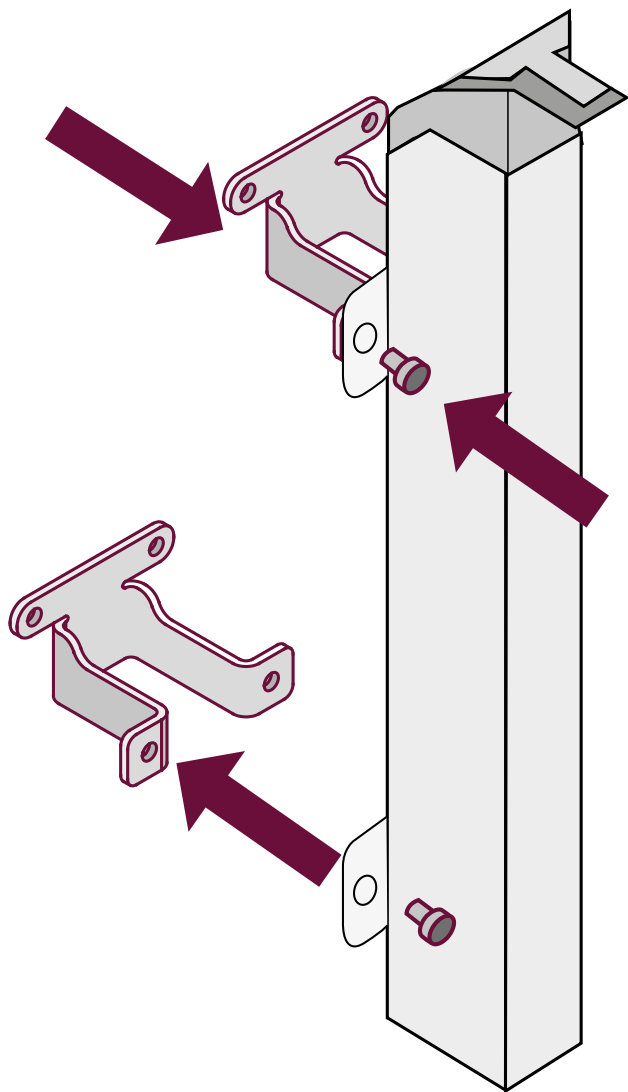
The legs should be positioned so that an arm can sit above each one. Use the calculated positions of the support arms to mark out where to fit the legs on the back wall.

**Items supplied but
not required:**

**Leg cover
Small spacer
Foot**

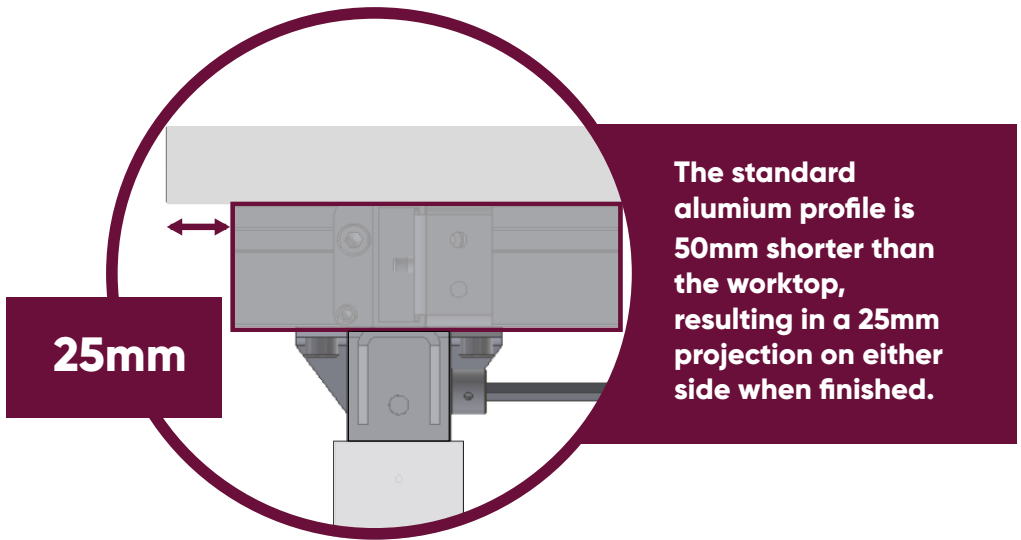
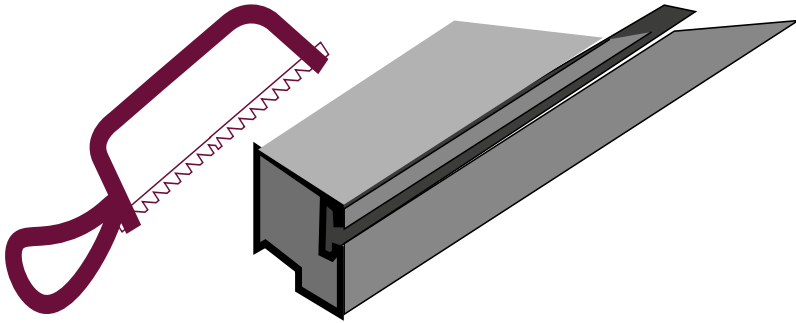
11.

Fit two spacer brackets on to the back of each support leg.



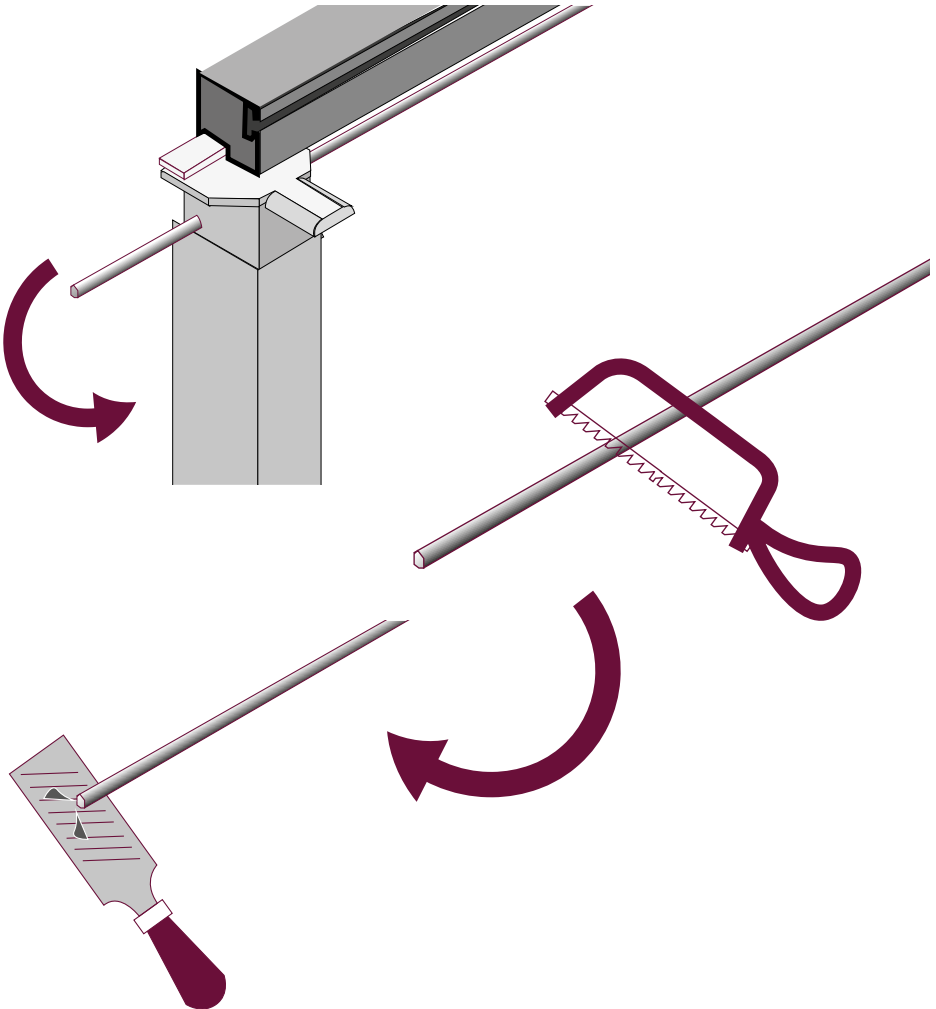
12.

Remove the spindle from the aluminium profile, then cut the profile to the required length (50mm shorter than worktop) using a chopsaw with an aluminium blade.



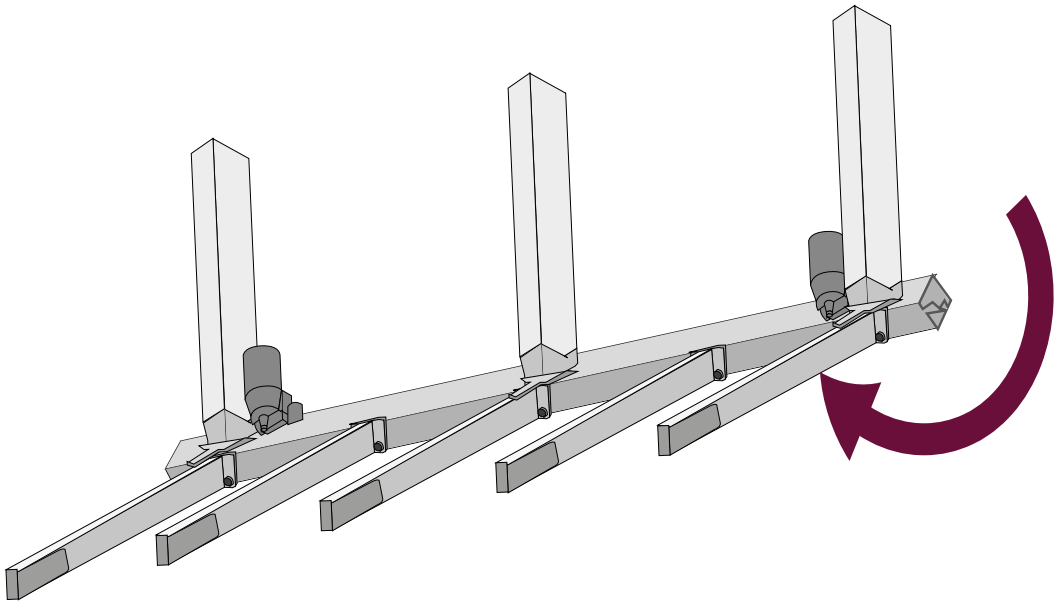
13.

Cut the spindle(s) to the required length (100mm shorter than the aluminium profile) using a chopsaw with an aluminium blade. Soften the sharp edges of the cut end of the spindle with a file.



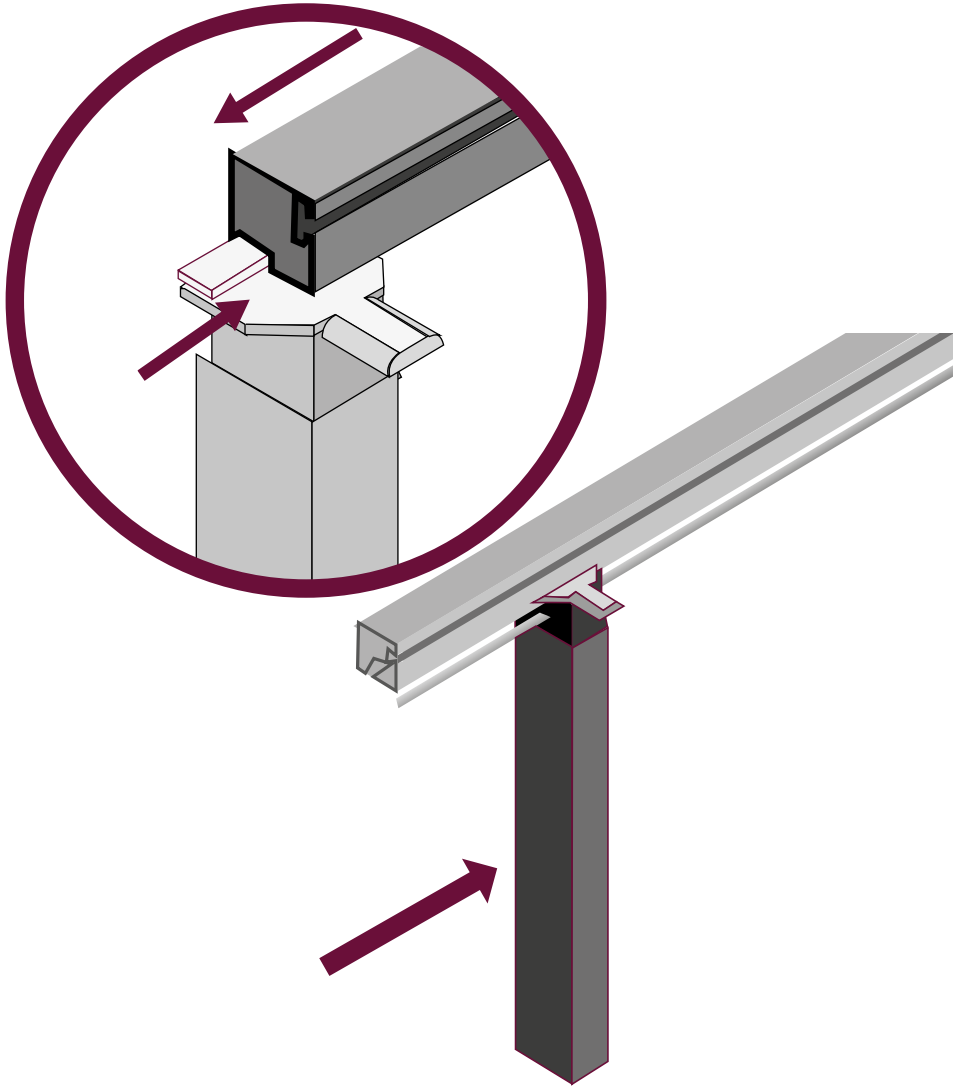
14.

If there is space, you may find it easier to lay the profile on the floor and build the frame upside down. Once it is built, turn it over and move into position.



15.

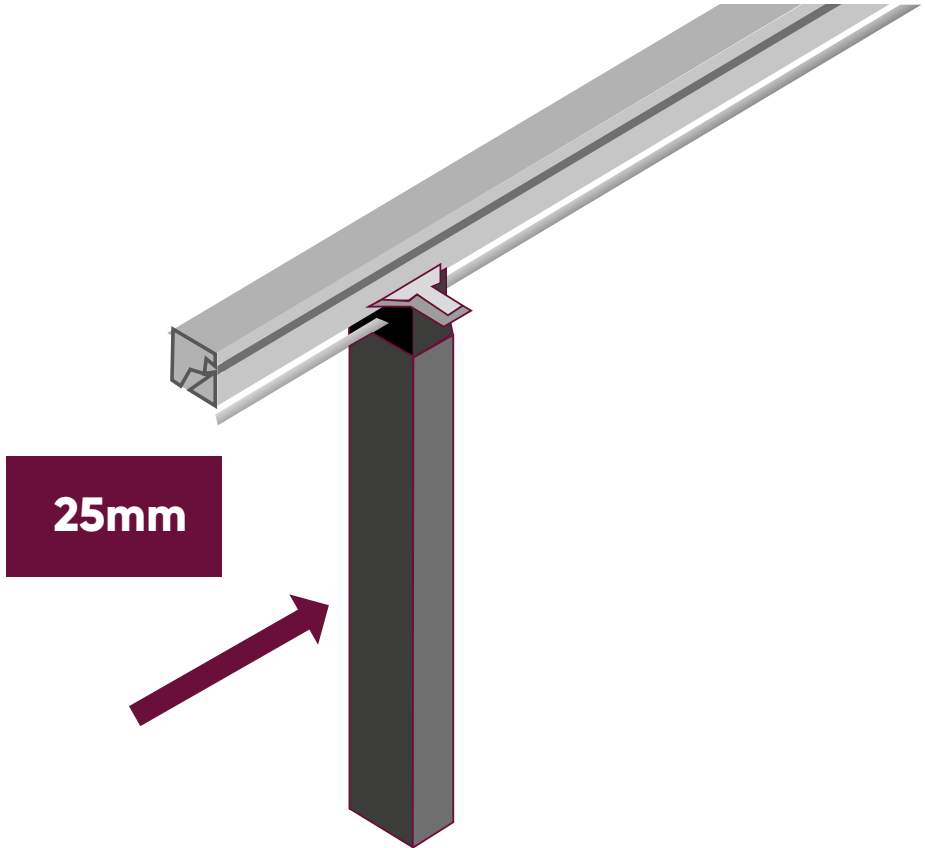
Push the left leg into the groove of the lower side of the aluminium profile.



16.

Position the adjustable legs on the aluminium profile. For frames with three legs, place one leg at each end, and one leg in the middle, where the support arms will be positioned.

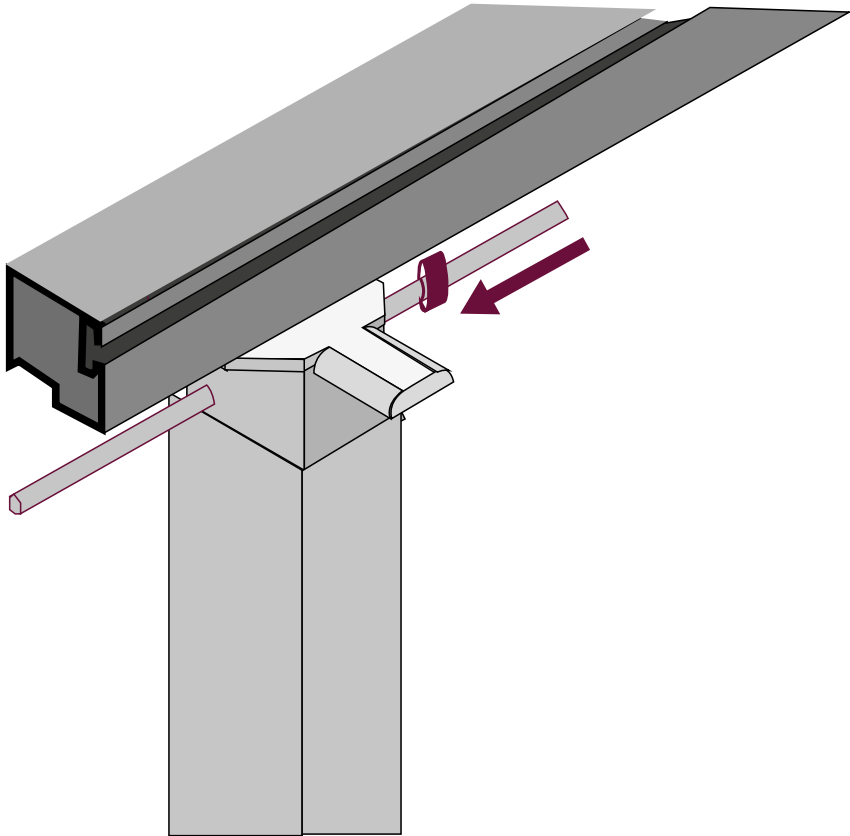
It is recommended that the leg is 25mm from the end of the profile, but the leg can be moved to either side if required.



Secure each leg to the aluminium profile with two bolts.

17.

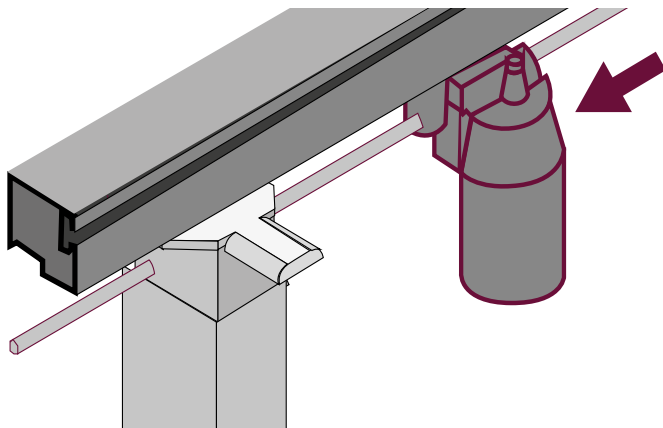
Push the connecting spindle through the leg on the left side. Push the stop ring onto the connecting spindle so it faces the leg.



18.

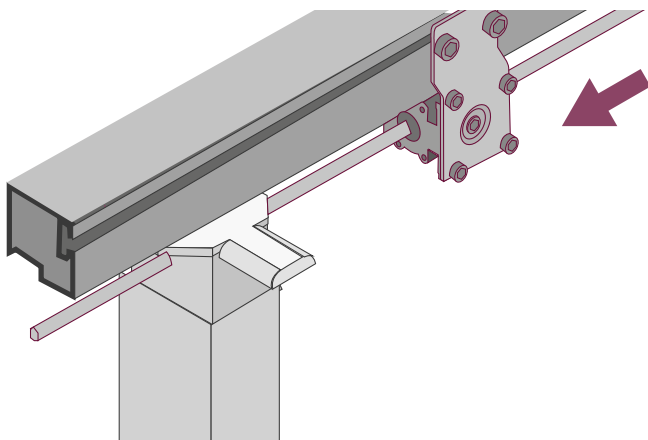
For electric rise and fall

Push the motor with fittings onto the spindle. If the motor is not parallel with the leg, then turn the motor to vertical position.



For manual rise and fall

Insert the transmission with fasteners into the groove of the aluminium profile and pass the spindle through the transmission (do not secure)

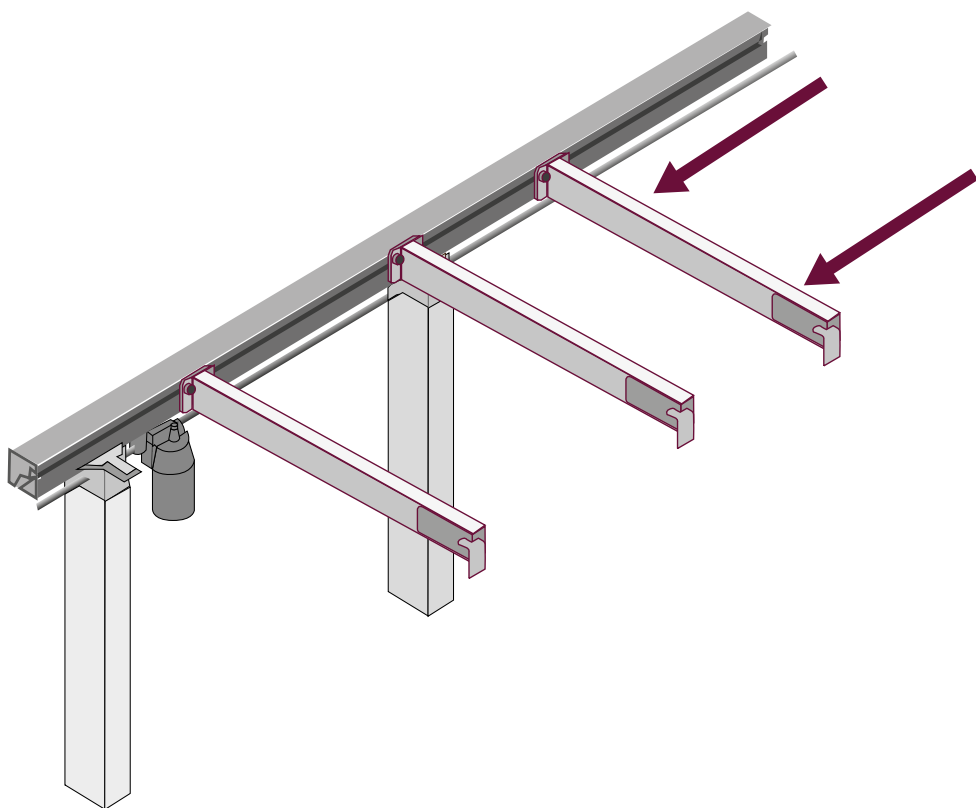


19.

Push the middle support arm(s) into the aluminium profile from the right hand side to the required position and fasten with two screws on each support.

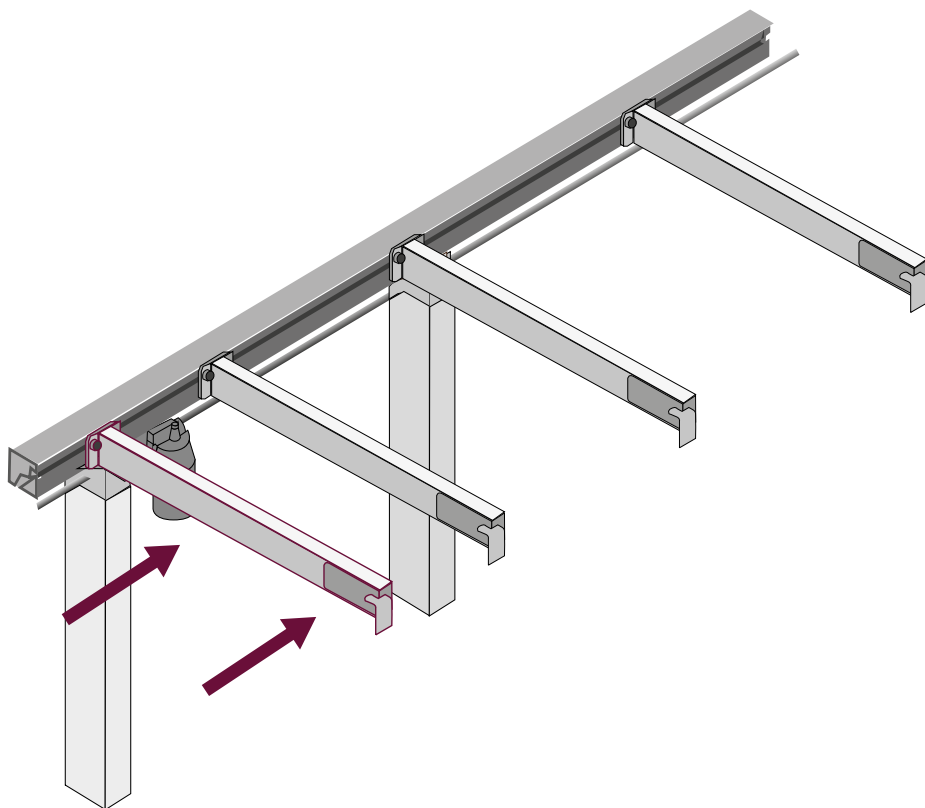
Push the two additional support arms onto the profile to the required position and fasten with two screws. See page 20 for more information on calculating the correct position for the additional arms.

Ropox recommends a maximum distance between the support arms of 60cm in order to obtain optimum stability.



20.

Push the left hand side support arm into the profile. Position it directly above the left leg and fasten it.

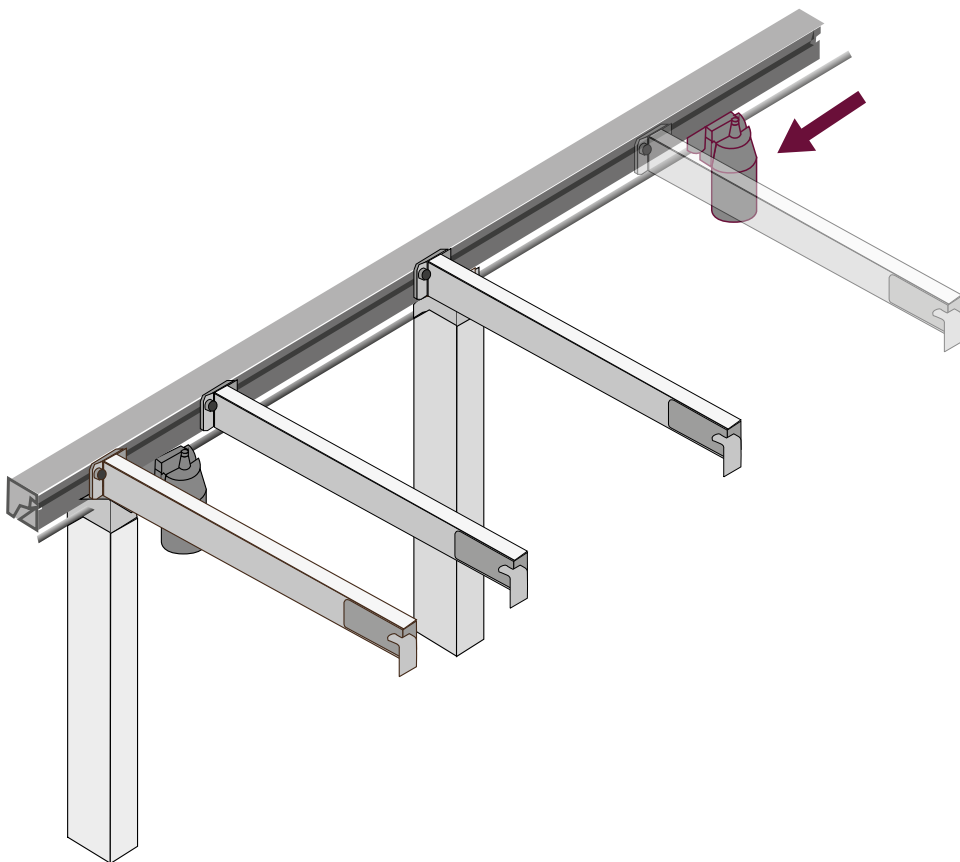


21.

For straight electric rise and fall

For worktop lengths 1050mm and over, an additional motor must be mounted.

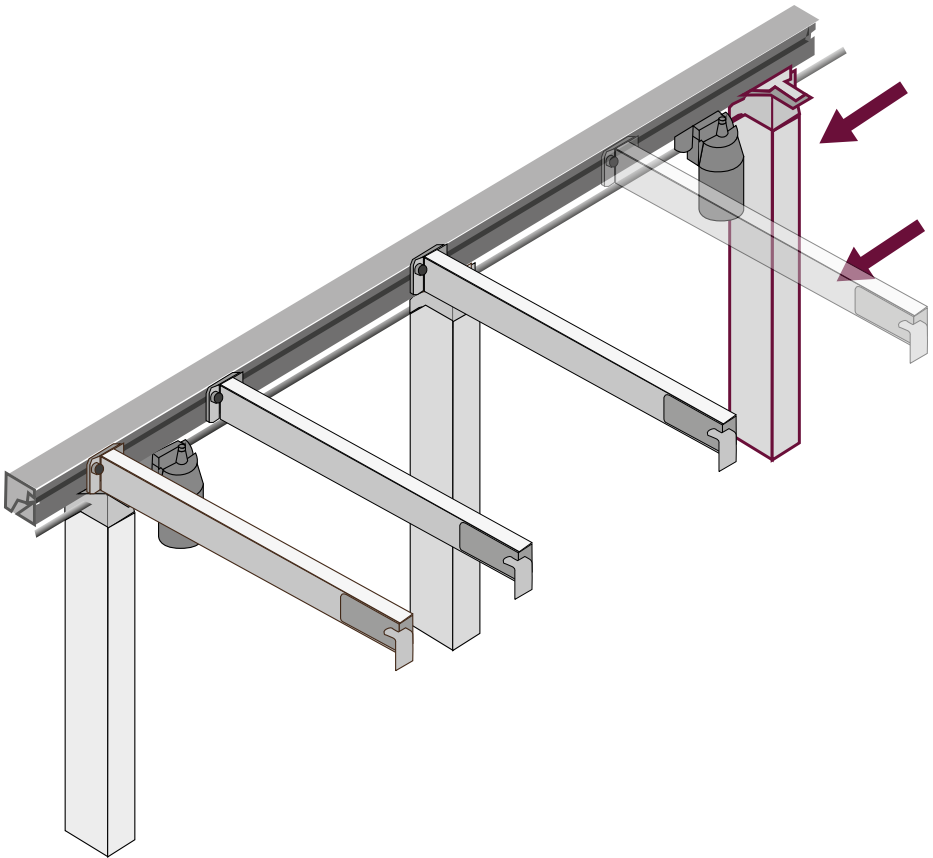
Place the washer and stop ring between the motor and the right hand leg so that the washer faces the leg.



22.

For straight electric rise and fall

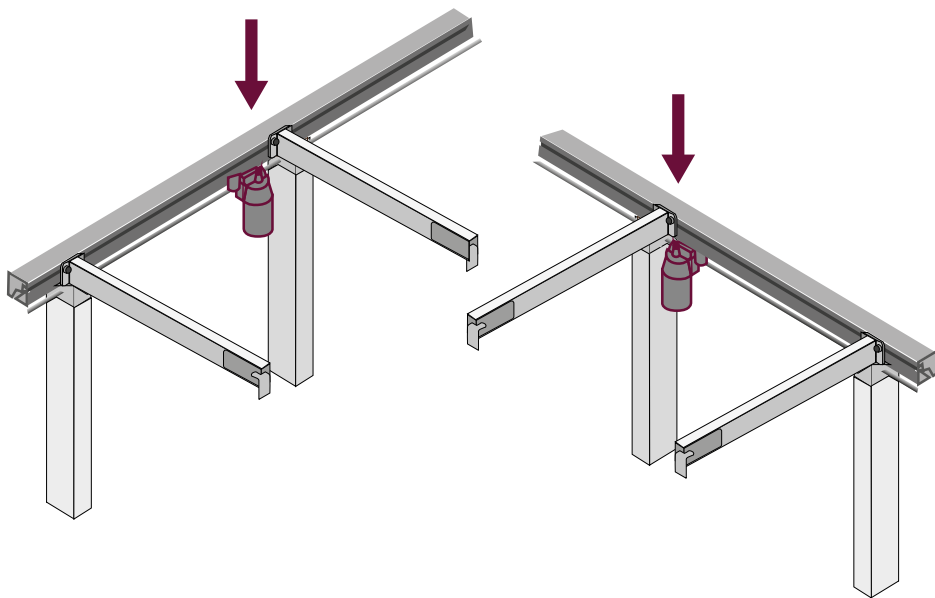
Push the right hand leg into the groove of the bottom side of the aluminium profile, and fasten it a distance of 25mm from the edge of the aluminium (or, under where the support arm will be).



22.

For L shaped electric rise and fall

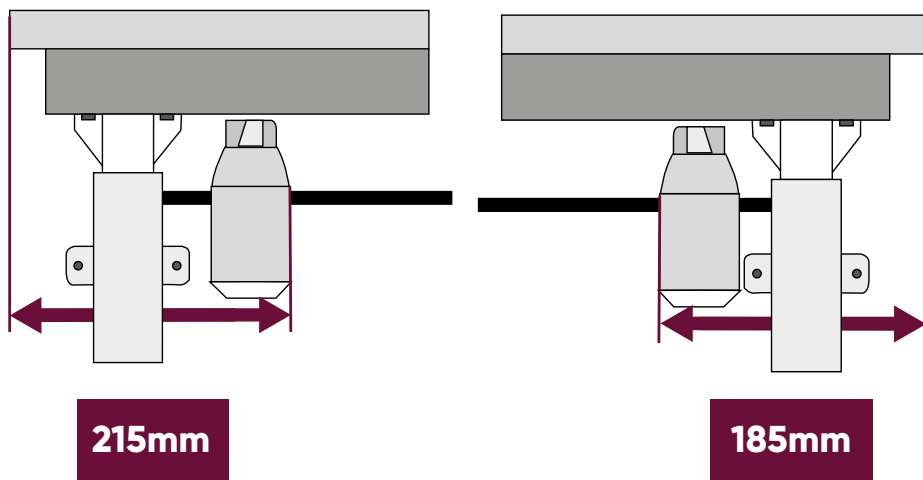
Fit one motor per profile, in the middle.



23.

For straight electric rise and fall

Place the motors at the distance shown from either end of the aluminium profile and fasten them.



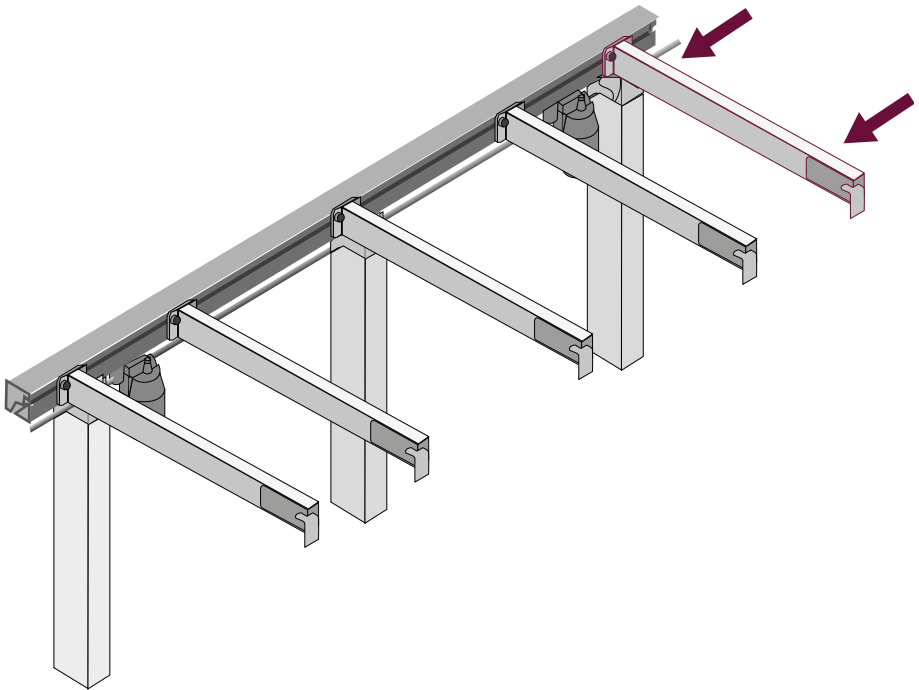
24.

For straight rise and fall

Push the right hand side support arm into the profile, position it on top of the right hand leg, and fasten it.

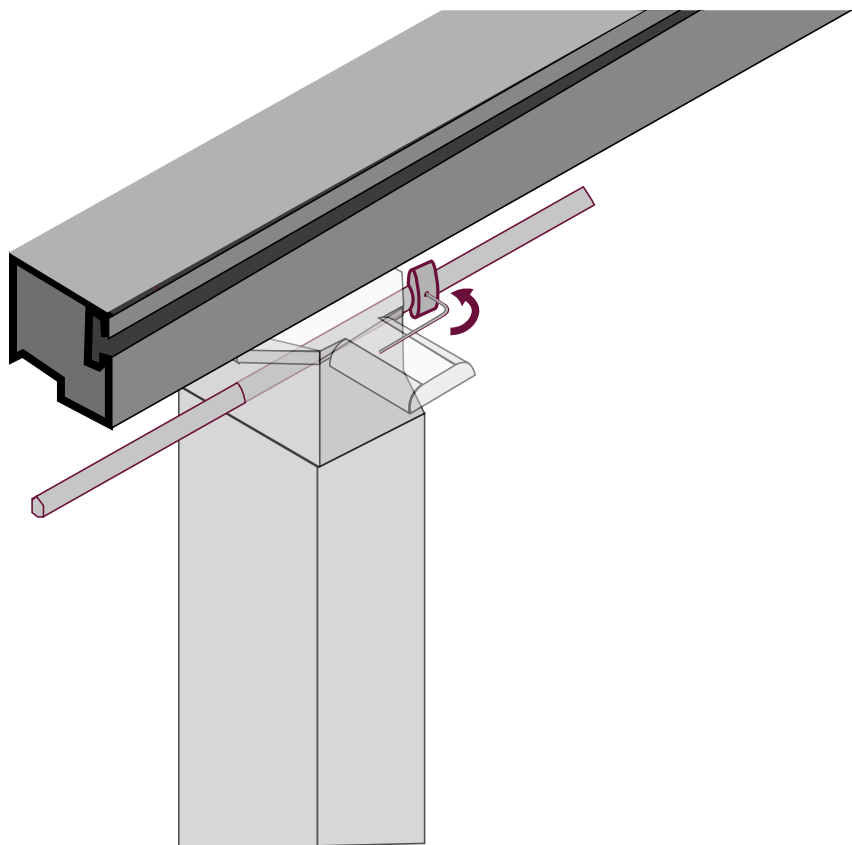
For L shaped rise and fall

Repeat the process for the second profile, and then join the two profiles together following steps 26 – 32.



25.

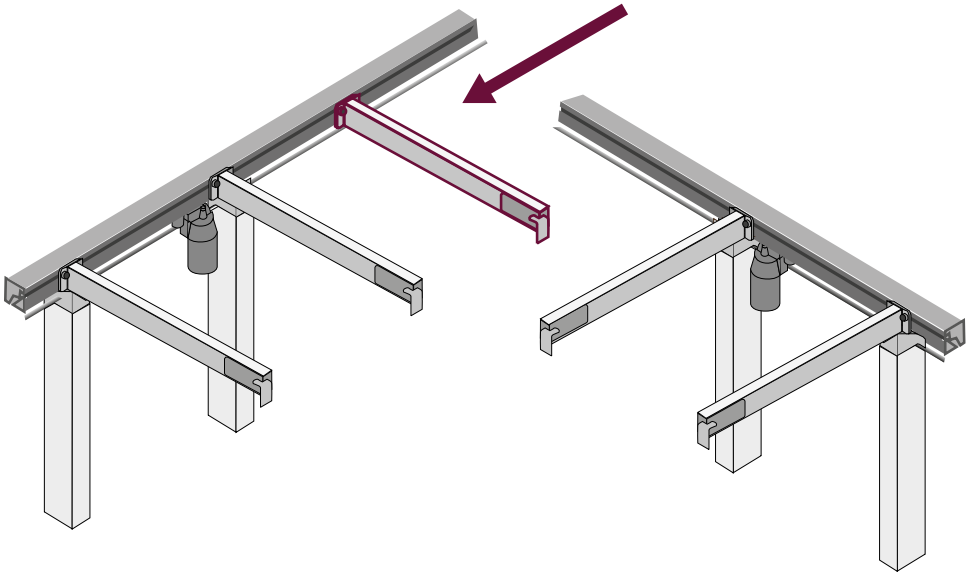
Move the stop rings on the spindle to both sides, so that the stop ring always faces the leg. Secure it by fastening the screw in the stop rings.



26.

For L shaped rise and fall

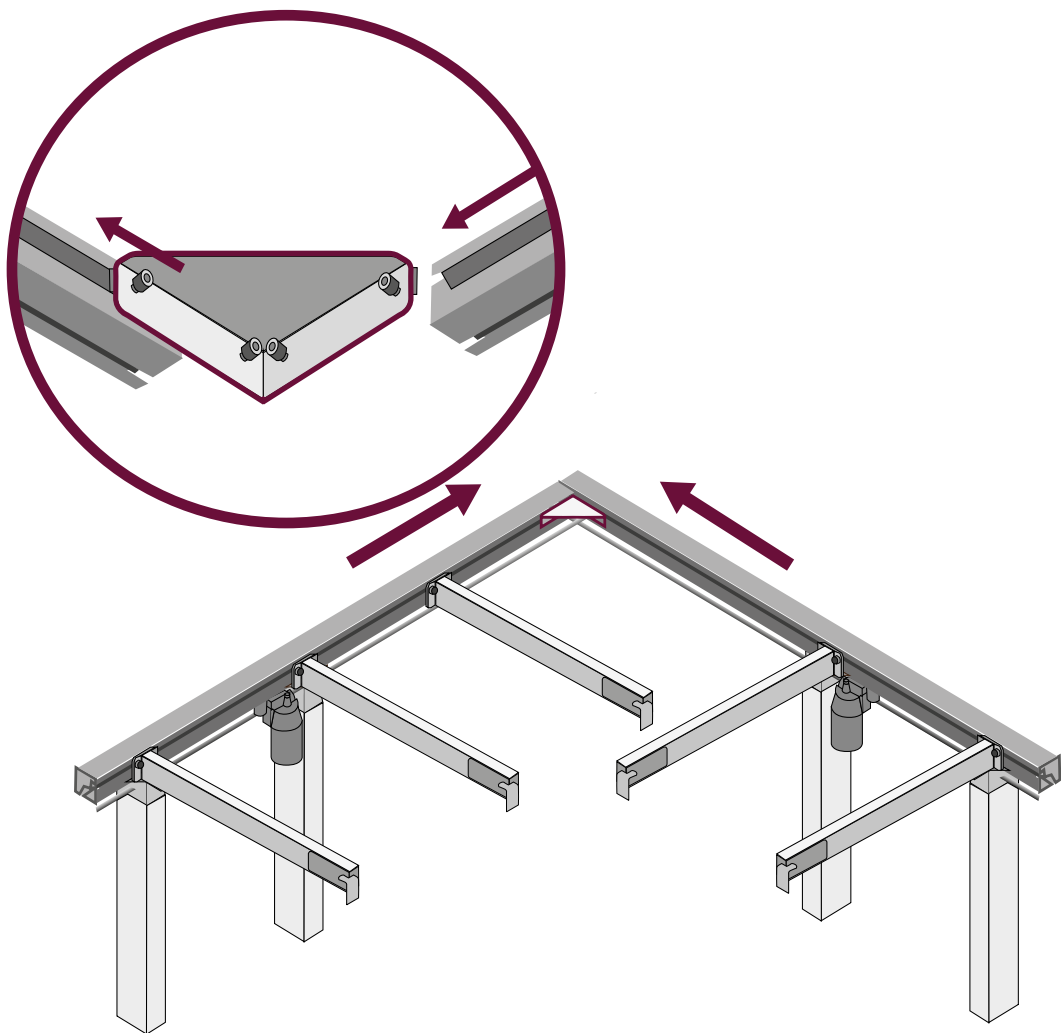
An additional support arm should be included in the corner



27.

For L shaped rise and fall

Slide the two nuts of the angular fitting into the aluminium profile, and tighten the screws lightly.



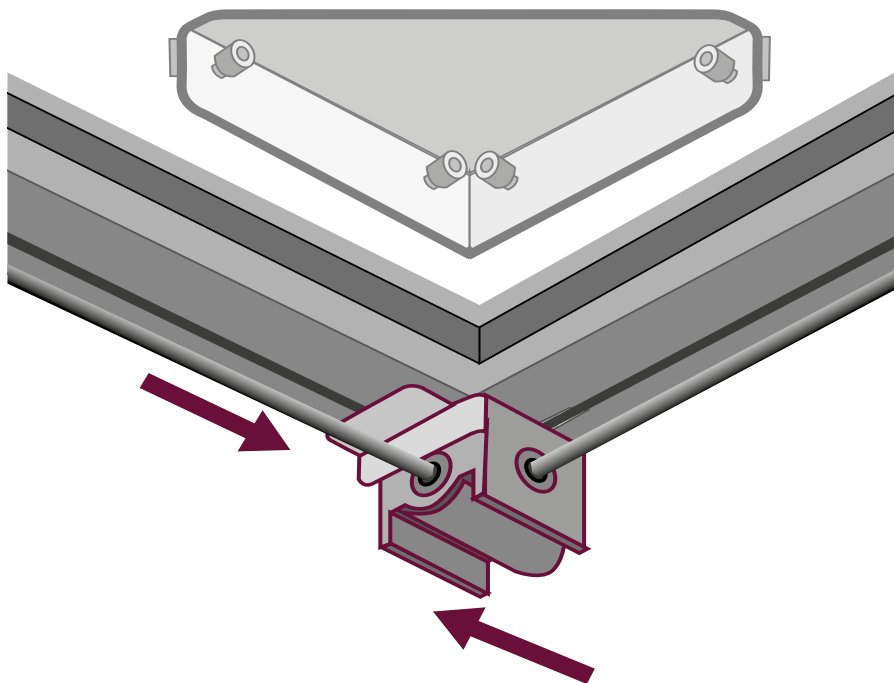
28.

For L shaped rise and fall

Slide the nut of the angular gear casing into the aluminium profile. Ensure the gear is placed as illustrated. Place the spindle in the gear casing and tighten the screws lightly.

Fix gear before fixing the frames to each other.

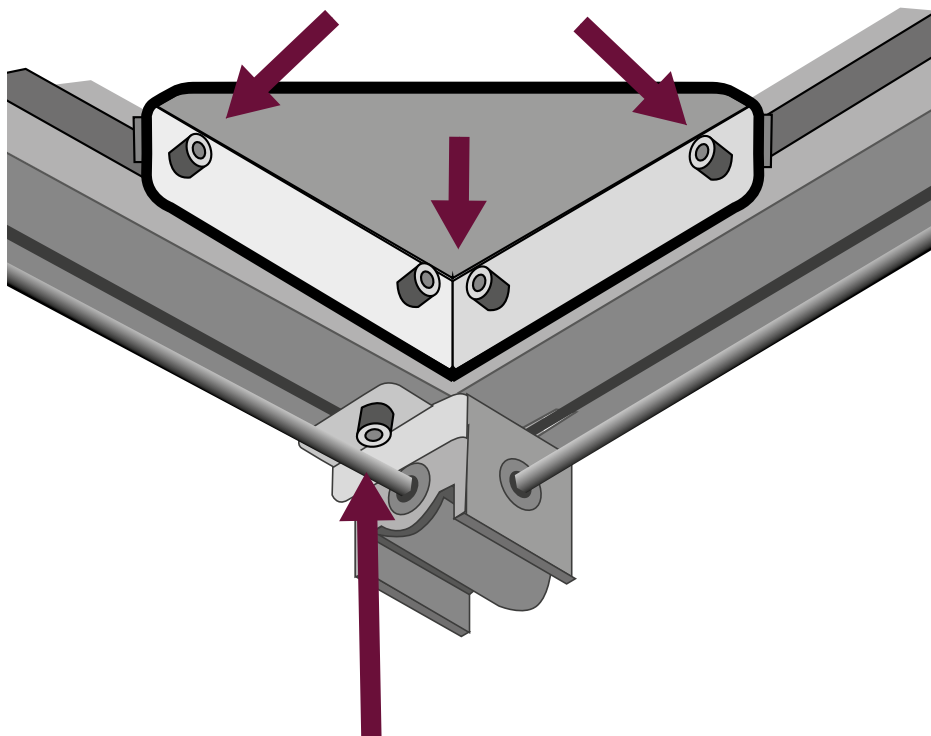
Ensure both spindles have been pushed into the gear casing.



29.

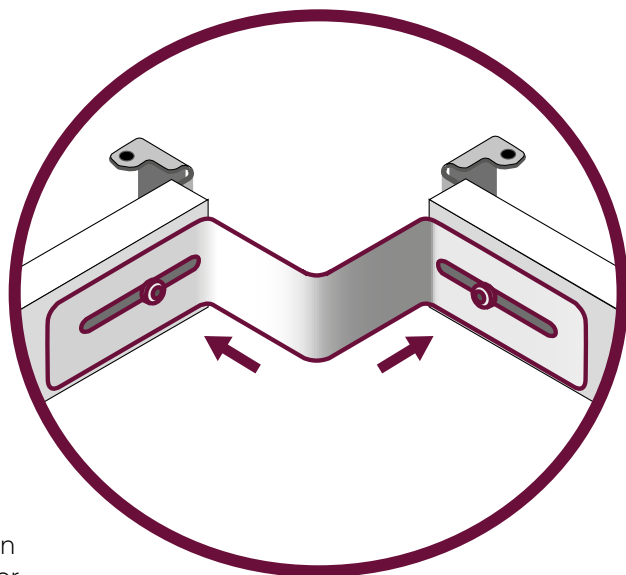
For L shaped rise and fall

Tighten the four screws of the angular fitting and the one screw of the gear case fitting.

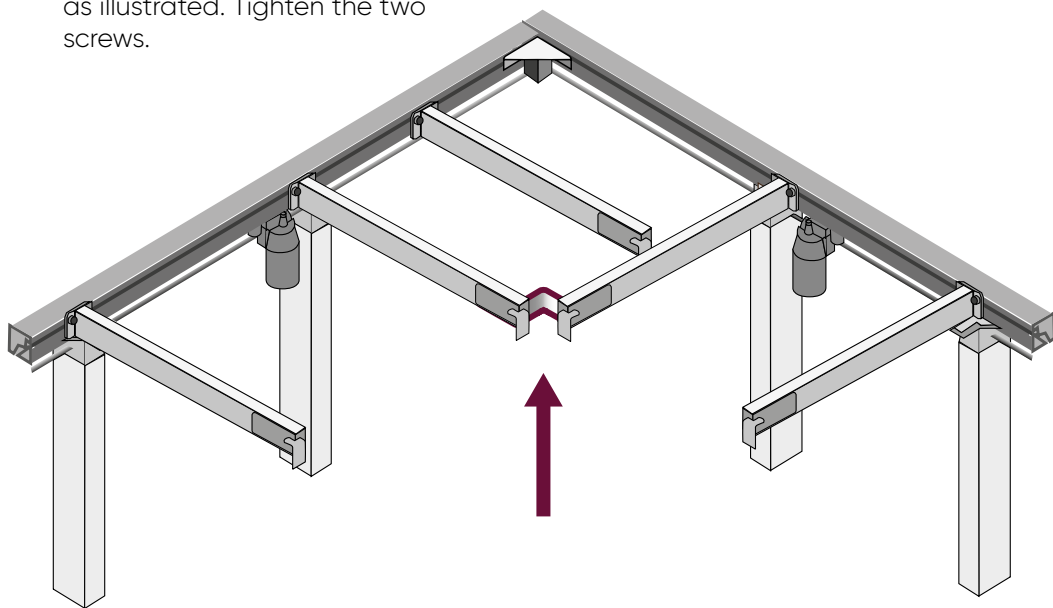


30.

For L shaped rise and fall



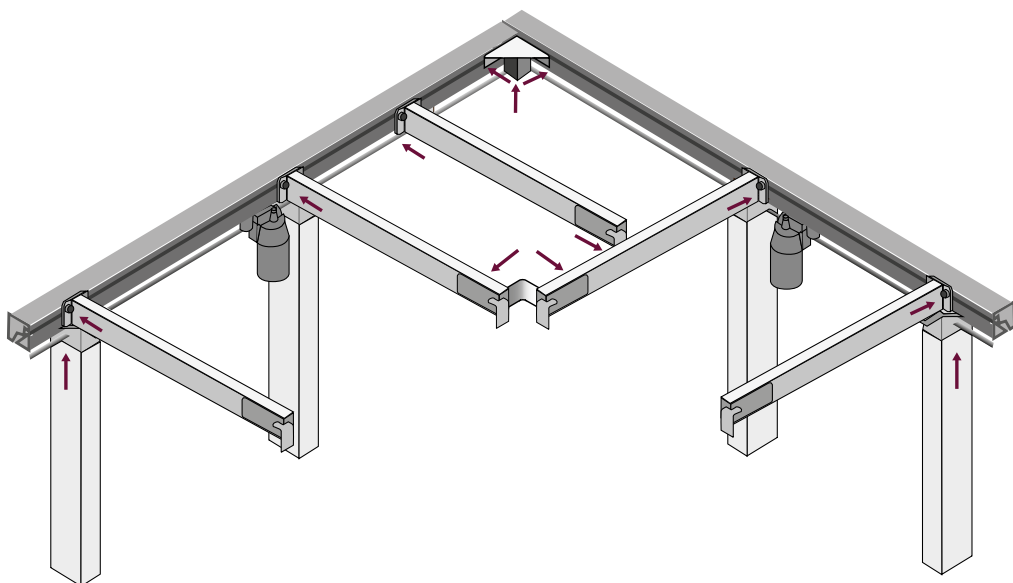
Mount the assembly fitting on the two brackets in the corner of the frame. Move the legs from side to side until the brackets fit as illustrated. Tighten the two screws.



31.

For L shaped rise and fall

When all legs and brackets have been aligned and placed in the required position, tighten all screws.

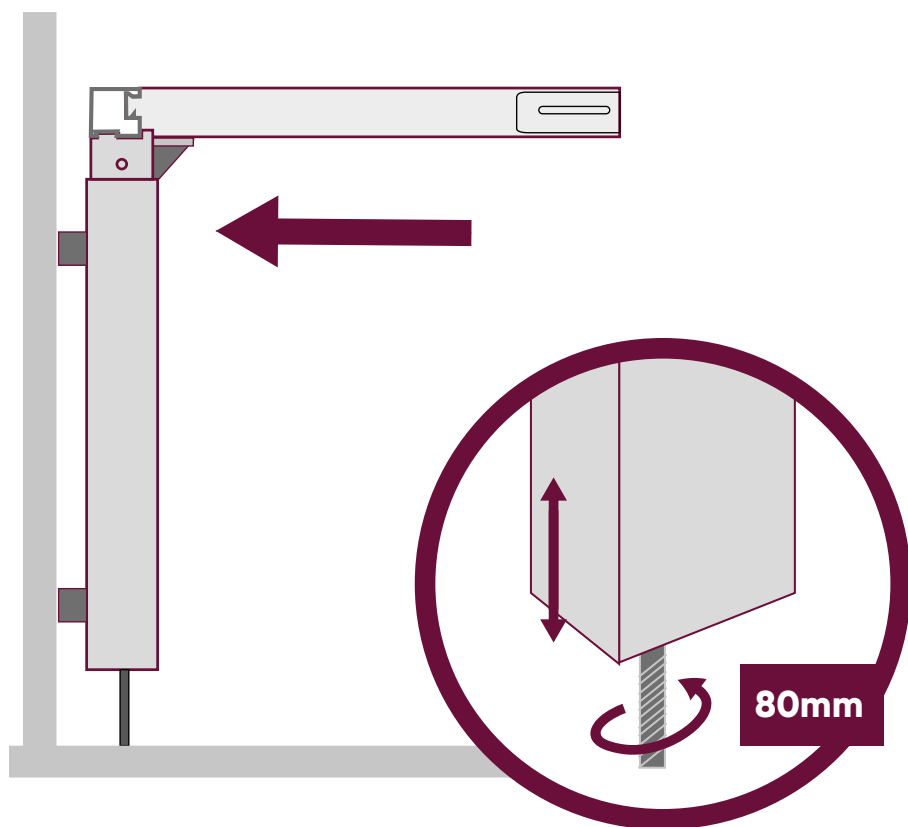


32.

Place the frame against the wall and align it. Adjust the threaded bolts under the legs to ensure that the frame is horizontal. After mounting, turn the threaded bolts up so they are hidden by the leg.

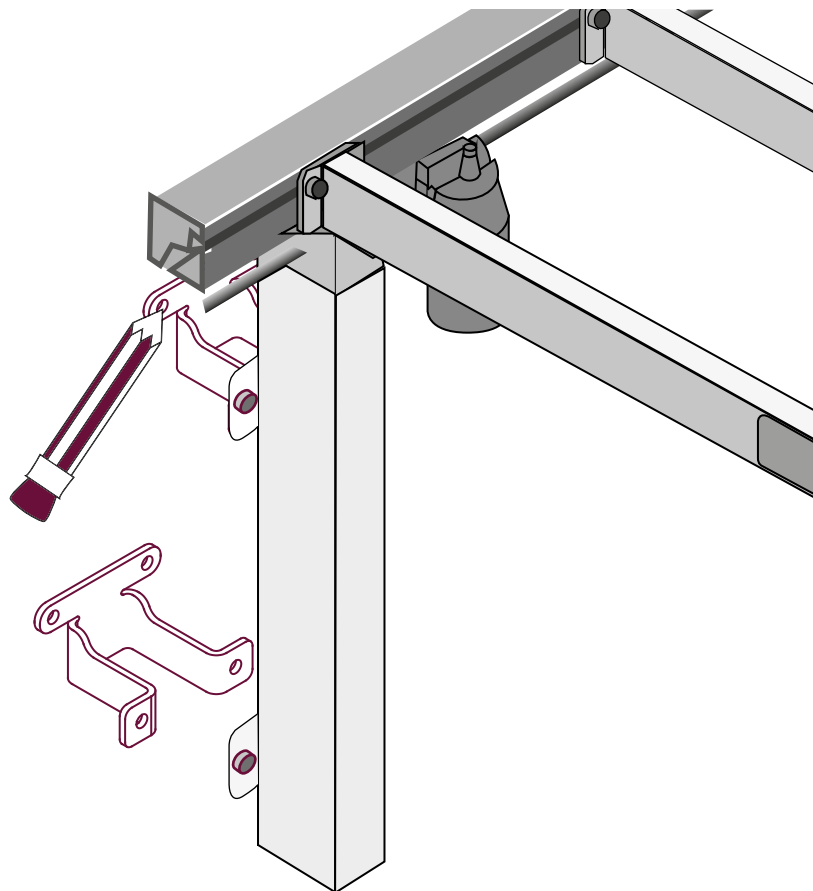
For L shape rise and fall

Place the aluminium profiles so that they are flush in the corner.

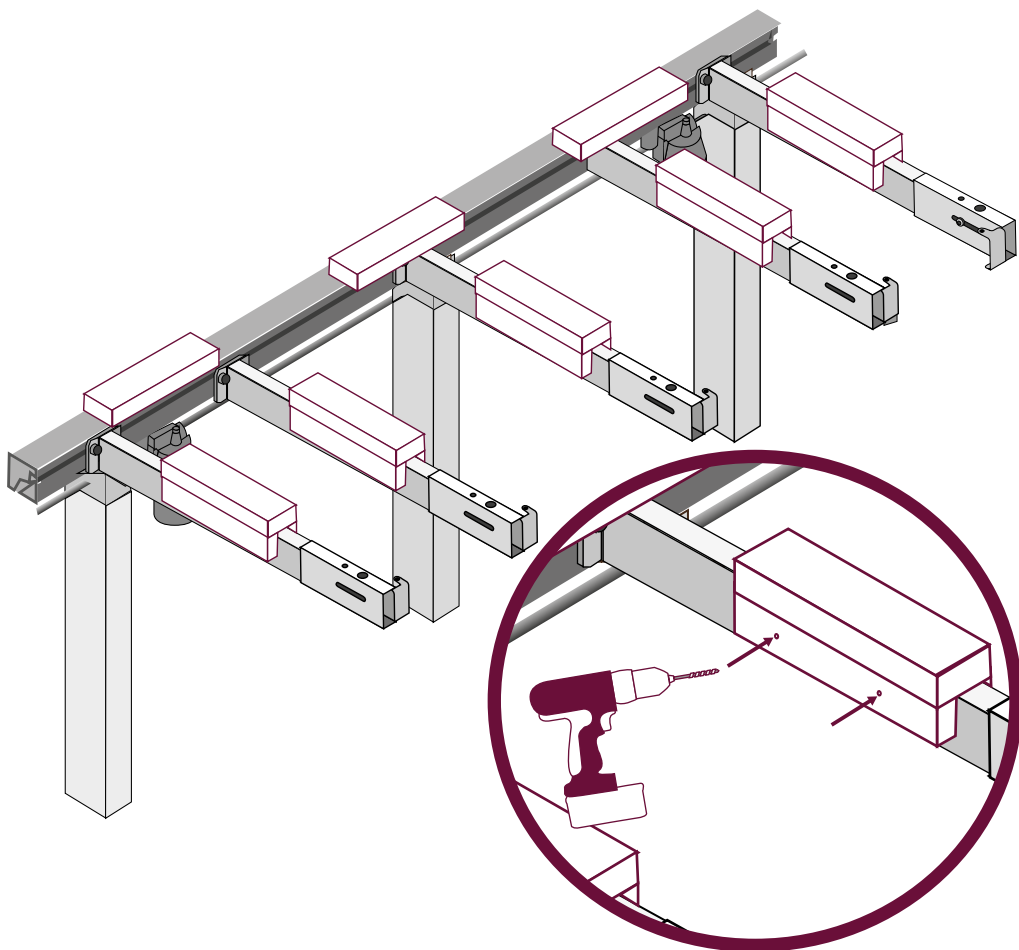


33.

Mark and drill pilot holes for fastening.



Drill through the sides of the packers and support arms and fix in place. One packer is provided per support arm (WTPACKER). One back packer piece should be fitted every 600mm on the aluminium profile (WTBKPACKWH). Ensure the worktop is packed out around the sink / hob cut-out.



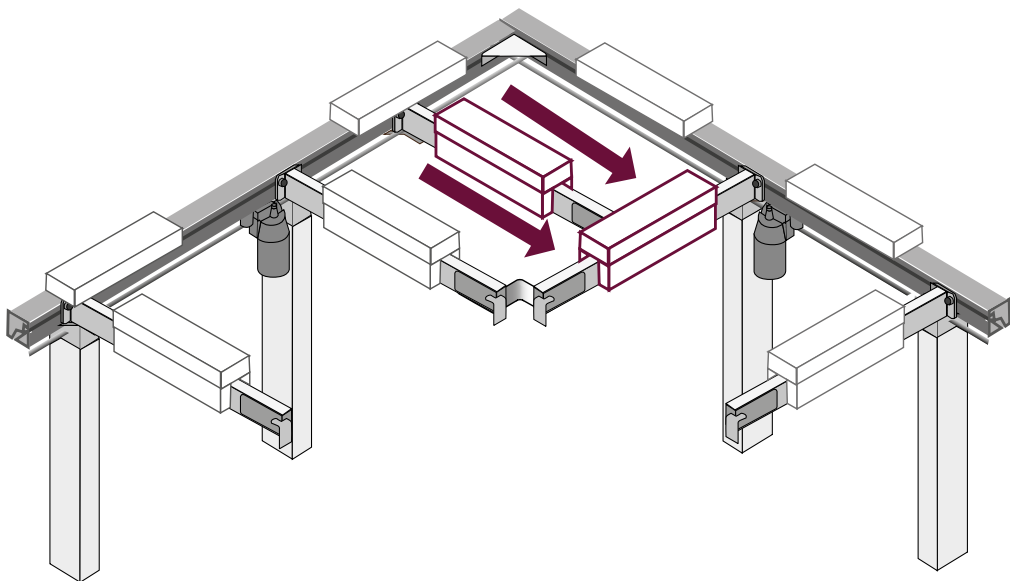
35.

For L-shape rise and fall

For additional support, position an arm and worktop packer in the corner and secure this to the packer opposite.

Ensure the arms in the corner are at a perfect right angle, or the worktop will not rise and fall correctly.

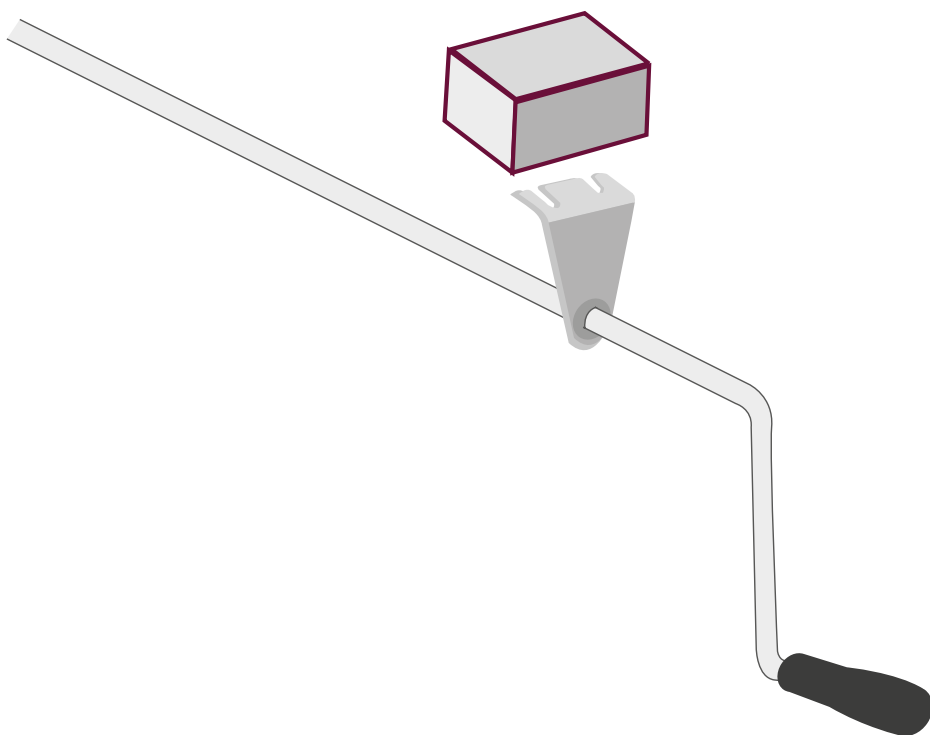
Do not fit the MDF blocks too far forwards, or they will prevent the corner bracket from fitting.



36.

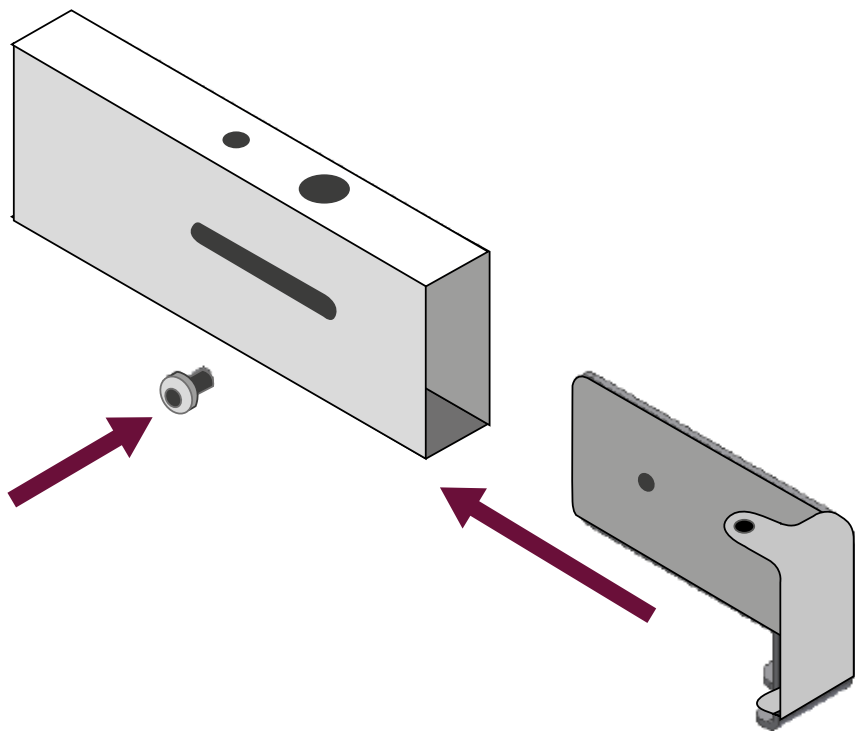
For manual rise and fall

Cut a piece from the back packer to pack out for the spindle suspension fitting to be fitted under the worktop.



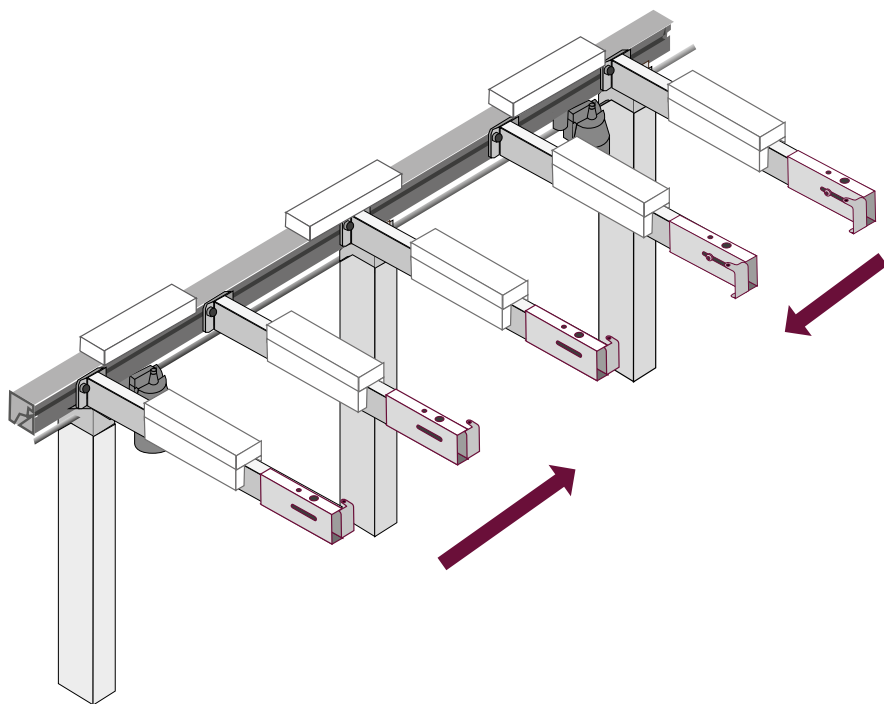
37.

Place the front fascia fittings on the side of the support arm and fasten them loosely by means of the screw provided.



38.

On the outmost arms we recommend pointing the front fascia fittings towards the middle of the frame to prevent them from conflicting with the side fascia

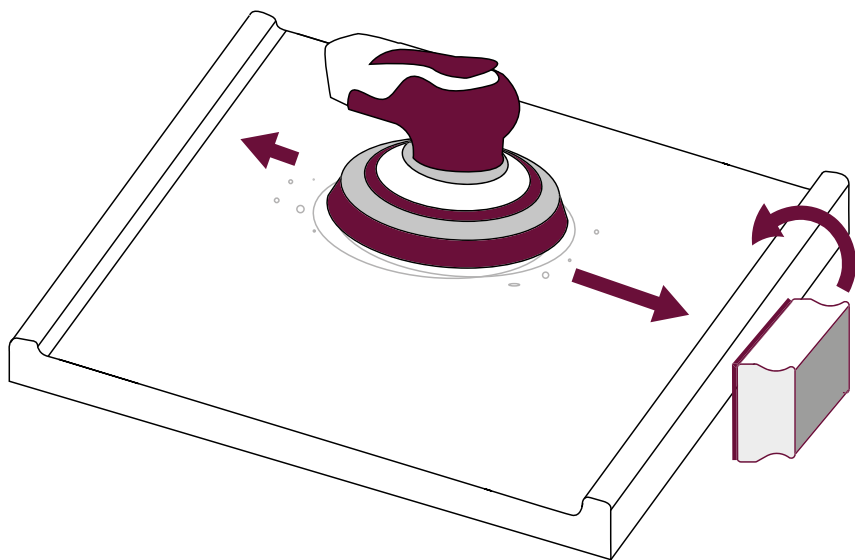


For Maia Waterfall Edged Worktops

Read the Maia installation, care and maintenance manual provided before fitting Maia worktops.

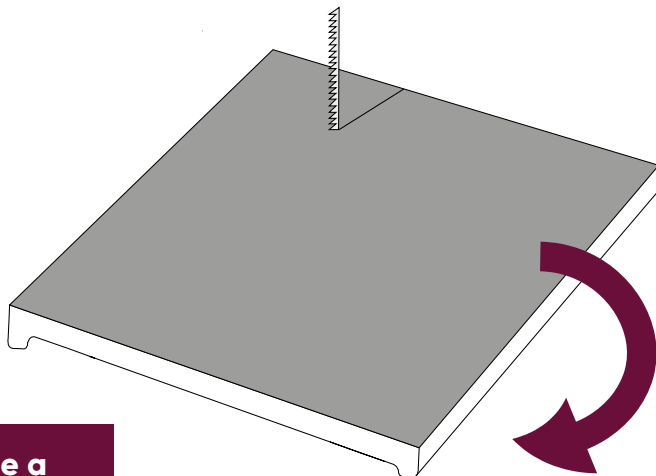
Extra care must be taken when sanding the joint of a Maia waterfall edged worktop. An orbital sander should be used for the middle flat area of the worktop only. The edges should be sanded by hand.

Cut outs should be done from the underside of the worktop.



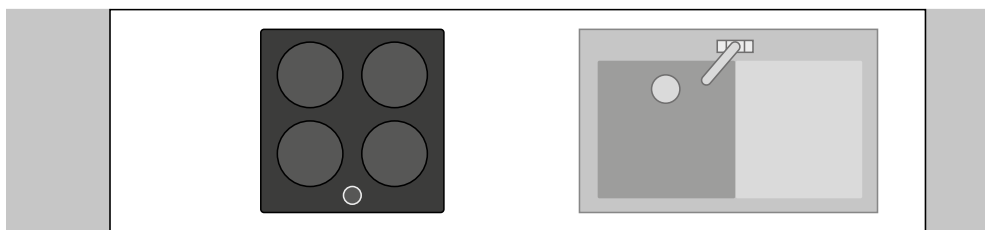
40.

Cut out the sink and hob holes in the worktop, and seal with a suitable sealant.



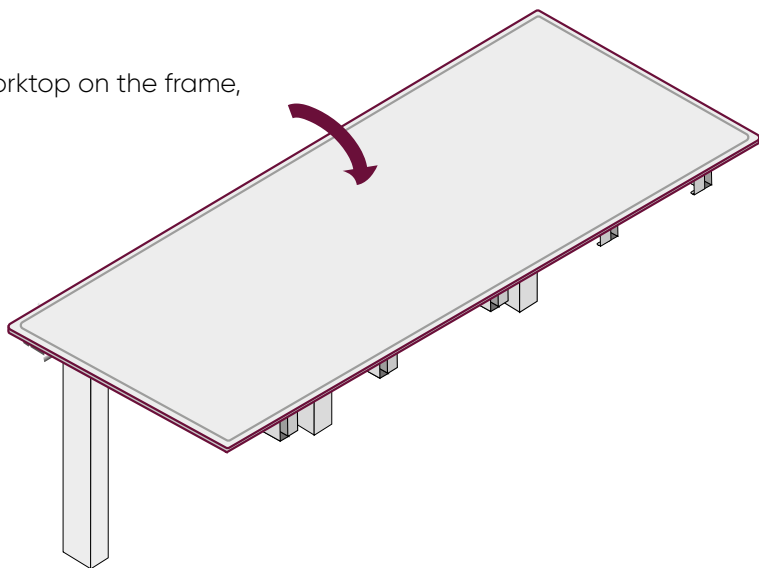
There should be a minimum of 300mm between the sink and hob. Measure this from the appliance edge, not the cut out edge.

300mm

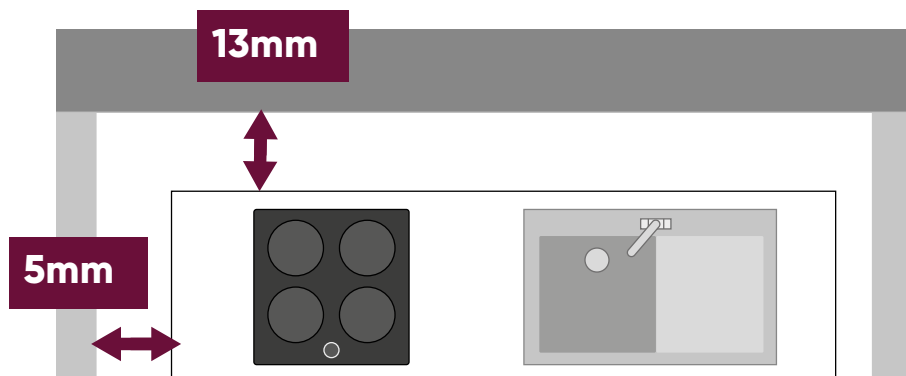


41.

Place the worktop on the frame,

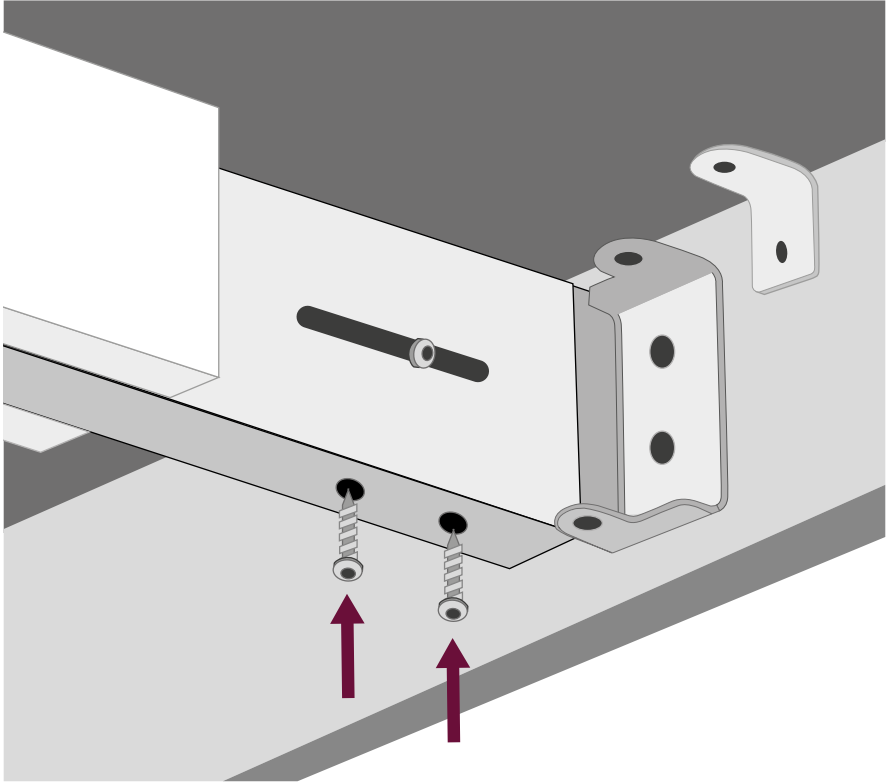


Ensuring there is a 5mm gap at either end and a 13mm gap behind. The 13mm gap behind is to allow for a wall covering of up to 8mm, leaving a 5mm gap behind the worktop once the wall covering is in place.



42.

Fasten the worktop with screws through the holes of the support arms. There will be a gap here for the packers. Use adhesive to attach the packers and back packers to the worktop

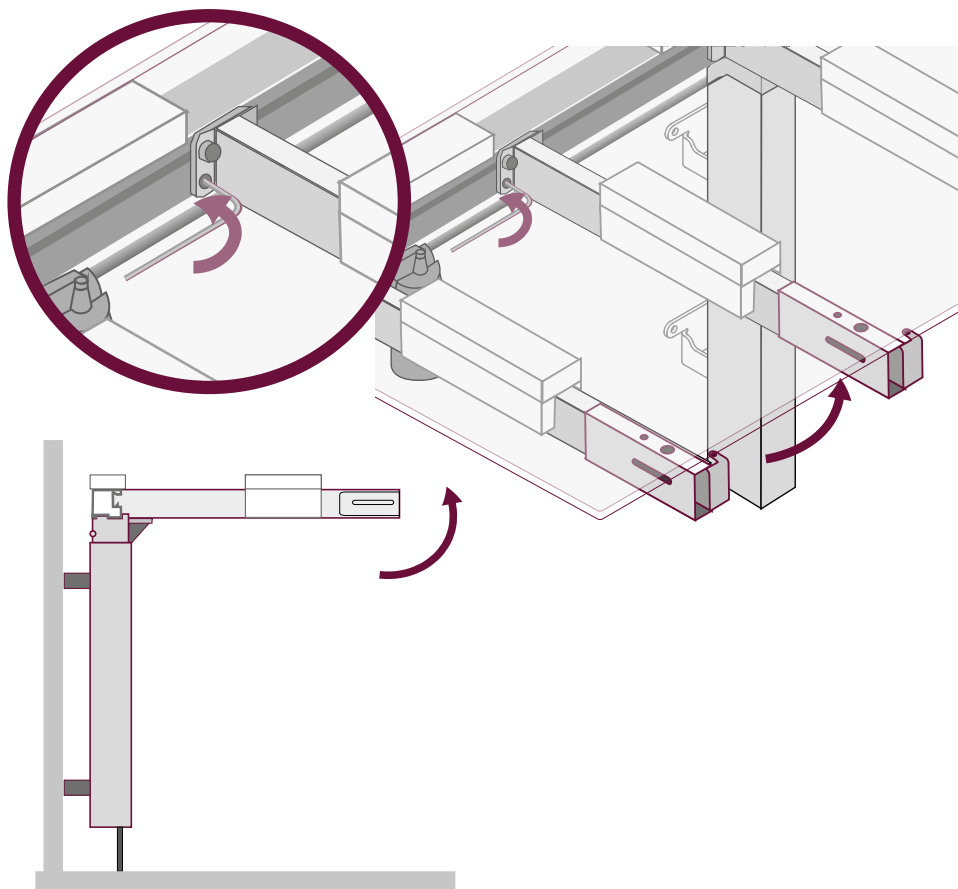


43.

After placing the worktop on the frame you may have to compensate for the weight of the worktop if the frame is no longer horizontal from the wall to the front fascia.

Adjust the tilt using the two lower screws of each support arm. Start by loosening the two screws fastening the support arm to the aluminium profile, and adjust the two lower screws to make the worktop horizontal. Finally retighten the two upper screws.

Do not adjust the support arms placed directly above the legs.



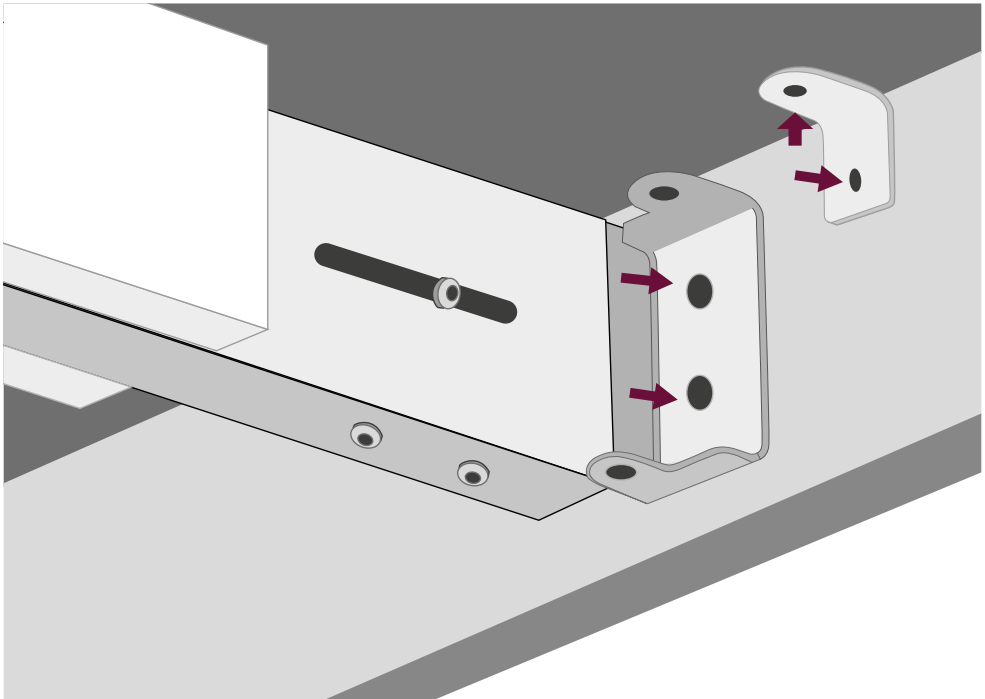
44.

Use a clamp to fasten the front fascia at the required position under the worktop. Press the front fascia fittings forward against the front fascia and fasten with screws from the inside. Use L-Brackets to screw the front fascia to the worktop

Screwing the fittings into the worktop will pull the front fascia upward.

Finally tighten the screws on the side of the support arm.

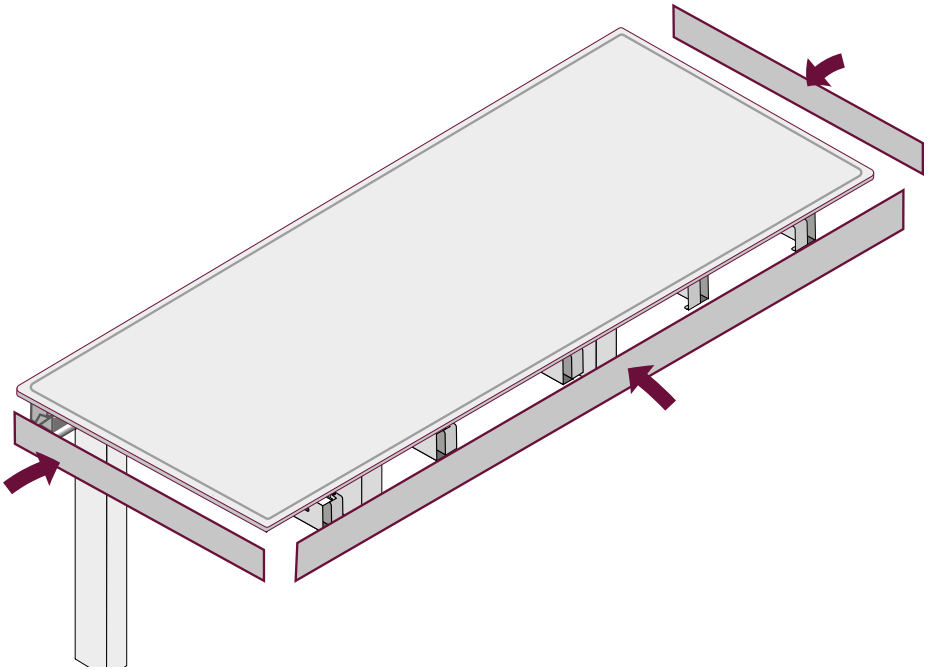
Ensure fascias are fixed securely so that the safety strip is always facing directly downwards at 90 degrees to the worktop.



45.

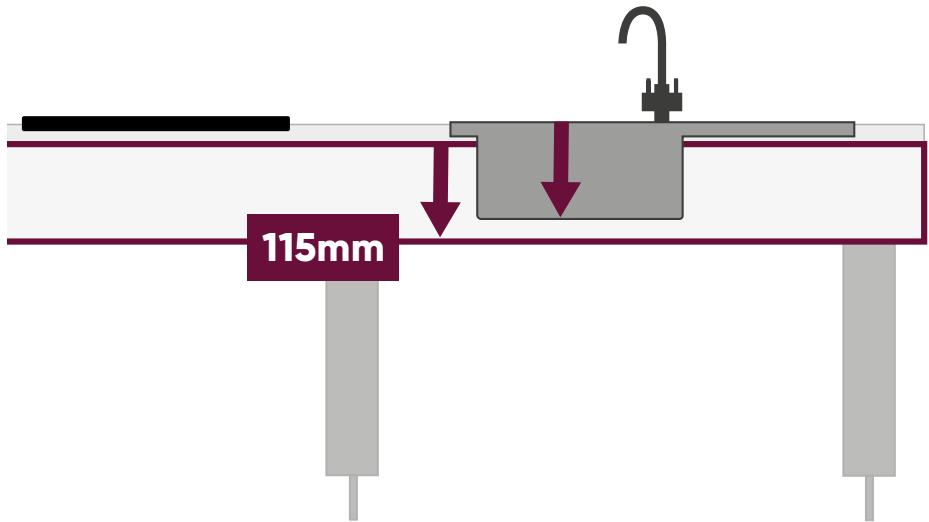
Fascias should be fitted on both sides, and on the back of the worktop if it is open and exposed (e.g. in an island).

Fit side fascias to back packers and front fascia using L brackets.



46.

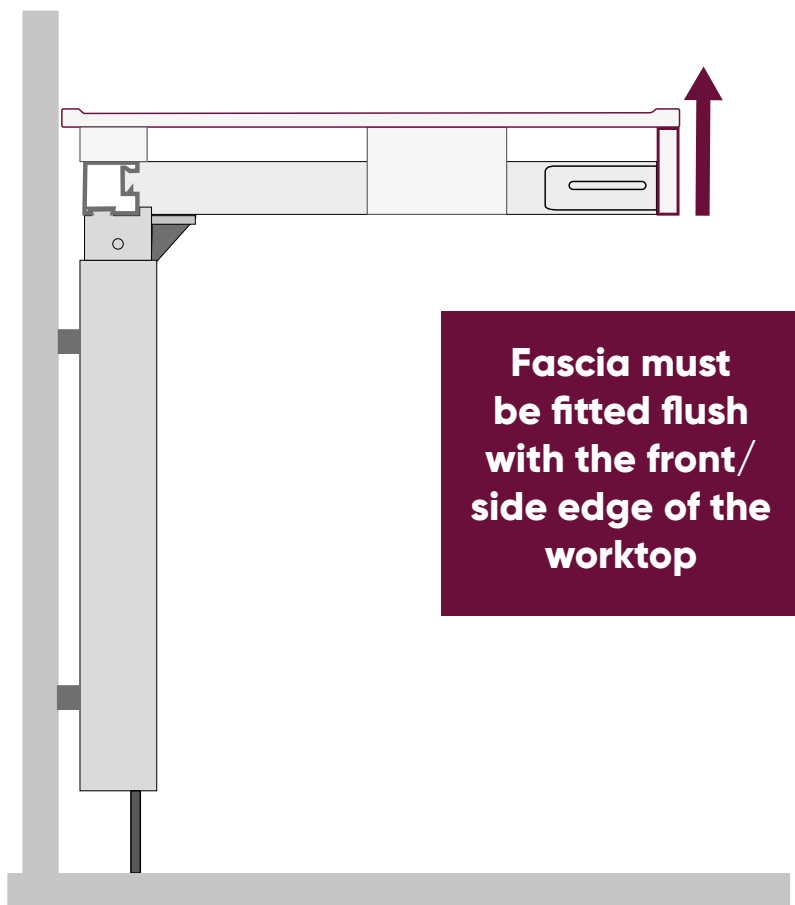
Fascia panel must extend as far down as the sink bowl. The bottom of the sink bowl must not be lower than the bottom edge of the fascia panel. In most cases, 115mm will be sufficient.



47.

Fascia must be fitted flush with the front/side edge of the worktop. Do not allow any worktop overhang on the rise and fall section, or on the worktop edge next to a rise and fall section.

If the fascia panel requires reducing in height, fit the cut edge facing up.



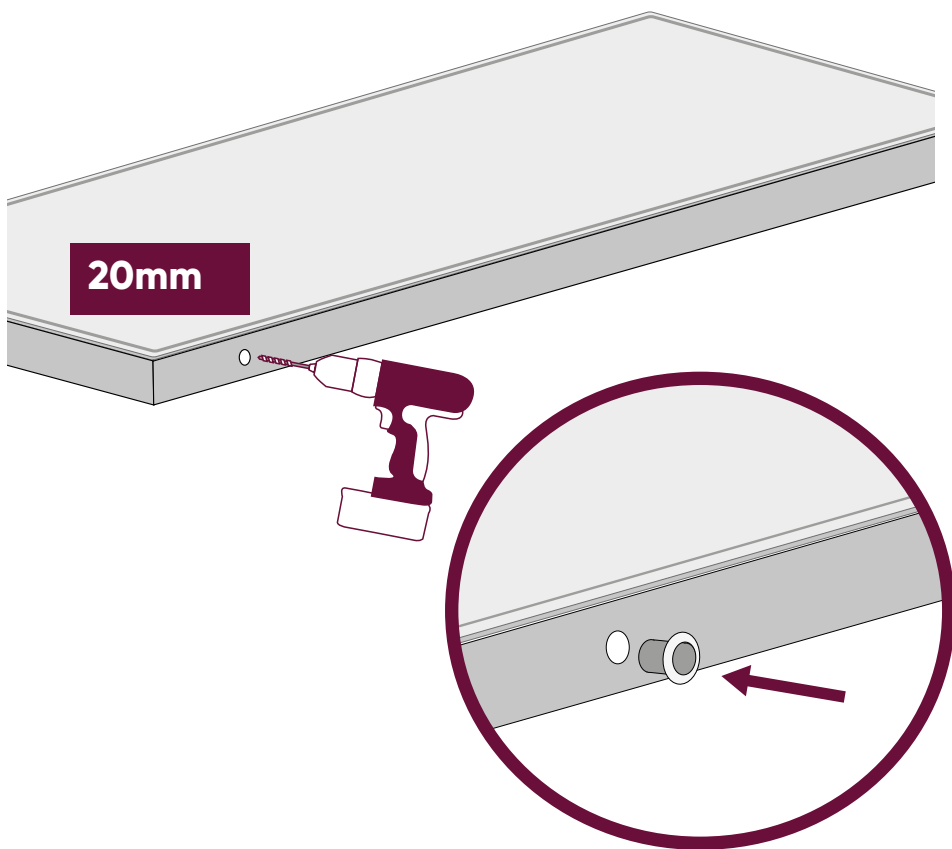
48.

For manual rise and fall

When the worktop and front fascias are in place, the transmission spindle may be mounted.

First drill a 20mm diameter hole in the front fascia. Place the chrome bush for the handle into the hole.

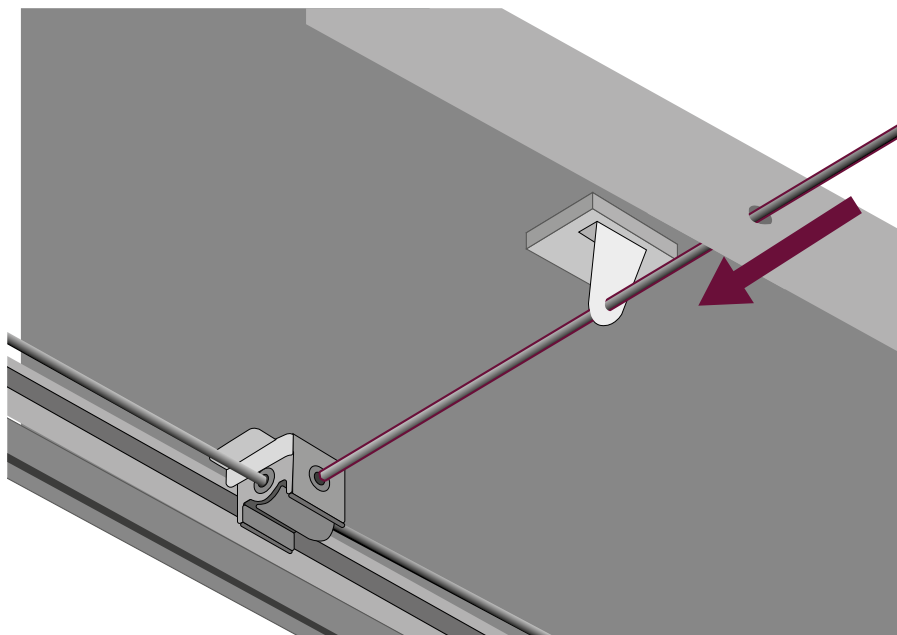
On straight run worktops, the handle for height adjustment should be located centrally between the hob and the sink. On L shaped worktops, the handle for height adjustment should be located on the front fascia of the hob run, 150mm from the corner. See page 74 for diagrams.



49.

For manual rise and fall

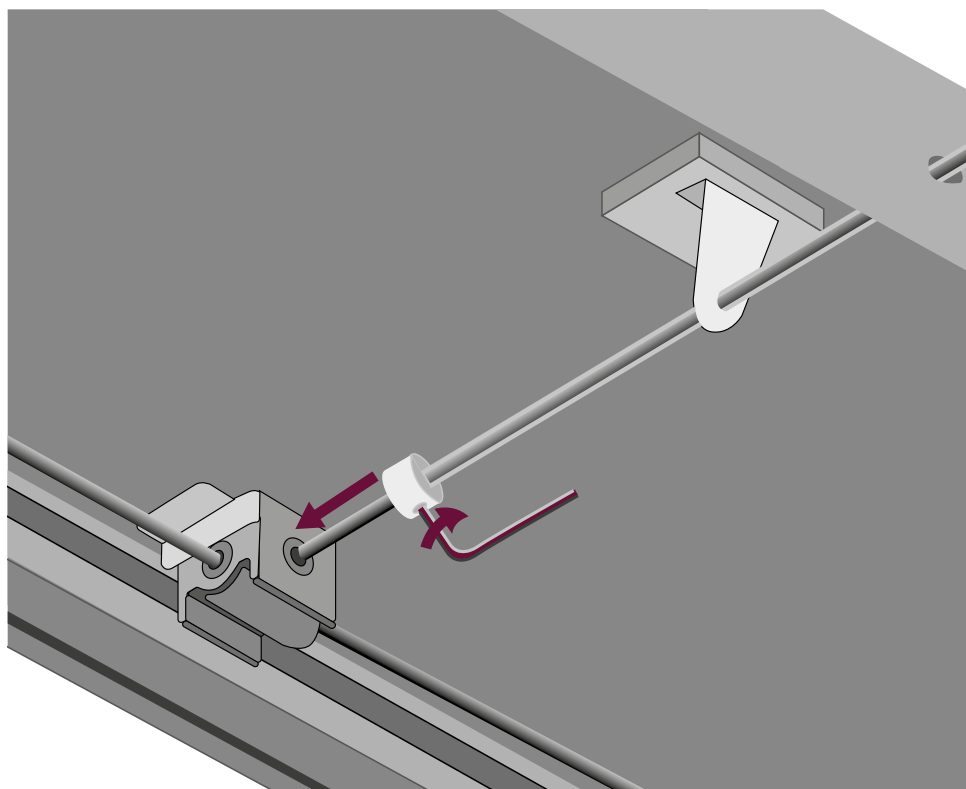
Insert the assembled spindle into the transmission.



50.

For manual rise and fall

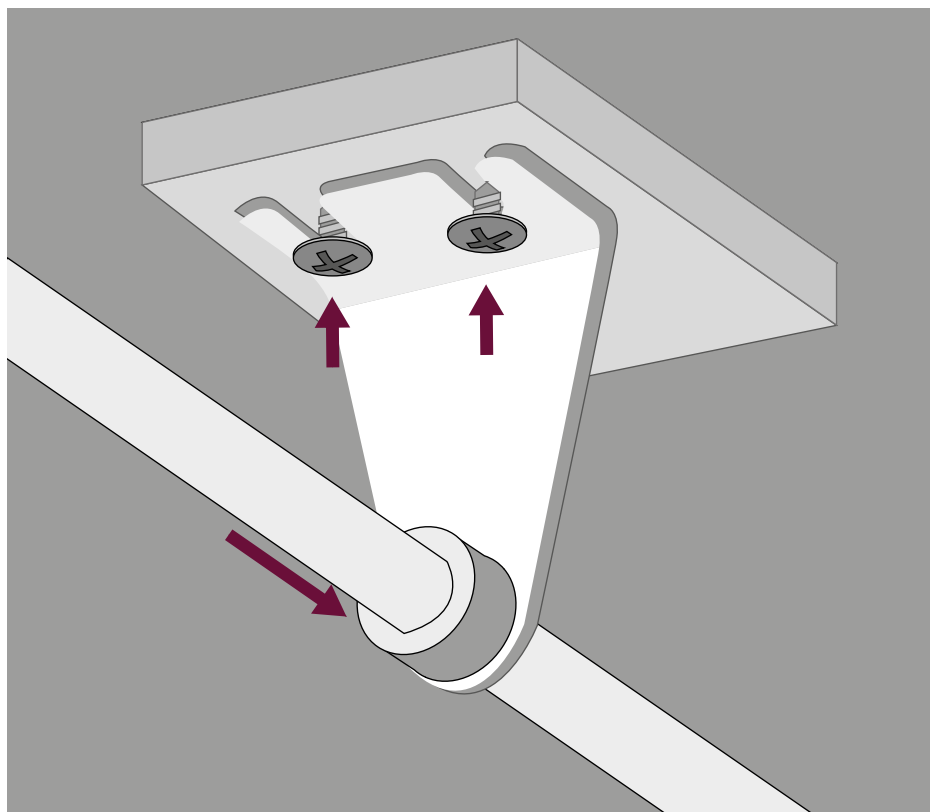
Loosen one of the M4-screws of the stop ring and pull the transmission spindle out to the required position in relation to the front fascia. Retighten the screw.



51.

For manual rise and fall

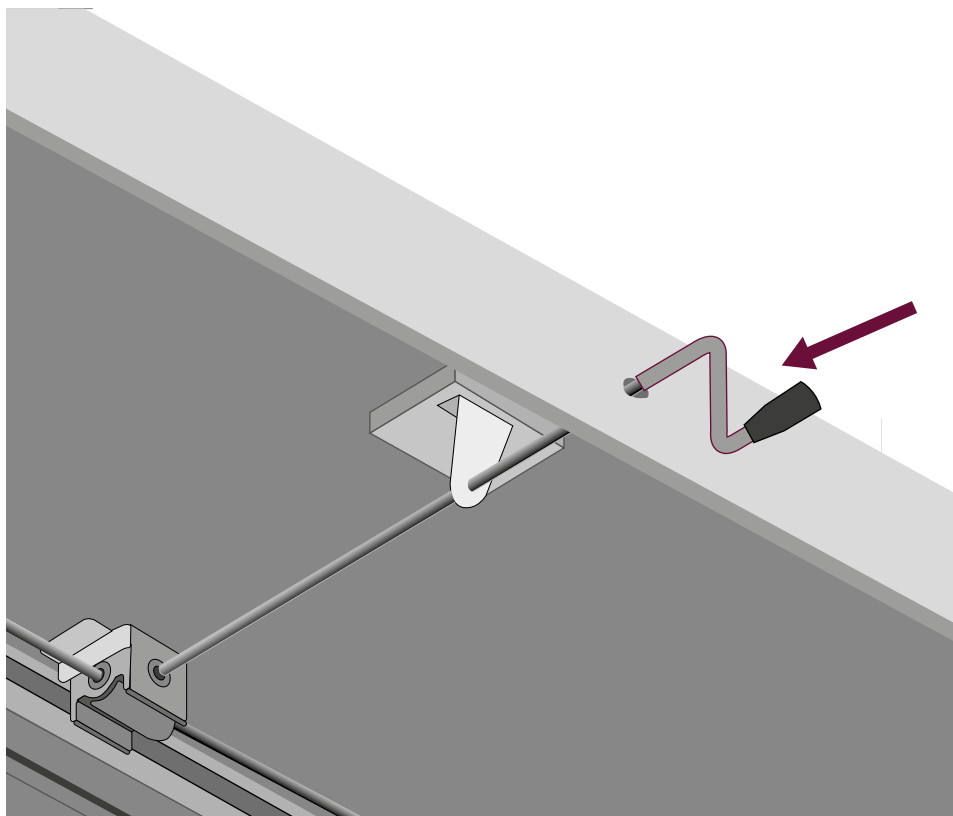
Pull the spindle suspension forward so that it may be fitted under the worktop and fasten it to the packer with screws. Push the small stop ring forward against the fitting and tighten the M4-screw. Fix packer to the underside of the worktop with glue.



52.

For manual rise and fall

Fit the handle. When the frame has been assembled, tighten all screws securely.



53.

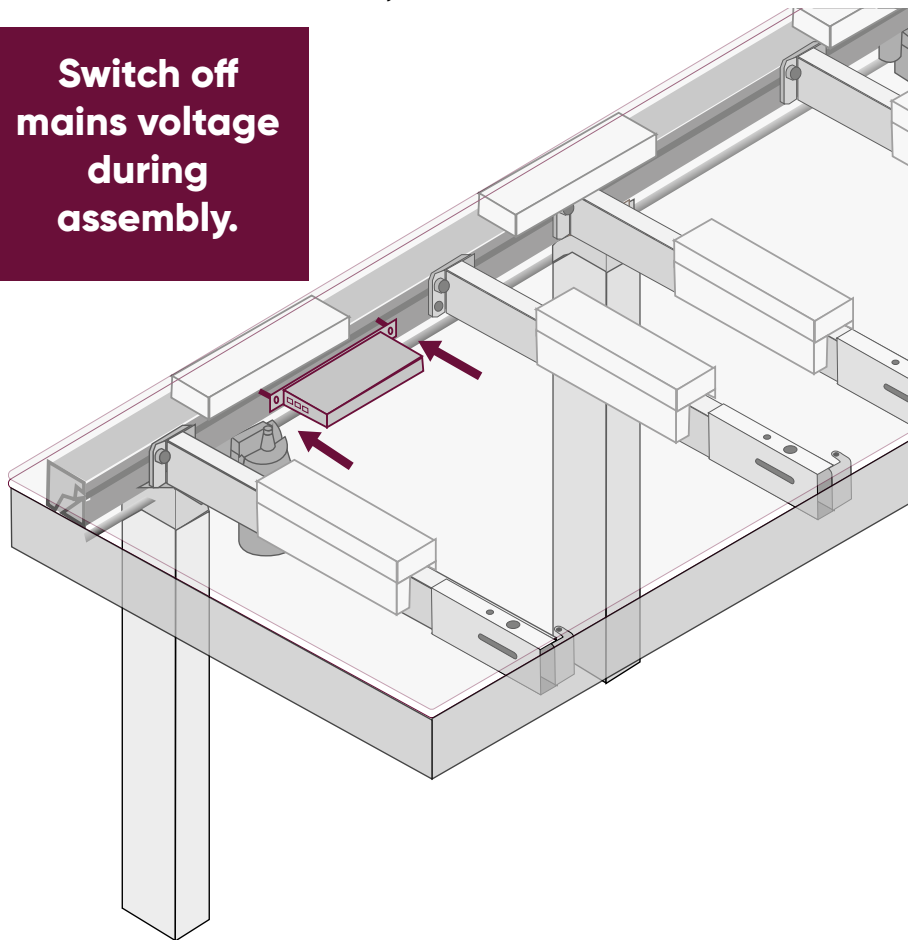
For electric rise and fall

Switch off mains voltage during assembly.

Turn the two nuts on the control box plate vertically, so that they fit into the long track on the aluminium profile. Position the plate on the front of the aluminium profile, and tighten the two M6 screws.

Ensure control box is fitted away from the induction hob.

**Switch off
mains voltage
during
assembly.**



54.

For electric rise and fall

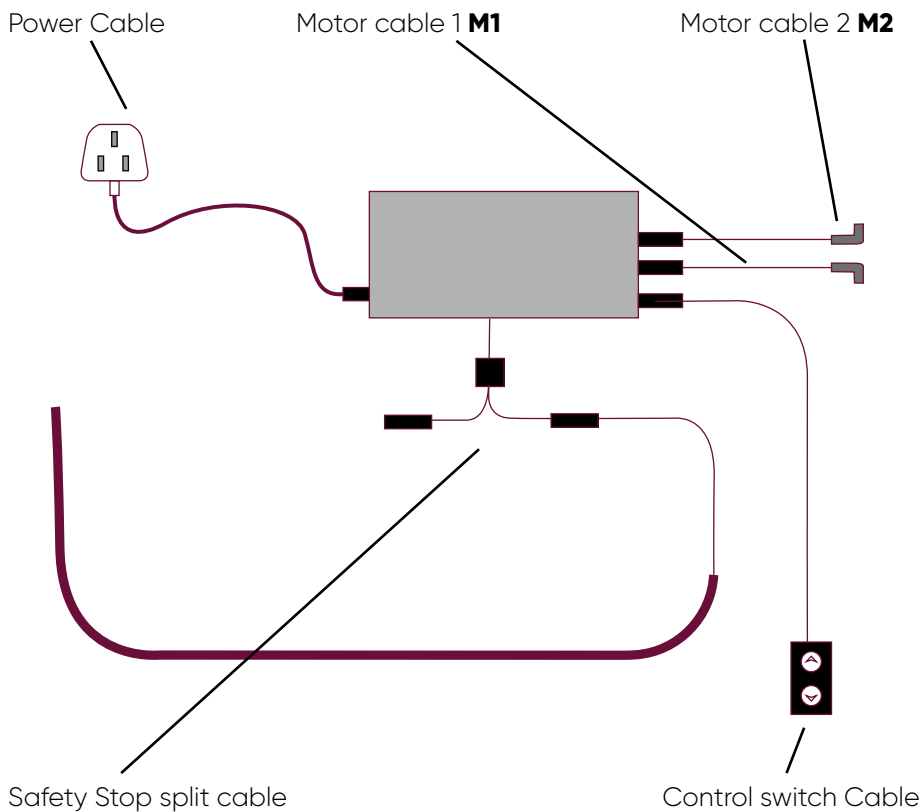
**Be careful not to damage
the safety strip during
transport or mounting.**

**If the safety strip is attached to
an uneven or curved surface,
whereby it is bent or distorted,
then the strip may not function
correctly.**

55.

For electric rise and fall

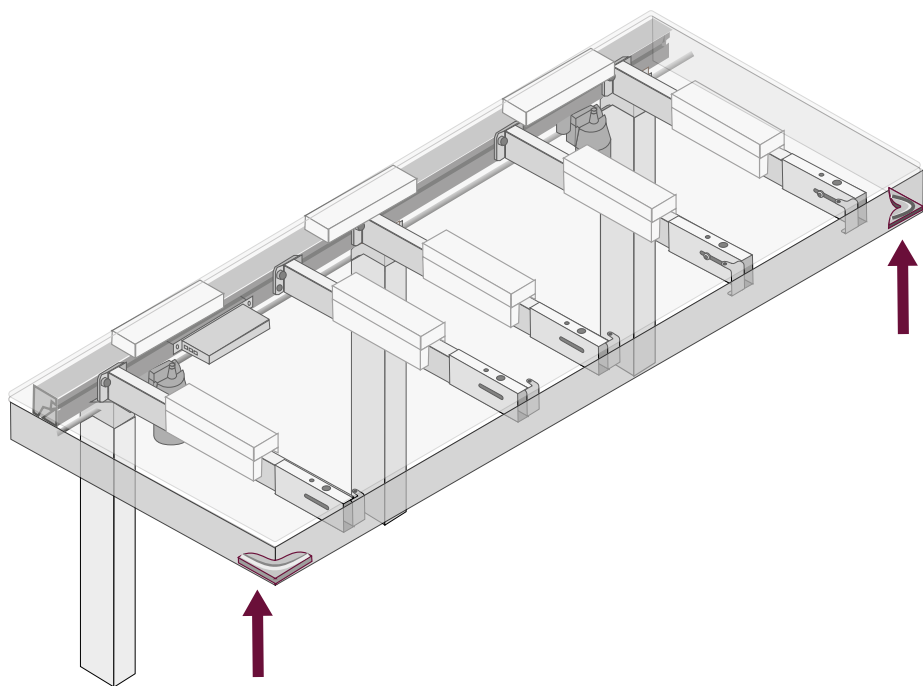
Mount all cable connections as illustrated.



56.

For electric rise and fall

The corner guides should be mounted first as a guide for the safety strip. They should be placed where the side fascia and front fascia meet.

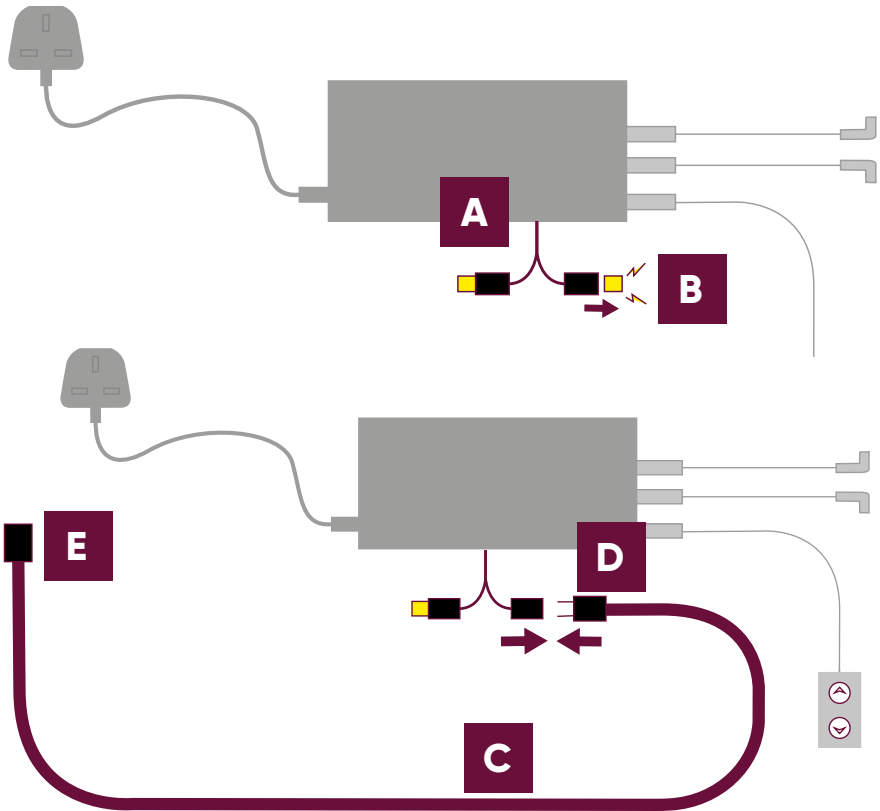


57.

For electric rise and fall

Pull out the yellow resistor plug (B) from the Y cable (A).
Connect the plug to the safety strip (C) with the available male plug (D).
The cut end of the safety strip must have a black resistor fitted (E), or the system will not work.

Ensure that if only one leg of the Y cable (A) is used, the other leg still has the yellow resistor connected, or the system will not work.



58.

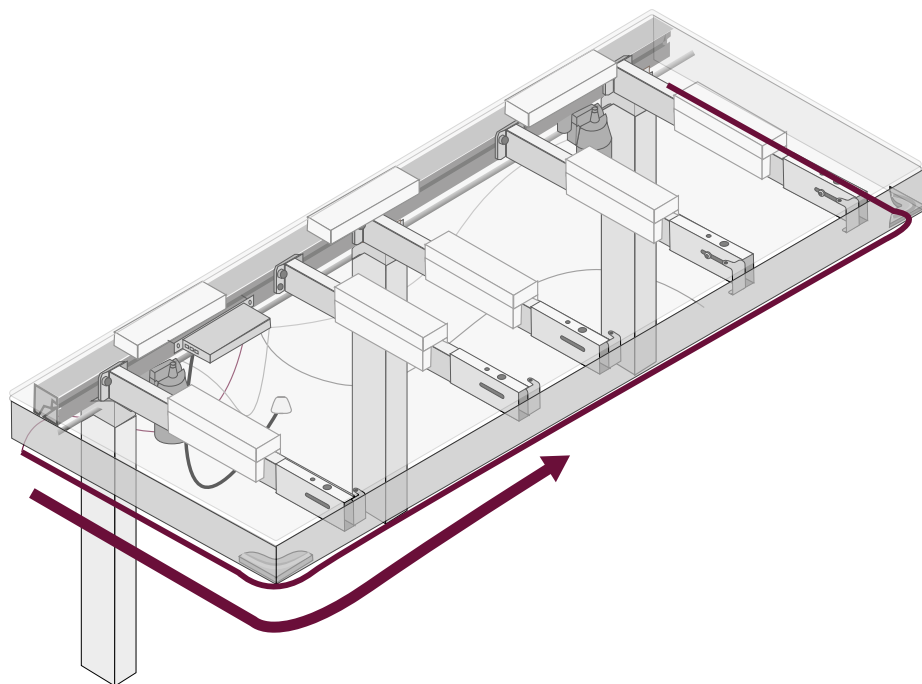
For electric rise and fall

Mount the safety strip on the bottom side of the fascia by means of double adhesive tape starting at the furthest point from the control box.

Remove the protective paper from the tape and press on the safety strip.

Be aware of the minimum inside bending radius $R_{min}=2cm$.

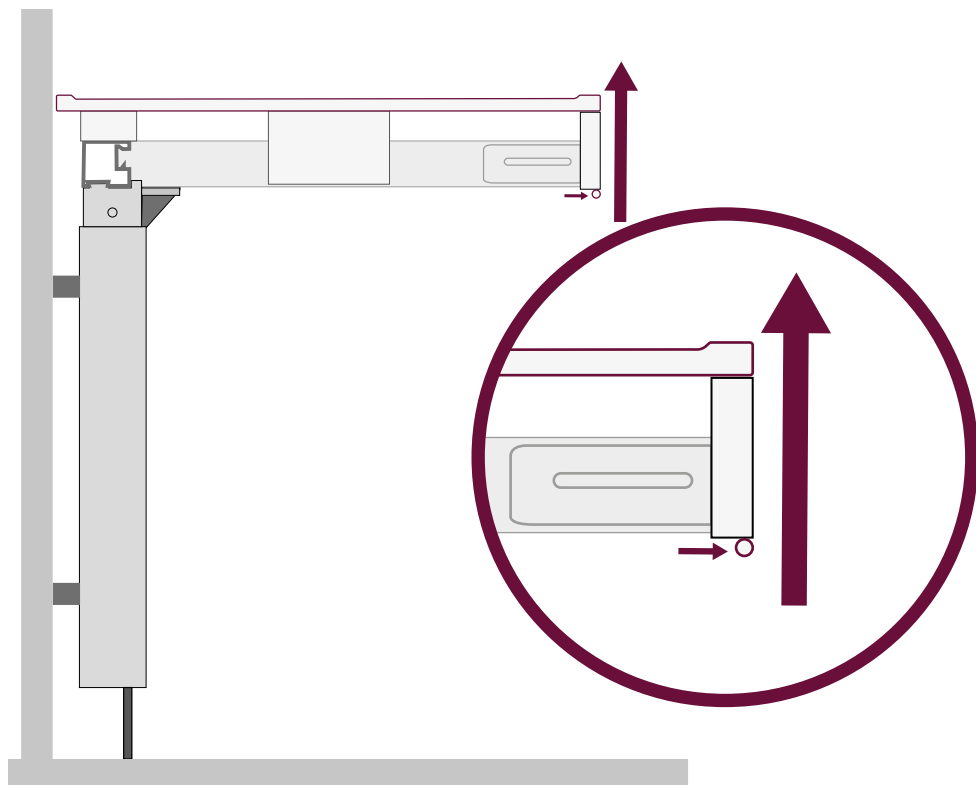
The surface to which the safety strip is attached must be clean, dry and degreased to obtain optimum adhesion. Please use provided cleansing tissue.



59.

For electric rise and fall

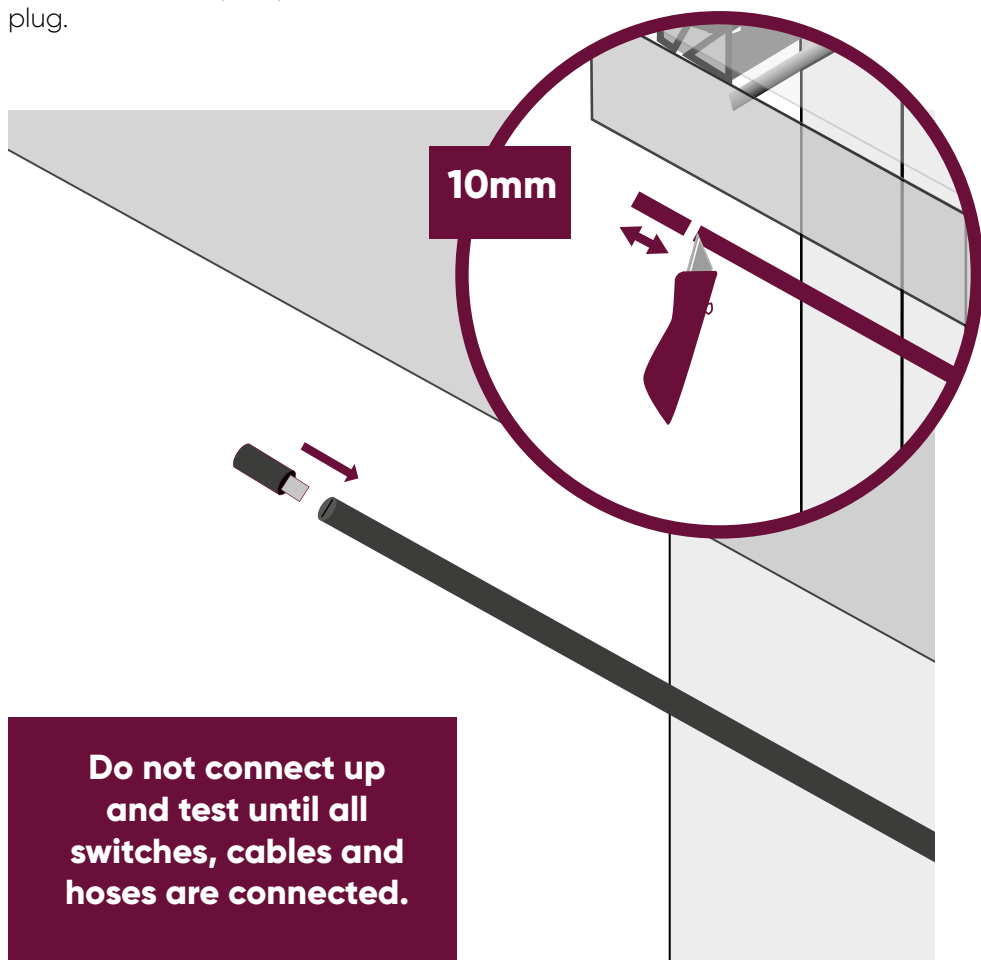
It is extremely important to mount safety strip in a straight line with the edge of front and side fascia. Maia has a slight curve to the bottom edge on the front, so the fascia will have to be fitted slightly back from the front edge.



60.

For electric rise and fall

Shorten the safety strip to 10mm shorter than fascia, then connect the end plug.

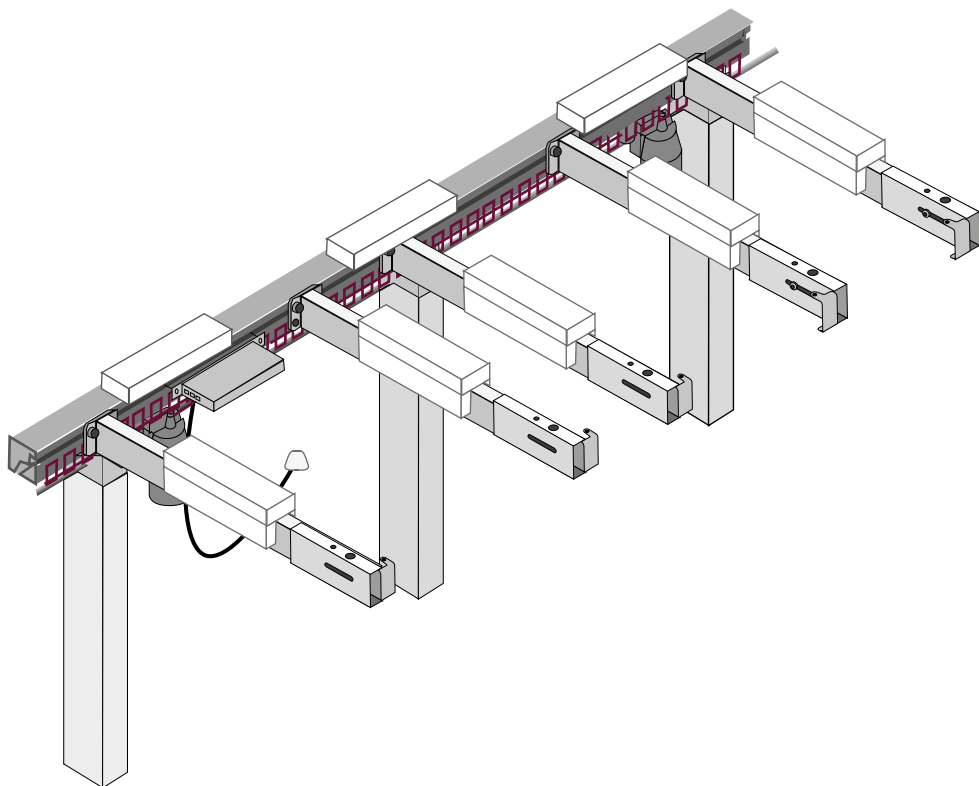


61.

For electric rise and fall

Fasten all loose cables using the cable bearers provided, and fit the bearers in the grooves of the aluminium profile.

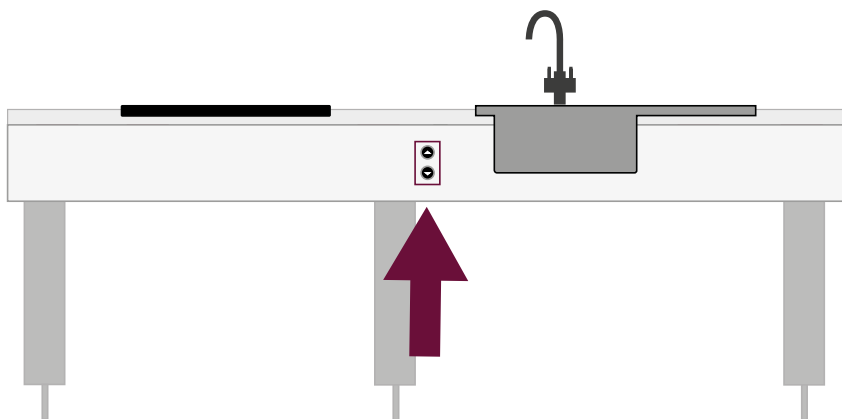
There should be no loose cables hanging down under the worktop.



62.

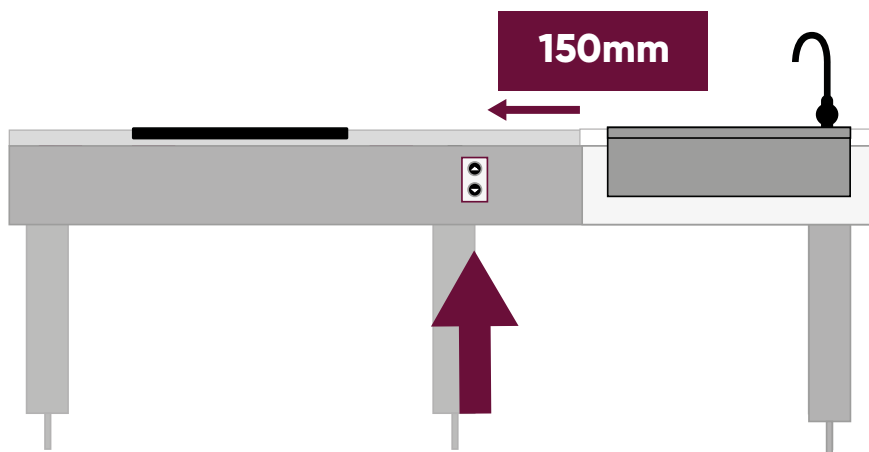
For electric rise and fall

On straight run worktops, the control switch for height adjustment should be located centrally between the hob and the sink.



On L-shaped worktops

The control switch for height adjustment should be located on the front fascia of the hob run, 150mm from the corner.



63.

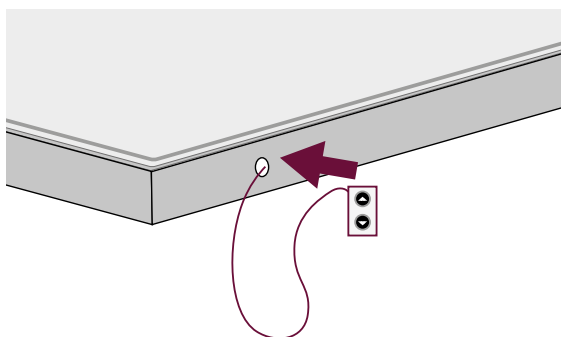
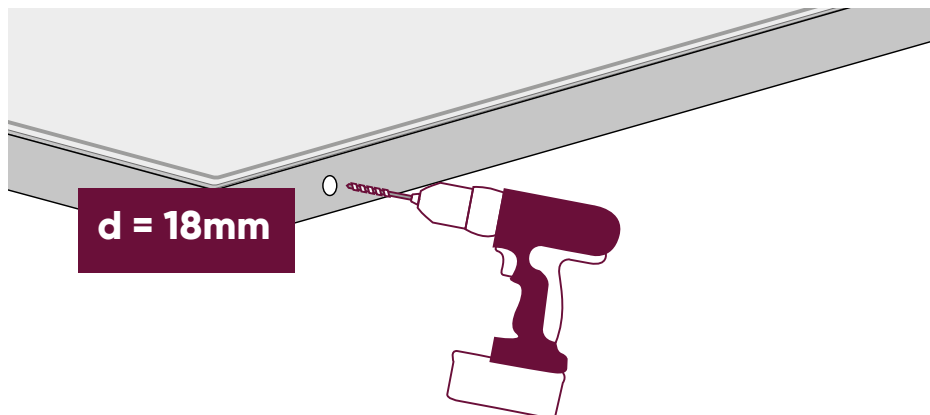
Drill an 18mm diameter hole in the front fascia. Push the cable through the hole in the front fascia from the front. Remove the protective paper on the double-sided tape on the back of the switch, and fix to the front of the fascia.

Keep your finger between the ribbon and adhesive on the backside to avoid ribbon from sticking.

It is important that the ribbon doesn't get in touch/contact with adhesive as this will damage the switch.

Fit the DIN plug of the cable on the control switch.

Ensure the cable in the immediate vicinity of the control switch is not too taut – slacken the cable before fastening into the bearers provided.

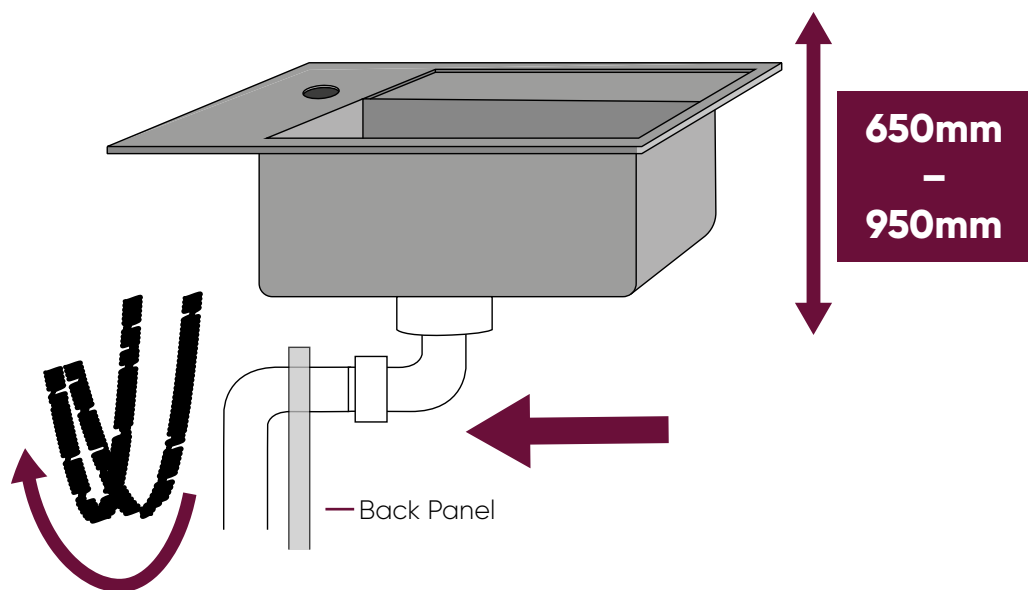


64.

When connecting hot and cold water and waste hoses, always use flexible hoses, so that the frame can move freely within the adjustment area of 650mm – 950mm.

Flexible hoses should be fitted so that they move in an arch parallel with the wall, but without getting squeezed.

Waste pipes should be directed backwards to increase space under worktop. There should not be a U-bend visible in front of the panels.



65.

For electric rise and fall

After installation and prior to use all functions must be tested. The test must be carried out by competent personnel. Subsequently the test shall be carried out at least once a year

Testing prior to connection of mains voltage:

1. Check that all mounting instructions have been observed.
2. Check that all bolts have been tightened.
3. Check that all cables have been connected correctly and that the plugs have been pressed home.
4. Check that there is no load on the frame.
5. Check that there is nothing preventing the frame from moving freely within the height adjustment range.

Start-up procedure:

1. Connect the net cable and turn on the power
2. Connect the motor cables to M1 and M2
3. Connect the control switch to HS
4. Press DOWN on the control switch and move the frame to the bottom position. Check that the movement is smooth and even. Make sure that the hose connections follow the movement of the frame and that they do not get squeezed. The frame is now reset.
5. Press UP on the control switch and move the frame to the top position.
Check that the movement is even and smooth. Make sure the hose connections follow the movement of the frame and do not get squeezed.

If a safety strip has been mounted under the frame, it must be tested as follows:

Press DOWN on the control switch and let the frame move 2-5cm downwards. Activate the safety strip by pressing it lightly. The frame should stop moving down, move 1-2cm upward and stop.

If a safety strip and smart box has been fitted above the frame, this must be tested as follows:

Make sure the frame is in the bottom position. Press UP on the button and let the frame move 2-5cm upward. Activate the safety strip above the worktop. The frame should stop moving up, move 1-2cm downward and stop.

Refer to the performance test / cleaning / maintenance instructions in the Ropox manual provided. Leave the Ropox User Manual with the end user, for reference.

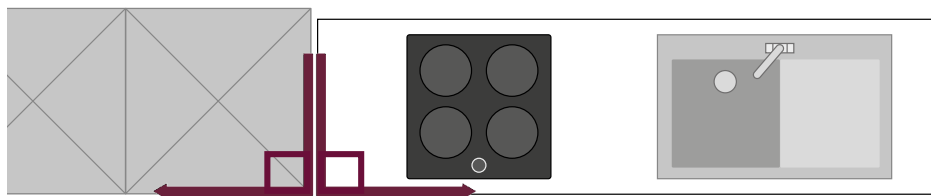
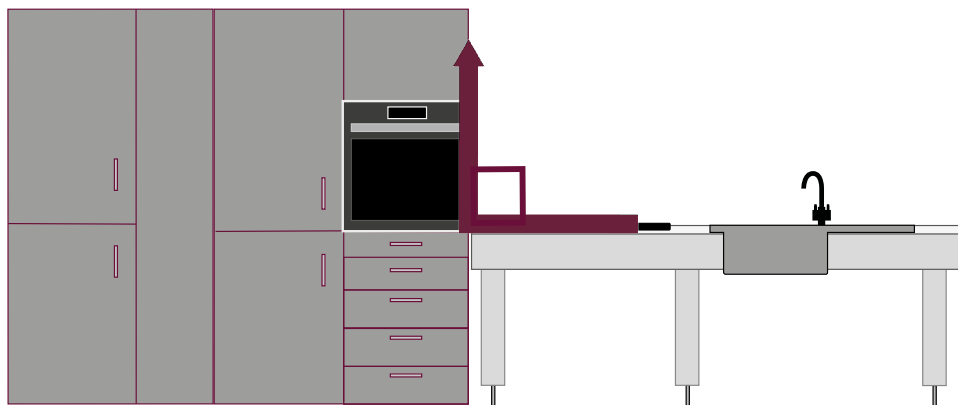
Troubleshooting

Problem	Reason	Solution
System will only move down, not up.	System needs to be recalibrated.	Use the down button to move the system to its lowest position. Then, let go of button. Hold down button for five seconds to reset the system.
Clicking sound when buttons are pressed, but no movement	The safety strip and/or other cables have not been correctly installed.	Check for any loose connections. Check that there are no kinks or bends in the safety strip. If the safety strip runs round a corner, check that the corner guides have been used. Check that the Y cable from the centre of the control box has the correct connections (see page 70). One leg should be connected to a safety strip with a black resistor on the cut end, and the other leg should be connected to either a second safety strip with a black resistor on the end, or a yellow resistor.
Clicking sound when buttons are pressed, but the system moves minimally or not at all.	The control box may be the wrong type, or is connected using the wrong sockets.	Check the control box label states the correct number of motors for the system: the white label will state either 1 motor or 2 motors. Check that the cable between the motor and the control box has been inserted into the correct socket. When using one motor, connect the cable to the M1 socket. When using two motors, connect the cables to the M1 and M2 socket. Do not use the socket labelled M3.
All the above have been checked, but the system will not move.	Full recalibration required.	Leave the power on to the control box, and unplug the cable from socket M1 (and M2 if using). Then reinsert the cables in the sockets, and follow step one above to recalibrate the system.

<https://www.symphony-group.co.uk/freedom-installation/>

66.

Make any adjustments to the tall units as required to ensure they are at right angles to the rise and fall worktop, and fix into position.
Fit fillers and blender panels around tall units.

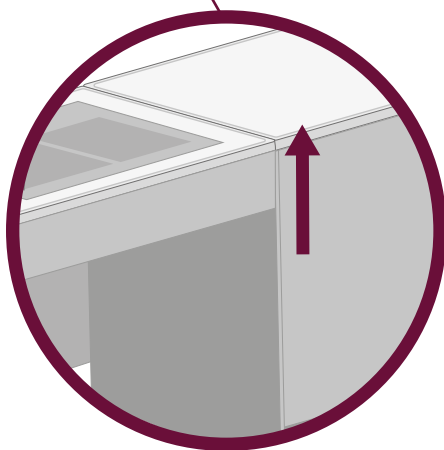
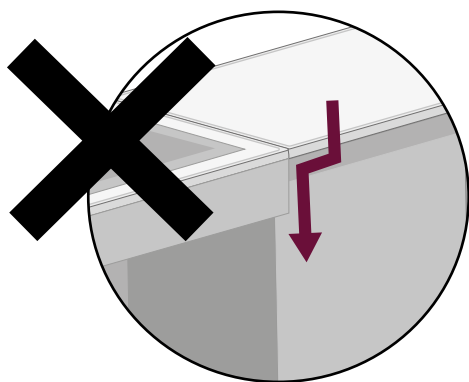
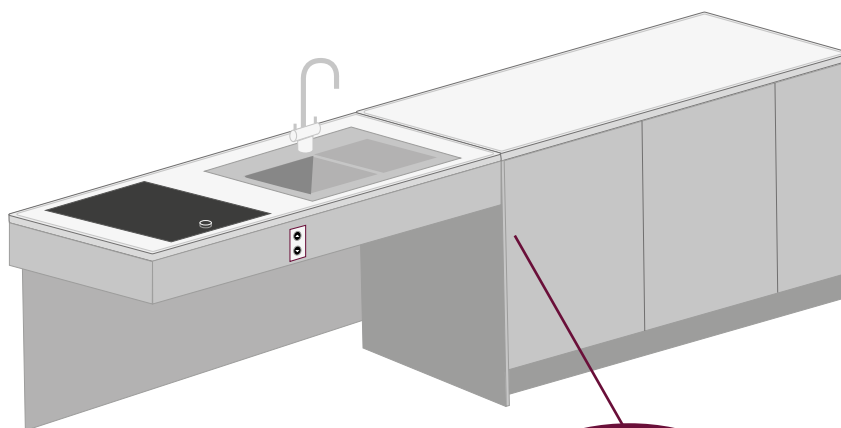


67.

Fit the remaining base units in position around the rise and fall worktop. They should be spaced away from the wall by 60mm to allow for a 650mm deep worktop with the front of the doors flush with the front of the worktop. They should be set out with the same plinth height as the tall units.

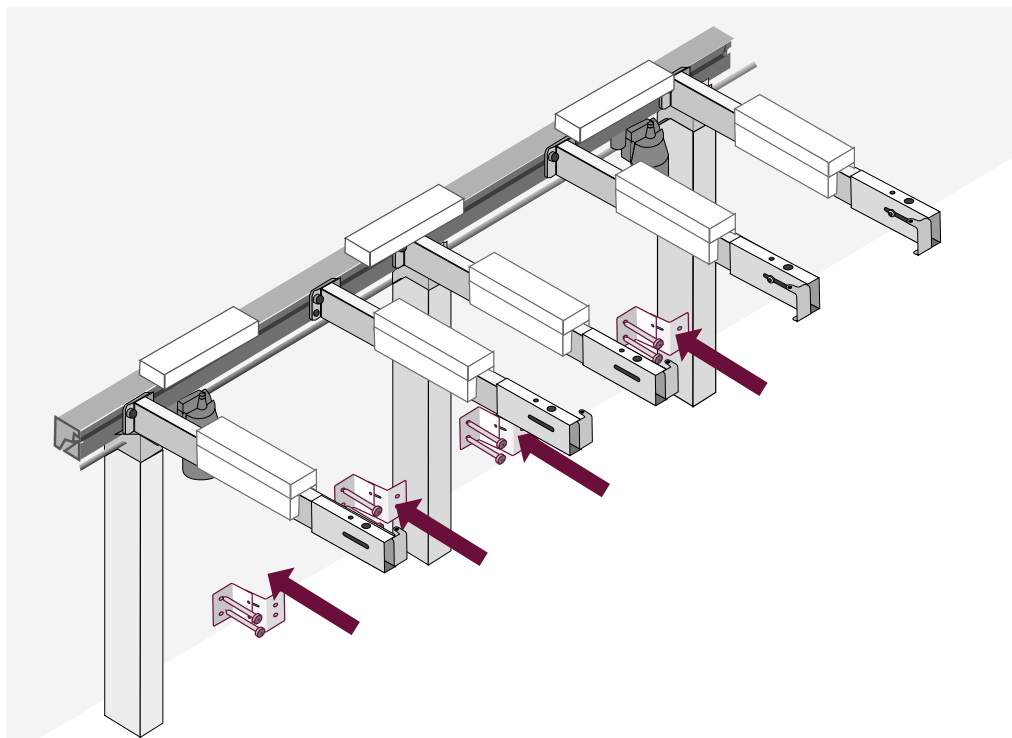
Ensure units are placed so that there is a 5mm gap at either end of the rise and fall worktop.

Ensure there are no worktop overhangs directly next to the rise and fall section of worktop.



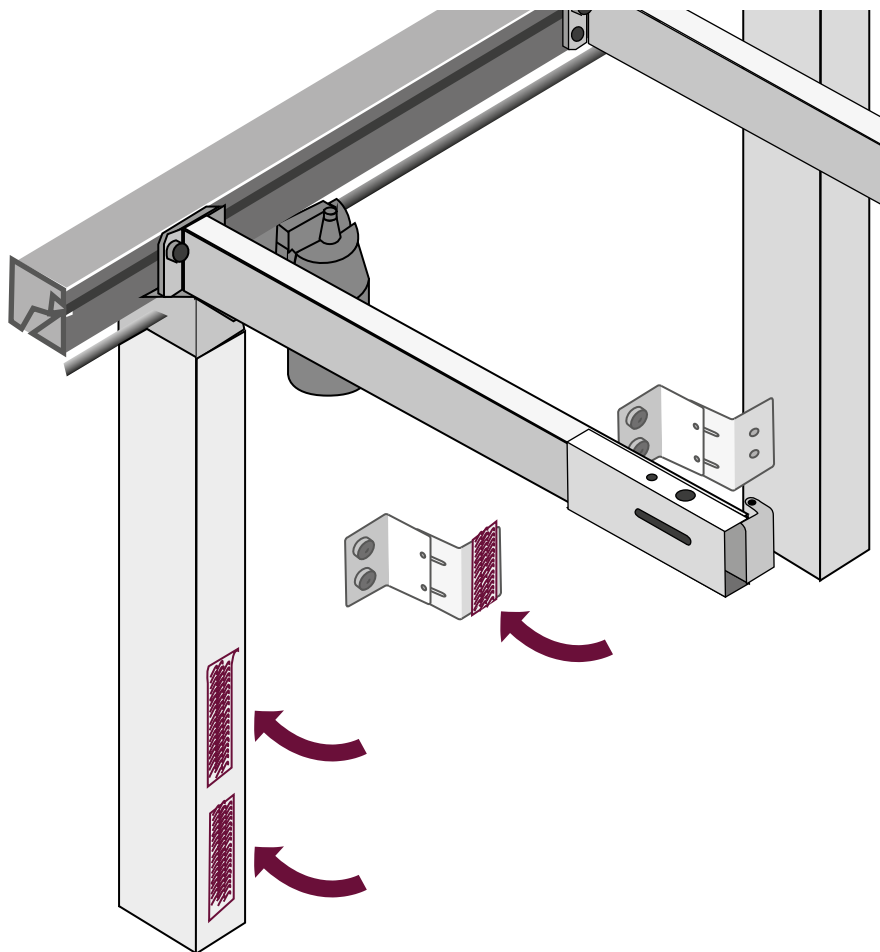
68.

Screw fittings for concealment panel to wall. Adjust them to make sure that the front of the fittings is in line with the front of the legs.



69.

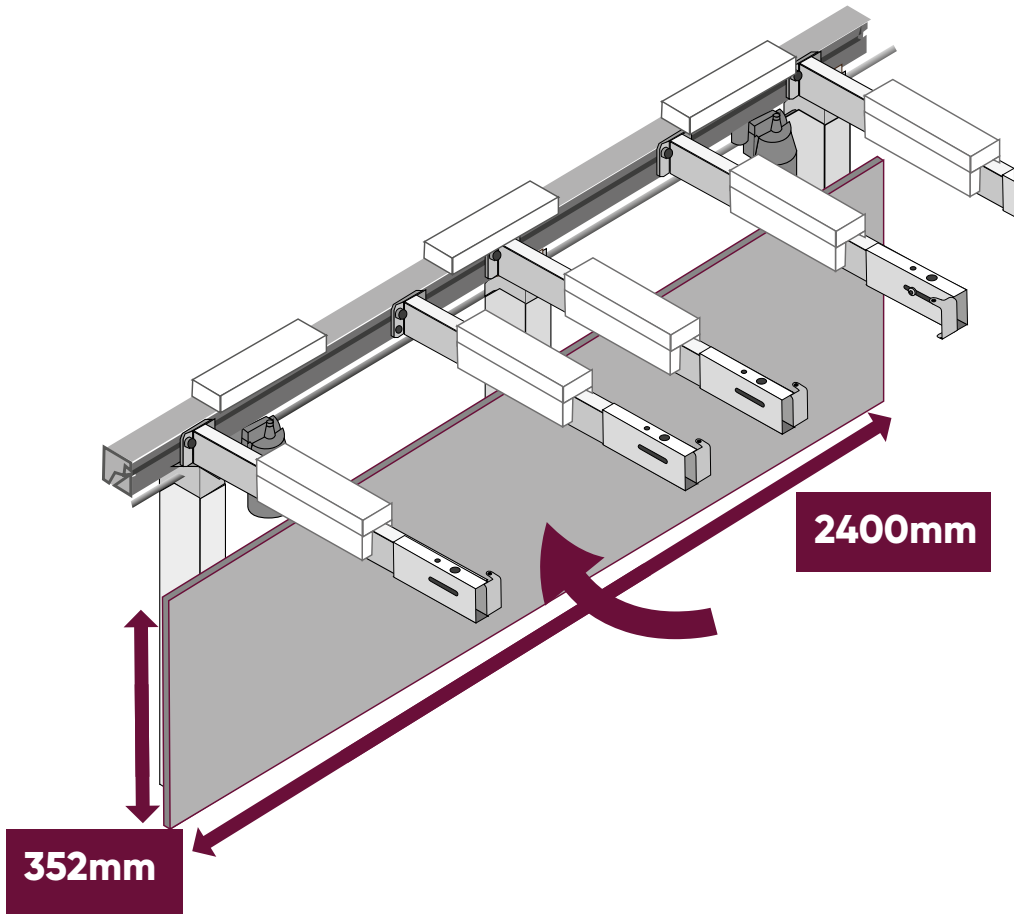
Attach a piece of Velcro to the legs and to the fittings.



70.

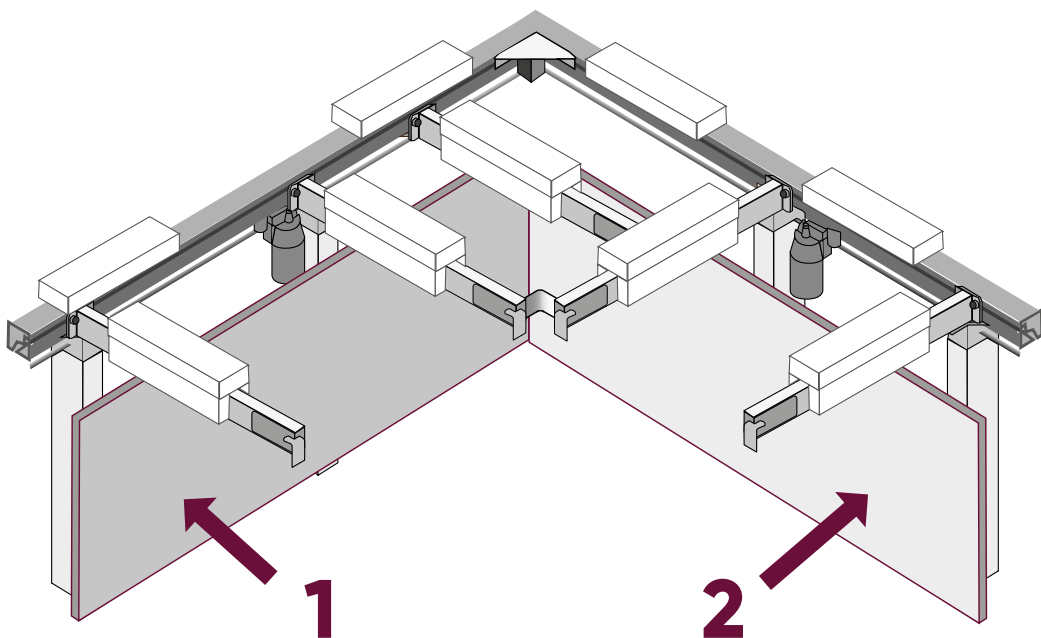
Attach the bottom panel (352mm) to the Velcro. It should be touching the floor, and flush with the units / panels either side.

For 2700mm and 3000mm worktops 2 panels be used and joined on site.
This applies to the front fascia as well



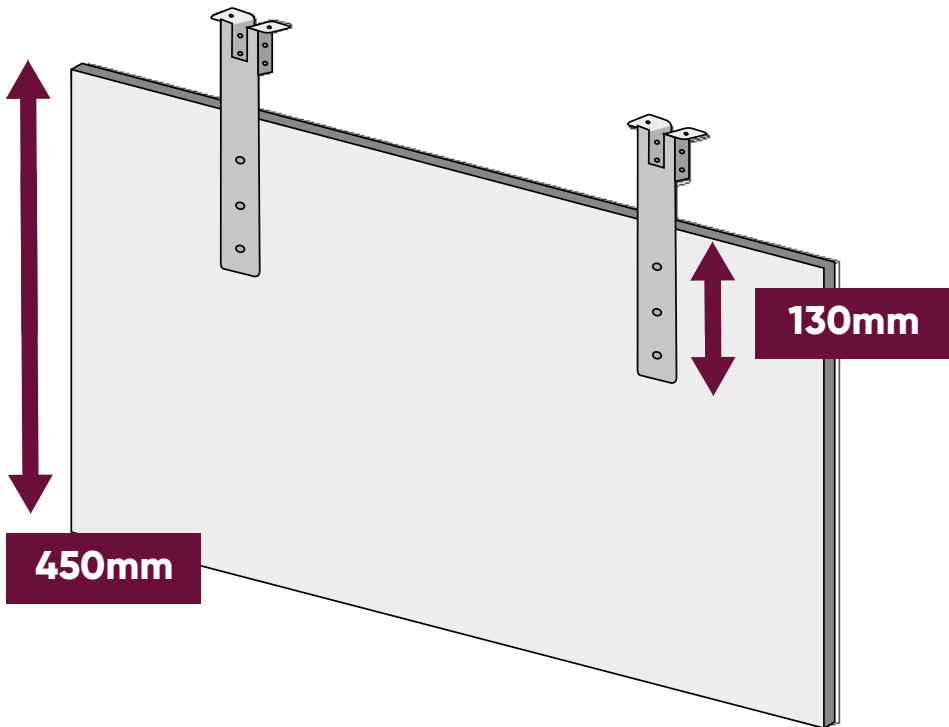
71.

On L shape, fit panels behind hob area first, and panels behind sink area second, to aid removal in case of a plumbing issue.



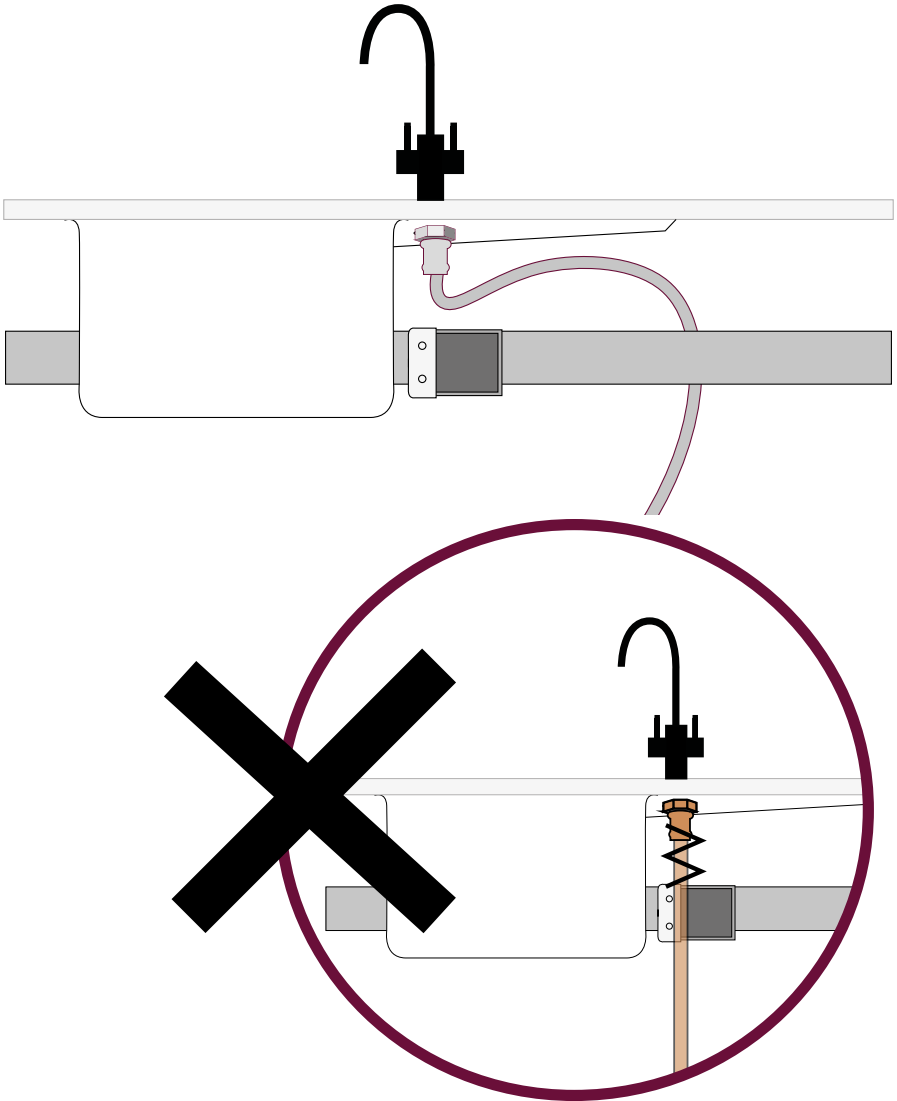
72.

Cut the top panel from 750mm high to 450mm high. Cut the panel in length so that it fits under the worktop with a 5mm gap at each end. Screw the top brackets into the top panel, so that the bottom of the bracket plate is 130mm from the top of the panel.



73.

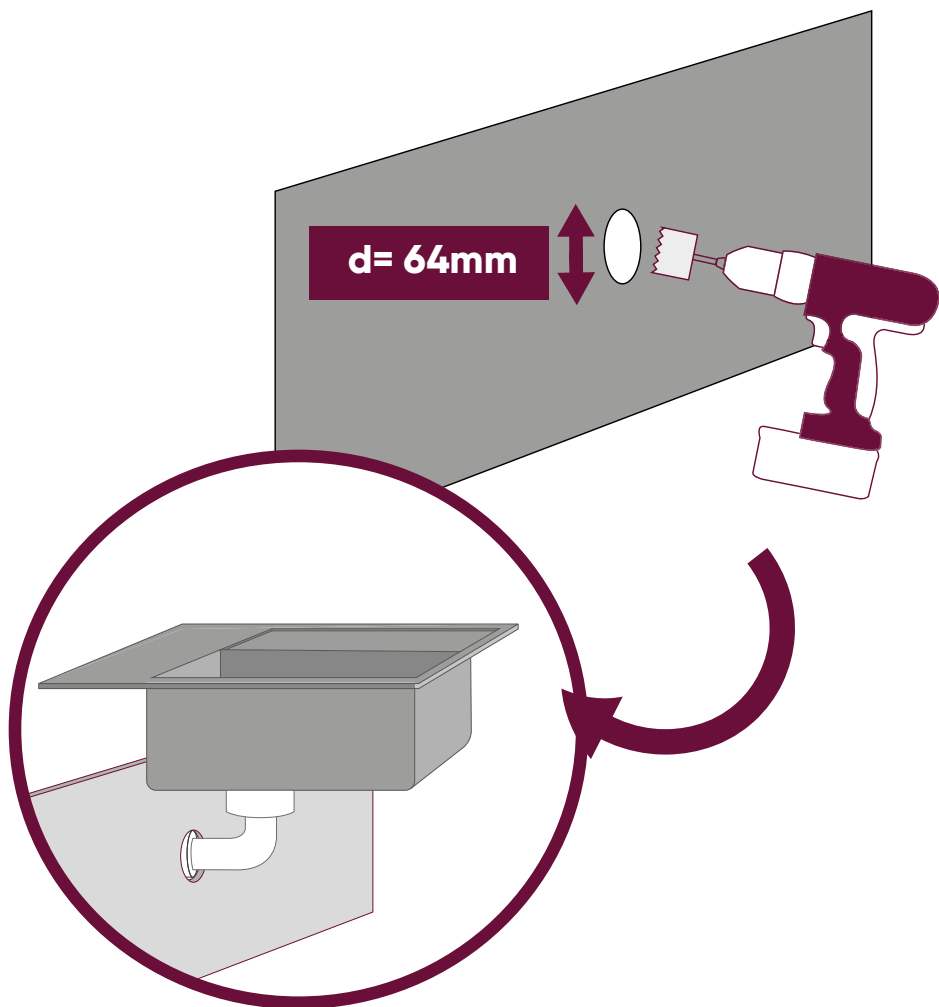
Use flexi tails on taps. Copper tails will clash with the top of the mechanism.



74.

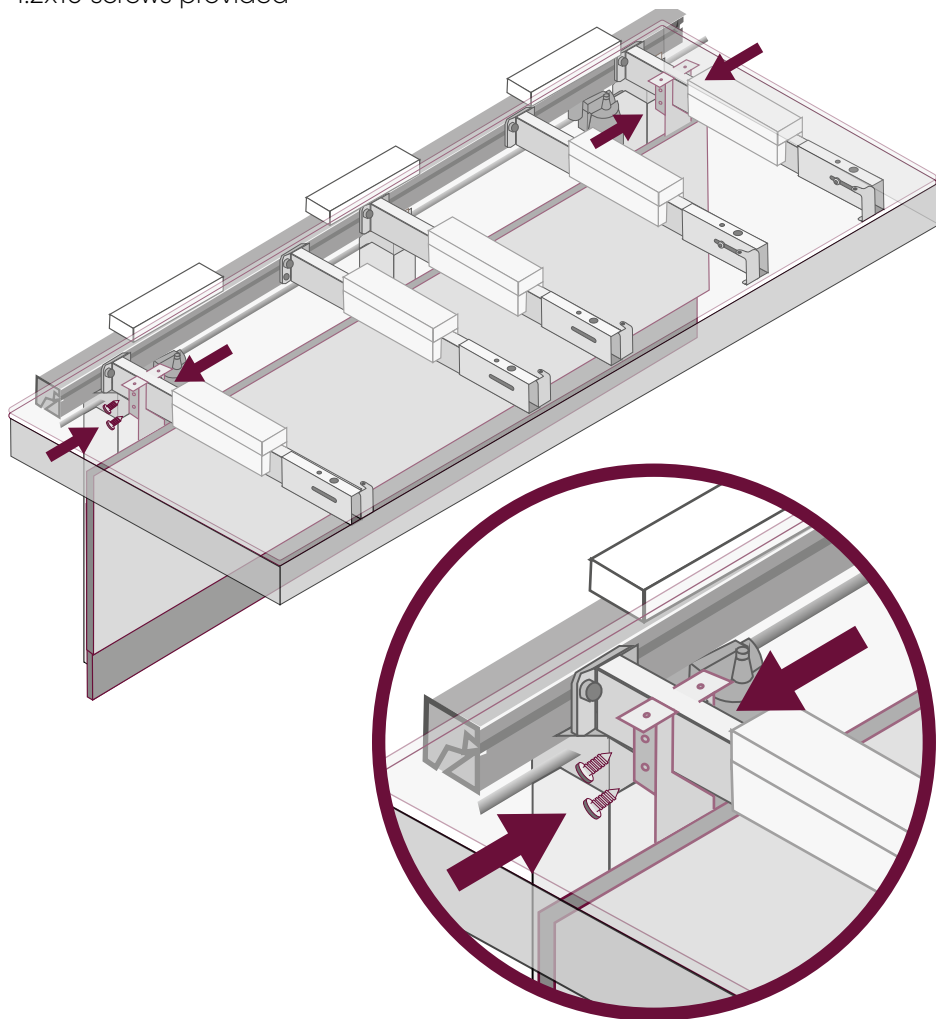
Calculate the location for the hole for sink waste. Drill a 64mm diameter hole, and seal with a suitable sealant.

The sink waste does not need to be slotted.



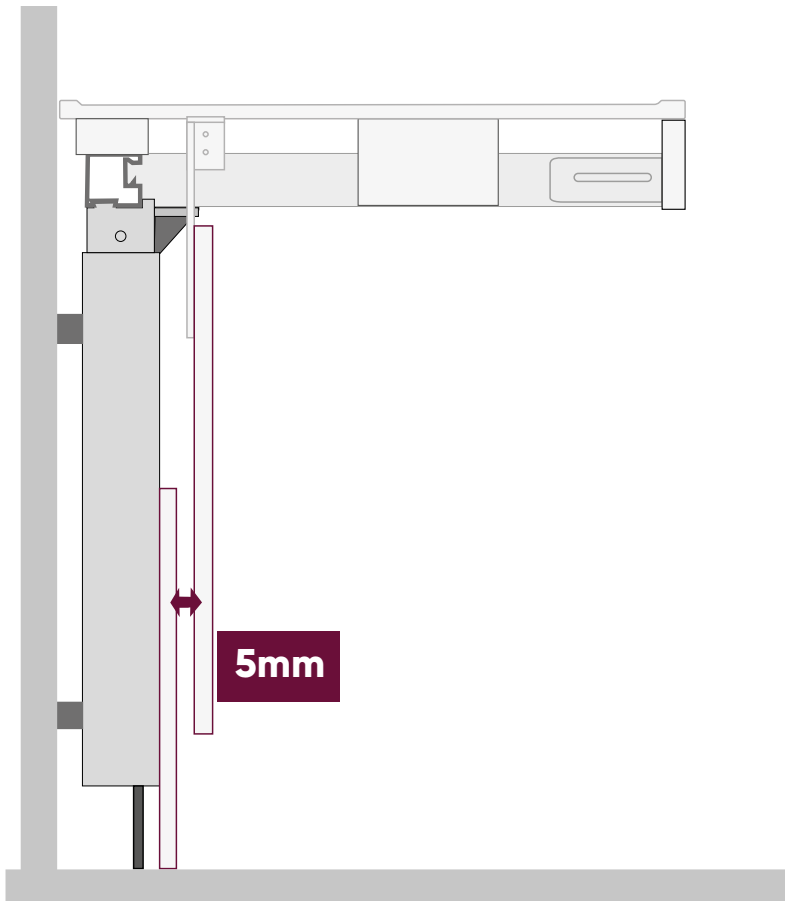
75.

The cover plates can be screwed onto the support arms of the frame. Place the top brackets in front of the support arms and drill 3.5mm diameter holes into the support arms. Then fix the top brackets with the 4.2x10 screws provided



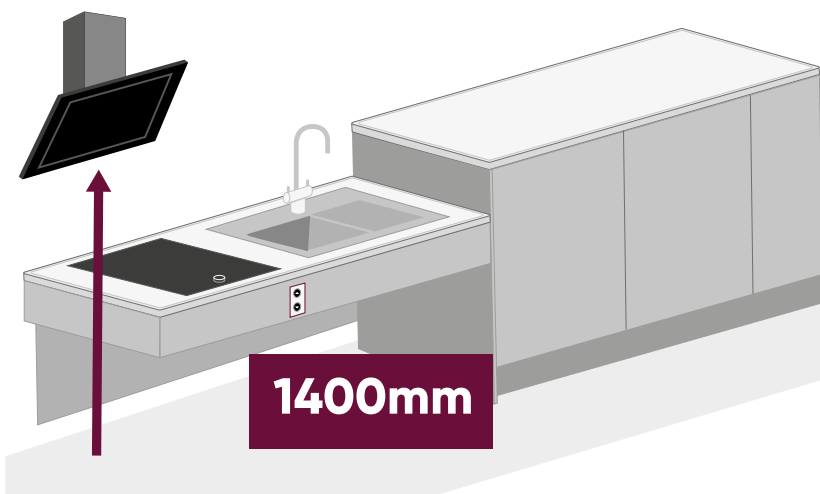
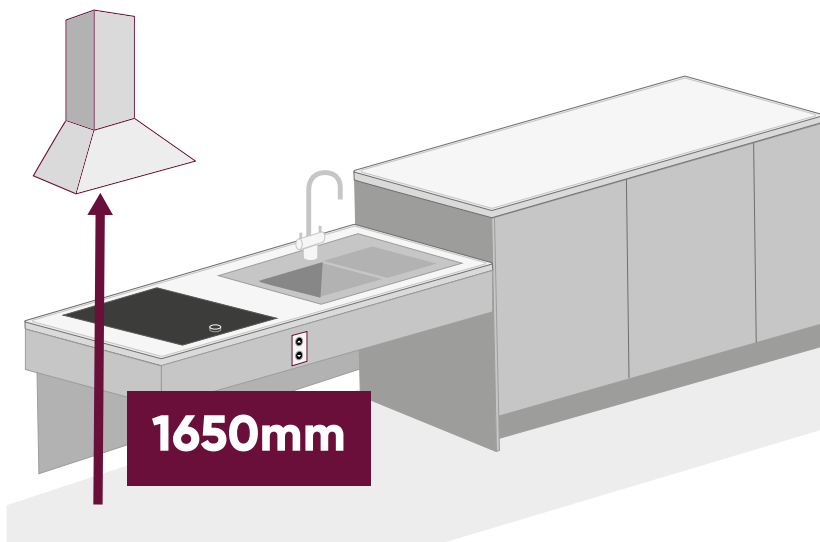
76.

Position the panels so that there is a 5mm space between the front of the bottom panel and the back of the top panel.



77.

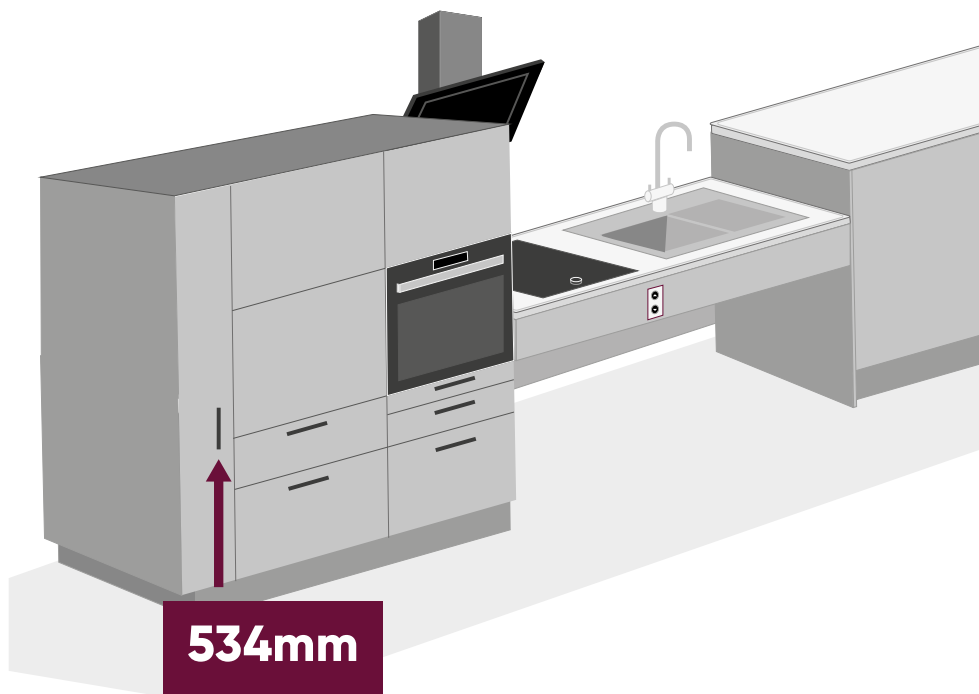
If no height is specified on the plan, then fit the base of a chimney extractor 1650mm from the floor, and fit the base of an angled extractor 1400mm from the floor.



78.

Fit base handles at a comfortable usable height for the client.

On tall units, if no personalised measurement is available for the lower/ full height door, then fit the handle with the lowest screw 534mm from the bottom of the door and a standard distance in from the side of the door.



79.

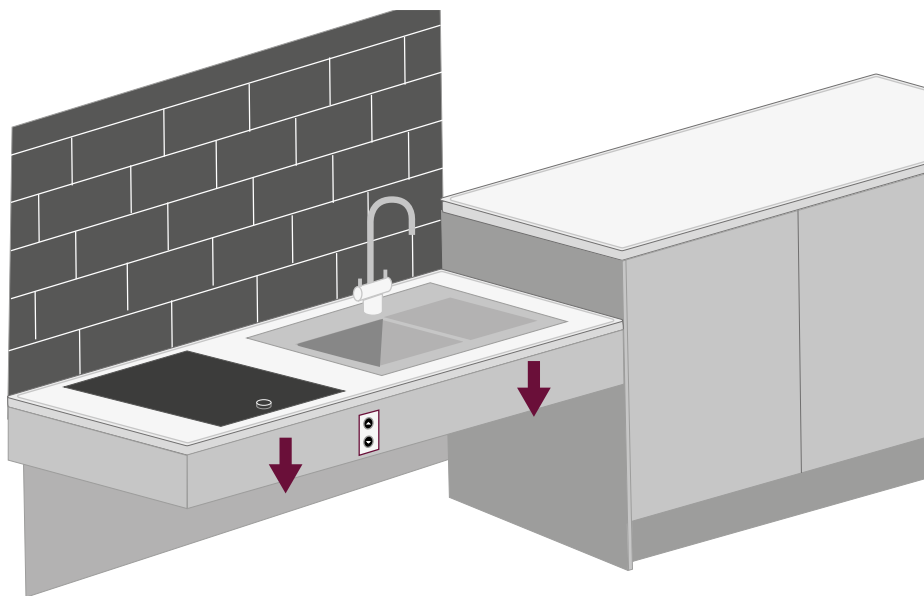
Tile / glass splashbacks can be fitted AFTER the rest of the kitchen.

Move the rise and fall to the lowest point and then fit tiles or splashback.

Fit the tiles or splashback so that the bottom edge is below the lowest height of the worktop, so that there is no risk of trapping items in the gap between.

Ensure the tiles are not so thick that they interfere with the movement of the worktop.

Ensure that on any runs with a rise and fall worktop, the front edges of all worktops, panels, and doors are flush with each other, to prevent trapping issues.



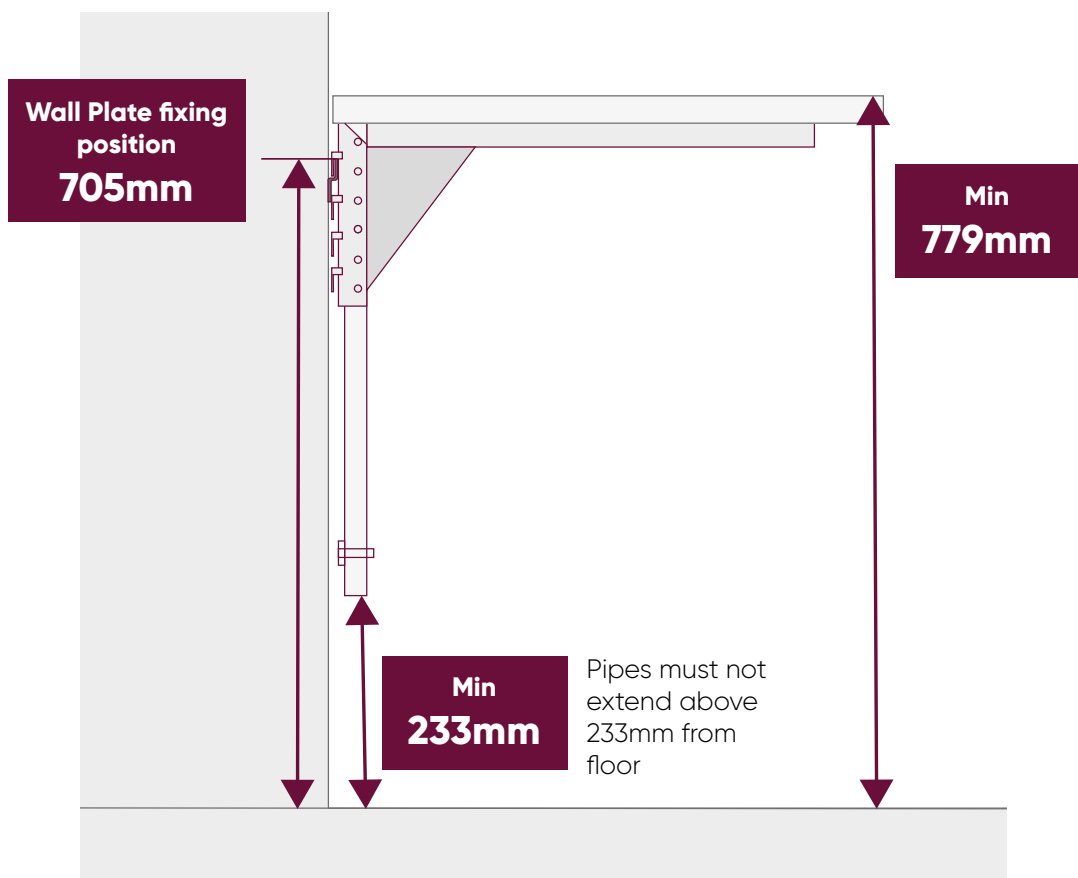
Fixed height worktops

F1.

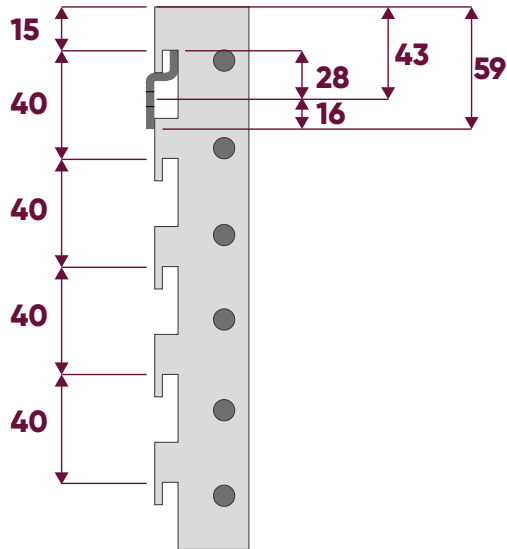
For fixed height worktop

Fix the wall hanging plates at 705mm from the floor. The plates can be cut to size to suit the space.

For worktops on fixed brackets, pipework should be fitted within the walls where possible. If this is not possible, the top of the pipework should be a maximum of 233mm from the floor, so it does not clash with the support arms in their lowest position. Ensure there is sufficient fall for water to drain from the sink.

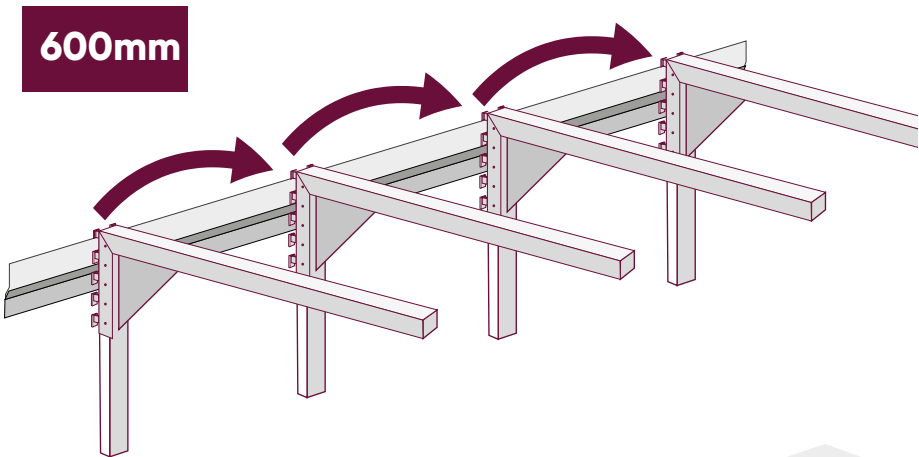


For fixed height worktop



F2.

Set support brackets at every 600mm space, before fitting worktops and fascia.



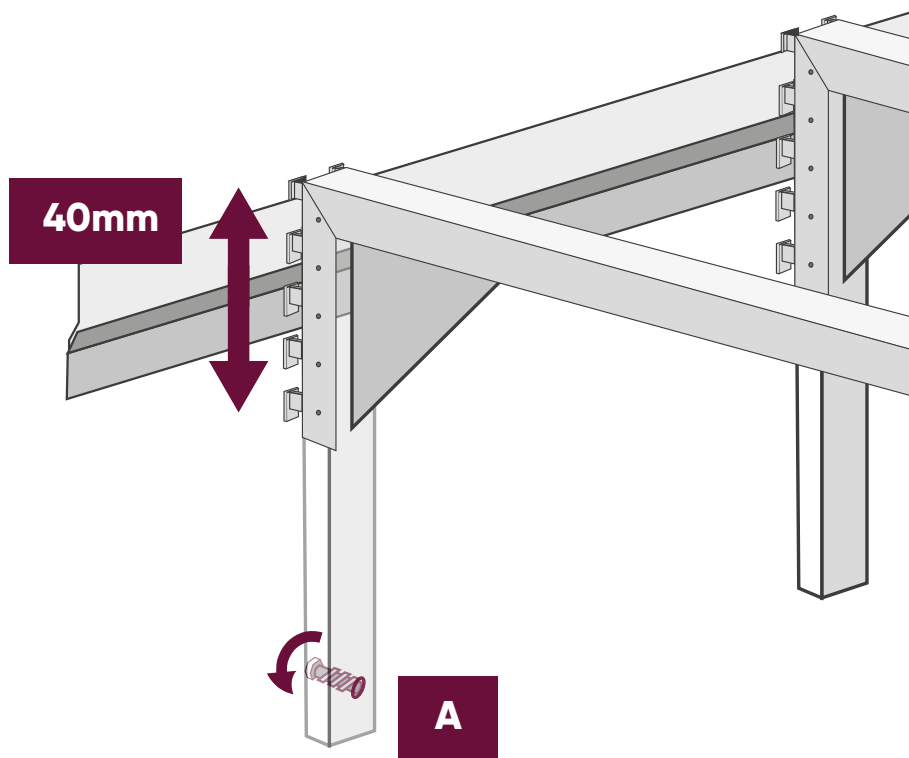
F3.

For fixed height worktop

Hanging brackets allow five levels of adjustment between minimum and maximum heights in 40mm increments.

Fixed worktop brackets should be set at an appropriate height for the user, or as advised by the site manager. Height from the floor to the top of the bracket can be 779mm, 819mm, 859mm, 899mm, or 939mm. Add the worktop thickness to calculate the finished height, e.g. a bracket at 859mm with a 40mm worktop will ensure the top of the worktop is 901mm from the floor.

Further adjustment is made by turning the adjuster screw at the bottom of the brackets with a 19mm spanner (A).



F4.

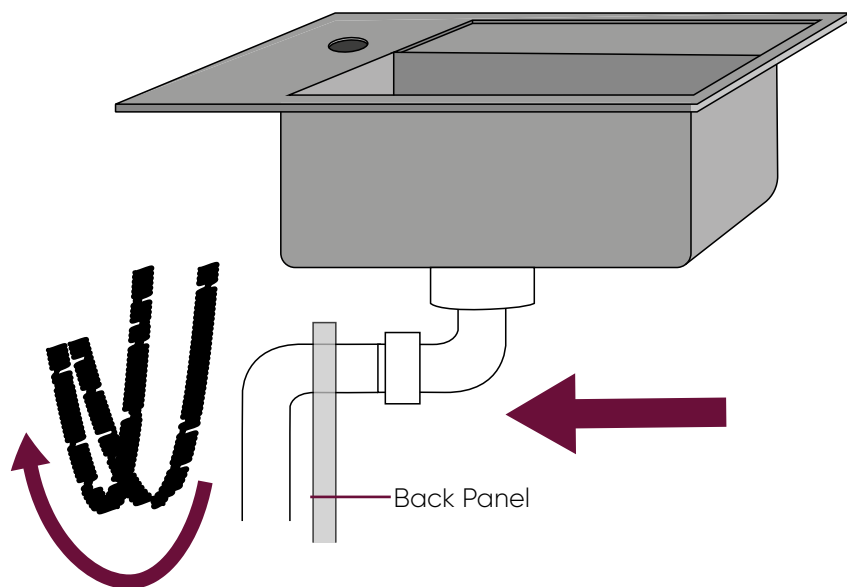
For fixed height worktop

Drainage height should be below 400mm.

When connecting hot and cold water and waste hoses, always use flexible hoses.

Flexible hoses should be fitted so that they move in an arch parallel with the wall, but without getting squeezed.

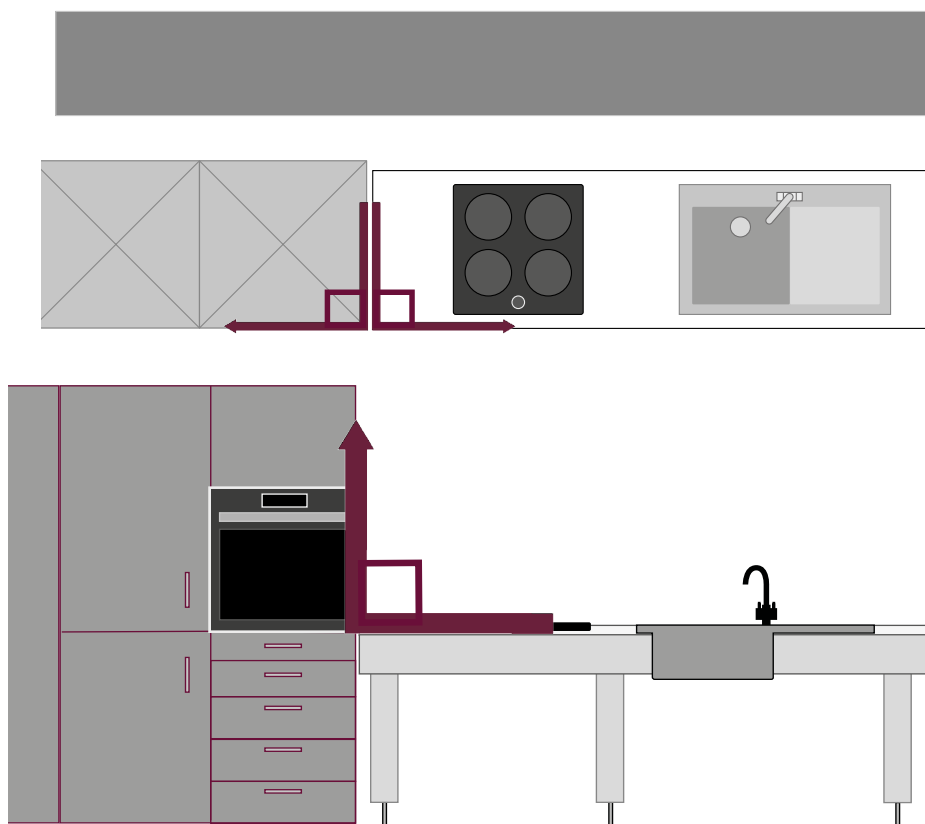
Waste pipes should be directed backwards to increase space under worktop. There should not be a U-bend visible in front of the panels.



F5.

For fixed height worktop

Make any adjustments to the tall units as required to ensure they are at right angles to the fixed height worktop, and fix into position.
Fit fillers and blender panels around tall units.

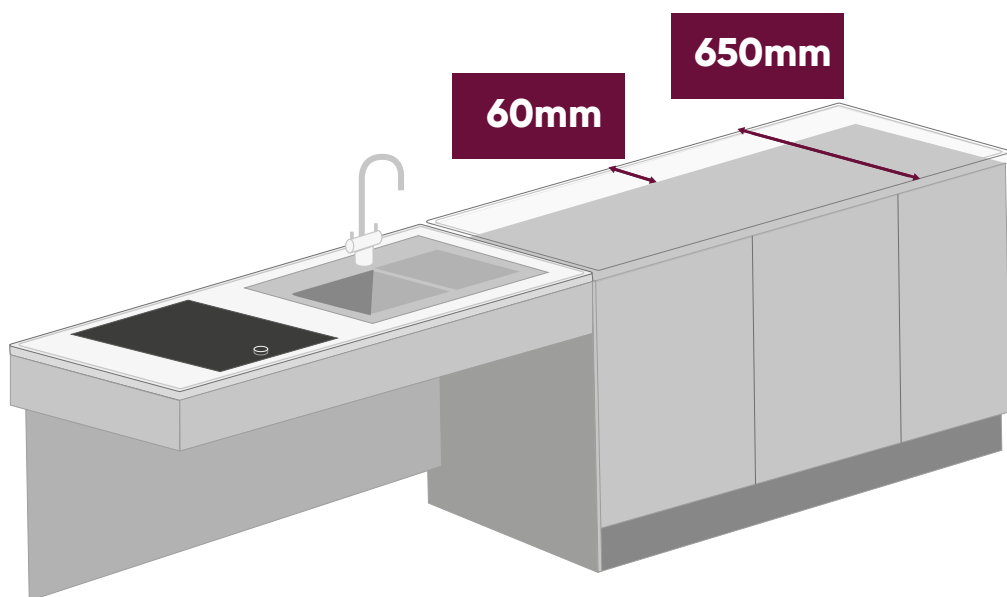


F6.

For fixed height worktop

Fit the remaining base units in position around the fixed height worktop. They should be spaced away from the wall by 60mm to allow for a 650mm deep worktop. They should be set out with the same plinth height as the tall units.

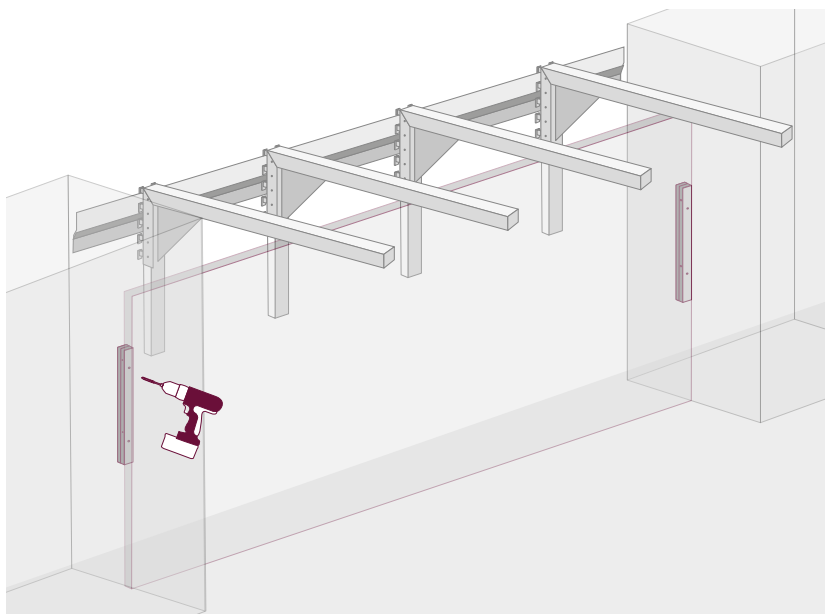
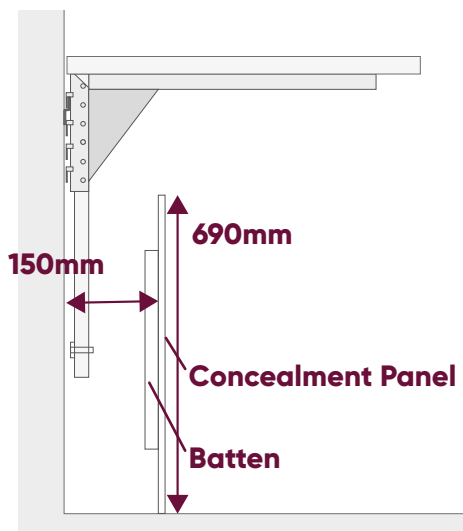
Ensure that all worktops, panels, and doors are flush with each other, to prevent trapping issues if the worktop is converted to rise and fall in the future.



F7.

For fixed height worktop

Fascias and back panels should be fitted to complete the installation. Concealment panels should be fitted 150mm away from the back wall. To secure use two battens and fix with screws to the adjacent units. Fix the concealment panel to the battens using 4 screws though the front of the panel.



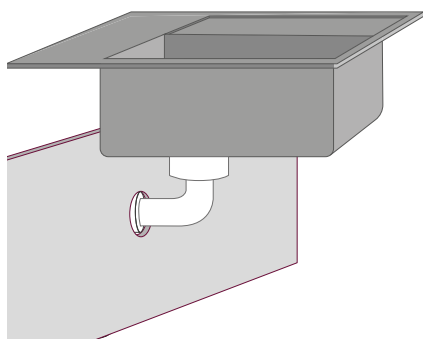
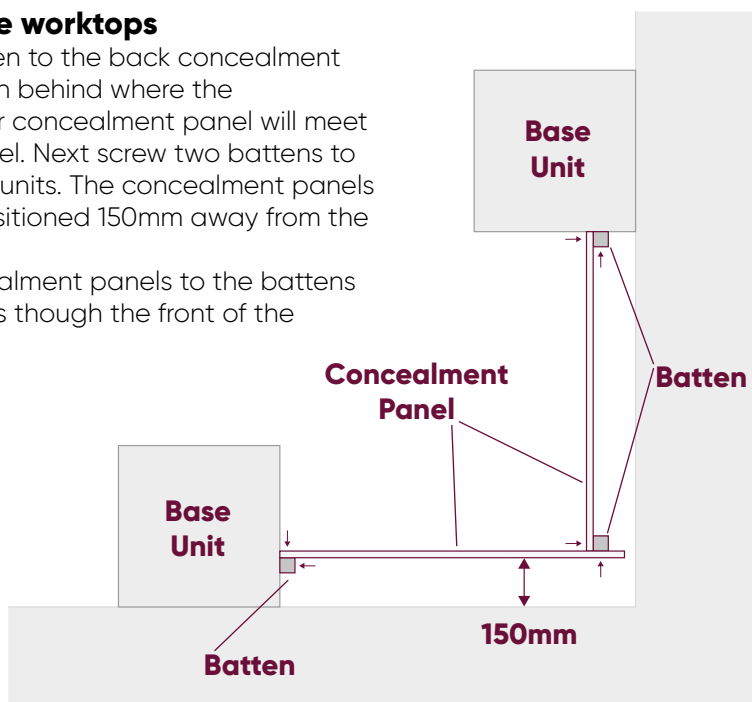
F8.

For fixed height worktop

For L-Shape worktops

Screw a batten to the back concealment panel. Position behind where the perpendicular concealment panel will meet the back panel. Next screw two battens to the adjacent units. The concealment panels should be positioned 150mm away from the back wall.

Fix the concealment panels to the battens using 6 screws though the front of the panels.



Calculate the location for the hole for sink waste. Drill a 64mm diameter hole, and seal with a suitable sealant. The sink waste does not need to be slotted.

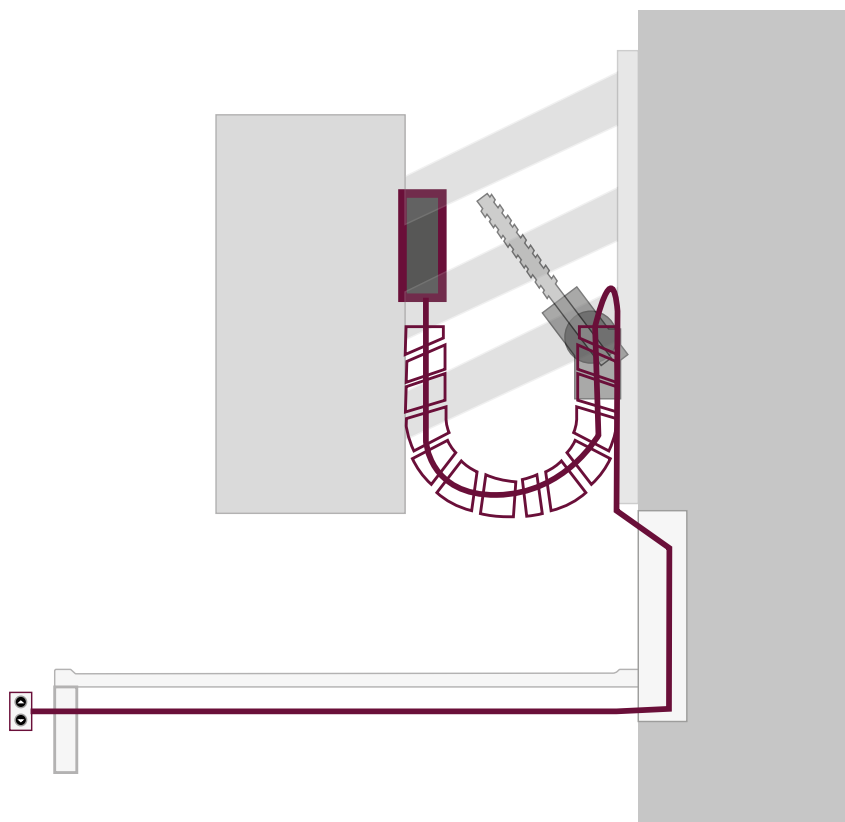
See step 39 on page 52 for Maia worktops

Electric Wall Units

EW1.

For electric wall units

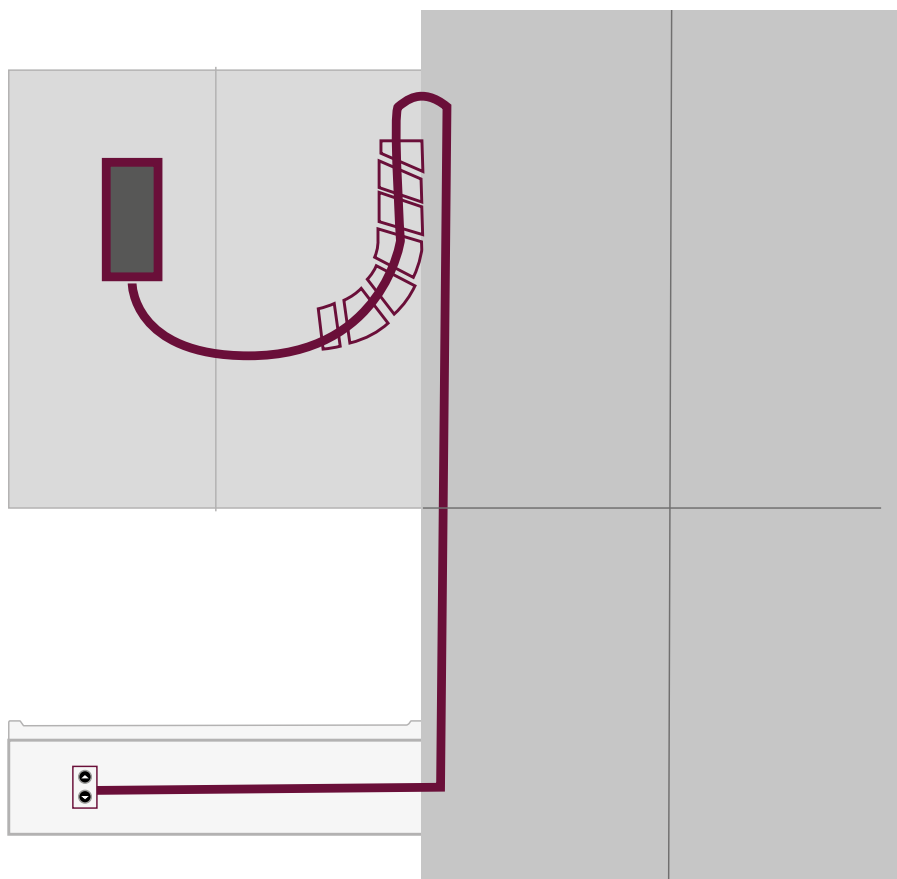
Cable for operation must be laid from the cabinet to the front edge of the worktop fascia for mounting the control switch. We recommend the installation of a conduit in the wall to accommodate the cable (3.5cm diameter).



EW2.

If a high cabinet stands in the immediate vicinity of the electric frame,

the cable may be run through the cabinet to avoid the conduit in the wall.
The minimum load capacity for screw/bolt is 60kg.
Fit the switch as close to the wall unit as possible, at a usable height for the client.

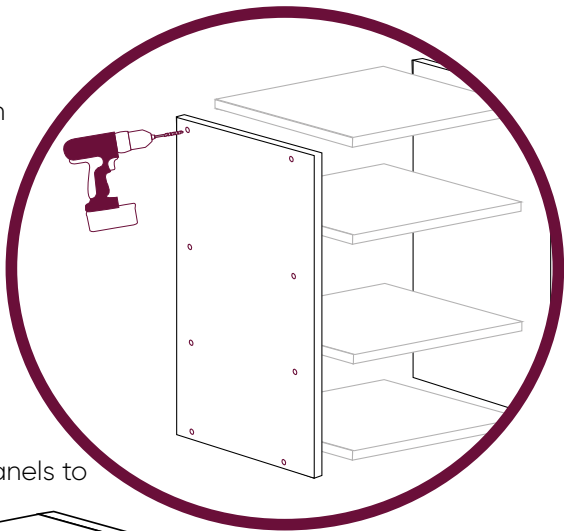


Corner Open Display

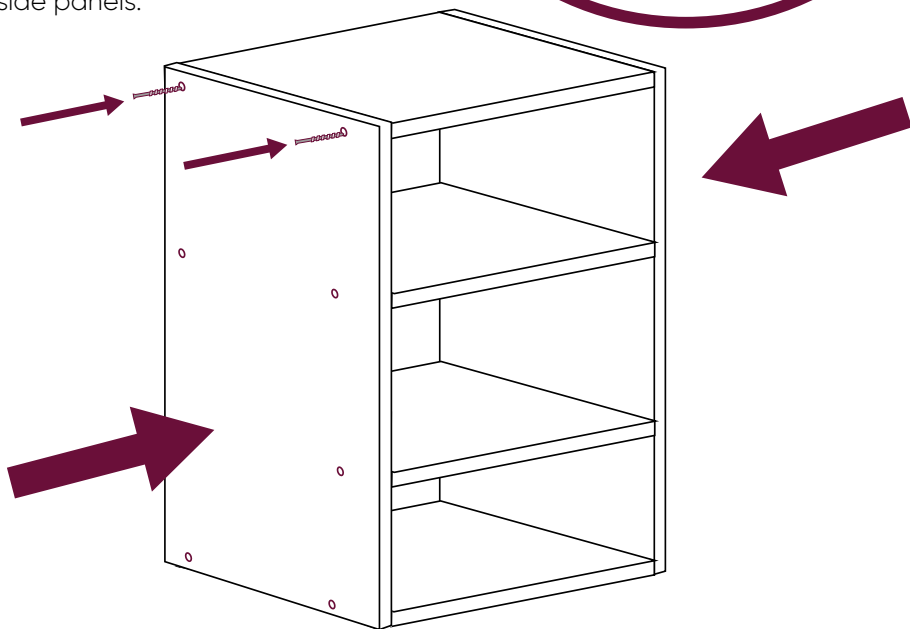
C1.

Measure and cut panels to size, ensuring all exposed seen edges are edged and finished.

Determine and measure position of top, bottom and mid panels on side panels. Drill holes through the side panels to allow the fixings to be hidden when the unit is in position.



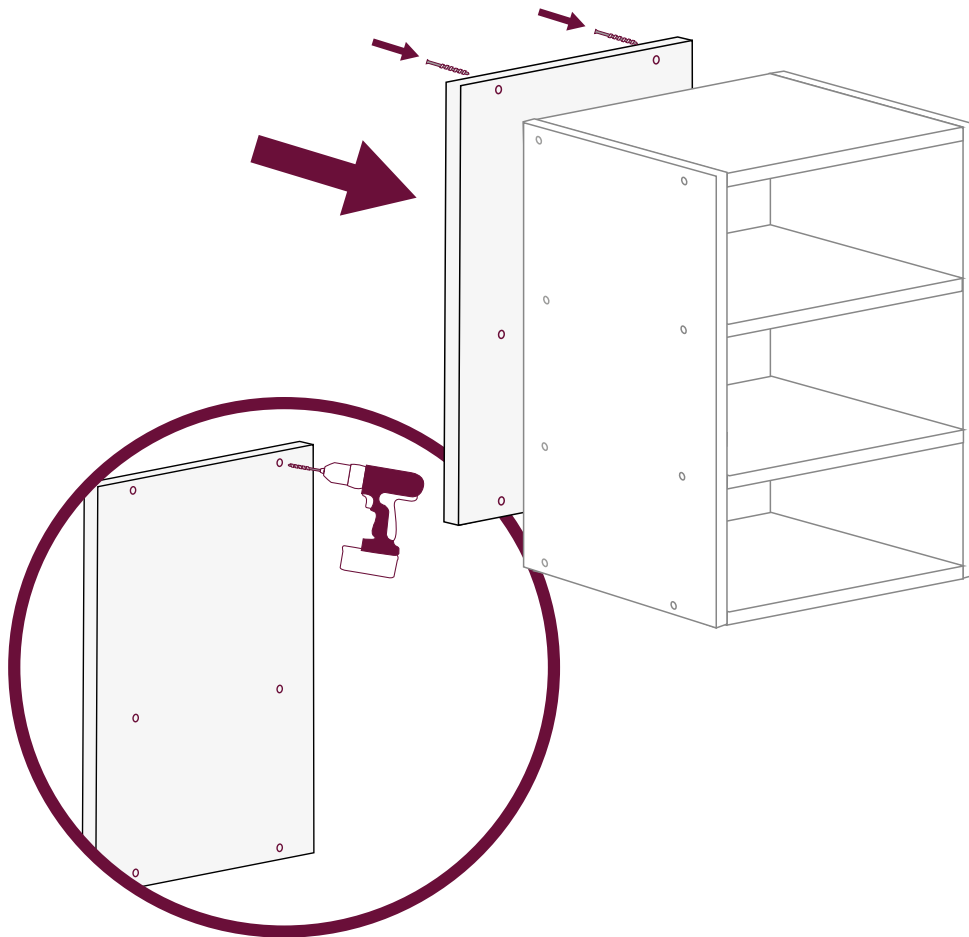
Screw fix top, bottom and mid panels to side panels.



C2.

Determine and measure position of back panel on top, bottom, mid and side panels. Drill holes through the back panel to allow the fixings to be hidden when the unit is in position.

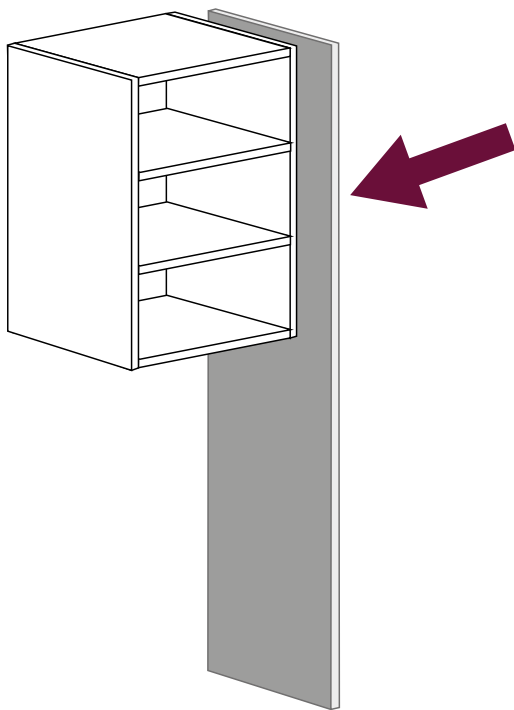
Screw fix back panel to top, bottom, mid and side panels.



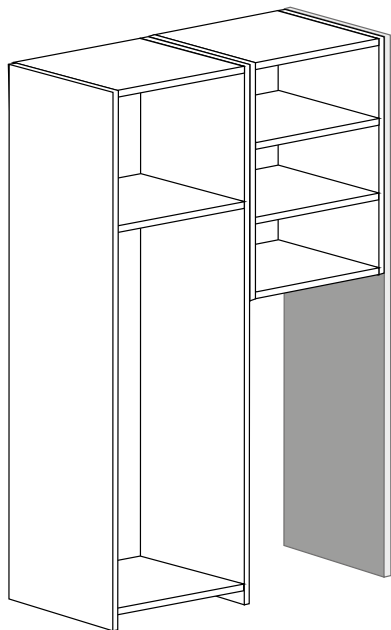
C3.

Determine and measure position of open display unit on blender panel. Drill holes through the blender panel to allow the fixings to be hidden when the unit is in position.

Screw fix blender panel to open display unit.



C4.



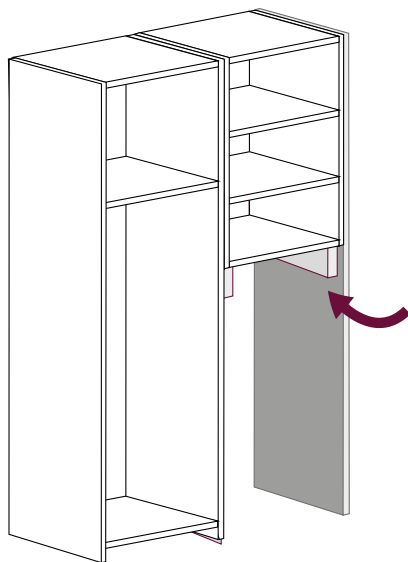
Determine and measure position of open display unit on tall unit. Drill holes through the tall unit side panel to allow the fixings to be hidden when the unit is in position.

Screw fix tall unit to open display unit.

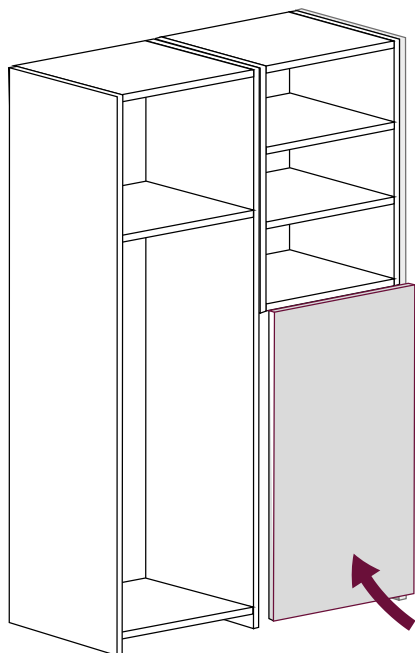
C5.

Measure and cut battens to size to fit beneath the open display unit and provide additional support for the weight of the unit.

Screw fix batons to blender panel and tall unit.



C6.



Use spring clips to fix front panel to tall unit and blender panel.

Fixing positions and holes to be determined by fitter.

All exposed seen edges to be edged and finished.

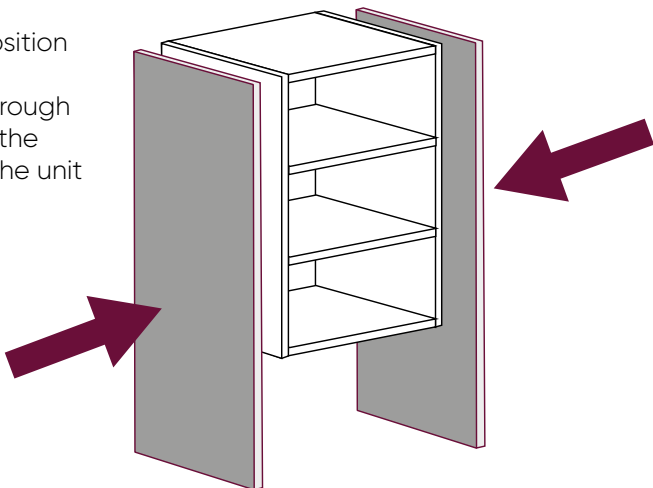
All fixings to be hidden.

Microwave Dresser Unit

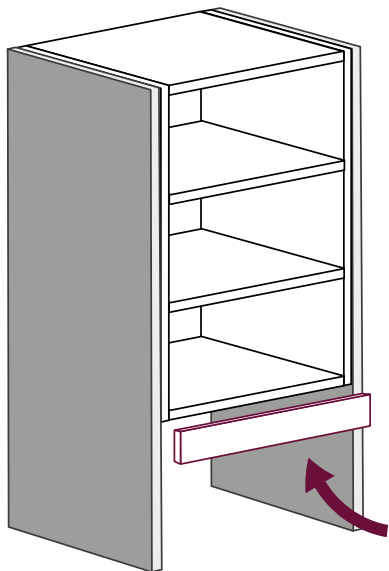
MU1.

Determine and measure position of open microwave unit on blender panel. Drill holes through the blender panel to allow the fixings to be hidden when the unit is in position.

Screw fix blender panel to microwave dresser unit.



MU2.



For units with 2100mm alignment.

Scribe a fascia to sit under the dresser unit and install using spring clips. Ensure all exposed edges are edged.

freedom

by Symphony®



**The Symphony Group PLC,
Pen Hill Estate, Park Spring Road,
South Yorkshire. S72 7EZ**

General Enquiries:

Tel: 01226 446000

www.symphony-group.co.uk/freedom

Copyright and all other rights in this brochure, the photographs and other works upon which it is based is owned by The Symphony Group PLC. No part of this brochure, said photographs and other works may be reproduced or transmitted in any form or by any means (including but not limited to photocopying or storing in any electronic medium) without the prior express written permission of The Symphony Group PLC. Copyright The Symphony Group PLC 2020.

IMF22-0