



Worktop Installation & Maintenance

Important message to the installer

This installation and maintenance guide must be left with the end user, as the guarantee is only valid if guidelines as described in the installation sheet have been followed.

CAUTION HEAVY

Formica Aria® products have been developed to make installation an easy fit option without the need for specialist off-site templating or tools. This information presents the most effective ways of fitting and installing your Formica Aria product. Before you do any work on your new worktop, breakfast bar, upstand or splashback please ensure you are completely satisfied with the product by checking it for damage or defects.

By following these guidelines, a competent installer will be able to achieve the best possible results.

Handling, storage, pre-conditioning and planning

Handling

- Formica Aria products should always be carried by a minimum of two people.
- Worktops should be carried vertically, not horizontally (flat) when moved manually.
- When lifting the Formica Aria worktop from the pallet or stack do not slide panels, always lift them.

Storage

- Always store Formica Aria products flat supported along all sides.
- Maintain the integrity of the packaging throughout all stages of the distribution chain (e.g. the peel coat should always be left on both sides of the product) until ready to be installed.
- Under no circumstances should you remove the peel coat on one side of the product without removing the peel coat on the reverse side, as this could cause product warpage.
- The product should always be stacked horizontal and flat to eliminate the risk of product warpage.

Pre-Conditioning

- Prior to fabrication and installation, a process of pre-conditioning should be carried out for all sheets.
- Panels should always be stored horizontally for the pre-conditioning process.
- Panels should be ideally conditioned in a climate that is representative of final installation.
- A minimum of 7 days prior to installation are required for pre-conditioning.

Planning

- The positioning of the joints is critical to the successful installation of your worktops.
- Please ensure that joints do not extend across any sink cut out or hob; and should always be supported.

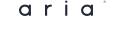
Appliances

- Please follow any manufacturers installation instructions relating to appliances.
- Caution should be taken when fitting worktops around any appliance which generates heat.
- Splashbacks may be fitted/used adjacent to a hob; however, it is essential to check with the hob manufacturer regarding the minimum distance required between the splashback and the gas jets.
- When fitting around free standing appliances, the unsupported length should not be more than 1260mm For overhang such as a breakfast bar the maximum allowed is 250mm for a 12mm worktop and 300mm for a 20mm worktop.
- Additional support will be required at the rear edge of the worktop when fitting around dishwashers, washing machines and tumble dryers.

Thermal Expansion

Thermal expansion is 1mm -1.5mm per metre in the length of the product. Therefore, when fitting a worktop length of 3600mm a gap of 5mm should be left at the end of the worktop for expansion.





Installation accessories

Below are a range of accessories designed to make fitting your Formica Aria® more straight forward.

Jointing and Under mounted Sink Kit

For the effective jointing of Formica Aria products and installation of under mounted sink. The kit allows the preparation of two joints and comprises of:

2 x 20g sealant

1x Applicator/Scraper Tool

6 x No.20 Jointing Biscuits

6 x Toggle Bolts (worktop connector bolts)

1x3mm Hex Key

1x 20ml Linseed Oil

10 x M6 20mm bolts

10 x M6 25mm bolts

10 x Brass Spreader Dowel

1x Drill Bit with Stop

Drainage Groove Jig

To aid sloping drainage grooves of approx 450mm in length. Kit comprises of:

1x Drainage Groove Jig

3 x Sloping side pieces

9 x Screws

In addition it is possible to rout mounting grooves for hot rods of up to 460mm in length.

*Drainage grooves should not be routed deeper than 6mm.

Compact Laminate Worktop Jig

Used for the following:

- Designed to form 90 degree mitre joints in your Formica Aria products using a (minimum) 1600w router fitted with a 12.7mm straight cutter and 30mm guide bush.
- Cuts a discreet joint in Formica Aria products.
- Bolt slots allow the preparation for toggle bolts which act as a clamp to hold joint together.
- Accommodates worktop sizes up to and including 650mm in depth.

Installation tools required

The below listed tools are to be used in conjunction with the above installation kits

Dust Extraction Unit

Hand-held Circular Saw - High quality TCT triple chip blades ensure a good quality finish to cuts.

Hand Router - Allow min. 2-3mm oversize for a final pass. Variable rotation speed and a high quality double flute tungsten carbide tipped cutter should be used for straight cuts, mitre joints and cut outs.

Biscuit Jointer - To help to align and strengthen the worktop joints.

Electric Drill - Variable speed.

Saw - Used when completing cut outs and removing waste material.

Edge/Profile Trimmer - Use a fixed tip guide trim cutter and profile trim cutter (Speed Clamps / Suction Clamps: Quick Release "G" clamps to hold jigs in position).

Jig (Drainage Grooves) - To support the routing of drainage grooves into worktop surface near sinks if required.

Drill Bit With Stop - To ensure correct hole depth for brass spreader dowels.

180, 240 Grit Sandpaper and Abrasive Disc - To smooth edges and drainage grooves. Do not sand the decorative surface as this will lead to permanent damage.

Masking Tape - To help with the positioning of drainage grooves.

Installation

When installing Formica Aria products, it is always recommended to use a method of mechanical fixing outlined below

Cutting and scribing

- During installation, your worktop should be stood vertically along its long side.
- Stand Formica Aria panels vertically and make sure the sides are not damaged by contact with the floor (e.g. use material such as a soft cloth under the sides). Dropping panels could result in chipping.
- Formica Aria worktops are supplied with a single long side pre-edged and breakfast bars and Islands are supplied with both long sides pre-edged.
- Ensure peel coat is removed from both sides at the same time.
- Check the surface for any irregularities prior to fabrication.

Cutting

Cutting should be carried out using a saw with clean, sharp blades to give best results:

- Cut worktop face down.
- Finish all joint edges and final finished edges with a hand router, use a sharp blade and allow for 2-3mm for final skim to size.
- Ensure slow or soft start tools achieve full speed before cutting.
- Ensure worktops are fully supported during the cutting and clamp accordingly to prevent movement.
- Check the quality of the dry fit.
- Repeat the trimming process if any gaps or chips are visible.

Scribing

When scribing the worktop surface to the wall, please also sand the top and bottom edges to remove any chipping that may occur.

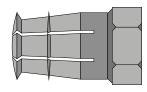
- Mark the cut line on the worktop with a pencil.
- If the line is not straight, then use a saw with a metal cutting blade.
- Use blades recommended for metal or HPL for a smooth cut.
- Sand top and bottom edges with 240 grit sandpaper.

Installing a horizontal Formica Aria® work surface

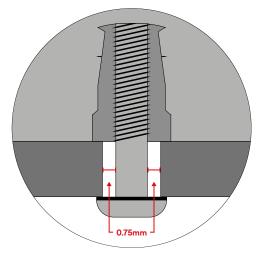
It is always advisable to use a mechanical fixing method for Formica Aria installations.

Fitting a worktop

- Ensure the worktop is cut to the correct length
- Position the worktop and drill through the cabinet (clearance) frame, making a slight marking to the underside of the Formica Aria board.
- Drill the underside of the Formica Aria material to the correct depth, using a drill bit with a stop to receive the brass spreader dowel, taking care to ensure the drill hole is perpendicular.
- Ensure holes are clear of debris.
- Insert the brass spreader dowels by hand initially and lightly tap to a depth of 0.5mm deeper than flush to the surface.
- Insert the brass spreader dowels into the holes in the underside of the Formica Aria worktop. It is important to note when fastening the screw into the brass spreader dowels you should use hand tools as opposed to power tools.
- · Reposition worktop to final placing.
- Loosely fasten until all final joints are in place
- If there is a requirement to joint two worktops together, ensure the below joint assembly guidance.
- For final fixing of the worktop to the base use screws provided in the installation kit.
 Do not over tighten. There must be a clearance of 1.5mm between the bolt and the worktop.



Screw inserted and tightened
Dowel opens from base to secure fixing



Jointing

Formica Aria® worktops are supplied with a single long side pre-edged. Breakfast bars are supplied with both long sides pre-edged. You should always ensure that the finished, decorative edges are in the correct location before cutting.

Joint layouts - straight/corner/peninsula

It is recommended to use a mason's mitre joint / corner joint, when joining worktops.

Mason's mitre joint

- Use a compact laminate worktop jig to router the edge with a 12.7mm cutter and 30mm guide bush.
- Follow jig manufacturer's instructions.

Joint assembly - either mason's mitre joint or straight joint

- Use the compact laminate worktop jig to prepare grooves for the toggle bolts in the underside of the worktop.
- Cut No.20 biscuit joints in the edges to be joined at least three biscuits per joint.
- Ensure that the positioning of toggle bolts and biscuit joints do not overlap.
- Dry fit the worktops to ensure a smooth fit.
- Apply sealant evenly to the biscuit joints and edges to be joined, bring the worktops together.



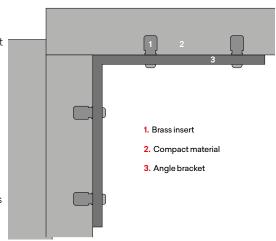


- Insert toggle bolts into the toggle grooves and tighten using the hex key provided do not over tighten.
- Check and adjust worktop levels and positioning if necessary.
- · Clean excess sealant using a lint free cloth and acetone, wipe at 90 degrees across the joint (never clean down the length of the joint).
- Ensure all mechanical fixings are tightened for joints and connections to base units.

End stand / side panel

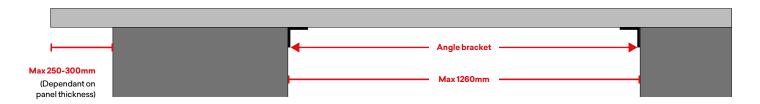
When using Formica Aria® products as an end stand / side panel, it is important that the product is mechanically fitted to the cabinet. If a end stand / side panel is installed without the support of cabinets, it should be mechanically fixed with angle brackets to secure the joint where the horizontal meets the vertical.

- Cut the product to the required length.
- Drill holes through the cabinet to which the product is to be fixed.
- Align the product with the cabinet and mark the position of the bolts on the product along with the cabinet to be fixed to.
- Drill holes for brass inserts, using correct drill bit with stop into the end stand / side
 panel to be fixed to the cabinet, insert the brass inserts and tap lightly.
- Make sure the product is supported throughout.
- Align with the end cabinet, insert 25mm roofing bolts (for a standard 18mm thickness
 of cabinet) through and into the brass inserts and tighten bolts.



Unsupported weight

This diagram demonstrates the maximum unsupported weight possible with Formica Aria 12mm and 20mm worktops. This provides enough space for two standard appliances.



Profiling edges and drilling

Profiling edges

A dust extraction unit should be used whilst shaping and profiling.

To match any exposed short edge, as referenced above in jointing, to the factory finished long edges the following guidelines should be observed:

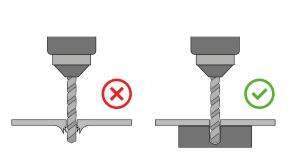
- Use a router fitted with a chamfer cutter.
- Router cutter should have a 45° angle for best results.
- Finish / polish edges using 180, 240 and 320 grit sandpaper; make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.
- Finish the core edges with Linseed oil.

Shaping worktop external corners

- Use a jig with the required edge radius, place on your worktop and secure into position with clamps.
- Use an offset scribe to mark the outline around the jig.
- Use a saw to remove the radius of the edge / corner you wish to remove.
- Use a router to finish the edge profile (as above)
- Finish / polish the edges with 180, 240 and 320 grit sandpaper; make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.

Drilling

- Holes and inserts can be drilled through the whole worktop or through part of the thickness
- For stopped holes a minimum of 2-3mm of thickness must remain to prevent cracking/splitting of surface.
- When drilling through the whole surface use a sacrificial piece of wood block behind the hole.
- For under mounted sinks drill holes for brass inserts.
- Pilot holes for brass inserts, fitted with under mounted sinks, should be used.
 Lightly tap in the brass inserts ensuring the work surface on the opposite side is supported to prevent cracking.
- Holes for taps can be cut through the whole surface, using the appropriate jig to cut the hole, and again using a sacrificial wooden block. The



Sink installation

Inset sinks

All Formica Aria® products are suitable for use with inset sinks. A frequent cleaning regime should be followed for both white and grey core materials. Extra care should be taken with spillages, which should be wiped up immediately and not left.

- Ensure a minimum distance of 150mm between the sink cut out and the adjacent seam joint and a minimum of 40mm from the
 worktop edge.
- Turn the sink upside down and place it on the surface of the worktop. Mark around the outline of the sink with a soft pencil. Using masking tape on darker worktop surface helps with the visibility of pencil lines.
- Refer to sink manufacturers guidelines to measure the sink cut out requirements and appropriate dimensions of the inner line for inset sink to sit comfortably once the cut out section is removed.
- Ensure the worktop surface is supported on all sides during the sink cut out process.
- Use a 12mm HSS drill bit to drill each of the corners of the inner line. This will prevent stress cracking.
- Rough cut with a saw between the drilled holes following the guidelines or a straight edge, then finish off to exact size with a hand router and hand router guide.
- Use 180, 240 and 320 grit sandpaper to smooth the inside edge of the sink cut out; make sure to avoid sanding the decorative surface as this could lead to permanent damage.
- Insert the sink
- · On the underside of the worktop, secure the sink with sink clips (supplied by sink manufacturer) secure with sealant.
- Remove any excess sealant.

Under mounted sinks

All Formica Aria products are suitable for use with under mounted sinks. A frequent cleaning regime should be followed for both white and grey core materials. Extra care should be taken with spillages, which should be wiped up immediately and not left.

Drainage Grooves

If drainage grooves are being cut into the surface they should never go to a depth greater than 6mm. A frequent cleaning regime should be adopted and any spillage should be wiped up immediately.

Face Cut out

- With the worktop facing up, mark the area of the sink cut out on the surface with a soft pencil.
- Cut out the sink space using a router fitted with a 30mm bush guide and 1/2 inch router cutter. Cut in stages of 3-4mm depth each time to reduce fatigue on cutter. Keep the router vertical at all times and support the waste piece at all times.
- Profile the inner edge using an edge profile/trimmer using a radius or chamfer cutter with a bottom bearing.
- Use a palm sander to smooth the inner edge with 180 grit sandpaper and then 240 grit sandpaper; make sure to avoid sanding the decorative surface as this could lead to permanent damage.

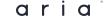
Fitting the sink

- Dry fit the sink into the sink cut out to check fit.
- · Place the sink 'bottom up' on the underside of the sink cut out, to check it centres when viewed from the worktop surface.
- The sink lip should be completely flat as this will form the seal with the worktop.
- Place the sink clips into position and mark location with a pencil.
- · Use a drill bit with a stop to drill pilot holes for the sink clips and insert brass spreader dowels, lightly tapping into place.
- Support the opposite side of work surface to prevent cracking.

Installation

- Clean the area around the sink cut out and the underside of the worktop.
- Apply sealant to the lip of the sink ensuring there are no gaps. Put the sink into place and press gently ensuring the sealant squeezes out to create a complete seal.
- Replace the sink clips and tighten into position being careful not to over tighten.
- Place the worktop 'face up' and clean off excess sealant.





Hob installation

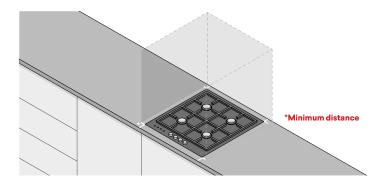
As Formica Aria® products are slim line, consider the depth of the hob when fitting onto the worktop in relation to any drawers or appliances fitted below. Refer to kitchen cabinet manufacturers installation instructions.

Fitting around a hob

Splashbacks may be fitted/used adjacent to a hob as in the diagram below, however it is necessary to check with the hob manufacturer regarding the minimum distance* required between the splashback and the gas jets.

Internal/external corner details

When fitting up to an internal corner, it is advisable to leave a small gap of approx 3mm which can be filled with a suitable sealant. This will allow for expansion and contraction due to environmental changes.



Splashbacks and upstands

Internal cut-outs and apertures (sockets)

- When a cut-out is made within the splashback, always ensure that the internal corners are given a radius of 6mm as this will prevent the likelihood of stress cracking. To achieve this detail, use either a portable hand router (with jig) or a combination of an electric drill and saw.
- Mark out the area in the correct position to be cut on the face side and drill a hole 12mm diameter in each of the 4 corners, turn the panel over and mark a straight line from hole to hole.
- Using a saw with a fine toothed blade, cut upward along the lines, ensuring that you do not overshoot into the radius corners.
- All edges should be smoothed out with a file or sandpaper to prevent chipping.
- Make sure to avoid sanding the decorative surface as this could lead to permanent damage.

Fixing your splashback

- The splashback can be fixed using an adhesive sealant. Please follow the manufacturer's instructions as described on the cartridge when using a wall panel adhesive.
- Position the beads of glue at centres that do not exceed 600mm.
- On a 600mm high panel, perimeter fixing along with central fixing at approx 600mm depending upon the length of the panels.
- The panel should be suspended up from the worktop by 3mm.
- The gap can then be filled with a suitable sealant.
- The ends of the panels can also be filled with sealant.
- If a splashback is being fitted across the full width of the wall, a gap of 3mm should be left at each end to allow for expansion.

Care and maintenance

General

- Formica Aria products are rigorously tested in line with British and European standards (EN438) to ensure they will meet the exacting requirements as stated.
- · Every Formica Aria product therefore incorporates specific features which make it resistant to heat, impact, scratching and moisture.
- Our decorative surfaces are tested to a temperature of 160 degrees for short periods.
- Boiling water and cooking splashes will do no harm to the surface of the worktop.

Cleaning

- Formica Aria Products have a non-porous surface which is resistant to stains, and does not promote mould and bacterial growth.
- Regularly wipe down with a damp cloth and mild detergent, rinse with warm water and dry the surface gently with a soft cloth.
- Wipe up any spillages immediately and not leave them to stand for a prolonged period.
- · Under mounted sinks or drainage grooves should be wiped down as instructed above on a daily basis to maintain their integrity.
- Abrasive scouring powders / creams, acid based cleaners and polishes should not be used.

PVC aprons

PVC aprons can cause excessive wear to the edges of work surfaces. We would recommend that PVC aprons are not used, as over a period of time the excessive wear will become more evident and spoil the look of the worktop.

Heat	To prevent damage from hot objects, use heat resistant mats on the surface of the worktop. Never place objects from the oven or hob, directly onto a surface.
Scratching	Always use a chopping board for preparing food. Never cut foodstuffs directly on the surface. Cookery items, kitchen utensils and other objects sliding across the worktop will produce fine scratches in the surface.
Moisture	Wipe spilt liquids away from joints and cut-outs immediately. Ensure that all inset appliances are properly sealed with a suitable waterproof silicone sealant.

10 year guarantee

Formica Group offers a 10 year guarantee for any Formica Aria® product (worktop, breakfast bar, upstand, splashback). This guarantee covers any product found to be defective in either material or manufacture from the date of its installation.

Swatch samples represent only a small area of an actual Formica Aria product, therefore colour and surface finish should be compatibility checked before your Formica Aria products are fitted, as claims cannot be accepted for re-fitting resulting from a mismatch of colour or surface finish. An installation and maintenance guide is supplied with every worktop; this must be kept by the end user to validate any guarantees.

All claims must be made in writing to residential@formica.com within 10 years of the date of installation of the worktop. Proof of date and place of purchase is required. This guarantee is in addition to your statutory rights as a consumer and does not affect your rights in any way.

Provided the product has been installed and used in accordance with the manufacturer's instructions and that the products are used for their intended purpose/application, Formica Group shall, at its discretion, supply direct replacement products or equivalent products should the direct replacement not be available.



