aria

installation and maintenance guide

# CAUTION HEAVY



## thank you for choosing

### aria<sup>™</sup>

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 Aria product. Before you do any work on your new worktop, breakfast bar, island, downstand, 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.





# 10 year guarantee

Formica Group offers a 10 year guarantee for any Aria<sup>™</sup> product (worktop, breakfast bar, island, upstand, downstand, 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 Aria product, therefore colour and surface finish should be compatibility checked before your 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.

## important message to the installer

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

### handling, storage and planning

#### Handling

Aria products should always be carried by a minimum of two people and the worktop should be carried vertically, not horizontally (flat) when moved manually. When lifting the Aria worktop from the pallet or stack do not slide panels but always lift them. (Additional handling information exists on the Formica Storage and Handling Guidelines information sheet).

#### Storage

Please store your Aria product 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 also eliminate the risk of product warpage. Please refer to the online Formica Fabrication Guide (formica.com) with respect to the appropriate storage and handling requirements.

#### **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**

Caution should be taken when fitting worktops around any appliance which generates heat. A gap of at least 50mm should be left when fitting a worktop near an AGA or any other continuous heat source. When fitting around free standing appliances, the unsupported length should not be more than 600mm or a maximum overhang of 250mm which will need additional support. Additional support will be required at the rear edge of the worktop when fitting around dishwashers, washing machines and tumble dryers.

Please follow any manufacturers installation instructions relating to appliances.

#### **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 potential expansion. This gap can be sealed by using Formica Lifeseal sealant.



### installation accessories

To help with the installation of your Aria™worktop there are a range of accessories designed to make fitting more straight forward.

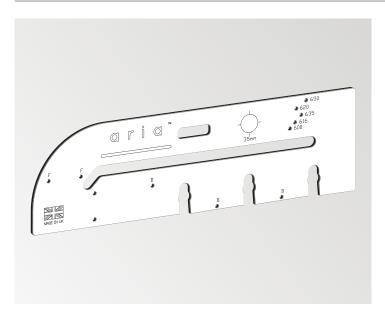


#### Jointing kit

For the effective jointing of Aria products with a masons mitre joint. The kit allows the preparation of two joints and comprises:

- 2 x 20g Colour Matched Formica Lifeseal
- 1 x Applicator/Scraper Tool
- 6 x No.20 Jointing Biscuits
- 6 x Toggle Bolts (worktop connector bolts)
- 1 x 3mm Hex Key
- 1 x Lint Free Cloth White
- 1 x 20ml Linseed Oil (Included in kits for black worktops only)

Jointing kits are matched by decor, please use the reference guide overleaf.



#### **Toggle Bolt Jig**

Used in conjunction with your Aria jointing kit:

- Designed to form 90 degree mitre joints in your Aria products using a (minimum) 1600w router fitted with a 12.7mm straight cutter and 30mm guide bush
- Cuts a discreet 10mm deep masons mitre joint in 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

Product code: CTCUNJGTB



#### **Under mounted Sink Kit**

For the effective installation of under mounted sinks in Aria products. Kit comprises of:

- 10 x Brass spreader dowels
- $10 \times M6$  (x 10mm) Roofing Bolts.
- 2 x 180 Grit Sandpaper Sheets
- 2 x 240 Grit Sandpaper Sheets
- 1 x Maroon Abrasive Disc
- 1 x Drill Bit with Stop

Product code: CTCUNSINK



#### **Drainage Groove Jig**

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

- 1 x 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.





#### Formica Lifeseal®

Colour matched sealant for Aria products:

- Colour matched to Aria worktop surfaces (please see colour match matrix below)
- 290ml cartridge approximately 20 linear metres at a 5mm bead or 9 joints
- Cartridges suit a mastic gun
- Easy and flexible to work with for bonding, sealing and finishing
- With Formica Lifeseal all Aria products are guaranteed for the lifetime of the product.

Formica Lifeseal is matched by decor, please use the reference guide below.

#### Aria Jointing Kit and Formica Lifeseal colour matches

Decor	Code	Jointing kit match	Lifeseal colour match
Black Granite	F2699	CTCBLJKT1	FLS-90-BK-05
Black Storm	F6357	CTCBLJKT1	FLS-90-BK-05
Calacatta Marble	F3460	CTCWHJKT2	FLS-05-WH-00
Carrara Bianco	F6696	CTCWHJKT1	FLS-90-WH-10
Concrete Formwood	F6362	CTCGRJKT2	FLS-70-GY-35
Elemental Concrete	F8830	CTCGRJKT1	FLS-70-GY-40
Elemental Graphite	F8833	CTCBLJKT3	FLS-70-GY-12
Fox	F1994	CTCGRJKT1	FLS-70-GY-40
Ice Quarstone	F5212	CTCWHJKT2	FLS-70-GY-35
Jet Sequoia	F3476	CTCBLJKT2	FLS-90-BK-05
Neo Cloud	F6314	CTCWHJKT2	FLS-15-GY-02
Neo Tornado	F6316	CTCGRJKT1	FLS-70-GY-40
Nero Grafite	F9485	CTCBLJKT2	FLS-90-BK-05
Polar White	F2255	CTCWHJKT1	FLS-90-WH-10
Soapstone Sequoia	F3459	CTCGRJKT2	FLS-55-GY-02



### installation tools required

#### **Dust Extraction Unit**

Should be used with saws and routers to remove airborne dust.

#### **Hand-held Circular Saw**

Please use a circular saw with high quality TCT triple chip blades to ensure a good quality finish to your cuts. Plunge type saws will provide a more precise finish.

#### Hand Router

A hand router must be used for the final sizing of exposed worktop edges. Please allow at least 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.

#### **Random Orbital Sander**

Using 180 grit - 240 grit, make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.

#### Palm Sander

Using 240 grit - 320 grit, make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.

#### Riscuit Jointer

Using biscuits will help to align and strengthen the worktop joints.

#### **Electric Drill**

Variable speed drill.

#### Jigsaw

A Jigsaw should be used when completing cut outs and removing waste material prior to trimming with a fine metal blade.

#### **Edge / Profile Trimmer**

In order to prepare a profile on an exposed worktop edge, use a fixed tip guide trim cutter and profile trim cutter. Speed Clamps / Suction Clamps: Quick Release "G" clamps to hold jigs in position.

#### Formica Lifeseal®

Sealant colour matched to surface décor to seal worktop joints, sinks and securing upstands and splashbacks.

#### Jig (Mason's Mitre Joint / Toggle Bolt / Tap hole)

To support the preparation of toggle bolts to secure worktop jointing and cutting of tap holes.

#### **Toggle Bolts**

x 3 per worktop joint to ensure a secure joint.

#### **Jointing Biscuits**

x 3 per worktop joint to ensure a level surface.

#### Lint Free Cloth and Linseed Oil

To clean joints from excess adhesive and finish edges on black core worktops.

Additionally for undermounted sinks

#### Jig (Drainage Grooves)

To support the routing of drainage grooves into worktop surface near sinks if required.

#### **Brass Spreader Dowels and Roofing Bolts**

To attach sink to worktop.

#### **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; make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.

#### **Masking Tape**

To help with the positioning of drainage grooves.



### cutting and scribing

#### Installation

During installation your worktop should be stood vertically along its long side. When standing the Aria<sup>TM</sup> product vertically make sure the sides are not damaged by contact with the floor (e.g. use something soft like cloth under the sides), don't drop the panels as this could result in chipping. 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 and check the surface for any irregularities prior to fabrication.

#### Cutting

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

- Cut worktop face down.
- · Skim 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.
- Allow slow or soft start tools to achieve full speed before cutting.
- Please ensure worktops are fully supported during the cutting and clamp accordingly to prevent moving.
- Ensure a sharp top edge and smooth face on the jointing edge for best results.
- · 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 with a jigsaw, 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. It is recommended to use a scribing tool.
- If the line is not straight then use a jigsaw 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.



### jointing and bonding

#### **Jointing**

Formica Lifeseal® sealant should be used to bond worktops together.

#### Joint layouts - straight / corner / peninsula

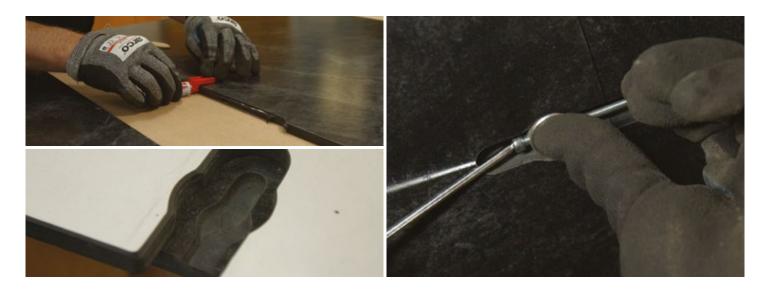
Aria™ worktops are supplied with a single long side pre-edged and breakfast bars and Islands are supplied with both long sides pre-edges. As a result we recommend using a mason's mitre joint, corner joint, to join worktops.

#### Mason's mitre joint

- Use a mason's mitre 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 toggle bolt 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 colour matched Formica Lifeseal 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 Formica Lifeseal using the lint free cloth and acetone, wipe at 90 degrees across the joint (never clean down the length of the joint).



#### **Downstands**

When fitting downstands or using Aria products as an end stand / side panel, it is important that the material is mechanically fitted to the cabinet.

- 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 downstand 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.

#### **Bonding to cabinets**

A colourless / unpigmented Formica Lifeseal is available (FLS-00-CL-01) which can be used to bond worktops to cabinets. Apply a few beads to the mounting batten or rear of the cabinet and to the front edge of the cabinet. Rest the worktop on top of the beads of Formica Lifeseal.



## profiling edges and drilling

#### **Profiling edges**

Use dust extraction unit whilst shaping and profiling.

Aria<sup>TM</sup> products are supplied with a single long side pre-edged and breakfast bars and Islands are supplied with both long sides pre-edged. To match any exposed short edge to the factory finished long edges:

- 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 sand paper; make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.
- Finish edges of black core Aria products 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 jigsaw 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.
- 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 tap hole should be 50mm from the edge of the sink cut out.





### sink installation

#### Inset sinks

Aria™ products with black cores, grey cores and whites cores are suitable for use with inset sinks.

- 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 tap 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 jigsaw 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 of the surface.
- Insert the sink.
- On the underside of the worktop, secure the sink with sink clips (supplied by sink manufacturer) secure with Formica Lifeseal® sealant.
- Remove any excess Formica Lifeseal.



#### **Under mounted**

Aria products with black cores are suitable for use with under mounted sinks.

#### **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 of the surface.



#### 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 Formica Lifeseal sealant to the lip of the sink ensuring there are no gaps. Put the sink into place and press gently ensuring the Formica Lifeseal 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 allow the Formica Lifeseal to dry.

#### **Drainage grooves**

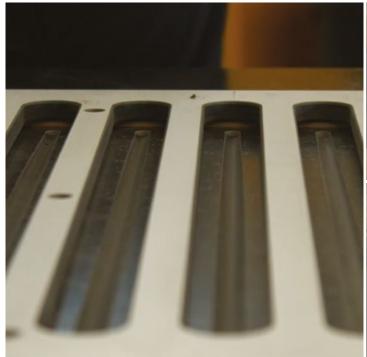
Drainage grooves are suitable for Aria<sup>™</sup> products with black cores for use with under mounted sinks. Please refer to Instruction manual for drainage groove jig for manual installation.

#### **Preparing drainage grooves**

- Apply masking tape to the surface to help position the grooves and protect the worktop surface.
- Ensuring they are parallel to the front edge of the worktop, mark out the groove centre lines.
- Centralise the drainage groove jig over the central line and clamp into position.
- Use a router fitted with a 30mm bush guide and a ball end radius cutter / lock the depth to 3mm. Ensure that you do not cut deeper than 6mm into the material and cut for each drainage groove.

#### Finishing drainage grooves:

Using 180, 240 and 320 grit sandpaper hand sand the drainage grooves to a smooth finish; make sure to avoid sanding the decorative surface as this could lead to permanent damage of the surface.









### hob installation

As Aria<sup>TM</sup> products are slim line, the gap immediately below the bottom of the hob has decreased from a more traditional 38mm. 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.

### splashbacks and upstands

#### Internal cut-outs and apertures (sockets)

Whenever 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 jig-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. With the aid of a jig-saw with a fine toothed blade, upward cutting, cut 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 of the surface.

#### Fixing your splashback

Once cut to size the splashback can be fixed using Formica Lifeseal® sealant. Please follow the manufacturer's instructions as described on the cartridge when using a wall panel adhesive.

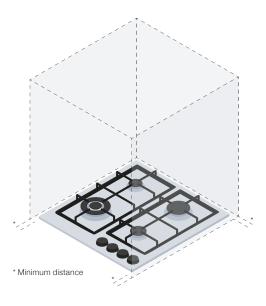
It is advisable to position the beads of glue at centres that do not exceed 600mm. On a 600mm high panel, perimeter fixing along with central fixing at approx 600mm depending upon the length of the panels. The panel should be suspended up from the worktop by 3mm. The void can then be filled with a Formica Lifeseal matching coloured sealant. The ends of the panels can also be filled with matching coloured sealant.

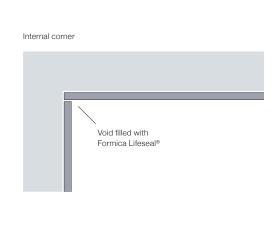
#### Fitting around a hob

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. We recommend a minimum distance of 50mm from the edge of the hob to the face of your splashback.

#### Internal/external corner details

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







### care and maintenance

#### General

- Aria products are rigorously tested in line with British and European standards (EN438) to ensure they will meet the exacting requirements as stated.
- Every 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

Aria products have a non-porous surface which is resistant to stains, mould and bacterial growth. This makes Aria products very easy to maintain and keep clean. They simply require a regular wipe down with a damp cloth and mild detergent, then rinsed with warm water and the surface gently dried with a soft cloth. While our surface is resistant to many substances, our recommendation is to wipe up any spillages immediately and not leave them to stand for a prolonged period. Should you choose to incorporate under mounted sinks or drainage grooves into your worktop design, these edges and channels should be wiped down as instructed above on a daily basis to maintain their pristine look and appeal.

Abrasive scouring powders / creams, acid based cleaners and even polishes should all be avoided.

#### Things to do and things to avoid

	To do	To avoid
Heat	To prevent damage from hot objects, use heat resistant mats on the surface of the worktop.  Always use ashtrays for cigarettes.	Never place objects from the oven or hob directly onto the surface since this may lead to blistering.  Care should be taken with hot irons and cigarettes.
Scratching	Always use a chopping board for preparing food.	Cookery items, kitchen utensils and other objects sliding across your worktop will produce fine scratches in the surface. Never cut foodstuffs directly on 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.	Moisture will not harm the surface but it is advisable to wipe away any spillages as soon as possible.  The critical areas are around joints and cut-outs.

#### **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.



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