

# IMPREZA TECHNICAL GUIDE

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# SPECIAL GUIDELINES FOR IMPREZA WORKTOPS

Impreza worktop solutions by Merino are high quality worktops suited for premium interior applications. They are Compact Laminates with excellent all-round performance and aesthetics. Common application areas include Kitchen Counters, Breakfast islands, Backsplash and Upstand.

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They have excellent physical properties which meets or exceeds BCS specifications as per EN438 standard. Their double-sided decorative surface makes them ideal for several application areas such as cabinet framing, breakfast bar waterfall sides and coordinated shelving.

Merino also offers Impreza in EP+ variant. Enhanced Performance Technology provides additional protection against heat, wear, moisture and impact, assuring a worksurface that is as reliable as it is stunning.

# TRANSPORT, HANDLING & STORAGE

As Impreza worktops are thick and highly dense, always plan ahead before attempting to move or handle them.

# **TRANSPORT**

Impreza are laid flat and transported in pallets. Given their weight, these pallets must be laden onto vehicles using forklifts. When using forklifts or similar mechanized vehicles for material loading and unloading, ensure that the pallets are clean and structurally sound.

# **HANDLING**

Merino recommends a minimum of 2 people to carry the panel while holding the panel vertically along the width. They should not be carried held flat.

The decorative faces may get damaged on sliding over other surfaces, including other panels. Therefore, sliding the panels IS NOT recommended, the sheets need to be lifted instead. Never allow the panels to touch the ground or the walls while they are being carried.

# **STORAGE**

Impreza panels are thick and heavy laminates, if stored improperly they can warp or telegraph due to their own weight. The panels expand 1mm for every meter due to thermal expansion, therefore proper storage control of environmental conditions is crucial. When storing Impreza panels, ensure the area is dry and adequately ventilated. During final installation, Impreza panels can be positioned vertically for brief periods of time- ensure that they are on the long edge.

All panels should be stored face-up and supported along their length. Do not place uneven weights on a stack of panels as it may cause warping. Always ensure the protective film is present on both sides prior to installation, as uneven exposure to atmosphere can lead to warping.



### PRECONDITIONING AND THE ENVIRONMENT

Preconditioning is one of the most important considerations for achieving a quality product installation. Follow the preconditioning guidelines closely.

Store the Compact Panels for at least 48 hours (ideal- 72 hours) in the following environmental conditions-

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- √ 24C temperature
- √ 55% relative humidity

The minimum time for preconditioning is 48 hours. These numbers can be tweaked depending on environment conditions in the geographical area.

Stored stock should be rotated such that older material is used first. The place of storage should be well ventilated and protected from moisture. The panels should never be in direct contact with the floor or outside walls.

All preconditioning should be performed at the fabrication site.

# **FABRICATION**

Merino Impreza panels have a slightly different composition compared to standard grade laminates and require special attention during fabrication and machining.

For Impreza panels with EP+ surface, extra care must be taken to reduce tool wear.

We recommend the use of high quality, well maintained tools with proper accessories to ensure best results. By following the recommended fabrication guidelines, fabricators can design a surface that is attractive and safe for use.

# CUTTING

For cutting Impreza panels to size, Merino recommends using saws with sharp, clean blades. For straight cuts, a circular saw can be used. For any other cut, a jigsaw is advised. A handheld circular saw with high quality, TCT teeth is the tool of choice for many furniture fabrication projects. Such circular saws can be comfortably used to cut Impreza panels to size.

Before starting the cutting process, clamp the panel uniformly to prevent any unintended movement.

To achieve the best quality cut, make sure the cutting process is carried out when the tool is running at its proper rpm, the panel is adequately supported and a guide is used. The feed speed should remain uniform, as a slow feed rate would leave burn marks and burnishes. The cutting process should be performed in multiple passes, making plunge cuts of upto 4mm in each pass. The guide must stay firmly in place after each pass for a well aligned, professional cut. For a fine cut, it is vital to maintain a sharp blade.



It is recommended to leave a 2-3mm tolerance for a final trimming step, preferably performed using a hand router.

For the final trimming, perform a dry fit and scribe the exact dimension of the panel. Cut the extra material and again verify the cut by performing a dry fit. In case there are gaps between the two edges, an extra trimming step may be performed.

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Finally, clean and sand the edges with fine grit sandpaper to remove any chipping and facilitate jointing.

For guidance on how to create a curve during the cutting process, please check the Special Guidance Section.

# JOINTING

Impreza panels can be jointed into peninsula, mason mitre joint as well as butt joints.

### **Butt Joints**

Butt joints are mostly created using biscuits between two panels. Panels that are going to be butt-jointed must be cut oversize by 3-4mm.

For creating a butt joint, lay the panels alongside each other, aligning them as per symmetry of design and aesthetics. Check for straightness of the edges, and in case of any discrepancy, fix them using a router.

If the panels are aligning properly, measure and mark the locations for the biscuits on both panels. Then use a biscuit machine to plunge-cut pockets into the edge of each panel. The pocket for the biscuit must not too shallow from the top of the surface, as this can lead to telegraphing over time. An adequate number of biscuits must be used in every joint.

Place the biscuits in the pocket and carry out a dry fit of both the panels to check if they fit seamlessly, without any major movement of the biscuits. In case of any fitment issues, further trimming may be required.

Before finalizing the joint, clean the surfaces to remove any debris. Apply a 2-part epoxy-based adhesive separately all over the biscuits, as well as along the edge of the panels. Insert the biscuit into the pocket, and once the biscuit sits snugly in the pocket, align the adjoining panels together and press them together.

The top surfaces should be perfectly level, for which suction cups can be placed across the joints. Some adhesive may ooze out from the joint, take care to remove the residue lest it hardens and damages the decorative surface.

# **Mason Mitre Joints**



Mason mitre joints are commonly used in kitchens to recreate the look of a mitre joint, without the wasting as much material as a 45 degree mitre joint. The curves on the edges of the joints allow for an aesthetic finish and also reduce chances for any dirt or debris to get lodged over time.

In case a mason mitre joint is being designed in any sink area, design the countertop panels to align the joint away from the sink.

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For more details on how to create a Mason Mitre joint, please contact our technical team.

# **DRILLING & ADDING FASTENERS**

Impreza worktops can be safely machined using stationary or hand-held drills. Use high quality, well maintained drill bits. Never use helical bits such as Auger drill bits. While TCT bits may prove to be economical due to their long life, Rectified HSS bits are sharper. Longer tool life helps improve reproducibility while sharper blades improve the quality of the cuts.

In case of non-stationary drills, it is important to ensure the appropriate pressure is applied. Pressure should be scaled up and down in a gradual manner, especially during entering and exiting the laminate. By controlling the feed speed of the drill, the panel is less likely to be damaged.

Holes and inserts can be part-drilled or through-drilled. In the case of part drilling, leave 2-3mm material in the hole to ensure material integrity. For the purpose of sink clips, create a pilot hole as per the chosen insert (recommended depth 8.5mm for 12mm panel) and insert a spreading dowel with brass construction.

If through holes need to be made, then a sacrificial board should be placed on the underside to prevent flaking and breakout. This also prevents any shock to the material when the drill exits.

When drilling into the edge, at least 3mm clearance should remain on all sides of the hole.

Screws and bolts should be slightly countersunk. Use a lower rotational speed to make countersunk holes. Drill oversize holes (at least 0.5 mm or 0.02" larger in diameter) for screws and bolts. This allows the screw to adjust with the slight dimensional movements of both the laminate and the screw, preventing cracks around the hole.

All attachments that are damaged or prone to damage/accelerated wear can be detrimental to the user and the worktop as well. Ensure that only high-quality fasteners and attachments are used.

Edges of the hole should be sanded smooth and cleaned after drilling.



# EXTERNAL CORNERS & EDGE PROFILING

To create an external corner for Impreza panels, use of a compass should be restricted to a marking tool. For creating professional external corners, Merino recommends the use of a jig with a matching radius, preferably a model that uses non-slip mats and stabilizing rods.

If using a router to create an edge or an external corner, always route into the face, as this reduces the chances of chips. To create an external corner using a router, first start by using a jigsaw to create an edge that leaves appx 2mms from the final line. Next, use a router with a flush trim bit, allowing the pilot bearing to run against the jig/template, while the router blade cuts into the material crafting the panel into the shape of the template. Use a bottom-bearing cutter, and ensure the blades are adequately sharp. The bearings must work well, otherwise the resulting router chatter may result in a poor-quality

Merino worktops are supplied with soft edges on all sides, therefore the joints at the end of a straight run can be made to a discreet finish or they can be left as manufactured, the former option being highly aesthetic.

Keep in mind that Merino Countertop panels are supplied with no polishing required for the surface. For the edges that will remain visible to the user, Merino recommends using a laminate polish after rubbing a sander on them. Linseed oil or wax can also be used on the visible edge.

# SPECIAL GUIDANCE

finished edge.

# KITCHEN COUNTERTOP

Use Silicone sealant to fix countertops to the base cabinets.

For fitted appliances such as dishwashers, washing machines or dryers, apply a protective layer of coating to the underside of any joint. This will help prevent any moisture from affecting the quality of the joint and maintain the aesthetics as well.

Always ensure that appliances that generate heat such as hobs and stoves are placed at a safe distance from overhead shutters and cabinets. A 50mm ventilation gap between the end of the countertop and any heating appliance should be maintained.

For free standing appliances, a maximum of 600mm panel length can be unsupported.

Never place hot items directly on the countertop, Merino countertops can become damaged if hot utensils are placed directly from the stove or oven. Always use heat resistant mat or stainless-steel grills.

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Darker colors and matt finishes will show marks, scratches and wear more readily than lighter and more glossier colors.

Everyday spills should be wiped without delay sing a damp cloth. For stronger stains, a mix of mild detergent and water can be used. In case the stain persists, an even mix of bleach and warm water can also be tried.

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Do not use acids or abrasives or expose the surface to bleach for extended periods of time. Avoid over-scrubbing the surface or using harsh scrubbing pads. A nylon brush is recommended instead.

Merino Impreza panels are ideally suited for inset and undermount sinks

### SINKS

The tools required to perform a sink fitment include-

- Handheld Router or Circular Saw
- Jig & Clamps
- Sandpaper
- Adhesive & Masking Tape
- Hole Saw- If the aim is to create rounded edges for any sink based application.

# For an inset sink-

- Start by laying out the sink template over the Impreza surface. In case a sink template is not available, use the sink as a stencil to create a guide for the outer frame of the sink.
- 2. Once the location of the sink has been identified, using this guide as reference, create an inner guide for the actual cutout.
- 3. Ensure a minimum distance of 150 mm between the sink cutout edge and the adjacent seam joint, and at least 40mm distance from the worktop edge. Secure the arrangement using clamps.
- 4. To create the cutout, use a handheld router or a jigsaw. In the case of a router, ensure that the cuts are made in increments no more than 4mm deep at a time. A guide rail and TCT blades are highly recommended.
- 5. Sand the inner surface using fine grit sandpaper, as this helps prevent any stress cracks and tension in the edges. Avoid damaging the decorative surface during the sanding process
- 6. For creating drainage grooves, place the groove jig over the Impreza panel. Use a router with a 30mm bush and a 12mm rounded bit, to a depth of 3mm to create the grooves. Drainage grooves must remain clear of the edges by a min 15mm.



- 7. Line the face of the surrounding panel with silicone and insert the sink.
- 8. Secure the sink using sink clips, preferably using spreading dowels.
- 9. On the underside secure the sink using the provided attachments. Remove any leftover silicone and wipe the panel.
- 10. Let the silicone cure before undertaking any further work on the installation.

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### Undermount Sinks

Undermount sinks require additional care while installing. Butler & Belfast sinks are not highly recommended for fitting with Merino countertops. In such cases, please refer to the sink manufacturer's installation guidelines.

Always use a sacrificial MDF board to help support the panel and minimize debris.

To perform a face cutout, position the countertop panel with topside facing upwards. Then put the pegs in the jig at the appropriate markings and place the jig on top of the countertop panel. Clamp the jig in place at all four corners and place the inner template to bond with adhesive. Use a hand router to cut into the countertop.

The edges can be profiled using a router bit with bottom bearing. Always smoothen the edges using a palm sander or any other sanding tool, taking care to sand the internal radii with a very high grit paper.

When fitting the sink into the cut out, perform a dry fit first. Ensure the sink lip is completely flat as this can affect the bond between the sink and the Merino countertop. Mark the location of the sink clips and drill pilot holes. Add the sink clips or the spreading dowels and check the fit of the sink. Once satisfied with the placement and fit, remove all clips and the sink.

For the final installation, it is best to ensure that the sink is face down. Clean the two joining faces of the countertop and the sink lips. Apply Silicone to the worktop. Position the sink in place, applying even pressure which squeezes out the Silicone from the cutout edges, ensuring a solid bond. Center the sink and tighten the sink clips using Allen key. Turn over the worktop and ensure the clips are attachments are smug. Clean the excess silicone and wipe dry.

Allow at least 24 hours for the sink to set before use.

# **TILES & CREATING CURVES**

Incorporate the sleek flow of curves for a truly stunning finish to any design. With no re-edging required thanks to the Matching Color core, external curves can easily be incorporated on site, or utilize our pre-curved corner module for an incredibly simple internal curve solution.



Place a template or a curved board on top of the panel on which the curve has to be made. Scribe the final cut onto the panel. With the template/board on top of the panel, use a jigsaw or a router with a flush trim bit which can follow the curve of the template and cut the panel in a similar fashion.

Clean the edges as per the directions given in Cutting Section.

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### POST FABRICATION

Once the fabrication of Impreza worktops is completed, it is safe to remove the peel coat protective film. Please ensure the film doesn't stay on the surface beyond a few months as it may leave a residue on the surface that can become hard to remove with time.

# **CLEANING & CARE**

Impreza worktops are High Pressure Laminates, which do not suffer from corrosion, oxidation or any such degradation process that wood-based products. Therefore no further surface protection and no maintenance apart from basic cleaning is needed.

# Care

Protect the surface from any heat sources. Do not use sharp objects on the decorative surface.

# Cleaning

As Impreza panels are routinely used in high wear areas such as kitchen, avoid exposing the decorative surface to prolonged exposure from staining agents.

In case of ordinary stains, Merino recommends cleaning the surface gently with a clean, damp, soft cloth. For persistent stains like coffee or tea, use a mild cleaner/detergent followed by wiping dry with a clean cloth. Do not use brushes or scourers at any time.