

SURROUND by Laminex™

Usage instructions:

This set of instructions outlines the curving of panels for Surround by Laminex.



Technical Bulletin – Curving of Panels

Curving of panels

What is kerfing?

Kerfing is a technique used to create flexible or curved shapes in various materials, including wood, plastic, or metal. The process involves making a series of parallel cuts along a specific line or curve in the material.

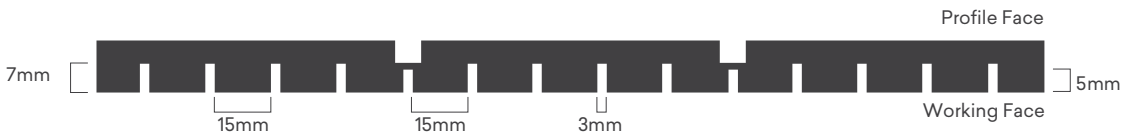
To begin the kerfing process on Surround by Laminex, you will need a suitable cutting tool, such as a table saw, power saw, or router depending on the material you are working with and whether working on-site or in a workshop. Selecting a cutting tool appropriate for the material's thickness and fully supporting the material during cutting is critical.

Profile summary:

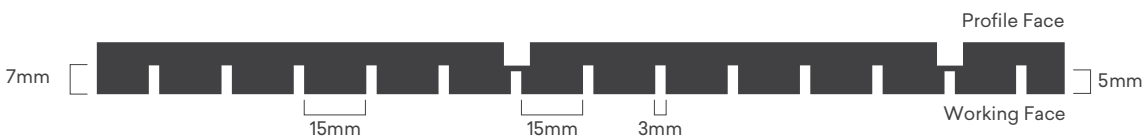
Batten 25



Batten 75



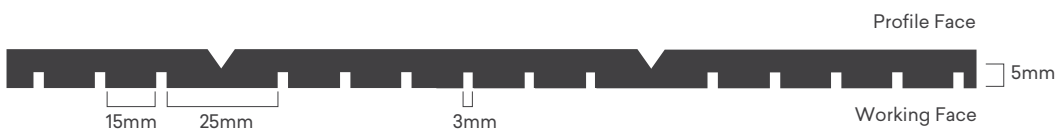
Batten 100



Batten 300



Classic VJ 100



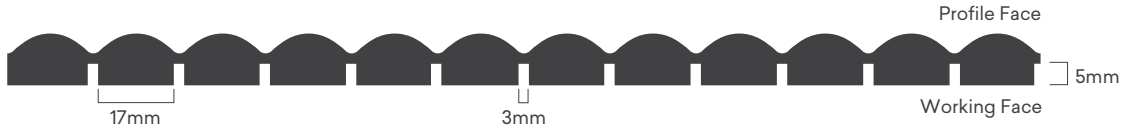
Planning is necessary for positioning the groove at the join. We recommend allowing 10mm gap between the groove and end of the join



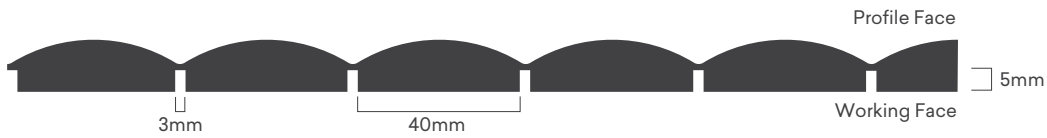
Classic VJ 200



Demi Round 20



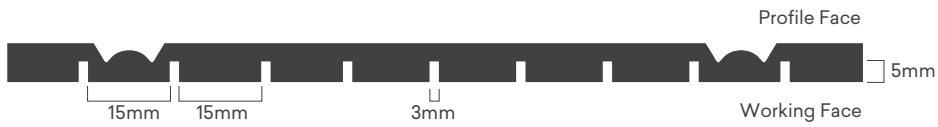
Demi Round 40



French Stripe 30



Heritage 150



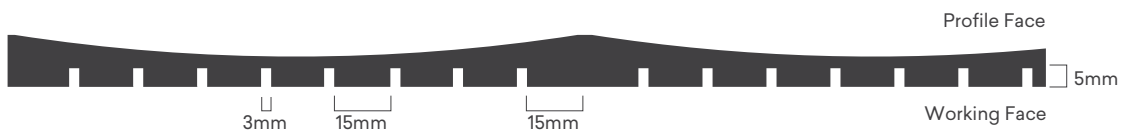
Scallop 22.5



Scallop 45



Scallop 135



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Curving specifications

Profile	Minimum Curved radius (mm)	Spacing between the grooves (mm)	Groove depth (mm)	Groove width (mm)
Batten 25	500	Spacing between each point 22mm located at the centre of the batten profile.	5mm depth on the profile area and 7mm depth on the non-profile area.	3
Batten 75	500	Spacing between each point is 15mm located at the centre of the profiled area. The spacing between the non-profile area is 15mm	5mm depth on the profile area and 7mm depth on the non-profile area.	3
Batten 100	500	Spacing between each point is 15mm located at the centre of the profiled area. The spacing between the non-profile area is 15mm	5mm depth on the profile area and 7mm depth on the non-profile area.	3
Batten 300	500	Spacing between each point is 15mm located at the centre of the profiled area. The spacing between the non-profile area is 15mm	5mm depth on the profile area and 7mm depth on the non-profile area.	3
Classic VJ 100	500	Spacing between each point is 25mm with the VJ profile located at the centre. The spacing between the non-profile area is 15mm.	5mm depth of all grooves.	3
Classic VJ 200	500	Spacing between each point is 25mm with the VJ profile located at the centre. The spacing between the non-profile area is 15mm.	5mm depth of all grooves.	3
Demi Round 20	600	20mm spacing from every semi-circle profile end	5mm depth of all grooves	3
Demi Round 40	600	40mm spacing from every semi-circle profile end	5mm depth of all grooves	3
French Stripe 30	500	5mm spacing centre in from each side of the profile	5mm depth of all grooves	3
Heritage 150	500	15mm from the centre of the profile. The spacing between non profile area is 15mm	5mm depth of all grooves	3
Scallop 22.5	600	22.5mm spacing located at the center of the semi-circle profile	7mm depth of all grooves	3
Scallop 45	600	10mm spacing from the semi-circle profile border and 20mm spacing at the curved profile	6.5mm depth of all grooves	3
Scallop 135	600	15mm off from the centre of the profile and spacing between each groove is 15mm	5mm depth of all grooves	3

The starting point of the first groove should be positioned from the joint and aligned with spacing guidelines provided in the above table.



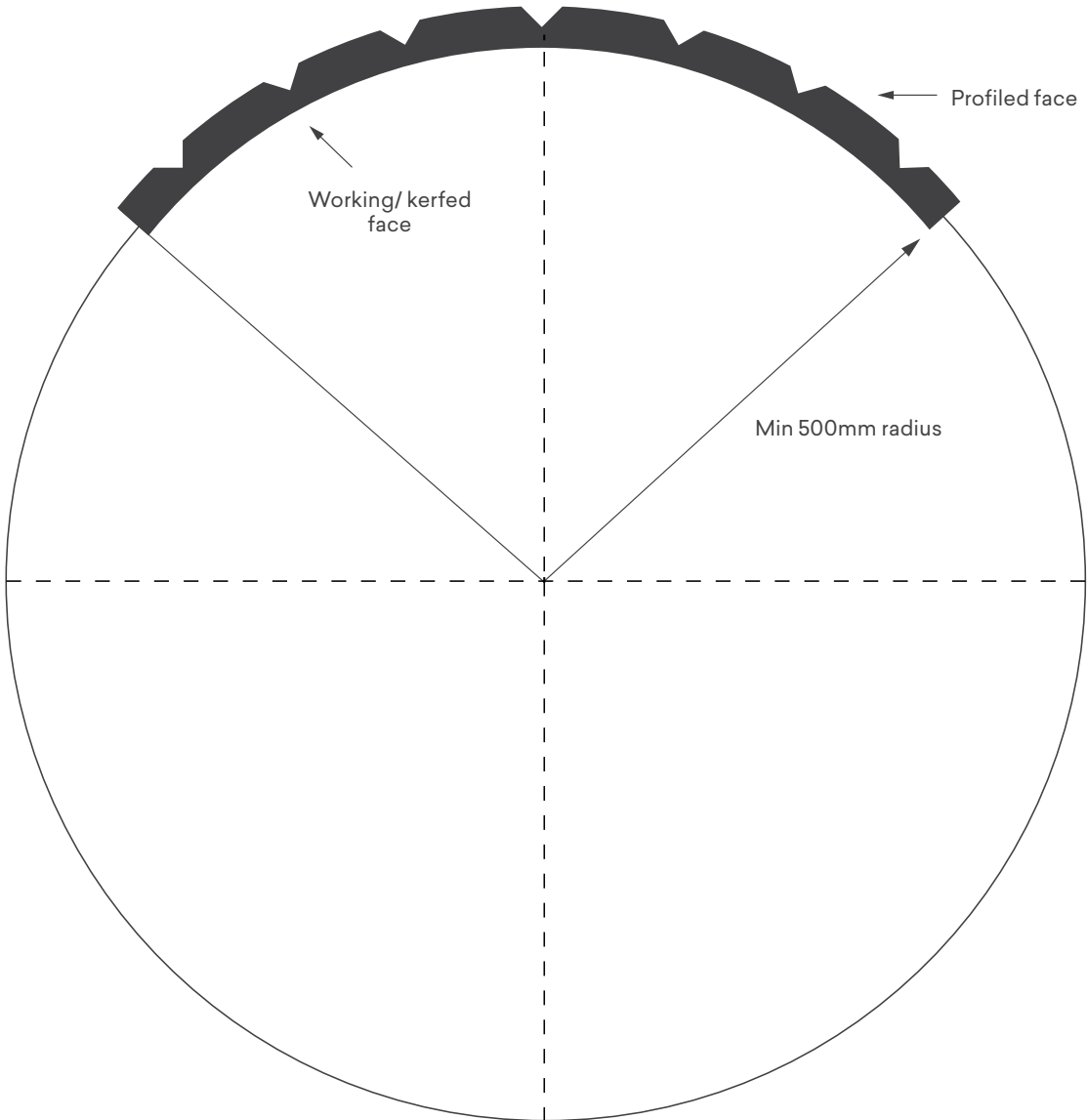
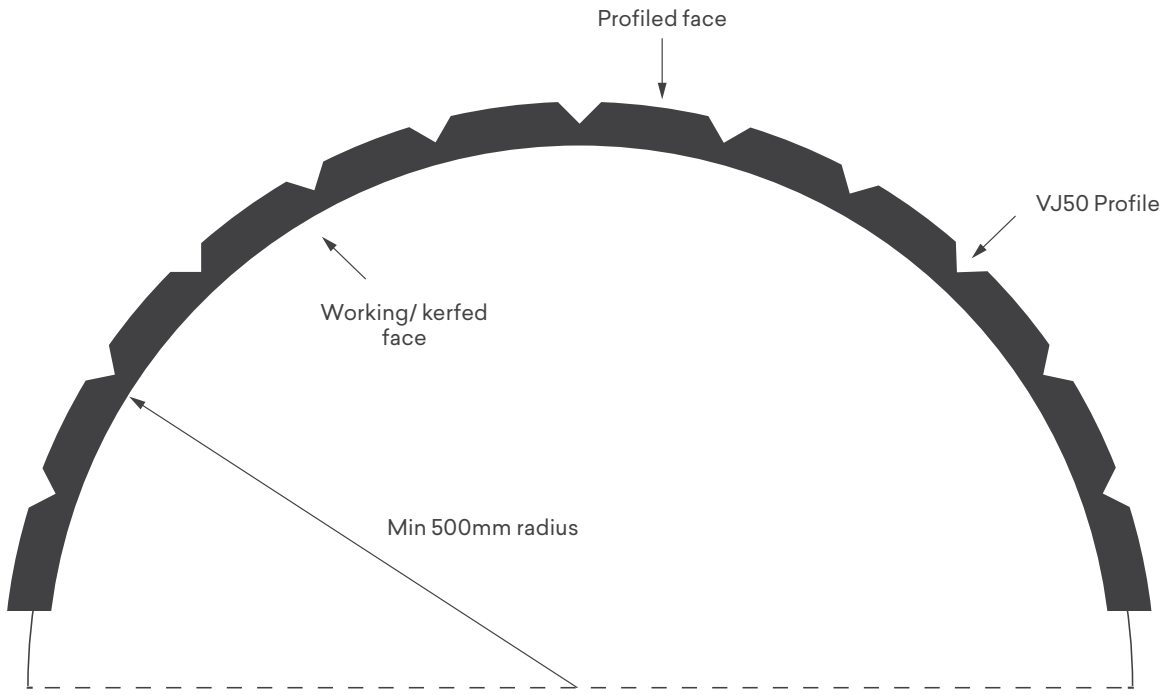


FIGURE 1



Cabinetry installation

What is kerfing?

Kerfing is a technique used to create flexible or curved shapes in various materials, including wood, plastic, or metal. The process involves making a series of parallel cuts along a specific line or curve in the material.

To begin the kerfing process on Surround by Laminex, you will need a suitable cutting tool, such as a table saw, power saw, or router depending on the material you are working with and whether working on-site or in a workshop. Selecting a cutting tool appropriate for the material's thickness and fully supporting the material during cutting is critical.

Cabinetry installation

Preparing the cabinetry

Designing cabinet components for decorative curved panels needs careful planning for the support structure of the kerfed panels. Check the radius of the intended cabinetry is aligned with the selected Surround by Laminex décor. The minimum radius under warranty is 600mm for Demi Round & Scallop décor & 500mm for all other Surround by Laminex décor. It is important to choose a suitable profile for the degree of curvature involved in the project.

Designing supporting structure

This can be approached in one of two ways.

1. A mould structure is built to which the Surround by Laminex curved pieces are combined with a panel of Craftform® (or equivalent product) bonded together. Refer to Trade Essentials Craftform® circular construction document - Trade Essential Raw MDF brochure.
2. A curved substructure to which the Surround by Laminex panels are affixed which forms a permanent section of the integral cabinetry build. If using a curved substructure (full substrate) use 3mm-6mm bending ply, 3mm-6mm raw MDF or 9mm Trade Essentials Craftform® (long or short cut needs to be planned) as a formwork to fix the kerfed Surround by Laminex panels to.

An open frame design is subject to more challenges in fixing. If used, a minimum of top and bottom rails in 16mm MDF or PB with central ribs at a spacing of every 250mm. Please note the degree of curvature will determine how many ribs are required. Refer to the curving specification table for the recommended interval and depth of the kerf cuts.



Cutting the panels

Mark the locations for the kerf cuts using a pencil or marking tool. Refer to the curving specification table for spacing between the grooves.

Set up your CNC or manual cutting tools to the required settings outlined in the specification table. A jig can be created for more accurate even spacing. Normal woodworking tooling is required noting that cutting tips need to be 3mm wide.

Adjust the blade height and refer to the depths of cuts and positions in the specification table. It is important not to exceed the depth of the cut as failure of the panels may occur.

Carefully make the kerf cuts along the marked lines, using a slow and controlled motion. Keep the panel securely clamped to prevent any movement.

Apply even coverage of PVA glue but avoid using excessive glue that might squeeze out when clamped. Follow the manufacturer's instructions for the amount to be used.

The kerf cuts will allow the panel to flex when the process handling and installation are followed correctly. Preventing breakage requires the panel to be supported at all times during handling.

Installing the curved panels to the interior cabinet frame

Ensure that your interior cabinet frames are constructed and ready for installation.

Have your kerfed Surround by Laminex panels, flexible construction adhesive, clamps, screws, and other necessary tools on hand.

Measure the dimensions of the cabinet openings where you intend to install the kerfed Surround by Laminex panels.

Transfer these measurements to the kerfed panels, marking the areas where the panels need to be trimmed to fit precisely.

Using a powered saw, trim the kerfed Surround by Laminex panels along the marked lines to match the dimensions of the cabinet openings. Always make sure that the panels are fully supported while machining and handling.

Gently bend the panel along the kerf cuts, following the desired radius on the supporting structure. Refer to Trade Essentials Craftform® circular construction document - Trade Essential Raw MDF brochure.

Sand the cut edges to ensure a smooth flake/chip-free surface.

Fix kerfed Surround by Laminex panels to prepare cabinetry.

Ensure all expansion gaps are maintained (2mm per meter min) between panels and fixtures to permit the panels to react in environmental conditions. All expansion gaps must be filled with flexible sealant (25% movement minimum).

All penetrations through the panels must be sealed on all edges.

Wet area sealant must be maintained for all wet-area installations per Standards Australia (2018)- **AS 4386** Cabinetry Commercial & Domestic 2018: Cabinetry Requirements.



Wall installation

Preparing the wall

Designing wall components for decorative curved panels needs careful planning for the support structure of the kerfed panels. Check the radius of the intended wall structure is aligned with the selected Surround by Laminex décor. The minimum radius under warranty is 600mm for Demi Round & Scallop décor & 500mm for all other Surround by Laminex décors. It is important to choose a suitable profile for the degree of curvature involved in the project.

Designing supporting structure

A curved wall structure is permanently fixed at the desired radius to which Surround by Laminex panels are affixed.

Please note the degree of curvature will determine how many stud fixings are required.

Refer to the specification table for the recommended interval and depth of the kerf cuts based on the profile of the panels.

Cutting and bending the panels

Setup the workplace to fully support the panels and mark the locations for the kerf cuts using a pencil or marking tool. Refer to the table for spacing between the grooves.

Place a straightedge or guide along the marked lines to ensure straight and even cuts. Make sure the panels are always fully supported when cutting and handling

Measure the dimensions of the wall openings where you intend to install the kerfed Surround by Laminex panels.

Transfer these measurements to the kerfed panels, marking the areas where the panels need to be trimmed to fit precisely.

Set up your table of powered saw or manual saw cutting tools to the required settings outlined in the specification table. A jig can be created for more accurate even spacing. Normal woodworking tooling is required noting that cutting tips need to be 3mm wide.

Using a powered saw, trim the kerfed Surround by Laminex panels along the marked lines to match the dimensions of the wall openings. Always make sure that the panels are fully supported while machining and handling.

Adjust the blade height according to the table above. Refer to the depths of cuts and positions in the specification table. It is important not to exceed the depth of the cut as failure of the panels may occur. Cuts depths exceeding the guidance table can result in visual imperfections on the finished face material.

Carefully make the kerf cuts along the marked lines, using a slow and controlled motion. Keep the panel securely clamped to prevent any movement.

Please ensure careful handling, transport, and fixing of the curved panel due to its increased flexibility within the panel.

Ⓜ FR substrate panels that are curved do not comply with Group 2 fire classification.



Warranty Document

To view the latest Warranty Document for this product, please visit www.laminex.com.au.

Care & Maintenance Document

To view the latest Care & Maintenance Document for this product, please visit www.laminex.com.au.

Safety Data Sheet

To view the latest Safety Data Sheet for this product, please visit www.laminex.com.au.

Technical and warranty Information

All technical information including Availability Guides, SDS, Technical Data Panels, Fabrication & Installation Guide and Warranties are located at laminex.com.au

Surround by Laminex products have a 12 month warranty.

The designs of the Surround By Laminex range are protected by Australian Design Registrations.

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For location of your closest showroom or more information visit laminex.com.au

Product Sample

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