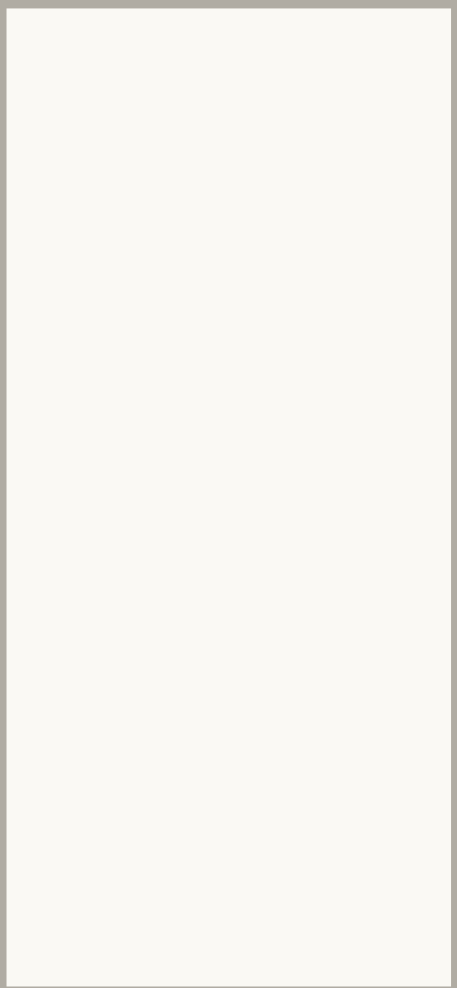
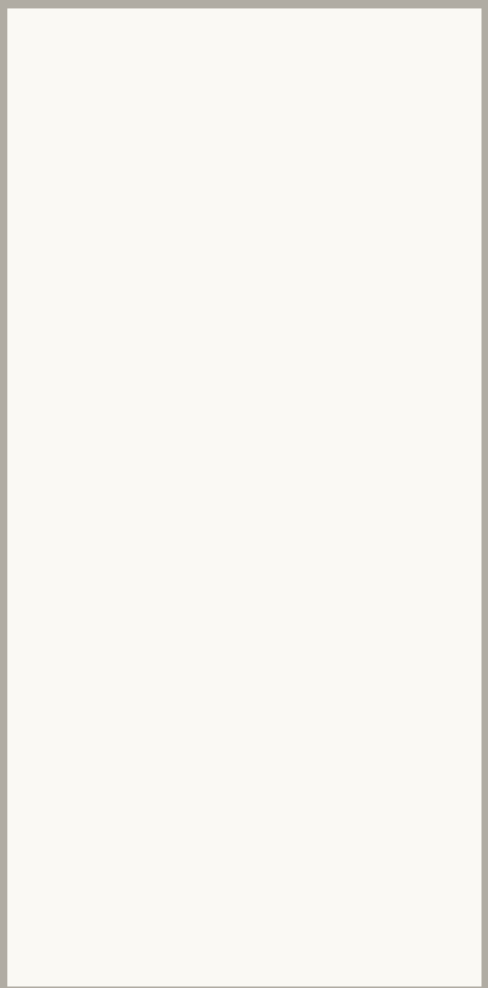
Forté

DESIGN AND USAGE GUIDE

Alor Cabinetry System

FOR USE WITH ALOR PANELS





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ABOUT ALOR VENEER PANEL

This guide is for designers, fabricators, and installers of Alor prefinished timber-faced veneer panels and related products. Each section includes information relevant to one or more of these roles. Refer to the sections that apply to you to make informed decisions, understand the advantages and limitations, and to help you:

– Design a joinery project, and/or

– Fabricate and assemble cabinetry panel components, and/or

– Install the completed joinery item/project/fixture.

Please be aware of warranty inclusions and exclusions in relevant sections.

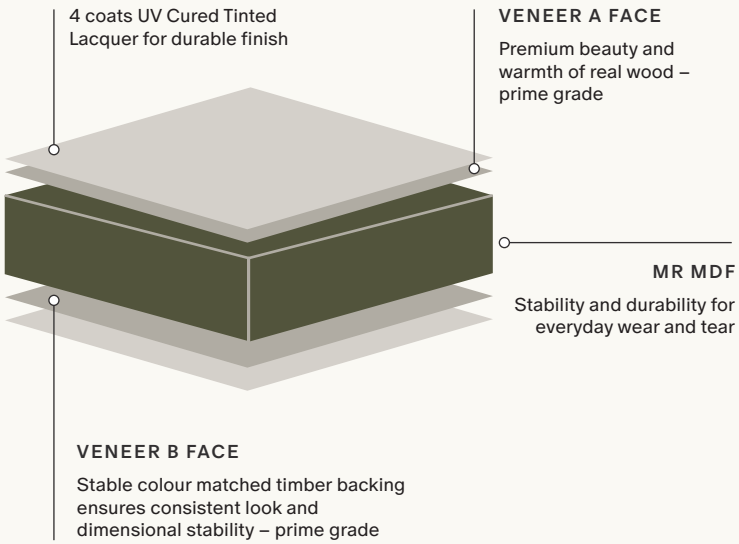
1.1 PRODUCT OVERVIEW

Alor Veneer Panel is a prefinished timber-faced veneer panel with Moisture-Resistant MDF core that is designed specifically for cabinetry.

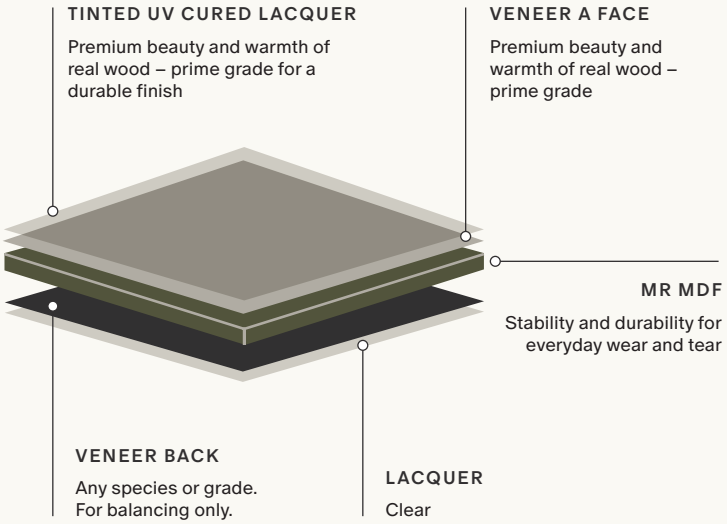
Unlike many other panels, Alor Veneer Panel comes prefinished with a factory-quality UV-Cured Lacquer finish.

This ensures a consistent and durable surface with clarity that cannot be replicated by Manual or Machine Spray Finishes. Being prefinished, it also reduces the time to produce cabinetry, removing the need to send unfinished panels away for finishing. Available in a range of curated colours and textures with consistent finish and surface quality.

19MM VENEER PANEL - 1F1B



7MM VENEER SKIN PANEL - 1FAB



SCOPE AND LIMITATIONS

Alor veneer panels are designed for interior use in residential and light commercial projects, bringing refined timber finishes to cabinetry, joinery and feature applications. The following guidance outlines where the Forté Alor Panel System can be used, and any limitations or conditions that apply to ensure safe, compliant and long-lasting installations.

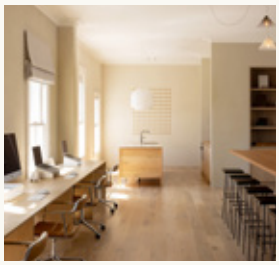
2.1 INTENDED USES

Alor Panel is well-suited for a wide range of interior cabinetry and joinery applications, including cabinets, shelving, and general storage.

Alor's robust construction ensures stability and reliability for everyday use, while its high-quality surface finish allows for a variety of aesthetic treatments.

While ideal for standard residential and light commercial applications, Alor is not intended for heavy-duty commercial or industrial storage, nor should it be used as a structural brace.

✓ RESIDENTIAL CABINETRY

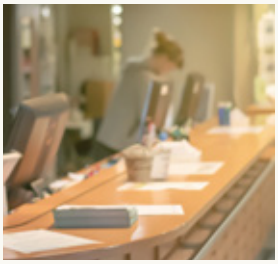


✓ COMMERCIAL FIT OUT CABINETRY

(Workspace, Retail & Hospitality)

✓ COMMERCIAL DEVELOPMENT CABINETRY

(Apartments, Aged Care & Hotels)



✗ HEAVY USE COMMERCIAL

✗ WET AREAS

✗ EXTERIORS

2.2 LIMITATIONS

CABINETRY CARCASSES/ INTERNAL CONSTRUCTION

Alor Cabinetry Panel is primarily intended as a facade product, with a Moisture Resistant Carcass Core, it can also be used for carcasses where design continuity is required. Alor veneer on MR MDF can be used as a carcass. It is best used for dry cabinets, even so, all cut edges must be sealed or edgebanded to prevent swelling.

Refer to 5.2.1

CABINETS IN PROXIMITY TO WATER

Where cabinetry interfaces with plumbing, allow for sealed edges at all cut-outs and toe kicks to protect the MDF core from moisture ingress. In high-splash areas such as bathrooms, laundries, or sink cabinets, an additional sealing coat may be applied to the unit after assembly.

Refer to 5.1.6, 5.2.3, 5.3.8

CABINETS NEAR HUMIDITY SOURCES

Where installed in wet or high-moisture environments such as bathrooms, panels should not be positioned directly adjacent to basins or taps without appropriate sealing, protection, and maintenance. Adequate ventilation within and around the vanity is required to help manage humidity and support long-term performance.

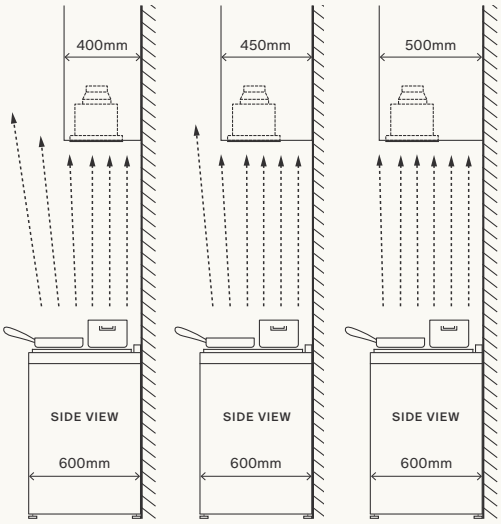
Refer to 4.2.3, 4.3.7

INTEGRATED RANGE HOODS

Always refer directly to the building codes and manufacturer specs for installation of integrated appliances. As a best practice, for veneer longevity “integrated” or “concealed” hoods, consider the carcass dimension as there needs to be room for both the appliance and adequate air movement. Timber veneer is sensitive to repeated humidity spikes, so detailing matters. We recommend the following:

HEIGHT TOP OF COOKTOP TO BASE OF PRODUCT	
Electric Cooktop	600mm – 750mm
Gas Cooktop	650mm – 750mm

Refer to 4.3.5, 5.3.6



WORKING SURFACES

Alor panels are not suitable for high-use or sanitary working surfaces such as benchtops, food preparation areas, or vanity tops. They are intended for use as cabinetry doors, drawer fronts, side panels, end panels, and light-duty shelving only

Refer to 5.1.4 & 5.1.5

CABINETS NEAR HEAT SOURCES

Timber is hygroscopic, meaning it absorbs and releases moisture based on its environment. To prevent movement or cracks or warping, we recommend specifying Alor Veneer panel in areas where a relative humidity of 40–60% and a temperature between 16–27°C will be maintained.

Refer to 4.1, 4.2


SOLIS

2.3 COMPLIANCE

RELEVANT NZBC CLAUSES	
B1 STRUCTURE — B1.3.1, B1.3.2, B1.3.3 (J), B1.3.4	Alor panel is a non-structural internal lining system and is not subject to specific structural design requirements under NZBC B1/AS1. Compliance with NZBC B1 is achieved by ensuring the system remains stable under its self-weight and expected service loads, is securely fixed to a suitable substrate, and accommodates building movement without risk of detachment, distortion, or hazardous failure. Assessment may be made in accordance with the principles of B1/VM1.
B2 DURABILITY – B2.1.1.1C	Alor panels are intended for internal lining applications that comply with NZBC B2/AS1 durability requirements for internal elements (5-year service life), when installed and maintained under normal interior conditions. Durability is dependent on correct installation, suitable substrates, and appropriate environmental conditions. Alor panels are supported by a 7-year manufacturer warranty covering material and manufacturing performance under specified conditions. The UV lacquer finish provides surface protection but does not remove the need for appropriate detailing or environmental control.
C1 LIMITING HEAT TRANSFER C1.3.2 / C/VM1	Alor panels are not intended for use in locations where surface temperatures may exceed 70°C. Where installed in proximity to heat-producing appliances, appropriate clearances, ventilation, and detailing must be provided to ensure surface temperatures remain within acceptable limits in accordance with C1.3.2.
C2 PREVENTION OF FIRE OCCURRING C2.2	Alor panels are classified as Group 3 in accordance with Table A1 of Appendix A, C/VM2, when tested under standard conditions. The product must be used within the defined scope of application and installation limitations. Where a higher group classification is required, a suitable intumescent coating system may be applied, subject to system testing and confirmation.
C3 FIRE AFFECTING AREAS BEYOND FIRE SOURCE C3.4(A)	Alor panels may be used where the required surface finish performance complies with NZBC C3.4(a), as determined in accordance with C/AS2 for the relevant building use and location. It is the responsibility of the designer/specifier to ensure the installed system meets the required fire performance criteria for the specific application.
E3 INTERNAL MOISTURE E3.3.4, E3.3.5, E3.3.6	Panels are suitable for dry interior applications and must not be used where they may contribute to moisture damage under E3.Alor panels are suitable for dry internal applications in accordance with NZBC E3/AS1. They must not be installed in areas subject to persistent or high moisture conditions where they may be exposed to water ingress, prolonged humidity, or conditions that could result in moisture-related damage. The product is not recommended for use in wet areas such as bathrooms or laundries, or in environments where relative humidity is expected to exceed 70% (e.g. sauna or pool rooms). While the UV lacquer finish provides a durable, easily cleaned surface, it does not provide waterproofing or suitability for high-moisture environments.
F2 HAZARDOUS BUILDING MATERIALS F2.3.1	Alor Panel achieved a Super E0 Formaldehyde emission rating and are safe to handle. As this is a timber product, dust masks should be worn when cutting.
G3 FOOD PREPARATION & PREVENTION OF CONTAMINATION G3.3.2	Alor panels feature a durable, easy-to-clean UV lacquer finish. However, they are not intended for use as sanitary working surfaces and are not suitable for food preparation areas. As a precaution, they should not be used as kitchen benchtops or in any application requiring a hygienic, foodsafe surface.

2.4 TECHNICAL SPECIFICATIONS

19mm Veneer Panel — 1F1B

DIMENSIONS (MM)	19/0.6 x 1220 x 3050	
ENVIRONMENTAL	Sustainably Sourced - FSC Available upon request	
DENSITY	730 kg/m3 +/- 7% (MDF Core)	
THICKNESS TOLERANCE	±0.2 mm	
SQUARENESS TOLERANCE	+/- 2mm/m	
FLATNESS	Bow/Cup = ≤2.0 mm per meter Twist = ≤1.0 mm per meter	
SWELLING IN THICKNESS	8% (18mm MR MDF)	
INTERNAL BOND	0.75 N/mm2	
BENDING STRENGTH	30 N/mm2	
MODUS OF ELASTICITY IN BENDING	2700 N/mm2	
MOISTURE CONTENT	6-10%	
LRV	Cove 40.63 Tusk 31.41 Ochre 13.04 Nox 7.82	Solis 33.48 Asta 20.71 Ember 14.21 Inca 4.24
THERMAL RESISTANCE	0.18m2K/W (18mm MR MDF)	
VOC EMISSIONS (FORMALDEHYDE)	Alor veneer panels achieve an E0 Formaldehyde emission rating	
REACTION TO FIRE (CABINETRY)	MR MDF Core: Group 3 FR Core: Test pending A higher group rating can be achieved with an intumescent coating applied by a third party	

7mm Veneer Skin Panel — 1FAB

DIMENSIONS (MM)	7/0.6 x 1220 x 3050	
ENVIRONMENTAL	Sustainably Sourced - FSC Available upon request	
DENSITY	730 kg/m3 +/- 7% (MDF Core)	
THICKNESS TOLERANCE	±0.2 mm	
SQUARENESS TOLERANCE	+/- 2mm/m	
FLATNESS	Bow/Cup = ≤2.0 mm per meter Twist = ≤1.0 mm per meter	
SWELLING IN THICKNESS	18% (6mm MR MDF)	
INTERNAL BOND	0.70 N/mm2	
BENDING STRENGTH	34 N/mm2	
MODUS OF ELASTICITY IN BENDING	3000 N/mm2	
MOISTURE CONTENT	6-10%	
LRV	Cove 40.63 Tusk 31.41 Ochre 13.04 Nox 7.82	Solis 33.48 Asta 20.71 Ember 14.21 Inca 4.24
THERMAL RESISTANCE	0.1m2K/W (6mm MR MDF)	
VOC EMISSIONS (FORMALDEHYDE)	Alor veneer panels achieve an E0 Formaldehyde emission rating	
REACTION TO FIRE (CABINETRY)	MR MDF Core: Group 4 (Indicative only) FR Core: Test pending A higher group rating may be achieved with an intumescent coating applied by a third party	

MATERIALS

In the past, carefully selecting the veneer grade, cut and panel configuration is essential to achieving your desired aesthetic, performance, and finish across cabinetry, joinery and interior surfaces. Forté have curated a collection of prefinished solutions that enhance the aesthetic of each colour to best bring out the natural beauty of timber.

3.1 VENEER PANEL PRODUCT OVERVIEW

A showcase of natural timber beauty, precision craftsmanship, and lasting performance in every panel.

Alor panels are premium, prefinished boards designed for cabinetry manufacture. Engineered for consistency and ease of use, they provide a reliable solution for high-quality interior applications.

— Real timber veneer with a lightly brushed finish for a natural appearance

— Prefinished surfaces in a select range of colours for consistency across projects

— MR MDF core for stability and moisture resistance

— UV-lacquered finish for durability and ease of maintenance

— Uniform thickness and factory finish to support efficient fabrication and installation

— Premium edgebanding and touch-up solutions available

19MM 1F1B PANEL	The 19mm 1F1B panel is designed for cabinetry and joinery applications where both faces may be visible or a consistent backing is required, providing a stable, prefinished solution for double-sided components. — Prime grade timber veneer on both A & B faces — Suitable for applications where both sides are visible, with the B face often concealed (e.g. drawer fronts) — 19mm construction for strength and rigidity — Ideal for cabinetry doors, panels, and internal components
7MM 1FAB SKIN PANEL	The 7mm 1FAB panel can be used as a standalone lining panel in fully supported, single-sided applications, or as a versatile skin panel for building up thicker, double-sided components. — Pre-Finished timber veneer face with a balancing veneer as the backing layer — 7mm construction for reduced weight and easy handling — Suitable for single-sided applications, such as cabinetry backs or wrapping bulkheads where the skin panel is affixed to a solid substrate — Ideal as a building block for F2S finishes, including thick feature end panels, shelving, and door skins — Designed to integrate seamlessly with the wider Alor panel range

SKIN PANEL BUILD-UP OPTIONS

FINISHED THICKNESS	CONSTRUCTION	
19mm Cabinetry panels, doors	FACE 1	7mm Skin Panel
	MDF CORE	4–5mm MDF
	FACE 2	7mm Skin Panel
26mm End panels, feature shelving	FACE 1	7mm Skin Panel
	MDF CORE	12mm MDF
	FACE 2	7mm Skin Panel
32mm Shelving, joinery components	FACE 1	7mm Skin Panel
	MDF CORE	18mm MDF
	FACE 2	7mm Skin Panel
39mm Thickened elements, feature panels	FACE 1	7mm Skin Panel
	MDF CORE	25mm MDF
	FACE 2	7mm Skin Panel
44mm Statement joinery, bulkier profiles, solid core doors	FACE 1	7mm Skin Panel
	MDF CORE	30mm MDF
	FACE 2	7mm Skin Panel

3.1.1 PREFINISHED VENEER PANEL SPECIFICATIONS

Colours

COVE

SOLIS

TUSK

ASTA

OCHRE

EMBER

NOX

INCA

COLOUR	DIMENSIONS	CODE	SPECIES	CORE	FORMAT
Light Blond					
Cove (Quarter Cut)	19 x 3050 x 1220mm	AL-C-1F1B-A1 -V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-C-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-C-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7
Natural					
Solis (Quarter Cut)	19 x 3050 x 1220mm	AL-S-1F1B-A1-V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-S-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-S-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7
Light Brown / Beige					
Tusk (Quarter Cut)	19 x 3050 x 1220mm	AL-T-1F1B-A1-V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-T-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-T-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7
Brown / Grey					
Asta (Quarter/Crown Cut)	19 x 3050 x 1220mm	AL-A-1F1B-A1-V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-A-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-A-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7
Mid Brown					
Ochre (Quarter/Crown Cut)	19 x 3050 x 1220mm	AL-O-1F1B-A1 -V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-O-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-O-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7
Ember (Quarter/Crown Cut)	19 x 3050 x 1220mm	AL-E-1F1B-A1-V3	American Walnut	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-E-1F1B-A2-V3	American Walnut	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-E-1FAB-A7-V3	American Walnut	Core A (MR MDF)	1FAB A7
Dark Brown/Black					
Nox (Quarter/Crown Cut)	19 x 3050 x 1220mm	AL-N-1F1B-A1-V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-N-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-N-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7
Inca (Quarter/Crown Cut)	19 x 3050 x 1220mm	AL-I-1F1B-A1-V3	European Oak	Core A (MR MDF)	1F1B A1
	19 x 2440 x 1220mm	AL-I-1F1B-A2-V3	European Oak	Core A (MR MDF)	1F1B A2
	7 x 3050 x 1200mm	AL-I-1FAB-A7-V3	European Oak	Core A (MR MDF)	1FAB A7

1F1B

	A FACE (FRONT FACE)	B FACE (BACK FACE)
FINISH	Prefinished Colour-Stain with UV-Cured Lacquer	Prefinished Colour-Stain with UV-Cured Lacquer
SPECIES	European Oak American Walnut – Ember Only	European Oak American Walnut – Ember Only
KNOTS	Small Knots – Limited Quantity	Small Knots – Unlimited Quantity
OPEN DEFECTS	Not Accepted	Very Limited
CRACKS	Up to 2cm From the Edge	Up to 2cm From the Edge
NATURAL FEATURES	Subtle	Moderate
FOILING	Clear Foil	Blue Marked Foil
THICKNESS	0.6mm	0.6mm
BRUSHING	Lightly Brushed	–
USE	Face	Back
GRADE	Prime Grade Face	Cabinetry Grade Back
LANYON (SPLICING)	Planked (Mismatch)	Planked (Mismatch)
VENEER CUT	Quarter & Crown Cut Mix - Asta, Ochre, Ember, Nox, Inca Quarter Cut Only – Cove, Solis, Tusk	Same as Face

1FAB

	A FACE (FRONT FACE)	B FACE (BACK FACE)
FINISH	Prefinished Colour-Stain with UV-Cured Lacquer	Unfinished Balancing layer only
SPECIES	European Oak American Walnut – Ember Only	Any
KNOTS	Small Knots – Limited Quantity	Up to Moderate Sized Knots – Unlimited Quantity
OPEN DEFECTS	Not Accepted	Limited
CRACKS	Up to 2cm From the Edge	Up to 2cm From the Edge
NATURAL FEATURES	Subtle	–
FOILING	Clear Foil	–
THICKNESS	0.6mm	0.6mm
BRUSHING	Lightly Brushed	–
USE	Face	Back
GRADE	Prime Grade Face	Any Species Back – For Balancing Only
LANYON (SPLICING)	Planked (Mismatch)	–
VENEER CUT	Quarter & Crown Cut Mix - Asta, Ochre, Ember, Nox, Inca Quarter Cut Only – Cove, Solis, Tusk	–

3.2 EDGEBANDING

Our veneer panels are finished with premium edgebanding designed to protect and enhance your cabinetry.

Natural Edgebanding is the standard choice, perfect for general applications with a seamless, refined look. Or select ABS for an ultra durable, timber look solution.

3.2.1 PREFINISHED EDGEBANDING

Premium edgebanding ensures seamless, durable edges that enhance both the appearance and longevity of veneer panels.

Our Edgebanding solutions provide options to embrace the authentic beauty of real timber veneer and strength of matched ABS backing to provide an innovative and resilient solution to the edges of Alor veneer panels.

Option 1 – Alor Natural timber edgebanding (24/48mm)

Option 2 – ABS edgebanding (23/43mm)

NATURAL

When selecting natural edgebanding, edges will need to be sealed using a finishing lacquer pen or similar to provide a waterproof seal.

FORMAT	TYPE	ROLL DIMENSIONS (TxWxL)
EN24	Natural	1mm x 24mm x 50m
EN48	Natural	1mm x 48mm x 50m

ABS

ABS edgebanding delivers superior durability, impact resistance, and a seamless finish that keeps your panels looking sharp and long-lasting.

FORMAT	TYPE	ROLL DIMENSIONS (TxWxL)
EA23	ABS	1mm x 23mm x 50m
EA43	ABS	1mm x 43mm x 50m

*Custom widths are available upon request in 50m rolls

3.2.2 EDGEBANDING

COLOUR	FORMAT	CODE	ROLL DIMENSIONS (TxWxL)
Cove	N24 (Natural 1x24)	AL-C-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-C-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-C-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-C-EA43-V3	1mm x 43mm x 50m
Solis	N24 (Natural 1x24)	AL-S-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-S-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-S-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-S-EA43-V3	1mm x 43mm x 50m
Tusk	N24 (Natural 1x24)	AL-T-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-T-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-T-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-T-EA43-V3	1mm x 43mm x 50m
Ochre	N24 (Natural 1x24)	AL-O-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-O-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-O-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-O-EA43-V3	1mm x 43mm x 50m
Ember	N24 (Natural 1x24)	AL-E-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-E-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-E-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-E-EA43-V3	1mm x 43mm x 50m
Nox	N24 (Natural 1x24)	AL-N-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-N-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-N-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-N-EA43-V3	1mm x 43mm x 50m
Inca	N24 (Natural 1x24)	AL-I-EN24-V3	1mm x 24mm x 50m
	N48 (Natural 1x48)	AL-I-EN48-V3	1mm x 48mm x 50m
	A23 (ABS 1x23)	AL-I-EA23-V3	1mm x 23mm x 50m
	A43 (ABS 1x43)	AL-I-EA43-V3	1mm x 43mm x 50m

3.3 ACCESSORIES

Our range of accessories is designed to complement our Cabinetry Veneer Panels and support a seamless, professional finish.

We've carefully considered both the visual and functional details of cabinetry construction, helping you achieve consistency down to the smallest elements. From edge finishing to joinery detailing, a range of accessory solutions is available to support a refined, cohesive result.

For guidance on the most suitable options for your project, please refer to our current offering or contact the Forté team.

EDGE TOUCH UP

A range of edge finishing and touch-up solutions are available to support the final detailing of veneer panels. These are designed to assist with blending edges, addressing minor imperfections, and maintaining a consistent, high-quality appearance. Touch up oil is available in 125ml for touching up our Natural Edgebanding.

For current options and recommendations, please refer to our latest product offering or contact the Forté team.

COVER CAPS

Using matching caps provides a seamless appearance across doors, drawers, and panels, maintaining the premium look and integrity of the veneer.

These caps are available for purchase in a convenient 12 mm diameter, which we have found to provide the best balance between coverage and subtlety.

Alternatively, caps can be self-made using the matching 0.5mm edge tape and fixing them in place with a quality double-sided adhesive such as Speed Stick.

MAINTAINING A STABLE CLIMATE

Timber is a living material, responding subtly to the environment around it. Stable temperature and humidity levels support both the performance and longevity of surfaces, while creating healthy, comfortable interiors. Forté guidance helps specifiers understand how to manage indoor climates, balancing timber's natural character with the demands of everyday use.

4.1 CONTROLLING AMBIENT TEMPERATURE AND HUMIDITY

Maintaining stable ambient conditions is essential for the long-term performance of Alor veneer panels.

Consistent temperature and relative humidity levels reduce the risk of panel movement, surface tension, or adhesive stress. Adequate ventilation—particularly around appliances, enclosed cabinetry, and service zones—prevents localized heat and moisture buildup. Designing cabinetry with airflow gaps, integrated vents, or recessed back panels supports material stability and finish integrity. Together, these measures help preserve the veneer's natural appearance and ensure reliable dimensional performance over time.

AMBIENT RELATIVE HUMIDITY	An internal relative humidity of between 40% and 60% is ideal for timber surfaces. There is an increasing risk of product movement and hairline cracks in the veneer degradation as humidity reaches outer ranges of below 35%, or above 70%. We strongly recommend the use of a humidification or dehumidification system to maintain relative humidity within these parameters. Note: BRANZ* recommends a relative humidity of 40-60% for optimum occupant comfort.
AMBIENT TEMPERATURE	Maintaining an average internal ambient temperature of between 16-27°C is recommended. The further outside this range increases the chance of product movement and hairline cracks in the veneer. Note: The Ministry of Social Development** recommends maintaining the internal temperature between 18-21°C.

OPTIMAL ENVIRONMENTAL CONDITIONS	AMBIENT TEMPERATURE (HEAT/COOL)	16-27 °C
	AMBIENT RELATIVE HUMIDITY (DRY/ MOISTURE)	40-60%
	SURFACE TEMPERATURE	20-30 °C

4.2 CONTROLLING TIMBER VENEER SURFACE TEMPERATURE

Thoughtful design can minimise impact of harmful heat and UV exposure so your timber veneer maintains its natural elegance.

It is important to protect the floor from extreme temperatures. Floor-to-ceiling windows coupled with the New Zealand sun have been known to create floor surface temperatures of over 70°C. It is recommended for homeowners to keep the timber veneer surface temperature below 45°C when exposed to direct sunlight.

Where temperatures majorly or regularly exceed this level, there is a higher likelihood of cupping and warping, rapid deterioration of the product coating. Timber left exposed to direct, unfiltered UV rays will noticeably change in colour in the first 1-3 months. Changes in appearance may include darkening, lightening, or yellowing of the timber.

4.3 CONTROLLING HARSH LIGHT

Timber surfaces are naturally sensitive to sunlight and heat. Over time, exposure can lead to fading, discolouration and surface damage.

While UV radiation plays a major role, it is not the only cause — visible light and radiant heat (infrared) also contribute to gradual colour change and ageing of timber finishes. Even glass or films that block up to 99.9% of UV light will still allow some visible light and heat into the home, meaning colour changes can still occur over time.

Protective glass and window films help reduce this exposure and provide added benefits by protecting furniture, fabrics, rugs, artwork and other interior finishes. However, glass and film alone are not a complete solution. For best results, we recommend combining them with window coverings such as curtains or blinds, particularly in high-sun orientations, to manage peak sunlight and provide layered protection for your timber interiors.

4.4 DESIGN CONSIDERATIONS

ESPECIALLY RELEVANT FOR HIGH-SUN EXPOSURE AREAS

The following considerations apply to homes with large north-facing glazing, minimal or no soffit protection, or spaces that receive prolonged direct sunlight.

Thoughtful selection of glazing, films and interior shading can significantly reduce fading and surface degradation of timber finishes. For general care information, refer to the Care & Maintenance Guide.

— **Specify appropriate architectural glass early in the design process.** Choosing the right glass is one of the most effective ways to reduce sunlight-related damage to timber and interior finishes. For new installations, architectural glass with a low EN410 Tdw-ISO rating limits the transmission of fading-causing radiation before it enters the interior. Standard Low-E glass provides moderate protection, while advanced Low-E and solar-control options offer higher levels of protection and are recommended for areas with strong or prolonged sun exposure.

— **Use aftermarket window films where glazing replacement is not feasible.** Aftermarket films, such as 3M Prestige and Ultra Prestige, can be applied to existing glass to improve UV and visible light rejection. These products provide a practical, cost-effective option for upgrading sun protection in renovation projects or where joinery has already been installed.

— **Incorporate interior shading as part of a layered protection strategy.** Sheers, curtains and blinds should be considered an essential secondary measure, particularly in high-sun rooms. Even when treated glass or window films are used, interior window coverings help manage peak solar exposure, reduce direct heat gain and soften incoming light. This layered approach further protects timber floors, cabinetry and wall panelling while maintaining a bright and comfortable interior. This is particularly relevant for Holiday Homes.

Using the table opposite, designers and specifiers can quickly identify appropriate solutions based on sun exposure, balancing fading protection with daylight access, thermal comfort and the value of the timber surfaces being specified. This approach supports long-term performance, helping timber finishes retain their appearance and reducing the likelihood of premature refinishing or repair due to sunlight damage.

ARCHITECTURAL GLASS		Metro Xcel™ Low-E	Metro Xtreme™ Low-E	SunX™ Grey / SolarPro™ Plus
	Total Weighted Damage (LOWER # IS BETTER)	0.69	0.58	0.27
	UV / Fading Protection	Moderate	High	Very High
	Visible Light / Tint	High / Neutral	High / Neutral	Medium / Tinted
	Total Protection Offered	Good	Better	Best
AFTERMARKET FILM		**3M Prestige Exterior**	**3M Ultra Prestige**	
	UV Rejection (HIGHER % IS BETTER)	99.9%	99.9%	
	UV / Fading Protection	High	High	
	Visible Light / Tint	~60–70% VLT	~60–70% VLT	
	Total Protection Offered	Better	Best	
SHEER, CURTAINS & BLINDS (WHEN CLOSED)		**Sheers**	**Black Out Curtains**	**Blinds**
	UV Blocked (HIGHER % IS BETTER)	~50-80%	~95-99.9%	~95%
	UV / Fading Protection	Moderate	Very High	Very High
	Visible Light / Tint	High Light	Medium Light	Low Light
	Total Protection Offered	Good	Better	Better

DESIGN GUIDANCE

Thoughtful design guidance ensures that every panel, joint, and surface contributes to a cohesive, high-quality result.

5.1 PLANNING AND LAYOUT

Thoughtful design and planning will bring out the natural beauty of Alor, ensuring refined proportions, seamless detailing, and enduring performance.

This section provides design considerations to guide you as you work through the design process. As the designer you must make the final decision on incorporating specific design features. This guidance will help you understand the applications for cabinetry panel from the inside out.

5.1.1

CABINETRY TYPES OVERVIEW

Alor veneer panels are suitable for a wide range of cabinetry applications, from kitchens and laundries to wardrobes, vanities, and general joinery. Their prefinished surface delivers a refined, durable finish ideal for vertical and low-impact horizontal uses. However, they are not recommended for:

— High-Moisture,

— High-Heat, or

— Heavy-Use Zones

This includes benchtops, splashbacks behind cooktops, or exterior settings. By aligning design intent with material capability, Alor panels achieve lasting visual and structural performance across a variety of cabinetry types.

5.1.2

PANEL USAGES

Visible From Both Sides

For applications where both faces of the panel are exposed, such as cabinet doors or free-standing units, the 19mm 1F1B Cabinetry Panel provides a premium, balanced finish on A & B faces. For custom thickness or feature panels, the 7mm 1FAB Skin Panel can be paired with an intermediate MDF core to create thicker “sandwich” constructions, perfect for doors, end panels, or other elements requiring a high-quality finish on both sides.

Visible From One Side Only

Where only one face will be seen, such as bulkheads, wall linings, or the back of open shelving, the 7mm 1FAB Skin Panel can be used independently or pressed onto a thicker MDF substrate. This approach provides a consistent, finished surface while allowing flexibility in panel thickness and structural support.

Build-Up Method

Two 7mm skin panels are applied to either side of an MDF core to achieve the desired finished thickness.

5.1.3

ERGONOMIC BEST PRACTICES

Alor panels in 2440 × 1220 mm and 3050 × 1220 mm formats are well aligned with global kitchen and bathroom ergonomic standards. Standard benchtop heights (around 900 mm), overhead cabinet placements (1350–1500 mm above floor), and full-height pantry runs (up to 2400–2700 mm) can be achieved efficiently from these sheet sizes.

This reduces waste during fabrication, allows for consistent door/drawer module sizing, and supports ergonomic principles such as comfortable reach zones and clear working heights. By matching common dimensional modules, Alor panels ensure both fabricators and designers can optimize sheet yield while delivering user-friendly, proportionally balanced cabinetry.

Source: **www.building.govt.nz**

Common Ergonomic Standards for Cabinetry

BENCHTOP HEIGHT	900 mm from finished floor (range 850–950 mm depending on user height and flooring thickness).
BENCHTOP DEPTH	600–650 mm is standard, matching appliance depths (dishwashers, ovens, fridges)
SPLASHBACK HEIGHT	450–600 mm between benchtop and underside of wall cabinets.
WALL CABINET UNDERSIDE	Typically 1350–1500 mm above floor, ensuring comfortable reach.
OVERHEAD CABINET HEIGHT	Commonly 720–900 mm tall; full-height cabinets to ~2400 mm.
TOE-KICK HEIGHT	100–150 mm for comfort and accessibility.
TALL PANTRY/FRIDGE HOUSING	2100–2400 mm to align with ceiling lines and appliance sizes.
DISHWASHER DOOR CLEARANCE	Allow ~1200 mm in front for safe access.
OVEN PLACEMENT	Eye-level ovens are often set with the base ~900–1050 mm from the floor to reduce bending.
WALKWAY CLEARANCE	— 900 mm minimum behind someone working at the counter. — 1200 mm preferred for two people to pass comfortably.

5.1.4

LOADING CAPACITY BEST PRACTICES

Shelving

Alor is suitable to standard wear horizontal surfaces like shelving, wardrobing, bases of light use cabinetry units etc.

As Alor Panel thickness is 19 mm as a standard, Consider the following when designing shelving:

SHELF SPAN & LOAD GUIDANCE — 18 MM MR MDF (CONSERVATIVE, FOR DESIGN/USE GUIDANCE)

UNSUPPORTED SPAN	GUIDELINE UNIFORM LOAD CAPACITY (UDL) — CONSERVATIVE
400mm	~35–45 kg UDL
450mm	~30–40 kg UDL
600mm (maximum)	~20–25 kg UDL (use additional support if possible)

Designer Guidance: When specifying shelving with MR MDF panels, consider that load capacity depends on panel quality, support, span, and environmental conditions. Use additional supports, thicker panels, or engineered brackets for high-load or critical applications, and refer to the MDF datasheet for MoE/MOR-based safe spans. Panels are suitable for storage but should not be used as structural braces, as overloading can lead to sagging.

5.1.5

HIGH USE SURFACES

Alor is not suitable for :

— Benchtops,

— Countertops, and

— Other High Touch / High Scratch Areas

— as a Sanitary Surface Finish, such as a Kitchen Benchtop

5.1.6

SPLASHBACK USE

Alor veneer panels can be applied as vertical surface feature behind countertops in dry zones. These should be set back at least 300 mm from high-use wet, humid or heat areas. These panels create a clean, continuous vertical surface that complements cabinetry facings and enhances visual cohesion. While not intended for direct water contact, like a traditional splashback, careful placement allows designers to introduce the natural timber aesthetic into kitchen or joinery walls without compromising durability.

5.2 CABINETRY INTERNALS

Internal use in cabinetry is a visual statement and should balance this with practicality and protection.

Internal construction defines the long-term performance of cabinetry. Thoughtful planning of carcass layout, clearances, and plumbing integration protects panel edges, accommodates hardware, and allows for smooth operation. This attention to detail prevents wear, moisture damage, and misalignment over time. Well-designed internals ensure both functional efficiency and a refined, enduring finish.

5.2.1 USE IN CARCASSES

Alor Cabinetry Panel is primarily intended for doors, drawers and other facings. It can also be used for carcasses where design continuity, with a Moisture Resistant Carcass Core. It can also be used for carcasses where design continuity is required. It is best used for dry cabinets, even so, all cut edges must be sealed or edge-banded to prevent swelling.

5.2.2 CLEARANCES

Design internal carcass clearances to protect panel edges and finishes, allowing for smooth operation of doors and drawers. Adequate gaps accommodate hardware movement and slight seasonal expansion, ensuring panels remain aligned and undamaged over time. Thoughtful spacing supports both durability and a premium, seamless finish. Refer to NKBA and Hardware manufacturers for recommendations

5.2.3 CABINETS WITH PLUMBING

Where cabinetry interfaces with plumbing, allow for sealed edges at all cut-outs and toe kicks to protect the MDF core from moisture ingress. In high-risk areas such as bathrooms, laundries, or sink cabinets, specify a fully waterproof sealing system to ensure long-term durability.

5.3 CABINETRY FACINGS

Cabinetry facing choices define the innate character of each design.

Inlay, overlay, and fascia treatments shape the personality and depth of cabinetry design. Each approach influences shadow lines, alignment, and how surfaces interact with light. Thoughtful specification ensures every facing complements the broader composition, achieving a refined and enduring aesthetic.

5.3.1 OVERLAY FACING DESIGN

Overlay is the most common method of setting cabinetry fronts. Cabinetry facings are set in front or on top of the frame. Overlay facings allow easier adjustments and replacement compared to inset styles while maintaining a clean, continuous appearance. This method is generally more robust and performs well in high-use areas. Ensure sufficient clearance around sinks, cooktops, and dishwashers to maintain durability.

5.3.2 INLAY/INSET FACING DESIGN

Inset doors and drawers provide a flush, furniture-style appearance, with a consistent reveal creating a refined visual separation between the door or drawer front and the cabinet frame. Allow for slightly larger reveals to accommodate seasonal expansion. Ensure visible and concealed edges are fully sealed. Careful planning of grain and alignment ensures consistent aesthetics across cabinetry. Consider standard or end grain edgebanding for this application.

5.3.3

FASCIA / FILLER PANEL DESIGN

Fascia panels can be used wherever cabinetry meets ceilings, walls, or lighting elements to achieve a clean, integrated finish. Use fascia to conceal under-cabinet lighting, wiring, and ceiling junctions, or to frame open shelving and range hoods. Align fascia with surrounding panels for consistent shadow lines.

5.3.4

END PANEL DESIGN

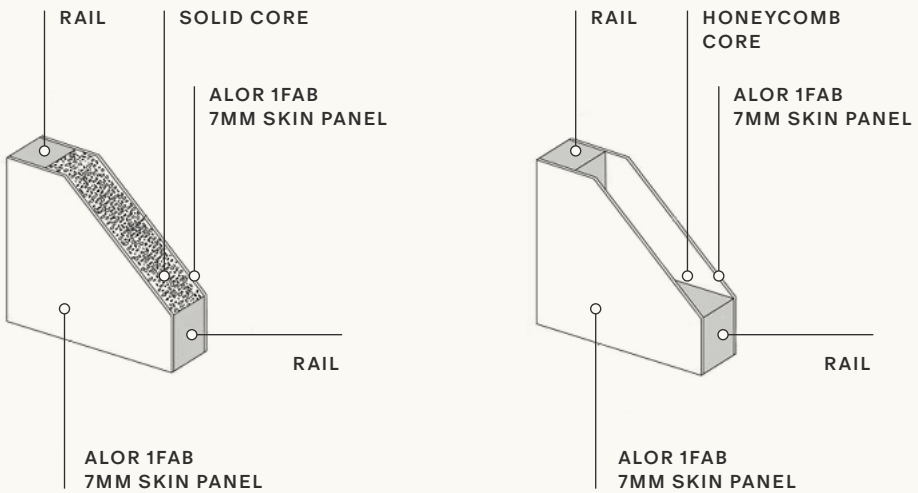
Specify end and side panels to provide a polished, finished appearance for exposed cabinetry edges. Ensure panels align with adjoining facings to maintain visual continuity and consistent grain flow. Use the same veneer or finish as the primary cabinetry to create a seamless look, and seal all exposed edges to protect against moisture or wear. Alor end panels can also serve as the cabinetry structural support for tall units or partitions while contributing to the overall aesthetic of the joinery.

5.3.5

DOOR LEAFS

Skin Panels can be used to form the visible surface of solid and hollow core doors. Proper installation requires a stable substrate, correct adhesive, and attention to grain direction to prevent warping or peeling. Edges and hardware cutouts should be sealed or reinforced to protect against damage, ensuring a durable, uniform finish that aligns with surrounding panels.

ALOR 7MM SKIN PANEL – DOOR BUILD UP



5.3.6

INTEGRATED RANGE HOODS

Always refer directly to the building codes and manufacturer specs for installation of integrated appliances. As a best practice, for veneer longevity “integrated” or “concealed” hoods, consider the carcass dimension as there needs to be room for both the appliance and adequate air movement.

Failure to provide adequate airflow may result in movement, delamination, or coating failure. Applications that expose panels to excessive heat, moisture, or restricted ventilation fall outside intended use and performance expectations.

Integrated rangehoods must allow for adequate clearance and airflow. Poor ventilation or excessive heat and humidity may damage timber veneer and fall outside recommended use.

Timber veneer is sensitive to repeated humidity spikes, so detailing matters. We recommend the following:

Clearances and Setbacks

Height (Countertop to Hood Intake):

— Minimum 600 mm for electric cooktops; 650–750 mm for gas.

— Set cabinetry toward the upper end to minimize heat-related expansion and discolouration.

Cabinet Face Setback:

— Set cabinet faces 10–20 mm behind the hood intake/front fascia to prevent steam damage.

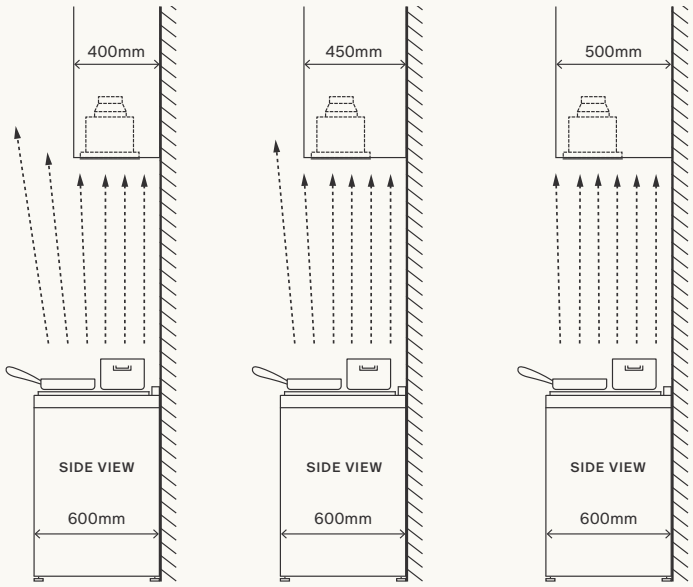
— If flush-mounted, add a stainless or aluminium deflector strip beneath the veneer.

Hood Overhang:

— Extend hood or baffle 5–20 mm beyond cabinet faces to improve vapor capture.

— Then add ‘other appliances’ from overpage to this page, so its all on one spread

HEIGHT OF RANGEHOOD



HIGHER RISK MID RISK LOWER RISK

HEIGHT TOP OF COOKTOP TO BASE OF PRODUCT	
Electric Cooktop	600mm – 750mm
Gas Cooktop	650mm – 750mm

5.3.7

APPLIANCE INTEGRATION

Alor panels can be used as integrated appliance facings for dishwashers, ovens, fridges, and similar units. Maintain adequate setbacks and ventilation to protect against heat and steam, following appliance manufacturer specifications. For a seamless appearance, ventilation grilles can be cut into the panel, with the exposed core sealed using matching paint or lacquer. Proper alignment ensures a continuous, uniform finish with adjacent cabinetry.

When specifying Alor panels for integrated or panel-ready appliances, ensure appliance manufacturer clearances and ventilation requirements are strictly followed.

Panels should be designed to match adjacent cabinetry for seamless integration, with allowances for handling weight, hinge strength, and service access. Edge profiles and finish alignment are key to achieving a flush, furniture-like appearance.

5.3.8

BATHROOM VANITIES

Alor panels should not be used as the working surface.

However, Alor Panel are designed for use as cabinetry doors, drawer fronts, side gables, and end panels.

To ensure durability, panels should not be installed immediately adjacent to basins or taps without appropriate protection and maintenance. Adequate ventilation within and around the vanity is recommended.

✓

✗

5.3.9

TOE KICKS

Alor panels are suitable for both traditional floor-mounted and shadow-line toe kicks, providing comfortable access while protecting cabinet bases from wear and moisture.

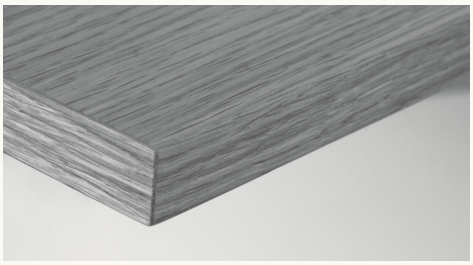
Floor-mounted kicks should have all visible and concealed edges sealed, with a silicone bead at the lower edge for added protection.

Shadow-line toe kicks should be edge-banded along the bottom to maintain consistent reveals and clearances, achieving a clean, contemporary aesthetic while safeguarding the cabinet base.

5.3.10

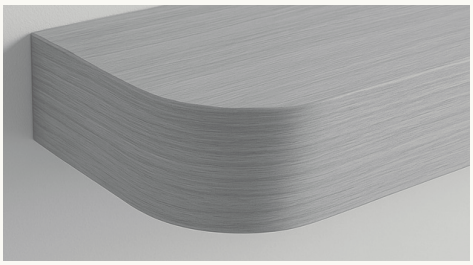
EDGE TREATMENTS & PROFILES

Select edge profiles based on aesthetic and functional requirements. Profiles should enhance durability while complementing cabinetry style. Maintain consistency across units for a cohesive visual effect.



SQUARE EDGE (STRAIGHT CUT)

LOOK	Clean, minimalist, modern. Works well in contemporary kitchens where seamless lines are desired.
NOTES	Requires precision in fabrication; edges are more exposed to chipping without robust edgebanding.



RADIUS EDGE (SOFTER IMPACT)

LOOK	Subtle rounding creates a softer, more tactile feel. Often used in family kitchens, vanities, or where durability meets comfort.
NOTES	More forgiving of minor knocks, reduces visible wear.

MITRED EDGES

While not recommended for everyday wear situations, light use area may be supported by this profile

LOOK	Creates the illusion of thickness and seamless transitions — common for luxury waterfall ends or sleek island benches.
NOTES	Demands high fabrication accuracy; adhesives and alignment critical.

SHARK NOSE / BEVEL EDGE

LOOK	Angled profile that allows for handle-less cabinetry with a shadow-line reveal. Very popular in modern handle-free designs.
NOTES	Requires careful detailing with appliance panels to maintain consistent reveals.

DOUBLE THICKNESS / LAMINATED EDGE

For this look, two Alor panels can be laminated together and finished with 48 mm-wide veneer edgebanding.

LOOK	Exaggerates panel thickness for bold design statements (e.g. chunky benchtops or wide gables).
NOTES	Adds weight and requires reinforced fixing; can look striking in premium kitchens.

5.4 OTHER CONSIDERATIONS

Finishing details unite form and function, creating cabinetry that feels cohesive, refined, and complete.

Other design considerations focus on the elements that define craftsmanship and cohesion. Thoughtful attention to shelving proportions, service integration, grain direction, and hardware placement ensures both function and visual balance. Together, these details create cabinetry that feels intentional, refined, and beautifully resolved.

5.4.1 FEATURE SHELVING

Design shelving for both functionality and aesthetic appeal. Consider load-bearing requirements per section 4.1.4, adjustability, and feature display opportunities. Alor can be doubled up to create a thicker look and improve structural stability. Align grain and finishes with surrounding cabinetry to create visual cohesion.

Alor panels are 1220 mm wide, with the grain running vertically along their 2440 mm or 3050 mm length. When designing cabinetry wider than 1200 mm, consider how joins or grain direction changes will affect the final look. Carefully positioned joins can maintain visual balance, while uninterrupted panels may alter the grain flow. This is especially important for wide elements such as vanity drawer fronts, toe kicks, pelmets, bulkheads, island backs, and end panels.

5.4.2 INTEGRATED SERVICES

When incorporating LED strip or recessed lighting into cabinetry, plan for proper cutouts and wiring channels to maintain a seamless finish. Ensure heat dissipation and accessibility for maintenance without compromising the timber veneer. Coordinate lighting placement with functional zones to enhance both aesthetics and usability.

Cabinetry design should anticipate all service requirements, including power outlets, USB ports, and network/data connections. Consider integration of lighting controls, audio/visual systems, and under-cabinet appliances to maintain a clean look. Plan wiring and conduit routes behind panels to allow easy access and future upgrades. Ensure proper ventilation and spacing for electronics to prevent overheating. Coordinating these services early preserves both functionality and the seamless aesthetic of the cabinet.

5.4.3 SHADOWGAPS

Shadow gaps create crisp reveals between panels and adjoining surfaces, enhancing the visual definition of cabinetry and wall systems. With Alor 7 mm skin panels, the gap is formed by setting the panel face back from the adjacent surface or substrate rather than cutting into the panel itself. Careful planning of backing, battening, and edge alignment ensures a consistent, stable reveal while maintaining panel flatness. Properly executed, the shadow gap emphasizes clean lines, accommodates slight movement, and contributes to a refined, architectural finish.

5.4.4

GRAIN ORIENTATION AND PANEL APPLICATIONS

Orient panels deliberately to maximize visual flow. Consider grain direction, pattern matching, and panel sequencing for both vertical and horizontal applications. This ensures a cohesive, high-quality finish across the joinery.

5.4.5

FEATURE PANEL USE

Alor panels can be used for feature or decorative applications, including double-thickness accents, picture frame elements, shadow gaps, and other reveals. Thoughtful placement on shelving, vertical panels, or cabinetry fronts maximizes visual impact, while careful alignment with surrounding joinery ensures a cohesive, refined, and architecturally polished finish.

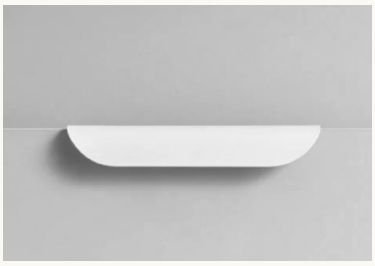
5.4.6

HANDLE & HARDWARE INTEGRATION

When designing cabinetry facings, consider how handle and hardware placement affects both function and visual balance. Pull hands, knobs, finger grooves, extrusion or push-to-open systems are all achievable with Alor Cabinetry Panel. Placements should complement the panel proportions. Consider panel thickness and reveal spacing to ensure hardware feels integrated rather than overpowering. Consistent alignment and spacing helps reinforce a cohesive, refined look across the cabinetry.

FRONT MOUNTED PULL HANDLES

Bow, Arch & D Handles, Front Mount Pulls, Cups

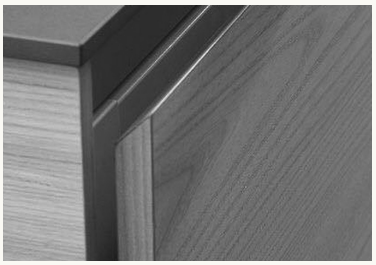


TOP MOUNT PULL HANDLE

Top Mount, Low Profile Pulls

FRONT MOUNT KNOB

Traditional Knobs, Globes, T-Bar Pulls

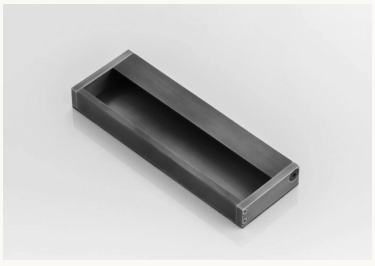


FINGER PULL PROFILE HARDWARE-FREE- SHARKNOSE

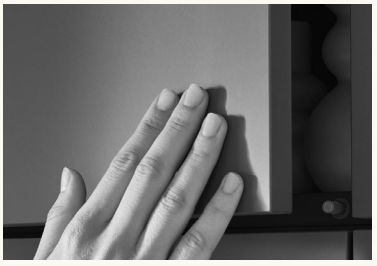
FINGER PULL PROFILE HARDWARE-FREE- J PULL

CONTINUOUS PROFILE (EXTRUSION)

ROUTERED HANDLES - WITH AND WITHOUT HARDWARE



INSET/FLUSH PULL HANDLES



PUSH-TO-OPEN

Extrusions and Hardware Pairing

While extrusions and hardware are typically coordinated with tapware and door hardware, a list of commonly selected colour options is provided below for reference.

Commonly Used Pairings

ALOR
Veneer Panel

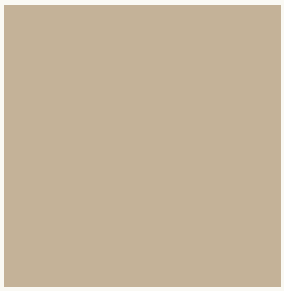

COVE


TUSK

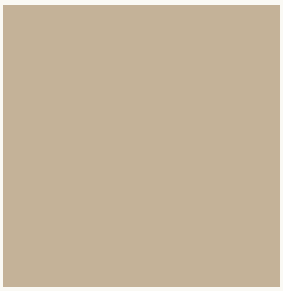

SOLIS

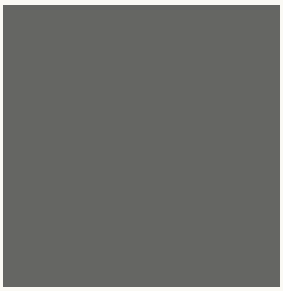

ASTA

COLORCOTE
Powder Coat Pairings

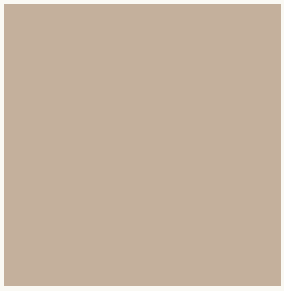

DESERT SAND

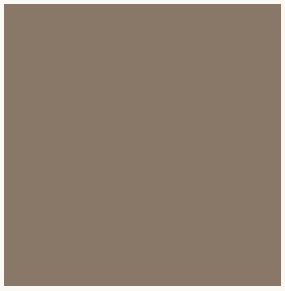

PEBBLE


DESERT SAND


MUDSTONE

DULUX
Powder Coat Pairings


DESERT SAND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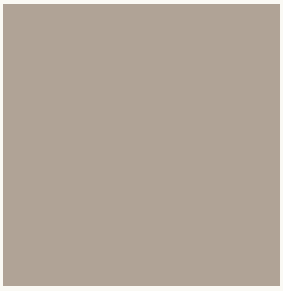
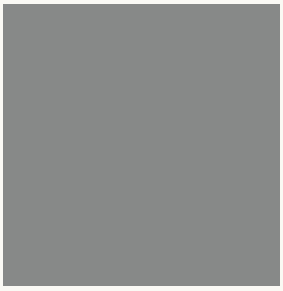

BRONCO


SANDSTONE GREY

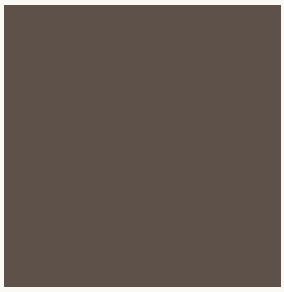
OCHRE

EMBER

NOX

INCA

LIGNITE



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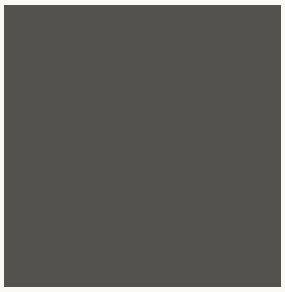

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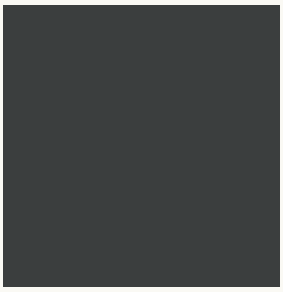

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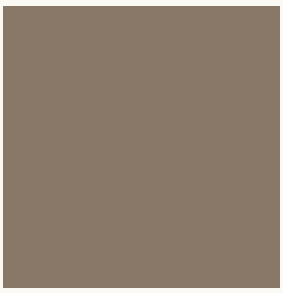

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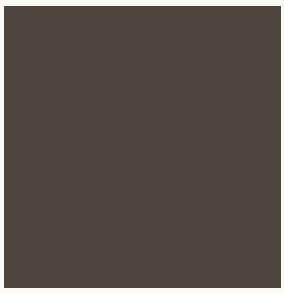
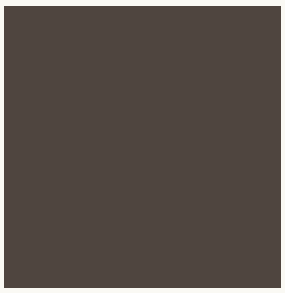
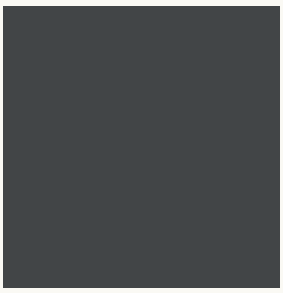


ANOTEC MID BRONZE



ANOTEC MID BRONZE



GRAVEL

PRE-FABRICATION GUIDANCE

Successful Fabrication begins with proper preparation. Allow for standard manufacturing tolerances, store panel away from contaminants like dust, and ensure the area is ready before work begins. Taking the time to plan and check layouts will enhance its natural beauty, minimise re-work from cutting errors and streamline fabrication progress.

6.1 HANDLING AND STORAGE

Caring for your panels keeps them pristine and ready for a flawless finish

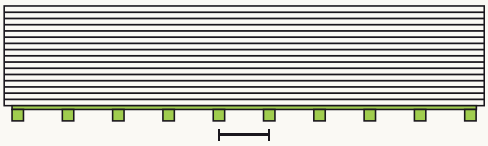
Proper storage and handling of Alor panels is essential to protect the surface finish and ensure the product performs as intended throughout its service life.

HANDLING

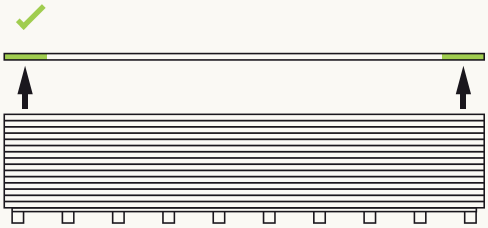
Avoid face-to-face stacking: Always use protective interleaving (foam, kraft paper, or felt) between panels.

— **Lifting**: Lift panels rather than dragging them across pallets, benches, or machinery.

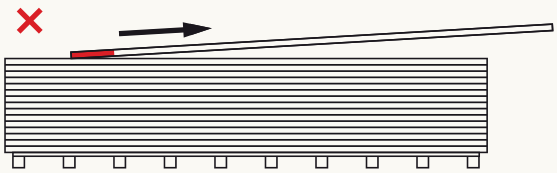
— **Large Panels**: Use team lifting or suction cups to prevent flexing and corner damage.



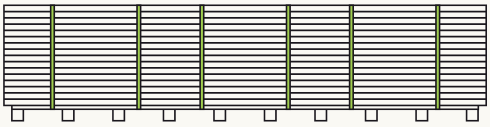
Ensure panels are on a flat surface or bearers max. 400mm apart



Lift panels on the edges using 2 people to lift at a time



Do not drag the panels off the stack



Ensure panels are secured to the pallet before transporting

STORAGE

— **Flat, covered storage**: Store panels horizontally on a clean pallet or rack with at least four evenly spaced supports.
— **Off the floor**: Keep stacks raised using supplied dunnage.
— **Conditions**: Maintain 18–25 °C and 40–60% RH to prevent moisture.
— **Avoid exposure**: Keep away from direct sunlight and moisture sources.
— **Edge protection**: Use foam or rubber guards on stacks or routed parts as required.

PANELS ON PALLET OR LEVEL BEARERS

PANELS SHOULD BE STACKED FACE-TO-BACK WITH PROTECTIVE CLING FILM ON BOTH SIDES

6.2 PRE-FABRICATION

Pre-fabrication preparation sets the stage for precise, seamless panels and a high-quality finish.

The practical aspects of working with Alor veneer panels focus on machining, tooling, and assembly for precise, durable results. Proper use of accessories, joinery methods, and PPE ensures both safety and quality.

Panel Set Out And Optimisation TIP Include a "buffer panel" for critical pieces to test machine settings before cutting main panels.	PANEL LAYOUT PLANNING	— Arrange panels for minimal waste using standard nesting/optimization software or manual planning. — Label each panel clearly with ID, face orientation, and edgebanding requirements.
	ORIENTATION AND GRAIN MATCHING	— Align panels for consistent grain/finish direction.
	CUTTING ORDER CONSIDERATIONS	— Prioritize long cuts first to reduce tear-out. — Reserve small cut-offs for test cuts or minor parts.
Machining Set Up TIP Record successful settings for repeat orders—saves setup time and ensures consistent quality.	TOOLING CHECKS	— Ensure blades, router bits, and edgebanding tools are sharp, clean, and correctly aligned. — Verify machine calibration—square fences, correct depth, and zeroed axes.
	SPEED AND FEED SETTINGS	Adjust according to panel thickness and edge material. Reference product-specific recommendations to minimize chipping or edge lifting.
	SAFETY AND ERGONOMICS	Ensure guards are in place; clamps or supports are ready for large panels.
	TEST RUN	Run a single test panel to verify cut quality, edgebanding adhesion, and mitre accuracy. Adjust as needed before production batch.
Edge Trimming Options	EDGEBANDER	For best results when edgebanding prefinished veneer, we recommend leaving the radius trimmer engaged, while turning off the scraper and buffer to avoid damaging the surface.
	HAND HELD EDGEBANDER	In some applications a hand held method is the most effective. Always ensure the veneer panel edge is clean, smooth, and free of dust before applying the edging, as debris can cause gaps or poor adhesion. Set the temperature and feed speed according to the edging material being used to prevent overheating or weak bonding. Apply steady, even pressure as you guide the machine along the edge, keeping a consistent pace to avoid glue marks or bubbles.

Edge Detailing Tools	SANDPAPER AND SANDING BLOCK	We recommend an ultra fine grit such as P320-400
	CABINETRY SHOP TOOL SET	A basic carpentry toolkit is all you need—this includes a tape measure, pencil, set square, planer, Stanley knife, drill and a set of drill bits. Accuracy at the planning stage will help avoid rework later particularly if you are manually cutting and finishing the product.
Assembly Essentials	ACCESSORIES	Such as Lamello Biscuits, Dominos, Dowels, screws
	GLUES	Alor is an MR MDF and works best with a Waterproof / D3 or D4 rating PVA glue, or a Two Part Epoxy
	FACE GLUING	Alor features a prefinished UV Lacquer Coating so glue will not have good face adhesion. A Two Part Epoxy, Cyanoacrylate (Superglue) or contact glue would work best for this application
	HARDWARE	as required by your design
	CABINETRY SHOP TOOL SET	A basic carpentry toolkit is all you need—this includes a tape measure, pencil, set square, planer, Stanley knife, drill and a set of drill bits
PPE	We recommend wearing gloves to handle the product	
	When manually cutting, a P2 dust mask, safety glasses and ear protection should be used to reduce exposure to dust and noise.	
	Dust Extraction should be used with or without a dust mask, where available, during cutting	
	Always cut in a well-ventilated area or outdoors PPE	

6.3 PERFORMANCE RECOMMENDATIONS

Follow best practices to ensure lasting performance and a premium finish.

Product Performance

— Pre-drill all screw holes to prevent splitting.

— Avoid stacking panels for prolonged periods; keep flat in a dry environment.

Durability

Processed Panels resist warping and delamination when cut, edged, and stored properly.

Environment

— Ideal fabrication temperature: 18–25°C;

— avoid high humidity (>60%) during edgebanding.

FINISHING	OBSERVATION	POSSIBLE CAUSE	POSSIBLE FIX
Trimming and Scraping	EDGES CHIP/TEAR	CNC scraper use; trimming against grain; feed too fast	— Test CNC scrapers, may not be needed — Use manual scraper — Trim with the grain — Slow feed (~12 m/min)
	WHITENING AFTER SCRAPING	Scraper set wrong; chip size too thick	— Reduce chip size (<0.2 mm) — Warm with hot air — Buff
	WHITENING IN RADIUS	Tape too cold; feed too fast; radius too tight	— Warm tape — Reduce feed speed — Increase radius / use thinner tape
Bonding and Adhesion	TAPE PEELS – ADHESIVE LEFT ON PANEL	Low adhesive; tape/panel too cold; draughts; adhesive too cool; low roller pressure; slow feed	— Add adhesive — Warm tape and panel — Remove draughts — Raise adhesive temp — Adjust pressure/feed
	TAPE PEELS – ADHESIVE SMOOTH/SLIPS	Wrong adhesive type; tape unprimed; tape too cold	— Use correct adhesive — Warm tape — Ensure tape is primed
	ADHESIVE STAYS ON TAPE (NOT PANEL)	Panel too hot	— Cool panel
	JOINT NOT CLOSING (STRAIGHT LINE)	Low pressure; cold adhesive; not enough glue; wrong tape tension	— Increase pressure — Raise adhesive temp — Add glue — Correct tension
	JOINT NOT CLOSING (MACHINING CENTRE)	Tape too cold; wrong pre-tension; adhesive too cold	— Warm tape — Adjust tension — Raise heater temp — Reduce feed speed
	TAPE ONLY BONDING AT EDGES	Low pressure; hollow joint; over-tensioned tape	— Increase pressure — Correct milling — Reduce tension
	POOR ADHESION AT PANEL START	Roller misaligned; insufficient adhesive	— Realign roller — Add glue

FINISHING	OBSERVATION	POSSIBLE CAUSE	POSSIBLE FIX
Mitres and Edge Details	MITRED JOINTS FAIL	Banding on 45° mitres; raw-core mitres	— Don't band mitres/raw core — Only mitre factory-finished faces
	NEED TO COVER MITRE (LAST RESORT)	Special request	— Use ≤0.5 mm pre-glued tape — Apply by hand — Trim with chisel/scraper — Light sanding only — Not standard practice
	TAPE BREAKOUTS/BURRS AT ENDS	Dull saw	— Sharpen/replace saw
	TAPE BREAKOUTS (TOP/BOTTOM EDGES)	Overhang too big; tape/panel too cold; draughts	— Reduce overhang — Acclimatize panels/tape (~18 °C) — Eliminate draughts
Surface and Finish	VISIBLE MILLING LINES	Feed too fast; cutting feed too low; not enough blades	— Adjust feeds — Use more blades — Scraper + buffer
	SCRATCHES/MARKS	Dirty rollers or scanner; damaged draw-in	— Clean rollers and scanner — Use separating agent — Fit rubber rollers
	DUST/RESIDUE AFTER MACHINING	Poor cleaning	— Wipe with damp microfibre — Use pH-neutral cleaner (diluted dish soap) — Avoid ammonia/alcohol sprays — Dry with lint-free cloth

FABRICATION & ASSEMBLY GUIDANCE

Alor veneer panels can be assembled using standard joinery techniques, with attention to precise alignment, grain continuity, and edge treatment. Proper handling during assembly—including clamping, squaring, and joining with approved adhesives or mechanical fasteners—ensures panel integrity and prevents damage to the prefinished veneer. Following recommended assembly practices maintains durability, supports accurate integration with cabinetry components, and delivers a seamless, professional-quality result.

7.1 PANEL FABRICATION

Ensures panels come together cleanly, for a polished, premium finish with best practices.

Alor panel can be cut to size via manually operated power tools, such as table saws, or via CNC machines (recommended method).

Cutting and Handling

Use fine-tooth blades or CNC settings recommended for our panels to minimize chipping. Avoid prolonged exposure to moisture before assembly.

— CNC cutting is our recommended method as Alor performs exceptionally well on CNC equipment, where its stability and surface integrity help deliver precise sizing and consistently clean edges. When paired with good hold-down and dust extraction, panels stay protected through multiple runs, and the product responds well to nesting software—helping fabricators get the most from each sheet with minimal waste.

— Manual power tools, such as table saws, are a suitable option for smaller runs, prototypes, or workshops without CNC, Alor also cuts reliably on table saws and other standard tools. Using a sharp triple-chip or scoring blade supports a smooth finish and clean veneer edge. While it may take a little more care than automated processing, fabricators can still achieve a high-quality result with confidence, even at lower volumes.

Flatness and Tolerance

Panels are factory-calibrated for minimal bowing; maintain a tolerance of ±0.5mm over 2m.

Trim to Size

Our panel dimensions are specifically oversized to allow for 10 mm along each edge for of wastage. Example: 2420 x 1220 mm can be cut to a standardised height of 2400mm and 1200mm width

TIP: For large panels, support along the full length during cutting to prevent edge splintering.

7.2 EDGEBANDING

Edgebanding gives panels a seamless, polished finish that highlights the veneer's natural beauty.

Once cut to size, Alor panels can be edgebanded using either hand tools or a machine setup. Alor Edgebanding is supplied without a pre-glued backing, as most edgebanding systems apply adhesive via an integrated gluepot for stronger, more consistent results.

Material Compatibility

Works with standard PVC, ABS and real wood veneer. Avoid high-temperature bonding that may warp thin panels.

Application

Use standard edgebanding machines or hand iron for smaller pieces. Pre-conditioning the edge improves adhesion.

Troubleshooting

Bubbles or lifting typically result from surface contamination—wipe edges with isopropyl alcohol before application.

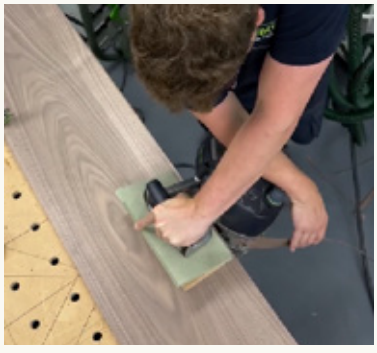
MACHINE EDGEBANDING (RECOMMENDED METHOD)

Machine edgebanders deliver the most consistent finish, particularly for cabinet panels requiring clean, durable edges. Using a gluepot system ensures the correct adhesive bond, while radius trimmers can be left engaged to create a smooth edge profile. For prefinished veneer panels, scrapers and buffers are generally best switched off to avoid damaging the lacquered surface. Feed speeds should be set to balance efficiency with quality, and it is good practice to perform test runs on offcuts before working with finished panels.

Like most edging products, Alor requires a small amount of roll to set up and finish off. Typically, fabricators see around 0.5–1m of waste at both the start and end of a roll, so allowing approximately 2m per roll gives a realistic expectation for planning.

HAND TOOL EDGEBANDING

Alor edging can also be applied confidently by hand with heat guns or with other hand held tools, making it a flexible option for smaller projects, custom pieces, or in workshops without dedicated machinery. With the right adhesive and careful trimming, fabricators can achieve a clean, professional finish that stands up well alongside machine-processed work. A light sand or scuff to ease trimmed edges is often all that's needed, and many fabricators find this method particularly useful for touch-ups or one-off details where setting up larger equipment isn't practical.



EDGEBANDING SEQUENCE – OVERLAPPING CORNERS

When edgebanding panels, it's important to sequence the edges correctly so the joins are clean and durable.

Recommended Order

Apply edgebanding to long edges first, then short edges. Overlap corners slightly to ensure a flush finish after trimming.

TIP: Use masking tape as a guide for consistent corner alignment.

Common Pitfall

Applying short edges first may leave gaps at mitres; following the sequence ensures tight joints.

MITRED EDGES

Mitred edges on veneered MDF are generally not recommended, as they expose the raw core and create a weaker bond.

They may be acceptable where a seamless wraparound or no visible edgebanding is required. Precision cutting (CNC or scoring saw) is essential to avoid tear-out and achieve clean joins. Factory-finished veneer faces should meet wherever possible, with raw cores sealed using PVA or polyurethane adhesive. Lamello or biscuit joiners can be used to strengthen mitred joints and improve alignment. Where covering is unavoidable, use thin veneer tape by hand, though square edges with proper edgebanding remain the preferred option.

Accuracy

Maintain ±0.5° angle tolerance. Use jig clamps to avoid gaps.

Adhesive

Use a high-strength PVA or EVA suitable for furniture panels.

TIP: Clamp for a minimum of 30 minutes; avoid excessive heat, which may discolour edges

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CURVES

Minimum Radius

Small curves require specialized bending or kerfing.

Technique

Steam or heat bending recommended only for veneer-faced panels; PVC edges can be cold-bent gently.

TIP: Test one piece before batch production to confirm bend behaviour.

7.3 ASSEMBLY

Guidance on putting Alor panels together ensures a precise finished product with clean lines and robust construction.

Assembly of Alor veneer panels is focused on achieving precise alignment, seamless joins, and a premium, furniture-quality finish. Attention to panel sequencing, joinery, and hardware placement ensures clean lines and consistent visual flow. Using the right accessories and tools supports accuracy while protecting the prefinished surfaces. With careful handling, each unit comes together efficiently, delivering durable cabinetry that showcases the natural beauty of the veneer.

CARCASS USE

Use strong joinery methods such as dowels, Lamello, or confirmat screws with glue, and avoid relying on screws into raw edges. Reinforce hinge and runner zones with full-length fixings or inserts for secure hardware attachment. Keep shelf spans conservative, or add edging, to limit deflection under load.

Use Self-Adhesive Cover Caps in matching veneer to disguise visible fixing holes and holes for unused adjustable shelving

— Fully seal all edges — front, back, and concealed sides — with high-performance lacquer or polyurethane.

— Provide slightly larger gaps than normal to account for expansion.

— Picture frame or face frame cabinet.

ASSEMBLY, HARDWARE AND FIXINGS

Screw and Fixing Guidelines:

— Pilot holes recommended for all visible surfaces.

— Hardware Integration: Compatible with standard hinges, drawer slides, and concealed fittings.

— Time-Saving Tip: Assemble carcasses first, then apply facings and hardware to reduce surface damage.

— Common Pitfall: Over-tightening screws can cause edge bulging; torque carefully.

TIP: Use Alor Adhesive Caps over any visible holes for a clean, consistent look

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CABINETS WITH PLUMBING

Avoid raw cut outs for Plumbing – seal edges thoroughly if required with Acrylic Paint OR PVA wood glue (waterproof grade D3/D4): A brush-on coat along all raw MDF edges forms a simple, effective moisture barrier OR 2-part epoxy resin or polyurethane sealants: Best for high-risk areas (sink cut-outs, bathrooms, laundries). Provides a fully waterproof seal if applied generously.

Seal the edges of toe kicks where cabinetry is floor mounted

POST PROCESSING

The final stage of working with Alor Veneer Panels is where craftsmanship and care truly shine. Quality edge finishing, using premium edgebanding options, ensures visual continuity and lasting protection. Subtle touch-ups with colour-matched materials help maintain a flawless appearance, while proper storage, handling, and transport—keeping panels clean, flat, and shielded from moisture and sunlight—preserve their integrity. With careful attention through every step, Alor Veneer Panels maintain their refined finish and enduring beauty.

8.1 EDGE FINISHING TREATMENTS

Panel edges should be finished and sealed to ensure durability and a consistent appearance.

The junction between the panel and edgebanding will need to be sealed. We recommend the following methods, which may also be used for minor touch-ups where required.

Natural Edgebanding	REQUIREMENTS	When using Natural Edgebanding the MDF Core remains unsealed, therefore the edges must be sealed.
	COLOUR SPECIFIC GUIDANCE	Solis/Ember/Inca: Clear may be possible All Others: A Tinted finishing solution should be selected
	COMMON FINISHING METHODS	A: Lacquer/Polyurethane (Tinted or Clear)
		B: Hardwax Oil (Tinted or Clear)
ABS Edgebanding	REQUIREMENTS	A Forté solution for ABS Edgebanding is in development. Alor ABS Edgebanding provides a self sealing solution once applied.
	COLOUR SPECIFIC GUIDANCE	Solis/Ember/Inca: Clear may be possible For darker colours a coloured glue is recommended to achieve a professional finish.
No Edgebanding	REQUIREMENTS	All Raw Edges must be sealed.
	COLOUR SPECIFIC GUIDANCE	All Colours: A Tinted finishing solution should be selected to minimise the look
	COMMON FINISHING METHODS	A: Lacquer/Polyurethane (Tinted or Clear)
		C: Acrylic or Enamel Paint (Tinted)

8.2 APPLICATIONS FOR FORTÉ LACQUER TOUCH UP SOLUTIONS

FINISHING / REPAIR TYPE	SUITABILITY	RECOMMENDED SOLUTION
Finishing clashed edges – Natural Edgebanding	Yes	
Finishing clashed edges – ABS Edgebanding	Yes	
Minor Chips or scratches to the face of the panel	Yes	
Disguising Minor drill blow-outs or sanding errors	Yes	
Wear and tear on the edges	Yes	
Concealing Seamlines	Yes	
Sealing Wet Area Surfaces	No	Alor is not recommended for Wet Area Surfaces
Colouring Unfinished Timber Features to Match Alor	No	We recommend a Colour Matched Lacquer/ Polyurethane or Hardwax Oil System
Blending Gradients or Grain Patterns	No	We recommend a Colour Matched Lacquer/ Polyurethane or Hardwax Oil System
Large Damaged Areas	No	Replace the Panel, or seek repair from a surface repair specialist. Contact Forté for more details
Structural Repairs	No	Replace the Panel, or seek repair from a surface repair specialist. Contact Forté for more details

8.3 STORAGE, HANDLING AND TRANSPORT (POST-PROCESSING)

Keep panels protected and supported after processing to preserve surface quality and prevent damage.

- Support panels on padded trestles or foam A-frames to prevent edge pressure damage.
- Keep panels/cabinetry off damp concrete or unsealed walls to avoid moisture absorption.
- Cover staged panels with breathable materials like cotton drop cloths or builder’s wrap.
- Use foam edge protectors or cardboard rails for safe transport or long-term storage.
- Apply U-channel foam or corner guards to protect drawer fronts or wrapped parts.
- Wrap panels in blankets or soft-touch bubble wrap to protect the finish.
- Avoid strapping directly over faces or edges; instead, use cardboard corner blocks and cover sheets.
- Always handle panels with clean hands or gloves to prevent fingerprints and smudges.

Forté