

DESIGN AND USAGE GUIDE

# **Alor Cabinetry System**

FOR USE WITH ALOR PANELS



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#### DISCLAIMER

This guide is not intended to be exhaustive as the responsibility for design lies with the specifier and designer, or responsible party for the project to ensure that the final design meeting the requirements of the intended application and relevant product considerations.

It is the responsibility of the designers, installers and owners to ensure that the information in this guide is current at the time of design/fabrication, by checking with Forté directly or our website.

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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

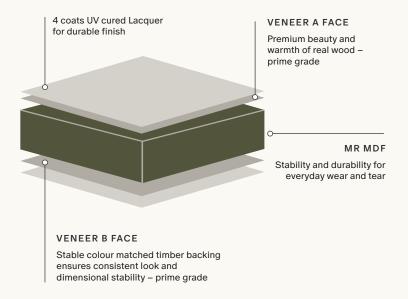
### PRODUCT OVERVIEW

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

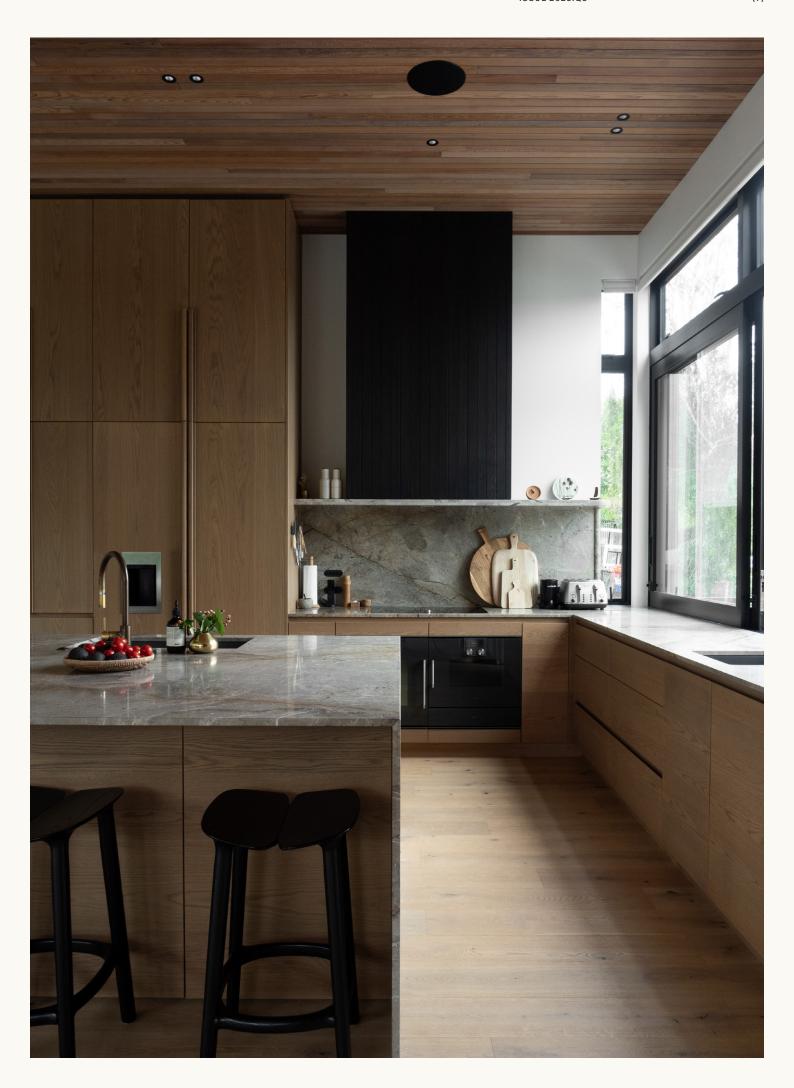
Unlike many other panels, Alor Veneer Panel comes prefinished with a factory-quality UV-Cured Lacquer finish.

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.

1F1B STOCKED CABINETRY PANEL



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# SCOPE AND LIMITATIONS

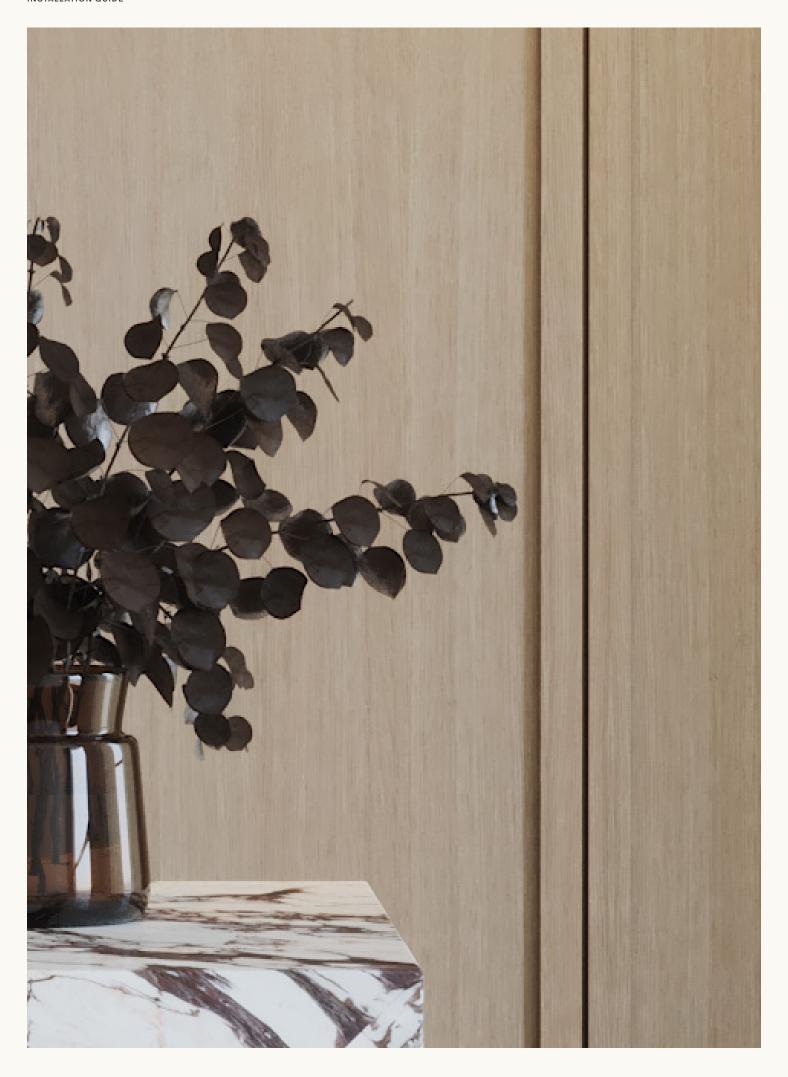


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Alor veneer panels are designed for interior use in residential and light commercial projects, bringing refined timber finishes to cabinetry, joinery, wall panelling and feature applications. The following guidance outlines where the Forté Alor Panel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

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### 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 highquality 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.







COMMERICAL FIT OUT **CABINETRY** 

(Workspace, Retail & Hospitality)



COMMERCIAL DEVELOPMENT **CABINETRY** 

(Apartments, Aged Care & Hotels)



HEAVY USE COMMERCIAL INDUSTRIAL







### 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 4.2.1



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-risk areas such as bathrooms, laundries, or sink cabinets, specify a fully waterproof sealing system to ensure long-term durability.

Refer to 4.1.6



## CABINETS NEAR HUMIDITY SOURCES

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.

Refer to 4.2.3, 4.3.7



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400mn

Side View

600mm

## HOODS

INTEGRATED RANGE 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 HIGHER RISK MID RISK LOWER RISK



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.

Refer to 4.3.6



Side View

600mm

Side View

600mm

#### 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 4.1.2, 4.1.6



## 2.3

# Compliance — Cabinetry Panel

## COMPLIANCE

NZ BUILDING CODE CLAUSE	DEMONSTRATED BY		
B2 DURABILITY B2.3.1 (C)(I)(II)	<ul> <li>Alor panels have a 7-year product warranty, ensuring Alor will be free from delamination or defects for 7 years from the purchase date.</li> </ul>		
	<ul> <li>Alor's UV lacquer coating protects the panels' surface layer and core.</li> </ul>		
C1 LIMITING HEAT TRANSFER C1.3.2 / C/VM1	<ul> <li>Fixed appliances, e.g. fireplaces &amp; ovens, must be installed in a way that does not raise heat of Alor Panel so as not to raise surface temperature above 70deg.</li> </ul>		
C2 PREVENTION OF FIRE OCCURRING C2.2	<ul> <li>Alor panels are deemed to comply with Group 3 as per Table A1 of Appendix A in C/VM2 and is to be used as per scope of limitations.</li> </ul>		
	<ul> <li>To achieve a higher group rating, an intumescent coating can be applied</li> </ul>		
C3 FIRE AFFECTING AREAS BEYOND FIRE SOURCE C3.4(A)	<ul> <li>Alor can be used in accordance with specified performance requirements in various areas of the building as determined by C3.4(a)</li> </ul>		
E3 INTERNAL MOISTURE E3.3.4, E3.3.5, E3.3.6	<ul> <li>Alor has a UV lacquer that is durable and easy to clean. However, as a precaution, we do not recommend it be used in close proximity to high- risk splash areas such as kitchen splashbacks and rangehoods or horizontal surfaces for bathroom cabinetry and in rooms where the humidity is expected to reach 70% RH or above (e.g. sauna, pool room, unventilated laundry)</li> </ul>		
F2 HAZARDOUS BUILDING MATERIALS F2.3.1	<ul> <li>Alor veneer panels achieved an E1 formaldehyde emission rating and are safe to handle.</li> </ul>		
G3 FOOD PREPARATION & PREVENTION OF CONTAMINATION G3.3.2	<ul> <li>Alor has a UV lacquer that is durable and easy to clean. However, as a precaution, we do not recommend for it to be used in close proximity to high-risk splash areas such as kitchen splashbacks and rangehoods or as a sanitary surface like a kitchen benchtop.</li> </ul>		
	<ul> <li>Any areas where it could be exposed to damage by boiling oil and/or hot steam</li> </ul>		

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## 2.4

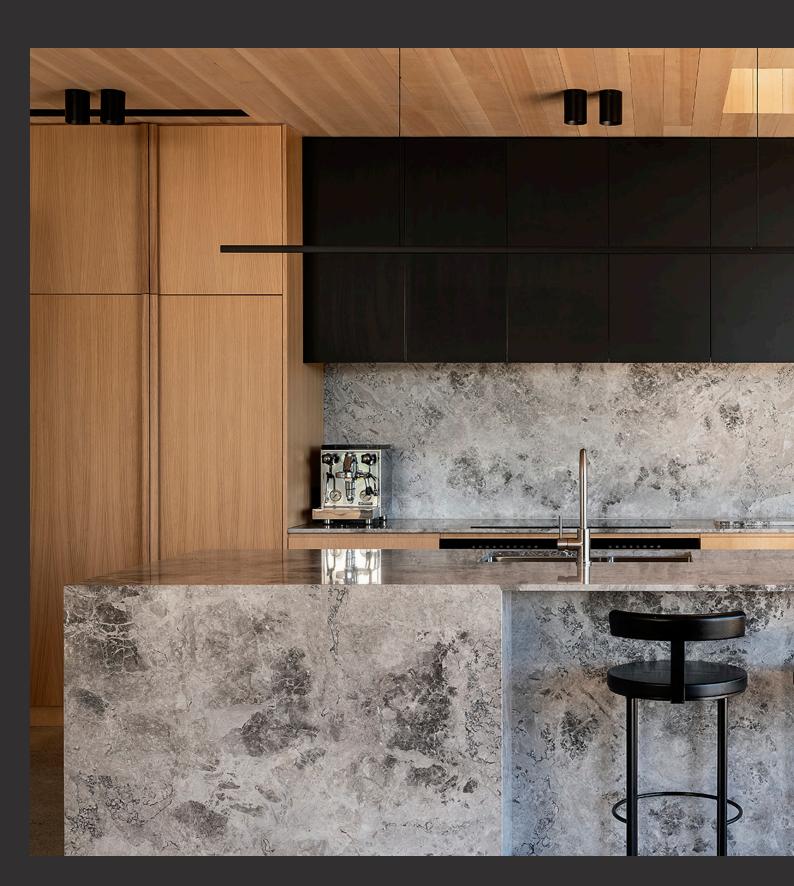
## TECHNICAL SPECIFICATIONS

Technical Specs

— Cabinetry Panel

ENVIRONMENTAL	FSC mix		
DENSITY	730 kg/m3 +/- 7%	730 kg/m3 +/- 7% (MDF Core)	
THICKNESS TOLERANCE	±0.2 mm		
SQUARENESS TOLERANCE	+/- 2mm/m		
FLATNESS	Bow/Cup = ≤2.0 i	mm per meter	
	Twist = ≤1.0 mm p	er meter	
SWELLING IN THICKNESS	8% (18mm MR M	DF)	
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 39.19	Solis 36.05	
	Vanta 4.85	Ember 16.51	
	Asta 22.60	Tusk 28.47	
	Ochre 12.52	Nox 18.09	
THERMAL RESISTANCE	0.18m2K/W (18m	0.18m2K/W (18mm MR MDF)	
VOC EMISSIONS (FORMALDEHYDE)		Alor veneer panels achieve an E1 Formaldehyde emission rating	
REACTION TO FIRE (CABINETRY)	MR MDF Core: Group 3		
	FR Core: Test per	nding	
	Group 1s can be a intumescent coar party	achieved with an ting applied by a third	

# MATERIALS

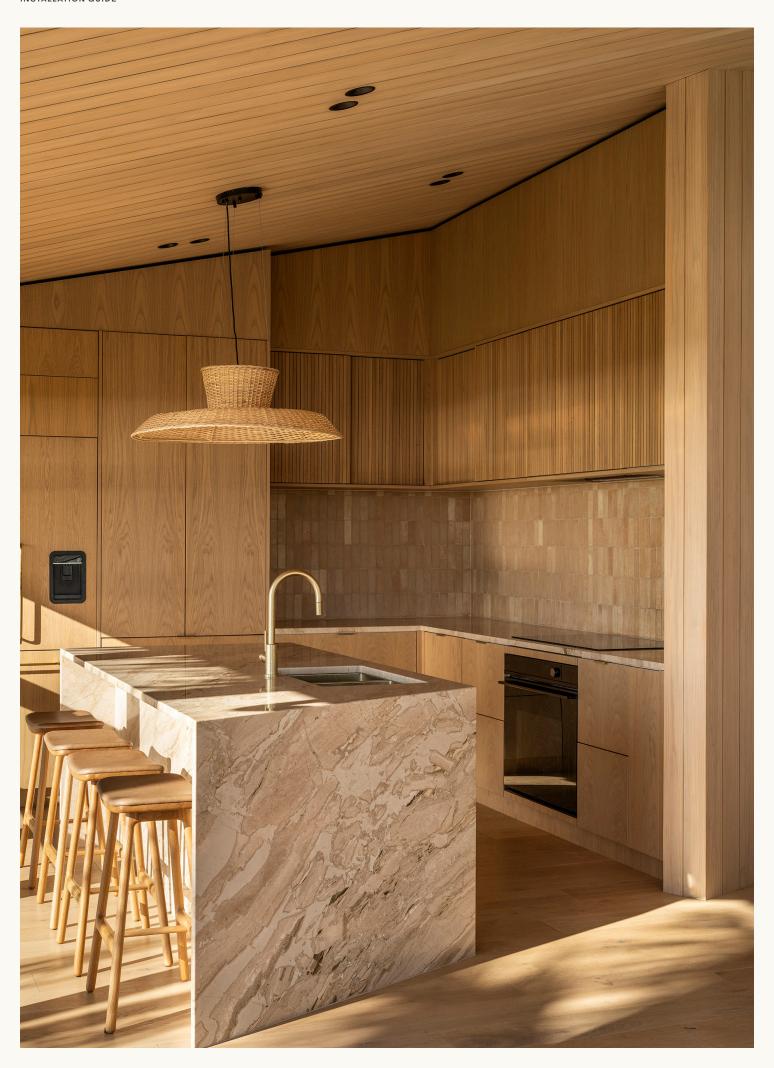


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In the past, carefully selecting the veneer grade, cut and panel configuration is essential to achieving your desired aesthetic, performance, and finish across cabinetry, joinery and interior surfaces. Forté have curated a collection of prefinished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

3.3 Acce	essories	



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## 3.1

# VENEER PANEL PRODUCT OVERVIEW

A showcase of natural timber beauty, precision craftsmanship, and lasting performance in every panel. Alor panels are premium, 19mm pre-finished boards, which are designed for cabinetry manufacture.

#### Each panel features:

- Real wood veneer face with a lightly brushed, consistent finish that eliminates on-site finishing.
- MR MDF core ensuring stability and moisture resistance, reducing the risk of warping.
- UV-lacquered for durability, scratch resistance, and easy maintenance.
- Uniform thickness and factory finish make them ideal for fast, high-quality interior installations.
- Available in pre-finished or unfinished veneer
- Premium edge banding finishes to protect and enhance your cabinetry.

## 3.1.1

# PREFINISHED VENEER PANEL SPECIFICATIONS

Colours



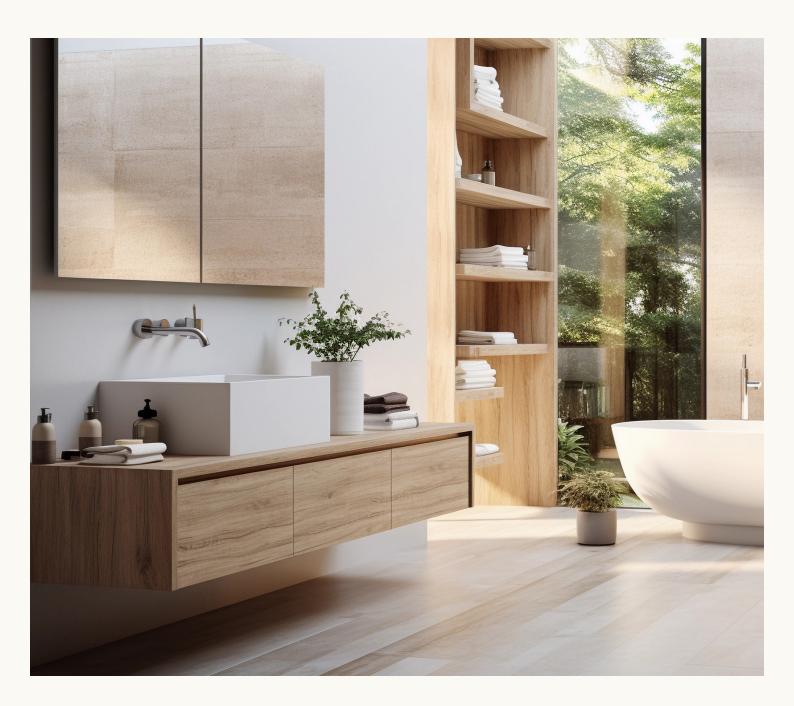
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COLOUR	DIMENSIONS	CODE	SPECIES	CORE	FORMAT (see over)
Light Blond					
Cove	19 x 3050 x 1220mm	AL-C-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter Cut)	19 x 2440 x 1220mm	AL-C-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Neutral Warm					
Tusk	19 x 3050 x 1220mm	AL-T-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter Cut)	19 x 2440 x 1220mm	AL-T-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Golden					
Solis	19 x 3050 x 1220mm	AL-S-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter Cut)	19 x 2440 x 1220mm	AL-S-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Neutral Cool					
Asta	19 x 3050 x 1220mm	AL-A-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter & Crown Cut)	19 x 2440 x 1220mm	AL-A-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Mid Brown					
Ochre	19 x 3050 x 1220mm	AL-O-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter & Crown Cut)	19 x 2440 x 1220mm	AL-O-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Ember	19 x 3050 x 1220mm	AL-E-1F1B-A1	American Walnut	Core A (MR MDF)	1F1B A1
(Quarter & Crown Cut)	19 x 2440 x 1220mm	AL-E-1F1B-A2	American Walnut	Core A (MR MDF)	1F1B A2
Dark Brown/Black					
Nox	19 x 3050 x 1220mm	AL-N-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter & Crown Cut)	19 x 2440 x 1220mm	AL-N-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Vanta	19 x 3050 x 1220mm	AL-V-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter & Crown Cut)	19 x 2440 x 1220mm	AL-V-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Unfinished					
Unfinished QC	19 x 3050 x 1220mm	AL-UQ-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter Cut)	19 x 2440 x 1220mm	AL-UQ-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2
Unfinished QC/CC	19 x 3050 x 1220mm	AL-UQC-1F1B-A1	European Oak	Core A (MR MDF)	1F1B A1
(Quarter & Crown Cut)	19 x 2440 x 1220mm	AL-UQC-1F1B-A2	European Oak	Core A (MR MDF)	1F1B A2

#### **Formats Available**

VENEER SPECIFICATIONS [I]					
FORMAT	PRODUCT TYPE	A FACE	B FACE	CORE [II]	DIMENSIONS [III]
1F1B A1	Cabinetry	Veneer 01 (Asta, Ochre, Ember, Nox, Vanta)	Veneer 04	MR MDF	19T x 3050L x
	Panel (1F1B)	Veneer 02 (Cove, Tusk, Solis)	-	Core	1220W mm
1F1B A2	Cabinetry	Veneer 01 (Asta, Ochre, Ember, Nox, Vanta)	Veneer 04	MR MDF	19T x 2440L x
	Panel (1F1B)	Veneer 02 (Cove, Tusk, Solis)	_	Core	1220W mm

1F1B panels have one premium-quality face for visible surfaces and a good-quality back veneer for hidden areas. This ensures a high-end appearance where it counts, while keeping the panel practical and cost-effective.



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VENEER SPECIFICATION [1]	AL-C-1F1B-A1
CORE [II]	AL-C-1F1B-A1
DIMENSIONS [III]	AL-C-1F1B-A1
GRADE [IV]	AL-C-1F1B-A1
LAYON [V]	AL-C-1F1B-A1
VENEER CUT [VI]	AL-C-1F1B-A1

## VENEER SPECIFICATION [1]







VENEER 02
Prime Grade Face QC Only



VENEER 04
Cabinetry Back



THICKNESS
BRUSHING
USE
GRADEIV
LANYON (SPLICING) <sup>v</sup>
VENEER CUTVI

Lightly Brushed

0.6mm

Face
Prime Grade Face

Planked (Mismatch)

Quarter & Crown Cut Mix

0.6mm

Lightly Brushed

Face

Prime Grade Face

Planked (Mismatch)

Quarter Cut

0.6mm -Back

Cabinetry Grade Back
Planked (Mismatch)

Same as Face

VENEER 05
Balancing Back
0.6mm

Any Species Back
- For Balancing Only

Back

CORE [II]

MR MDF Panel (Green Dyed)

FR MDF Panel (Red Dyed)

DIMENSIONS [III] (T X L X W) **DIMENSIONS 1** 

19 x 3050 x 1220mm Panel

DIMENSIONS 2

19 x 2440 x 1220mm Panel

#### GRADE [IV]



PRIME GRADE FACE

A Prime Grade Face has a clean appearance with minimal colour variations. Knots are limited in visability and are only in the wood colour.



CABINETRY GRADE BACK

Cabinetry Grade Back has more colour variation allowed and may contain a small number of healthy and pin knots.



**BALANCING GRADE BACK** 

Any grade from any species, for balancing purposes only.

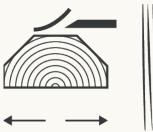
## LAYON [V] (SPLICING) DETAILS

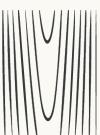


#### PLANKED (MISMATCH)

The planked/mismatch method of splicing creates the most natural appearance as the patterns are not repeated. This method cannot be imitated by melamine or HPL.

#### VENEER CUT [VI]





#### CROWN CUT

Crown cut veneers display more grain variation across the panel with catherdral grain structures. This cut is best suited to mid-dark shades (e.g. greys, browns, and dark colours)





#### QUARTER CUT

Quarter cut veneers generally display straight-grain (with some slight variation) which creates a cleaner and more consistent appearance. This cut is best suited to lighter shades (e.g. natural and blond colours)

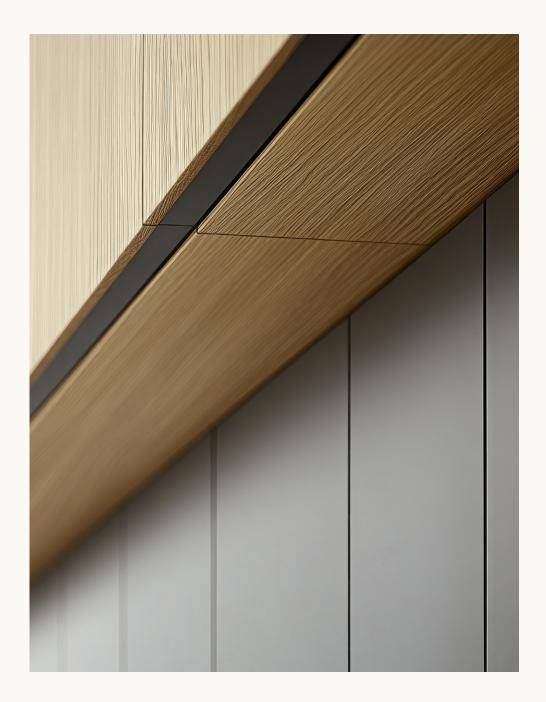
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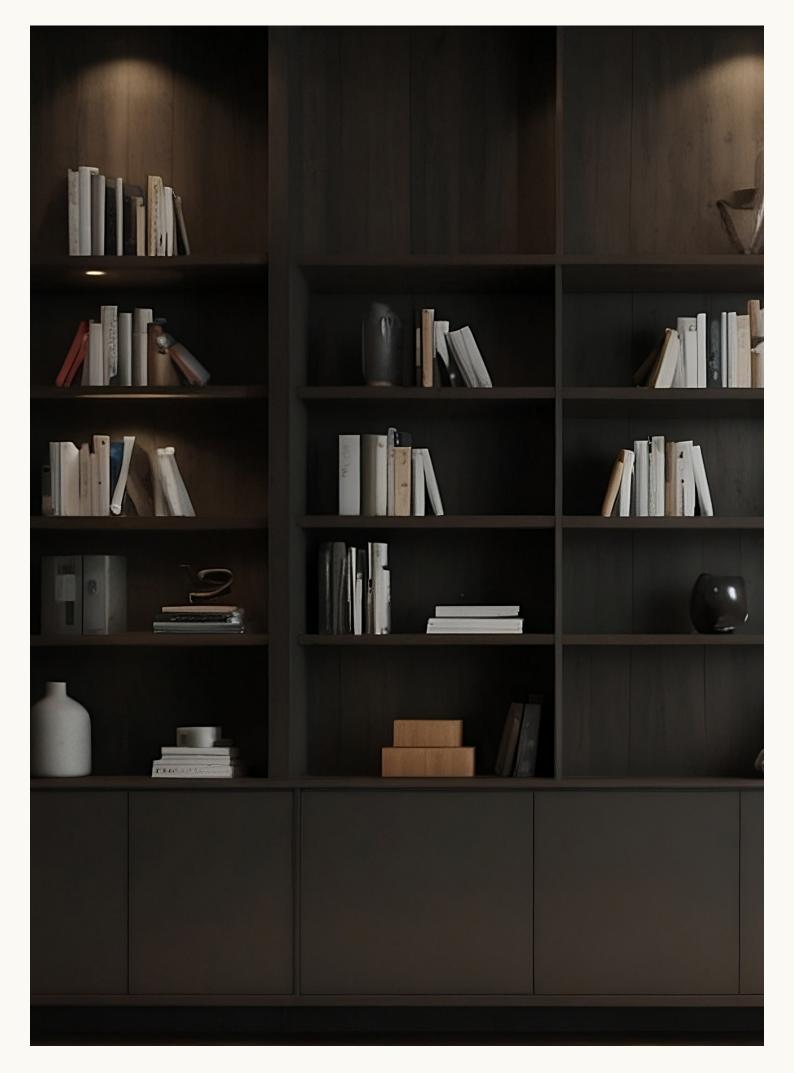
## 3.2

## EDGE BANDING

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

Natural Edge banding is the standard choice, perfect for general applications with a seamless, refined look. For spaces that demand more resilience, choose Duo Hybrid Edge banding—engineered for greater durability and moisture resistance, making it ideal for kitchens, bathrooms, laundries, and other high-use areas.





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## 3.2.1

# PREFINISHED EDGE BANDING (DUO HYBRID / NATURAL)

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

Our Duo Hybrid Edgebanding combines the authentic beauty of real timber veneer with the strength of ABS backing to provide an innovative and resilient solution to the edges of Alor veneer panels.

Option 1: Alor Duo Hybrid timber edgebanding (24/48mm)

Option 2: Alor Natural timber edgebanding (24/48mm)

#### **Duo Hybrid**

The Duo Hybrid construction consists of a Timber surface bonded to a colour-matched ABS base. This seals the core while retaining the timber face.

FORMAT	ТҮРЕ	ROLL DIMENSIONS (TxWxL)
E1	Duo	1mm x 24mm x 50m
E2	Duo	1mm x 48mm x 50m

#### Natural

When selecting natural edge banding, edges will need to be sealed using a finishing lacquer pen to provide a waterproof seal.

FORMAT	TYPE	ROLL DIMENSIONS (TxWxL)
E3	Natural	0.5mm x 24mm x 50m
E4	Natural	0.5mm x 48mm x 50m
E5	Natural	1mm x 24mm x 50m
E6	Natural	1mm x 48mm x 50m
E7	Natural	2mm x 24mm x 50m
E8	Natural	2mm x 48mm x 50m

## 3.2.2

## EDGE BANDING

COLOUR	FORMAT	CODE	STATUS	ROLL DIMENSIONS (TxWxL)
Cove	E5 (Natural 1x24)	AL-C-E5	Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)	AL-C-E6	In Development	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-C-E1	Stocked	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-C-E2	Stocked	1mm x 48mm x 50m
Tusk	E5 (Natural 1x24)	AL-T-E5	In Development	1mm x 24mm x 50m
	E6 (Natural 1x48)	AL-T-E6	In Development	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-T-E1	In Development	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-T-E2	In Development	1mm x 48mm x 50m
Solis	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)	AL-S-E6	In Development	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-S-E1	In Development	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-S-E2	In Development	1mm x 48mm x 50m
Asta	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)		Stocked	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-A-E1	In Development	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-A-E2	In Development	1mm x 48mm x 50m
Ochre	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)		Stocked	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-O-E1	In Development	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-O-E2	In Development	1mm x 48mm x 50m
Ember	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)	AL-E-E6	In Development	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-E-E1	Stocked	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-E-E2	Stocked	1mm x 48mm x 50m
Nox	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)		Stocked	1mm x 48mm x 50m
	E1 (Duo Hybrid 1x24)	AL-N-E1	In Development	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)	AL-N-E2	In Development	1mm x 48mm x 50m

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COLOUR	FORMAT	CODE	STATUS	ROLL DIMENSIONS (TxWxL)
Vanta	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E1 (Duo Hybrid 1x24)		Stocked	1mm x 24mm x 50m
	E2 (Duo Hybrid 1x48)		Stocked	1mm x 48mm x 50m
Unfinished	E5 (Natural 1x24)		Stocked	1mm x 24mm x 50m
	E6 (Natural 1x48)		Stocked	1mm x 48mm x 50m
	E7 (Natural 2x24)		Stocked	2mm x 24mm x 50m
	E8 (Natural 2x48)		Stocked	2mm x 48mm x 50m

#### **Phasing Out**

COLOUR	FORMAT	CODE	STATUS	ROLL DIMENSIONS (TxWxL)
Cove	E3 (Natural 0.5x24)	AL-C-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-C-E4	Phasing Out	0.5mm x 48mm x 50m
Гusk	E3 (Natural 0.5x24)	AL-T-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-T-E4	Phasing Out	0.5mm x 48mm x 50m
Solis	E3 (Natural 0.5x24)	AL-S-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-S-E4	Phasing Out	0.5mm x 48mm x 50m
Asta	E3 (Natural 0.5x24)	AL-A-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-A-E4	Phasing Out	0.5mm x 48mm x 50m
Ochre	E3 (Natural 0.5x24)	AL-O-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-O-E4	Phasing Out	0.5mm x 48mm x 50m
Ember	E3 (Natural 0.5x24)	AL-E-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-E-E4	Phasing Out	0.5mm x 48mm x 50m
Nox	E3 (Natural 0.5x24)	AL-N-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-N-E4	Phasing Out	0.5mm x 48mm x 50m
Vanta	E3 (Natural 0.5x24)	AL-V-E3	Phasing Out	0.5mm x 24mm x 50m
	E4 (Natural 0.5x48)	AL-V-E4	Phasing Out	0.5mm x 48mm x 50m

## 3.3

# ACCESSORIES

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

We've carefully considered both the visual and functional details of cabinetry construction, so you can achieve consistency down to the smallest elements. From lacquer pens that allow you to touch up and protect edges, to matching cover caps that neatly conceal standard fabrication holes, these accessories make it easy to maintain the premium look and integrity of your finished cabinetry.



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## EDGE FINISHING OPTIONS

Our colour-matched and clear lacquer touch-up accessories are designed to seamlessly blend with our veneer panels. They make it easy to repair minor marks, edges, or installation imperfections for a flawless finish. These accessories ensure long-term durability while maintaining the panel's premium, consistent appearance

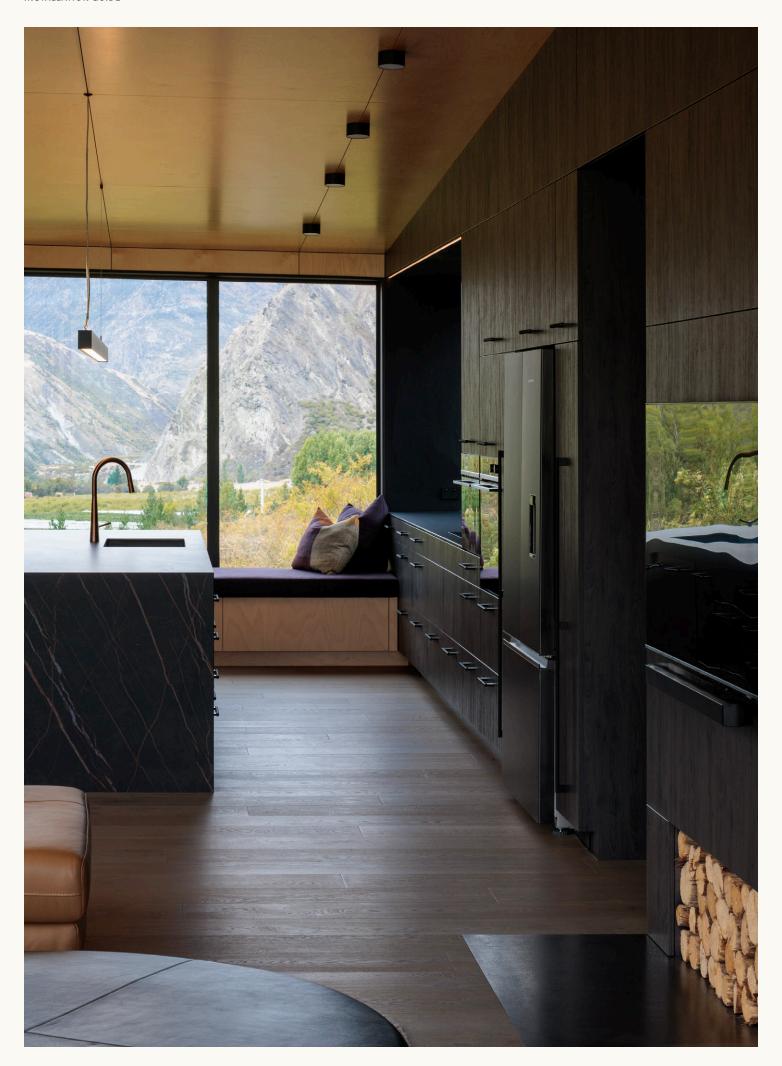
VOLUME OF EACH PEN	11mm
LINEAL METRES OF USE	28 lm

#### Clear Finishing Lacquer Pen

NAME	Clear
CODE	AL-CL-P1
ТҮРЕ	Alor Clear Finishing Lacquer Pen
STATUS	Stocked



COLOUR NAME	RECOMMENDED EDGE FINISHING METHOD	CODE
Cove	Alor Cove Finishing Lacquer Pen	AL-C-P1
Tusk	Alor Clear Finishing Lacquer Pen	AL-CL-P1
Solis	Alor Solis Finishing Lacquer Pen	AL-CL-P1
Asta	Alor Asta Finishing Lacquer Pen	AL-A-P1
Ochre	Alor Ochre Finishing Lacquer Pen	AL-O-P1
Ember	Alor Clear Finishing Lacquer Pen	AL-CL-P1
Nox	Alor Nox Finishing Lacquer Pen	AL-N-P1
Vanta	Alor Clear Finishing Lacquer Pen	AL-CL-P1



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#### ADHESIVE 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.





# DESIGN GUIDANCE



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

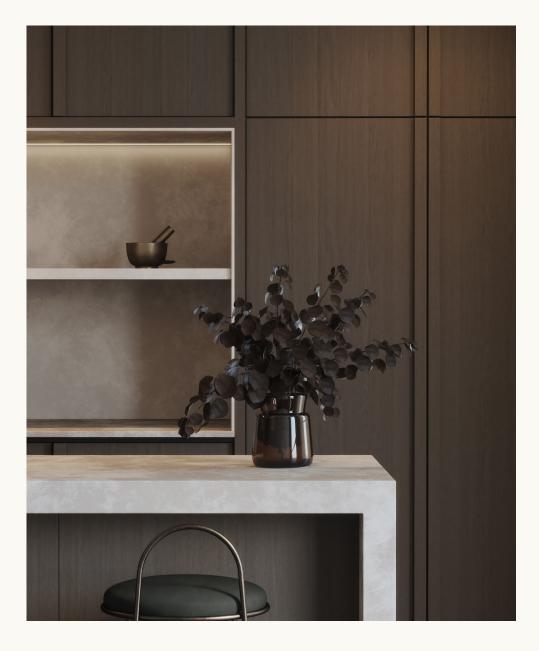
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## 4.1

## 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.



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#### 4.1.1

## 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.

#### 4.1.2

# VENTILATION AND MAINTAINING A STABLE CLIMATE

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: <u>The Ministry of Social Development\*\*</u> recommends maintaining the internal temperature between 18-21°C.

# 4.1.3 ERGONOMIC BEST PRACTISES

Alor panels in  $2440 \times 1220$  mm and  $3050 \times 1220$  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	<ul> <li>900 mm minimum behind someone working at the counter.</li> </ul>
	<ul> <li>1200 mm preferred for two people to pass comfortably.</li> </ul>

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#### 4.1.4

## LOADING CAPACITY BEST PRACTISES

#### 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.

#### 4.1.5 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



#### 4.1.6 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.

#### 4.2

#### 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.

# 4.2.1 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.



# 4.2.2 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

# 4.2.3 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.



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#### 4.3

#### 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.

#### 4.3.1 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.



# 4.3.2 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 edge banding for this application.



# 4.3.3 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.



#### 4.3.4 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.



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#### 4.3.5

# 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:

#### **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 discoloration.

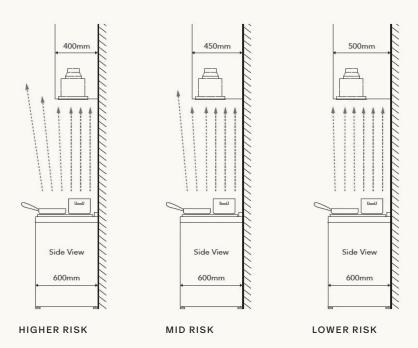
#### Cabinet Face Setback:

- Set cabinet faces 10–20 mm behind the hood intake/front fascia to prevent steam damage.
- If flush-mounted, add a stainless or aluminum 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



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

#### 4.3.6 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.

# 4.3.7 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.





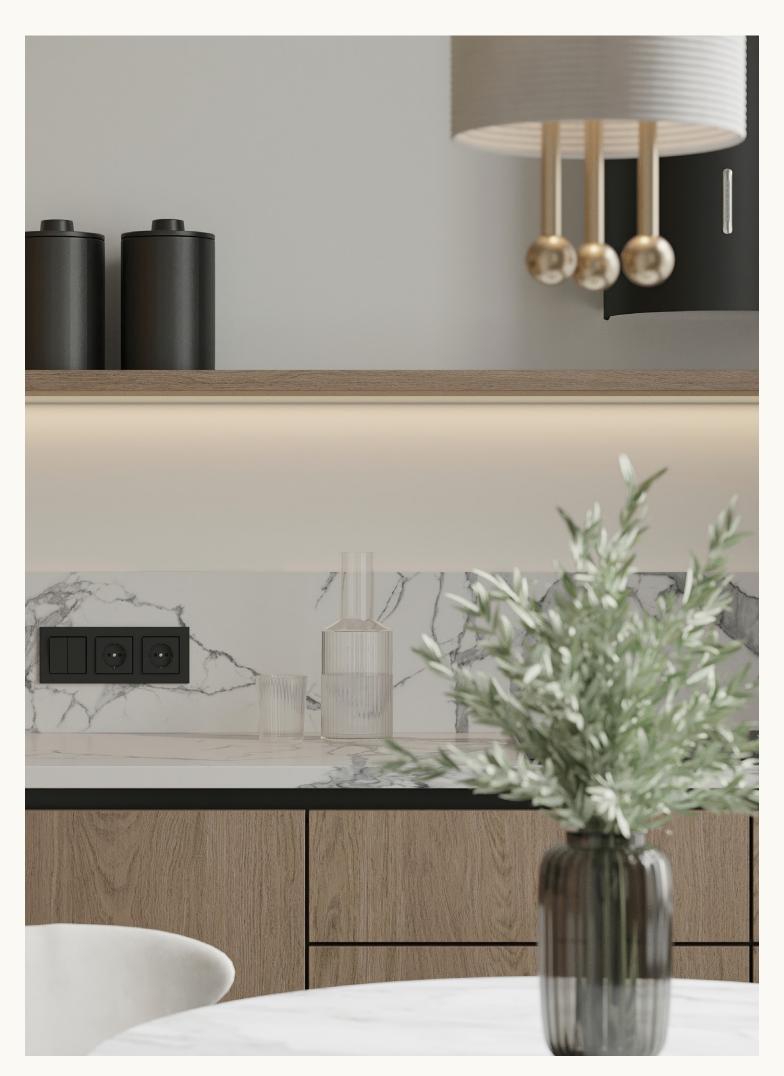


4.3.8 TOE KICKS

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.



# 4.3.9 EDGE TREATMENTS & PROFILES

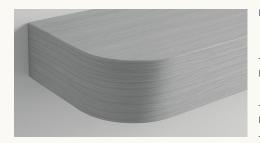
Select edge profiles based on aesthetic and functional requirements. Profiles should enhance durability while complementing cabinetry style. Maintain consistency across units for a cohesive visual effect.



#### SQUARE EDGE (STRAIGHT CUT)

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 edge banding.



#### RADIUS EDGE (SOFTER IMPACT)

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

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

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 edge banding.

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.

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#### 4.4

#### 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.

#### 4.4.1 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.

# 4.4.2 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. "

4.4.3
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.





# 4.4.4 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.

# 4.4.5 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



**COLORCOTE**Powder Coat Pairings



**DULUX**Powder Coat Pairings



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# PRE-FABRICATION GUIDANCE



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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.

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#### 5.1

#### HANDLING AND STORAGE

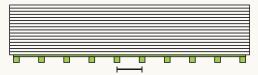
Caring for your panels keeps them pristine and ready for a flawless finish

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.

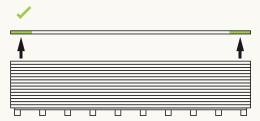
#### HANDLING

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

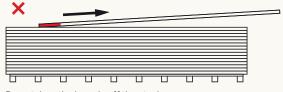
- Lifting: Lift panels rather than dragging them across pallets, benches, or machinery.
- Large Panels: Use team lifting or suction cups to prevent flexing and corner damage.



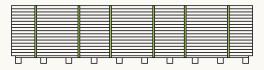
Ensure boards are on a flat surface or bearers max. 400mm apart



Lift boards on the edges using 2 people to lift at a time  $\,$ 



Do not drag the boards off the stack



Ensure boards are secured to the pallet before transporting

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#### 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.
- Touch-up pens: Store horizontally at 18–25 °C.

#### **BOARDS ON PALLET OR LEVEL BEARERS**



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



## 5.2

## 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.	ORIENTATION AND GRAIN MATCHING CUTTING ORDER	<ul> <li>Arrange panels for minimal waste using standard nesting/optimization software or manual planning.</li> <li>Label each panel clearly with ID, face orientation, and edge banding requirements.</li> <li>Align panels for consistent grain/finish direction.</li> <li>Prioritize long cuts first to reduce tear-out.</li> </ul>
Machining Set Up	TOOLING CHECKS	Reserve small cut-offs for test cuts or minor parts.      Ensure blades, router bits, and edge banding tools are
TIP Record successful settings for repeat orders—saves setup time and ensures consistent quality.		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, edge banding adhesion, and mitre accuracy. Adjust as needed before production batch.
Edge Trimming Options	EDGE BANDER	For best results when edge banding pre-finished veneer, we recommend leaving the radius trimmer engaged, while turning off the scraper and buffer to avoid damaging the surface.
	HAND HELD EDGE BANDER	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.

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Edge Detailing Tools	SANDPAPER AND 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			



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#### 5.3

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

# PERFORMANCE RECOMMENDATIONS

#### **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 edge banding.

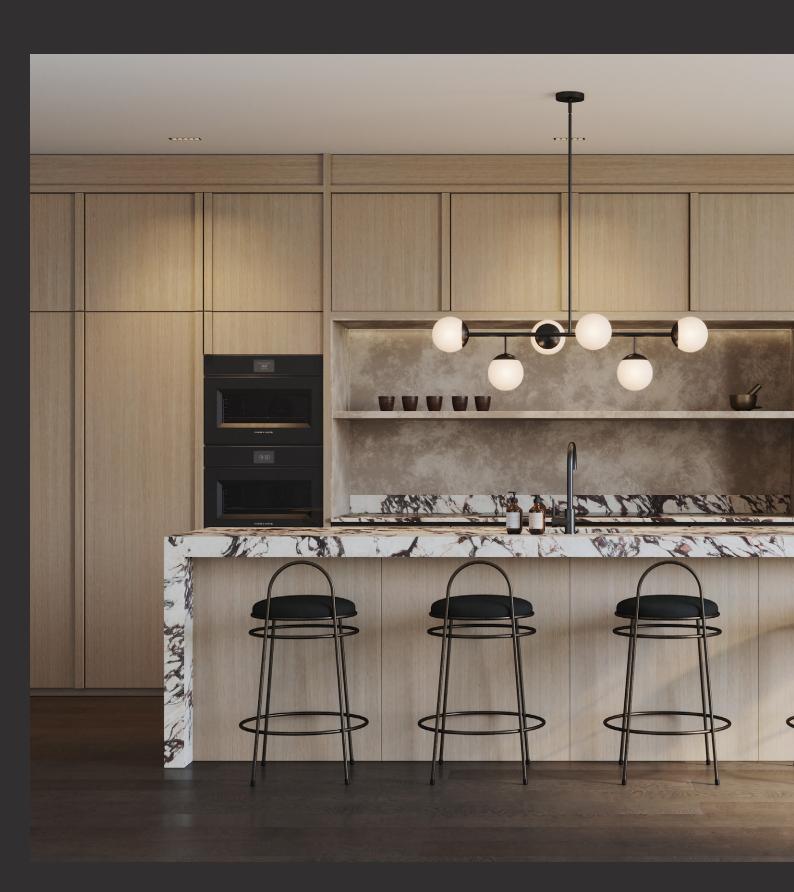


FINISHING	OBSERVATION	POSSIBLE CAUSE	POSSIBLE FIX
rimming and Scraping	EDGES CHIP/TEAR	CNC scraper use; trimming against grain; feed too fast	Test CNC scrapers, may not be needed
			<ul> <li>Use manual scraper</li> </ul>
			<ul> <li>Trim with the grain</li> </ul>
		AFTER Scraper set wrong; chip size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

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

# FABRICATION & ASSEMBLY GUIDANCE



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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.

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6.2 Edge Banding
------------------

6.3 Assembly

#### 6.1

#### 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:  $2420 \times 1220 \text{ mm}$  can be cut to a standardised height of 2400 mm and 1200 mm width

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

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#### 6.2

#### EDGE BANDING

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

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

#### **Material Compatibility**

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

#### **Application**

Use standard edge banding 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 EDGE BANDING (RECOMMENDED METHOD)

Machine edge banders 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 pre-finished 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 EDGE BANDING

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.





#### EDGE BANDING SEQUENCE -OVERLAPPING CORNERS

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

#### **Recommended Order**

Apply edge banding 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.



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#### 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 edge banding 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 edge banding 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

#### 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.



#### 6.3

#### 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.



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#### 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

# 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



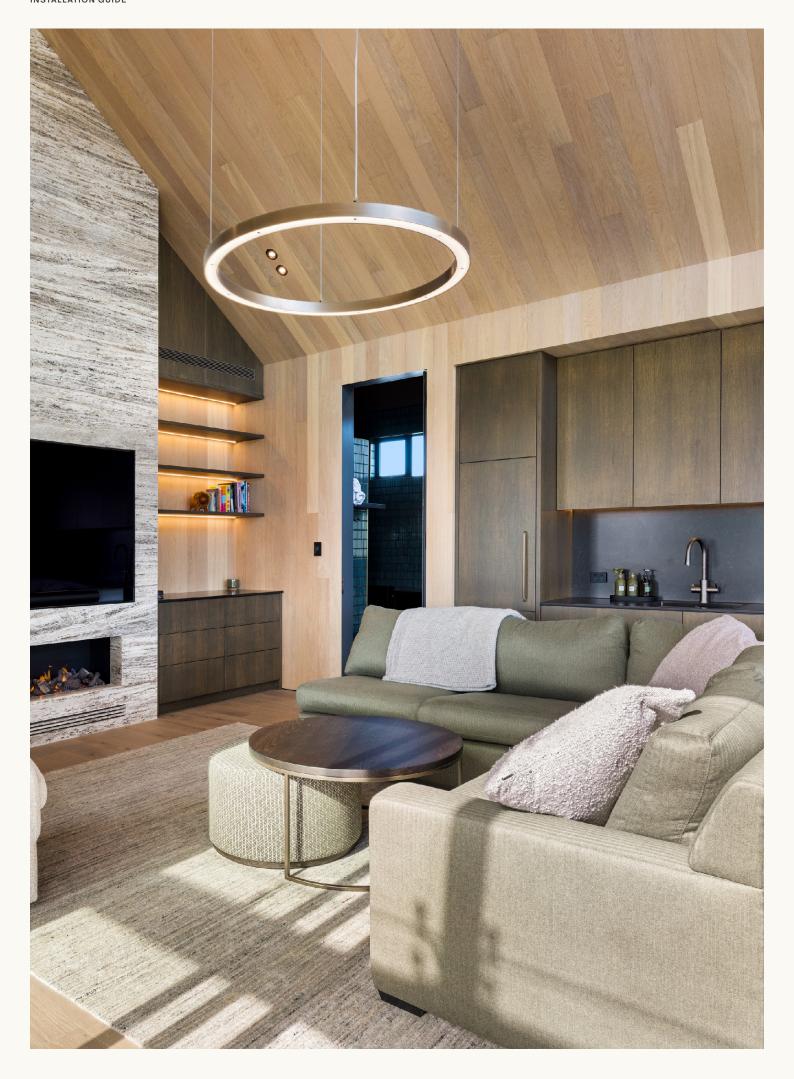
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The final stage of working with Alor Veneer Panels is where craftsmanship and care truly shine. Quality edge finishing, using premium edgebanding options, ensures visual continuity and lasting protection. Subtle touch-ups with colour-matched materials 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.

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(Post-Processing)



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## 7.1

## EDGE FINISHING TREATMENTS

Duo Hybrid Edge Banding	REQUIREMENTS	When using Duo Hybrid Edgebanding the ABS Base should seal the MDF Core.	
		Finishing would be for Aesthetic detailing.	
	COLOUR SPECIFIC GUIDANCE	Solis/Ember/Vanta: 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)	
Natural Edge Banding	REQUIREMENTS	When using Natural Edgebanding the MDF Core remains unsealed, therefore the edges must be sealed.	
		Note: Panels are 4-6% Gloss	
	COLOUR SPECIFIC GUIDANCE	Solis/Ember/Vanta: 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 Edge Banding	REQUIREMENTS	A Forté solution for ABS Edgebanding is in development. However, local manufacturers may offer matching services.	
		Finishing would be for Aesthetic detailing.	
	COLOUR SPECIFIC GUIDANCE	Solis/Ember/Vanta: 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)	
No Edge Banding	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)	

## 7.2

# APPLICATIONS FOR FORTÉ LACQUER TOUCH UP PENS

FINISHING / REPAIR TYPE	SUITABILITY	RECOMMENDED SOLUTION
Finishing clashed edges – Natural Edge Banding	Yes	
Finishing clashed edges – Duo Edge Banding	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 Hardwx Oil System
Blending Gradients or Grain Patterns	No	We recommend a Colour Matched Lacquer/ Polyurethane or Hardwx 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

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#### 7.3

# 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