

CONSTRUCTABOARD

FABRICATION GUIDE

INTRODUCTION

Constructaboard is a waterproof PVC composite sheet designed for cabinetry, joinery and decorative panel applications where moisture resistance and dimensional stability are required.

The board features a smooth hardened surface on both faces and is supplied with protective PE masking to assist with handling and fabrication.

Typical applications include cabinetry, vanities, laundry joinery, commercial joinery and covered outdoor cabinetry installations.

STORAGE & HANDLING

- Store sheets flat on a continuous support surface
- Protect sheets from prolonged sunlight before installation
- Protective PE masking should remain during fabrication

MAIN BENEFITS

- Waterproof PVC construction
- Smooth hardened surface on both faces
- Suitable for machining with conventional woodworking equipment
- Compatible with CNC routing and panel processing equipment
- Suitable substrate for decorative laminates including HPL
- Resists insect infestation
- Available in white and black sheet colours

CUTTING

- Constructaboard sheets can be cut using panel saws, table saws or CNC routers, use a 2 flute cutter for best results
- Use sharp carbide tipped blades
- Maintain consistent feed rates
- Avoid excessive heat build up

CNC MACHINING & ROUTING

- Constructaboard can be machined using CNC routers and panel processing equipment
- Common operations include rebates, grooves, pockets and hardware recesses
- Solid carbide cutters are recommended

PRODUCT RANGE

- Sheet size 2440 mm × 1220 mm
- Thickness options 16 mm and 18 mm
- Standard colours White and Black
- Brushed Aluminum/Black HPL 16mm only
- Coloured HPL 18mm available
- Compatible with PVC edge tape and laser edge tape
- Additional board sizes may be available on request. Minimum order quantities and lead times may apply.

DRILLING

- Use standard woodworking drills or carbide tipped bits
- Moderate drilling speeds recommended
- Use backing boards to reduce breakout

MACHINING PARAMETERS

OPERATION	TYPICAL SPEED	FEED RATE
Saw Cutting	3000–6000 rpm	10–25 m/min
CNC Routing	18000–24000 rpm	5–15 m/min
Drilling	2000–6000 rpm	Moderate feed



CHEMICAL RESISTANCE

Constructaboard PVC composite sheets exhibit good resistance to many chemicals encountered in residential and commercial environments.

Resistant to:

- Water and moisture
- Dilute acids and dilute alkalis
- Household cleaning detergents
- Alcohol based cleaners
- Many salts and aqueous solutions

Limited resistance to:

- Oil and greases (prolonged exposure may cause surface staining)
- Hydrocarbon based cleaners
- Some solvent based adhesives

Not recommended:

- Ketones such as acetone
- Chlorinated solvents
- Aromatic hydrocarbons
- Strong oxidising agents

Chemical resistance performance may vary depending on concentration, exposure duration and temperature. Suitability testing should be undertaken where chemical exposure is expected.

MOISTURE RESISTANCE

Constructaboard features a waterproof PVC core and demonstrates very low water absorption under normal service conditions.

- Bathroom cabinetry
- Covered outdoor cabinetry
- Laundry joinery
- Kitchen cabinetry including internal Carcasses
- Commercial wet areas

Constructaboard is not intended for continuous immersion.

DESIGN CONSIDERATIONS & LIMITATIONS

Constructaboard is designed for cabinetry, joinery and decorative panel applications.

Structural applications not recommended:

- Bracing panels
- Load bearing components
- Structural building elements

Heat exposure considerations:

- Maintain clearances near ovens
- Maintain clearances near cooktops
- Avoid installation near heating appliances

Outdoor exposure:

- Suitable for covered outdoor cabinetry
- Not recommended for fully exposed exterior installations

MECHANICAL FIXING

- Use confirmat screws, cabinet screws or pocket screws
- Predrilling recommended near sheet edges
- Avoid excessive tightening

ADHESIVE BONDING

- Use adhesives compatible with PVC substrates
- Polyurethane adhesives
- MS polymer adhesives
- Contact adhesives



HINGE RECOMMENDATIONS

DOOR HEIGHT	RECOMMENDED HINGES
Up to 800mm	3 Hinges
800 to 1300mm	4 Hinges
1300 to 1800mm	4 Hinges
1800 to 2100mm	5 Hinges
2100 to 2400mm	6 Hinges

- Always test hinge boring tools on a sample panel to ensure a clean cut is achieved.
- Best results will be achieved by drilling or boring through a thin MDF sacrificial block.
- Only bore the required depth amount of your hinge hardware.

FABRICATION RESPONSIBILITY

Constructaboard is supplied as a fabrication material intended for processing using conventional joinery and panel processing equipment. Fabricators should confirm machining parameters, adhesive compatibility and fixing methods prior to production.

FABRICATION CHECKLIST

- Confirm sheet thickness and colour prior to fabrication
- Inspect sheets for surface damage
- Allow sheets to acclimatise to workshop conditions
- Confirm machining parameters before production
- Confirm adhesive compatibility where laminates are used
- Allow clearance for thermal movement

INSTALLATION NOTE

Constructaboard is supplied as a fabrication material. Constructaboard should be installed using conventional cabinetry and joinery construction methods. Consider ventilation, moisture exposure and proximity to heat sources during installation. Installation methods and detailing remain the responsibility of the designer, fabricator or installer to ensure the product is suitable for the intended application and complies with applicable building regulations.

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM D792	0.53 – 0.57 g/cm ³
Water absorption	ASTM D570	0.8 %
Flexural modulus	ASTM D790	800 – 860 MPa
Service temperature	–	-10 to 55 °C

Technical Note: The coefficient of thermal expansion isn't included in the physical properties

FURTHER INFORMATION

For additional product information, fabrication guidance or technical support contact Mulford New Zealand.

Technical Disclaimer

Information contained within this document is provided as general technical guidance only. Mulford New Zealand makes no representation or warranty as to the completeness or suitability of this information for specific applications. Designers, fabricators and installers are responsible for determining the suitability of Constructaboard for the intended application and should undertake appropriate testing where necessary. Product specifications may change without notice.

