

# Navlam

## Frequently Asked Questions

### What is Navlam?

Navlam is a range of reconstructed timber veneers, factory pre finished with high quality 2-Pac polyurethane with UV inhibitors. It is laid onto a laminate back, ready for application. Navlam reduces the timber veneers working, polishing and laying times associated with traditional timber, resulting in time, labour and cost savings.

### What colour consistency should I expect with Navlam products?

As with traditional wood, it is not possible to guarantee absolute colour consistency between one batch of Navlam and another. Therefore, a slight colour difference between two sets of panels cannot be considered a defect.

### What is Navlam's likely reaction to light?

All woods, including Navlam, react to direct and indirect light, both natural and artificial (such as incandescent and fluorescent lamps). Any change of the surface colour and appearance over time is a natural characteristic, not a defect. In particular, heat and humidity will interact with light to accelerate the ageing process. When exposed to direct and strong light, pastel coloured, melamine-finished patterns can undergo sudden and irregular changes in the original colour.

### What is the recommended method for handling Navlam?

Navlam can be handled stocked and worked as a traditional HPL sheet. Some specific features of wood surfaces require particular care. Always carry Navlam sheets vertically. Handle full size sheets carefully to avoid breakage or injury. It is recommended that two people carry full size sheets.

Be careful in moving Navlam sheet so as not to strike them against anything which would damage the decorative surface or edges. Always lift Navlam sheet surfaced assembly from one point to another. Never slide the panel on its decorative surface. Navlam is supplied with a clear protective film. We recommend that you leave the film in place while working the sheet. Colour uniformity and quality checks should be carried out on the sheets before working commences. The protective film is clear enough that you may inspect the material without removing the film. When in doubt, peel the film around the suspect area.

### Should Navlam Sheets be rolled?

If the sheets are to be rolled, care should be taken to avoid bending or cracking. Rolling against the grain may cause the veneer to crack, and must be done with care. It is not recommended that the laminate be stored in rolls.

### What is the recommended method for stacking or storing Navlam?

Navlam sheets should always be stacked flat, horizontally, face to face, at a moderate ambient temperature (about 20C) and a relative humidity of around 60%.

All wood surfaces, should be protected from sunlight and humidity. We recommend wrapping in non-transparent plastic (preferably dark) to assure stability.

### What edging is available for Navlam?

Matching ABS edging is available in all colours in varying thickness and widths.

### What's the recommended method for pressing Navlam?

Navlam sheets can be adhered to substrates in a hot or cold press, at a maximum temperature of 60 – 70°C with pressure values suitable for the glue being used. Setting the pressure or temperature too high, or extending the time in the press may cause the following problems:

- Panel bowing
- Release of glue from the protective peel off film onto the surface
- Irregular variation of the finish brightness
- Deterioration of the polyurethane surface, causing irreversible change of wood colour.

We do NOT recommend the use of Contact Adhesives. Before application it is absolutely necessary to condition the Navlam sheet and substrate in the same place for at least 24 hours.

The best backing for Navlam panels is the Navlam product however other materials offer a suitable balance under proper conditions. In order to balance boards a 1.2mm white or black laminate is available from New Age Veneers.

### Does Navlam require preconditioning?

As with all wood products Navlam reacts to the ambient conditions. Navlam sheets and substrates gain moisture and expand under high relative humidity conditions and loose moisture and shrink under dry relative humidity conditions. Because of the grain structure of wood, there is a tremendous variance in the amount of movement between different wood products, and often within the individual products themselves. Products such as particleboard and MDF have a uniform matching and cross directional movement; while solid lumber and single direction bending plywood move tremendously in their cross grain direction and very little in their machine direction.

Allow the Navlam sheet and the substrate to acclimatise for at least 48 hours at the same ambient condition. Optimum conditions are approximately 22 degrees Celsius and at a relative humidity of 40 to 65%. Provisions should be made for the circulation of air around the components.

### What substrates are typically used with Navlam?

MR MDF is the most common substrate to use when pressing Navlam. Plywood is not generally recommended due to the movement in the board in particular bending ply. Do not apply Navlam to drywall (gypsum), plaster, concrete or solid timber.

The more resistant the substrates are to dimensional change (shrinking and expansion from changes in humidity and temperature) the better the result. The substrate must be smooth and free of grease, wax, dust, oils or silicones and must be uniform in thickness. All raised areas must be sanded or filled so that the surface is smooth.

All edges should be finished using the matching 1mm ABS edging to prevent moisture absorption into the timber layer.



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### Which machinery is recommended for use with Navlam?

Panel saws or table saws may be used to cut Navlam before or after lamination. Routers for trimming edges after bonding must have a smooth, clean base plate, so that the surface of the veneer will not be scratched. Use carbide-tipped bits with ball bearing guide rolls. Keep all bits sharp. Drilling into Navlam may be done with standard wood bits or router bits. For a final edge finishing, use a flat smooth or fine file. You may consider applying a light or dark stain to the edge to hide the phenolic line.

### What is recommended for cleaning and maintenance of Navlam products?

Navlam surfaces are easy to clean using a damp cloth and mild soap or non-abrasive wood cleaning products. Do not use abrasive cleaners, pads, or harsh solvents. Do not allow any solvent, acetone or trichloroethylene to come in contact with the surface. Accidental spills, splatters or over sprays should be wiped off immediately with a soft cloth and mild soap. If removed immediately, solvents should not have an effect on the veneer. Watered down alcohol, ammonia and other light solvents may be used for tougher stains.

### What causes stress cracking?

Stress cracking is caused by the concentration of stresses greater than the surfacing material can withstand. These stresses can be caused by external forces such as loading or impacts but are generally created by the normal dimensional movements of the Navlam assembly as it reacts to the surrounding environment. Navlam moves about twice as much across the grain (sanding direction) as it does in the length direction. Whenever possible minimize the dimension of the cross grain direction. Usually when drying conditions occur, stress cracking can result. When properly fabricated, Navlam surfaced assemblies should not stress crack when exposed to low humidity conditions. Note: Stress cracking can also result when high moisture material is glued and subsequently exposed to low humidity conditions.

However, overly dried material may lengthen and cause bubbling if improperly glued. As with all wood based products, Navlam surfacing material and substrates gain moisture and expand under moist conditions (high relative humidity) and lose moisture and shrink under dry conditions (low relative humidity).

### Can you achieve Inside Corner Fabrication?

Radius all inside corners as large as possible (5mm minimum). Inside corners required for sinks, grills, electrical outlets, etc must contain the stresses generated by the normal movement of the Navlam. Radiusing the cutouts greatly reduces the stresses. The radiused corner created by a 10mm diameter router bit is sufficient.

