

PRESSING & FABRICATION Sustainable Natural Real Wood Veneers

Matching the veneer leaves

The veneer leaves should be matched (Book-, Slip-, Random-matched etc) to suit the veneer appearance and/or the client's or project requirements.

Joining the veneer leaves ("Jointing & Splicing")

Veneer leaves must be straight-cut on a veneer guillotine ("jointing"), edge-glued and spliced in the required matching pattern to make layons (sheets of veneer). Stitching veneer leaves should generally be avoided if possible as the thread marks may show through over time.

Substrates

Suitable substrates are MDF or particle board. Plywood (AA face grade) may also be used, but to prevent cracking, veneer should be laid at right angles (across) the direction of the face veneer of the plywood. Substrates should be of uniform thickness, clean, free of oil, grease and other foreign materials. Veneers should not be applied directly to plasterboard, concrete, brick or timber.

Pressing/Gluing onto substrate

Veneers should be glued ("laminated" or "pressed") onto the substrate using a plywood or veneering hotpress, using cross linking veneering-glues such as PVA or Urea-formaldehyde, applied and pressed according the glue manufacturer's recommendations. Vacuum and other presses may also be suitable.

Note that veneer pressing is a skilled job best undertaken by experience panel layers. Hand lamination is generally not recommended except by those experienced in this, nor are contact adhesives recommended as these tend to cause the veneer to peel off - especially if a solvent based coating is applied. To prevent warping and bowing, balancing veneer of the same thickness, moisture content and general type/tensile strength of veneer should always be used on the back of veneered panels.

Trimming & Sanding

After pressing, the veneer panels should be trimmed and sanded

Edging

Veneered panels should be edged with veneer or solid timber. This is important to prevent moisture ingress, to protect the edges of the panel and also for appearance.

Finishing/Coating

Veneered panels should never be used in the raw state but must always be sanded then finished with a suitable coating or sealer. Coatings are available in a range of types and gloss levels (eg Matt, Low-Sheen, Satin, Semi-Gloss and High-Gloss). It should be noted that the type of clear-coating, light, humidity, age/time may affect the appearance of the finished panels. Generally, high wear (such as desks) or humid applications (such as bathrooms) require a two-pack polyurethane or similar.

To minimize yellowing, fading and colour change with age and exposure to long periods of light, a non- or lowyellowing coating (such as a non-yellowing 2-pack acrylic-urethane) with manufacturer approved UV inhibitors is best. For best consistency of appearance, the same coating type and gloss should be used across the entire project by all contractors. Note that Cellulose Nitrate lacquers should be not be used in any wall or ceiling applications that the Building Code of Australia specifies should be of Fire Hazard Material Group 1, 2 or 3.

We recommend that fabricators prepare test veneered panels to check the suitability of the coating system for colour stability and any other properties desired in the intended application, such as wear resistance and hardness. This information is presented as a guideline only - expert advice should be sought with regards to coatings – please contact your coating supplier.

Bending

Veneer can be only really be successfully bent around a curve if it is laminated onto paper-backing, bending plywood, very thin MDF or medium thickness MDF with slots or grooves in the back. If bent as 0.6mm veneer, it will likely split. Veneer can also be used as the face of moulded plywood. Specially treated ("tenderised") paper- or fleece-backed veneer can be moulded to very tight curves in special hot presses.

Download Timber Veneer Association Manual