



PRESSING & COATING & FABRICATION

Matching the veneer leaves

The veneer leaves should be matched (Book-, Slip-, Random-matched etc) to suit the veneer 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 hot-press, using cross linking veneering-glues such as PVA or Urea-formaldehyde 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, a balancing veneer in the same grain-direction as the face veneer, and same thickness, moisture content and general type/tensile strength of veneer should always be used on the back of veneered panels.

Trimming & Sanding

It is preferable for veneered boards to be coated immediately after sanding, because raw wood exposed to air may oxidise and discolour.

Edging

Veneered panels should be edged with veneer edge-strips or some other sealing process. 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 low-yellowing polyurethane (such as a non-yellowing 2-pack acrylic-urethane) with manufacturer approved UV inhibitors should be used for sealer and top coats. Sealer and coating film thickness to be as recommended by the coating manufacturer. For best consistency of appearance, the same coating type and gloss should be used across the entire project by all contractors. Do not use acid catalysed coatings on pale veneers, American Walnut, American Cherry, Blackwood or European Beech. Cellulose Nitrate lacquers should not be used in any wall or ceiling applications that the National Construction Code Australia specifies should be of Fire Hazard Material Group 1, 2 or 3.

Bending

Veneer can only 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 just as a 0.6mm veneer, it will likely split. Veneer can be used as the face of moulded plywood.

Download [Use of Veneer in humid conditions](#)

Download [Timber Veneer Association Manual](#)

This information is presented as a guideline only - expert advice should be sought with regards to coatings – please contact your coating supplier. As it is not possible to cover all associated manufacturing materials, conditions, products and methods, the end-user is responsible for carrying out the necessary tests and trials to check that the veneer, coating type, fabrication methods, associated materials and cleaning products/methods are suitable for the application.