

PRESSING & FABRICATION

INNATO[™] natural-grain Pre-finished Real Wood Veneer Laminates

Substrates

Suitable substrates are MDF or particle board. Plywood (AA face grade) may also be used, but is more likely to bow or twist. Substrates should be of uniform thickness, clean, free of oil, grease and other foreign materials. *InnatoTM* should not be applied directly to plasterboard, concrete, brick or timber. Gluing to metal is possible but requires careful preparation of the surface, particular attention being paid to thorough degreasing of the metal.

Conditioning and Pressing/Gluing onto substrate

Due to its real wood surface, $Innato^{TM}$ is more sensitive to warping than ordinary melamine laminates. If glued when moist or too dry, there is a risk of cracking due to shrinking or expansion of the wood. $Innato^{TM}$, the substrate and the backer laminate ideally should be conditioned for 7 to 10 days (and a minimum of 48 hours) prior to pressing in the environment in which they will be bonded and used. The best conditions are 40% to 65% relative humidity and 18°C to 22°C. Conditioning is most effective if air can circulate between the sheets during storage.

InnatoTM should be cold-pressed or warm-pressed (do not exceed 60°C) onto the substrate in a plywood-, veneering- or laminating-press, using a PVA or UF veneering- or PUR-glue, according to the glue manufacturer's instructions and using their recommended glue spreads. Uniform glue spreads with 100% coverage are essential. We recommend that trial bonding is carried out with the glue and substrate to be used in the project. Note that laminating InnatoTM onto substrate is a skilled job best undertaken by experienced panel layers and laminators.

Hand lamination and the use of contact adhesives is generally not recommended except by those experienced in this. Care must be taken to ensure that all solvent has evaporated before bringing the laminate and substrate together (otherwise, delamination may occur). A balancing laminate backer must be used, preferably of the same *Innato*TM type/specie. 0.6mm melamine cabinet liners may also be used, or downgrade *Innato*TM if available. *Innato*TM comes with a clear plastic protective film which should be peeled off after final fabrication or installation. All glue spills should be cleaned off the surface. PVA glue is water-soluble and may be easily removed. Spills of PUR or UF glue must be removed immediately - if these glue deposits harden, they will be difficult to remove without damaging the panel's surface, their removal being possible only with a sharp-edge chisel.

Innato comes with a peel-off clear plastic protective film on its surface – this should be peeled off before pressing or laminating.

Edging

Edge finishing may be done with a fine mill file. $Innato^{TM}$ on substrate must be edged-sealed or have edgebands applied, with 0.9mm ABS edging now being available for many $Innato^{TM}$ laminates. If ABS edging is not available, laminate self-edging can be used, ie using strips sawn from the face laminate. In this case it is important that the end and side grain of the laminate is sealed with a lacquer pen or other clear finish or sealant, otherwise humidity will enter the timber veneer, with resultant wrinkling and/or staining.

Machining

*Innato*TM can be machined, drilled or sawn using standard, sharp, carbide tipped tools as used in working with ordinary high pressure laminates. It should be sawn with the veneer edge outermost to minimise surface chipping. Machine plates in contact with *Innato*TM should be smooth and clean.

 $Innato^{TM}$ on substrate may expand & contract slightly with changes in humidity. To minimise any stress cracking, take the following precautions:

- Avoid use near hot air vents and air conditioner vents
- Internal corner radii of laminate cut-outs should be smoothly rounded at a minimum of 5mm radius.
- Seams and panel joints should be placed to intersect at inside corners
- Screw holes should be drilled slightly over-size
- Use of the laminated panels in damp or arid dry conditions will make stress cracking more likely. To minimise such problems, the product should conditioned in conditions close to the humidity conditions of intended use.

Bendina

 $Innato^{TM}$ cannot be post formed or bent around tight radii. It can be cold bent to a 200 mm radius (or greater) either parallel or perpendicular to the wood grain.