

PRESSING & FABRICATION

Pure Paper Metal and Color laminates are processed and bonded in the same manner and to the same substrates as all other high pressure 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. Innato 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 and the balancing backer.

Conditioning and Pressing/Gluing onto substrate

Pure Paper 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 veneering- or PUR-glue, according to the glue manufacturer's instructions and using their recommended glue spreads. The best conditions are 40% to 60% relative humidity and 18°C to 22°C. Do not use Urea-formaldehyde glues. Uniform glue spreads with 100% coverage are essential. When using a press, the pressure must be between 2kg/cm² and 5kg/cm². A balancing laminate backer must be used, preferably of the same thickness as the Pure Paper face laminate. We recommend that trial bonding is carried out with the equipment, settings, glue, substrate and backer to be used in the project.

PVA glue is water-soluble and may be easily removed. Spills of PUR 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, which can damage the laminate.

Hand lamination and the use of contact adhesives is generally not recommended except by those experienced in this. Note that use of contact adhesives with Pure Paper Metal can cause telescoping of the glue-line through to the surface.

For all Metal laminates and Relief Patterned laminates – ie Waved, Clawed, Tiles, Sticks, Tabs, Platforms, Landscape, Spines, Cities, Mesh, Dots, Strips, Lines and Net – use the minimum pressure necessary to ensure a good bond. This especially applies to Pure Paper Metal patterned laminates.

Pure Paper Metal comes with a peel-off clear plastic protective film on its surface – this should be left in place for the pressing process. If it has been removed, a thin protective soft layer such as paper should be used between the laminate and the press plates. We also recommend that such a protective layer be used with all the Pure Paper Color Relief Patterns.

Edging

Edge finishing may be done with a fine mill file. Pure Paper must be edged-sealed or have edge-bands applied, with 1mm ABS edging being available by indent for all Pure Paper Color laminates. Pure Paper Metal can be self-edged.

Machining and Cutting

Pure Paper laminates can be machined, drilled or sawn using standard, sharp, carbide tipped tools as used with other high pressure laminates. They should be sawn with the top/outer/face edge outermost/upmost to minimise surface chipping. Machine plates in contact with Pure Paper should be smooth and clean.

During cutting and machining, a slight burring may occur along the new edge. This can be removed by careful use of a fine file.

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 to a minimum of 5mm radius.
- 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 be conditioned in conditions close to the humidity conditions of intended use.

Bending

Pure Paper cannot be post formed or bent around tight radii. It can however be cold bent to various radii depending on the type and thickness of laminate.

Installation

- To obtain the best match between patterned panels: Use laminate sheets from one production batch if possible.
- Keep a note of the serial numbers of the back of Pure Paper sheets, in order to place installed panels in sequential serial number order.
- Orientation: Always install panels in the same direction, follow the coloured arrow marker on the bottom left hand-side on the back of the laminate sheets

Pattern alignment

- Managing the first saw-cut with patterned Pure Paper - The left long side of Pure Paper is parallel to the first line of the pattern, that edge should be used as the reference point.
- Set sequential sheets at eye level to line up patterns on sequential sheets.
- Provide an open-joint - A space (open-joint) between 2 panels helps limit the visual impact of incorrect pattern alignment

For more information go to:

<http://www.purepaper-laminates.com/applications.html#color> and

<http://www.purepaper-laminates.com/applications.html#metal>

As it is not possible to cover all associated manufacturing materials and conditions, the end-user is responsible for carrying out the necessary tests and trial bonding to check that the laminate, fabrication methods and associated materials such as glues and substrates are suitable for the desired application