

The panels are fabricated and glued in the same manner and on the same substrates as conventional laminates. In addition, we would like to add the following comments:

Storage and handling

Store the panels face to face. Flat storage is the best. It is possible also to store them vertically in racks specially designed to avoid sagging. It is recommended to store the panels in an atmospherically stabilized room to avoid extreme fluctuations of moisture . When handling, care should be taken to avoid scratches and cracking of the resin . The best way to carry panels is with two persons so that the decorative face is on the concave side.

Conditioning

Bodies of whatever type are never inert . They are sensitive to ambient conditions (temperature and humidity). Due to their real wood surface, the panels are slightly more sensitive to warping than conventional laminates. Prior to gluing, they have to be perfectly conditioned. If they are glued when moist, there is a risk of cracking due to shrinking of the wood, particularly in winter when humidity often falls below 20%.The best method of conditioning is to store substrates and panels for a period of 8 to 10 days in the same room where the atmospheric conditions are the closest possible to those of the site where they are to be used . This is especially important in the case of overheated rooms without humidity control . Ideal conditions are :

- - Temperature : from 18° C to 22° C
- - Relative humidity : 50 to 60%

There is a risk of cracking due to shrinkage of the wood if the panel is used too moist, while too dry a panel may expand with, as a result, warping or blisters on the surface, if gluing was not perfect. Conditioning is effective only if air circulation is possible between the sheets during storage. When substrates are to be faced on both sides it is advisable to stack panels and substrates in the same sequence as their eventual construction in order to achieve hygrometric balance. A dry atmosphere is preferable to high humidity.

Substrates

The panels can be applied to all kinds of base material having a perfectly flat and thoroughly clean surface, such as particle board, MDF, etc, with the exception of solid wood. Gluing to metal requires careful preparation of the surface, particular attention being paid to thorough degreasing with a strong solvent (trichlorethylene, etc...). Bonding on cement or gips substrate is to be avoided.

Balancing

To avoid warping of a panel lined with an OBERFLEX type laminate, the stress on both sides must be balanced . The best result is obtained by using an OBERFLEX type laminate on both sides . Another, more economical method, though without any guarantee on our part, is to obtain a balance by using an ordinary laminate of the same thickness (note that OBERFLEX type panel thickness may vary depending on the wood species). Example : a 1mm thick Oberflex panel should be balanced with another 1mm thick laminate. Narrow panels for wall covering, held rigidly in place by a securing system or reinforcement, can have just an OBERFLEX face side, if the back side is protected from humidity and covered with an ordinary veneer, paint, lacquer or a vapour-resistant varnish.

Gluing

The surface to be glued must be sound, thoroughly dry, clean and free of dust, wood chips and oil.

Press Gluing. Gluing with the use of a press is the safest method. Conventional adhesives normally applied to laminates are recommended (vinyl glue, formol urea glue, etc...). When gluing with a hot press, do not exceed 60°C. Above that temperature, there would be risks of creating tension harmful to effective adhesion.

Gluing without a press. A number of neoprene glues available on the market may be used. Glue at an ambient temperature of between 18°C and 22°C with a 40 to 60% relative humidity rating. Dry heat is an advantage, cold delays evaporation of the solvents, while overly high humidity can cause harmful condensation.

Description of the different neoprene adhesives to use: a. High performance polychloroprene adhesive, which is a currently available contact adhesive normally suitable for all gluing work requiring strong adhesion. We recommend the use of «PATTEX Super puissante», «PANO-ASD» and «AGOPLAC».

b. High temperature resisting polychloroprene adhesive, should be used in all cases where an excellent mechanical resistance to high temperature (up to 120°C) is called for . We recommend the use of «PATTEX SPECIAL (HENKEL)», «AGOPLAC NCP (LAMBIOTTE)» and «NEOPRENE GEL (SADER)».

Application of the adhesive . Prior to application, the adhesive must be thoroughly homogenized . Apply a regular, symmetrical coat of glue to the two sides to be bonded, use an appropriate tool (serrated trowel, gluing roller, short-bristle brush, spraying gun) . Ensure the coat is sufficiently thick on the edges . If the glue is applied with the aid of a serrated trowel, the direction of application on substrate and decorative laminate should be at right angles to each other. After evaporation of the solvent, the glue film must be clearly visible and sufficiently thick. In the case of porous or extremely absorbant surfaces, several coats of adhesive must be applied. Before gluing the two units, both glue films must be touch-dry (the adhesive must not stick when touched) . Observe the curing times specified by the glue manufacturer. Comment: An overly brief evaporation time creates a risk of incomplete evaporation of the solvent (weakening of the gluing) . An overly long time leads to poor adhesion of the two glue films. Note: it is not recommended to apply the glue direct with the laminates vertically installed. Application should be with the laminates in horizontal position .

Gluing of CSTB-tested «M1» fire rated panels:

The adhesives referred hereabove are for use with our standard grade panels. In the case of fire-retardent grade panels, which have a different underlay and are applied to different types of substrates themselves fireproof, we recommend contacting the glue manufacturer to ascertain the product best suited in each case. Certain glues recommended for use with our standard grade panels are in fact unsuitable for fire-retardent grade sheets.

Hand pressing

Only a roller can achieve results comparable to a press . We recommend the Pattex roller most suitable for this task . Rolling should be in both directions starting from the centre and working towards the outside, paying particular attention to the edges. Important: Strong pressure on the roller is recommended.

Fabrication

Sawing - milling - drilling: can be done with all tools currently used for the fabrication of laminates.

Protection of cut edges

Following levelling, the cut edge of the wood must be isolated from the air in the direction of the wood grain by application of a clear varnish to ensure even better aging of the wood and prevent oxidation.

Cleaning off glue residue

Vinyl glue stains (white glue) are water-soluble and may be easily removed. Stains from neoprene or formol urea glues (with separate hardener) must be removed immediately . If the glue deposits have had time to harden on the panel surface, there will be difficult to remove without damaging the panel's surface finish, their removal being possible only with a sharp-edge chisel.

Technical assistance

Our technical department is at your disposal to help and advise in each particular case. The information offered in such cases, as well as that contained herein, is given to the user in good faith and to the best of our knowledge. However, the only criteria we take into account and guarantee is the intrinsic quality of our products.