



Good practice for exterior use panels

The aim of this document is to provide the user with guidance on how exterior use panels should be handled & stored in order to help preserve their properties.



Storage:

- Panels should not be subjected to extreme conditions while storage, e.g. abrupt changes in moisture or temperature, direct sunlight, rain, high temperatures...
- Avoid direct contact with any potentially harmful agents, e.g. pools of water, soil, moss, fungus, etc.
- Avoid storing panels in areas where they might be damage by passing vehicles.
- In order to achieve optimal storage conditions, panels should be kept at between 30 and 60% humidity and in their original packaging, in a well-ventilated space.
- Panels should be stored flat, leveling crates with suitable materials, if required.
- Avoid using mechanical handling systems, steel straps or other equipment harder than wood, as these may cause damage to the panels.
- Panels should be stacked in accordance with standard safety regulations.
- Panels should not be stacked more than four packs high.
- Brackets should be fitted in vertical alignment in order to achieve good weight distribution.
- Panels should be stored away from flammable materials, flame or other ignition source.
- In the event that storage conditions are not able to meet the above criteria, please contact to our Quality Control department for advice.





Usage and handling:

Any treatment, handling or re-processing of panels may modify the inner characteristics of the poplar plywood, resulting in potentially serious defects.

The following rules for correct use should therefore be followed:

- Before use, the panels should be acclimatized to local environmental conditions whilst taking into account the aforementioned general conditions.
- When machining panels, always use suitable, high-quality tools, which allow the wood to be cut cleanly, without tearing, shredding, etc.
- Screws and metallic pieces used with exterior use panels should be rust-proof, as it will be exposed to the action of rainwater and environmental humidity.
- The panels should not be hit with anything harder than wood or be subjected to any impact.
- The following information should be considered when using these panels:
 - An environmental humidity from 30% to 60% is considered to be good.
 - The panel dilation rate is $(\alpha^{\circ\text{C}^{-1}}=10^{-6})$. A sufficient expansion joint should therefore be allowed when installing the panel.
 - Preferably, protect and seal any altered side of the panels (board sides, especially when being cut) to preserve the bonding quality. Use a suitable product for sealing such as varnish, sealing products, painting, etc.
 - Special attention should be paid on board sides and they should be sealed properly. Although the board sides do not be exposed apparently, they are the weakest part of the panel and they can be a moisture entry into the core. They should be sealed at the same way as the cutting areas (as was indicated in the aforementioned point).
 - The surfaces where panels are installed should be clean, stable, comply with humidity indications, flatness, etc.
 - Avoid direct/continuous contact with water (puddles, moisture of lower contact, etc.) or if necessary try to protect it with some insulation or suitable means.



Surface finish:

External use panels need a finish to protect them against weather conditions and help to preserve their properties longer. An adequate treatment will extend the material life.

- Always use good quality surface finish products and follow the manufacturer's instructions.
- Once the panels are installed in their final place, the surface treatment should be applied as soon as possible. The panels should never be left untreated for more than a week after fitting
- Always bear in mind the weather conditions at the time.
- Different installation and assembly designs will extend the life of the board in different ways. Installation and assembly designs that minimize the exposure to sunshine and rain of the panel edges can lead to their properties lasting longer.
- Different surface finishes (quality, quantity...) may provide better protection for the panels. Adequate treatments should be chosen depend on the use of the panel. Opaque, breathable finishes are preferable to semi-transparent varnishes (which provide less protection against sunlight) or varnishes which do not allow the wood to breathe.
- Even though, the manufacturer's instructions should be followed, the following general instructions for finishing are:
 - The panel's surface should be cleaned before any product is applied.
 - Apply finish only in good weather conditions (no rain, too high or too low temperature, avoid direct sunlight when painting, etc.).
 - It is recommended that treatments should be applied by either brush or roller rather than a spray gun to ensure good impregnation of the panel.
 - If the panel is broken/machined, the panel edges should be sealed with waterproofing and UV treatment.



Maintenance:

- Due to sunlight and weather conditions, any treatment applied on the panel will be damaged over time. It is necessary to carry out an adequate maintenance of the finish, according to the initial treatment, to assure the panel keep their properties.
- For the most of the treatments will be necessary to remove the previous layer of product by no-aggressive ways and apply, at least, a new layer of the surface treatment selected periodically, according with manufacturer's instructions.
- Poor maintenance, or indeed the application of too many coats of paint, may lead to a reduction in the protection provided by the panel. In case of an excess of application of treatments, it can be caused the premature fall of the layers protection.
- Panel edges should be sealed. Checks should then be carried out at intervals and if necessary, repairs made to ensure their continued good condition.



garnica

Challenge the ordinary

Parque de San Miguel, 10 - bajo
26007 Logroño, La Rioja
Spain
Tel.: +34 941 51 23 53
Fax: +34 941 51 23 59
quality@garnica.one
www.garnica.one