

IMPREGNATED WOOD, kestopuu®

Wood is treated with preservative to prolong its life in outdoor use. Preservation allows timber to be used in areas and applications where it would otherwise be unsuitable. Service life of 20-25 years can be reached by using chemical compounds.

Timber impregnation according to NWPC (Nordic Wood Preservation Council) standards prevents rotting, fungi, termites and marine organisms. Impregnation does not weaken the carrying capacity of wood.

In the impregnation process the preservative penetrates under pressure through the pine sapwood. Timber is treated by using copper preservative, that comply with all safety and effectiveness requirements of NWPC standards and BS EN 351-1 (British-Adopted European Standard). Each batch of impregnated timber is issued a treatment certificate, which informs about the producer, used preservative and its amount and the class of impregnation.

There are no restrictions of use in outdoor premises for wood treated by copper preservative. Arsenic and chromium are no longer used for timber preservation.

Class of impregnation is chosen to fill the requirements of the customer and policy of the target country. The most common pressure impregnation classes in domestic market (Nordic Countries) are A and AB.

Class A is ideal for use in constructions in contact with water or ground and in structures where safety is an important feature, for example bridges, poles and the base floor of buildings.

Class AB is used in wooden constructions above ground level, such as fences and outdoor furniture.



kestopuu® is registered trademark for impregnated wood. Members of The Finnish Wood Preserving Association are permitted to use kestopuu® -trademark in their products.

kestopuu®



Colour and surface treatment

Impregnation can be made in green and in brown colours. Exposed to outdoor conditions, impregnated timber tends to grey with time. Surface treatment is needed to maintain the original colour. It also makes the wood last longer and helps to keep it clean. The wood can be treated using oil- or water-based surface treatments or paints recommended for outdoor premises. Treatment should be made when the wood is sufficiently dry, $u < 20 \%$.

Machining

Impregnated wood is machined using conventional wood processing methods. It is recommended that as much machining as possible is done prior to impregnation. The use of gloves, eye protection and dust mask must be standard practice in the sawing, drilling, shaving, sanding and gluing preserved wood. After processing the wood, surface treatment is required.

Installation

Take into account the future impacts brought by long term use. Nails, screws and angle irons made of stainless steel must be used to install impregnated timber in bearing structures and in structures that require absolute safety, such as stairs and railing. In other structures also hot-dip galvanized products are suitable (minimum thickness of the galvanisation 90 μm) Attachment materials used together should be made from same material. Stainless and hot-dip galvanized products must not come into contact. Weatherproof adhesives are recommended for gluing.