PTG TREATMENTS

High Pressure Treated Timber User Guide

Important information for users of Osmose Naturewood High-Pressure Treated timber

What is Osmose Naturewood?

Osmose Naturewood preserved wood is the name given to timber that has been preserved with an Osmose preservative system which is based on copper and an organic co-biocide (Alkaline Copper Quaternary). Alkaline Copper Quaternary systems have provided proven performance for over a decade in locations throughout Europe, North America, Australia and Japan.
Osmose Naturewood preserved wood can be used for fencing, timber decking, landscaping timbers and construction timbers. Osmose Naturewood® can be used to treat all timber in use classes 1-4. Information on the Use Class system is available from PTG Treatments or from BS EN 335-1. Osmose Naturewood® appears in the Wood Protection Association Manual as compliant with EN 599 expectations.

What length of service life can be expected?

Service life of the treated timber depends upon the species, end use and application rates. In general it can be expected that internal timbers used in Use Class 1 or 2 will last in excess of 60 years. Those timber exposed to weathering but installed above ground ground contact will achieve service lives of between15-30 years. Timbers serving in-ground contact such as fence posts can achieve a service life of around 15 years. However care should be taken to chose the correct species for the end-use and to specify the correct level of treatment.

How do I specify treatment with Osmose Naturewood?

1) Firstly identify the component end use.
2) Identify the Use Class pertaining to this end use – e.g. fence post = Use Class 4.
3) Identify any special service life considerations – do they differ from those described above? If so consult PTG Treatments for specialist advice.
4) Identify and report the species of the timber to be treated as this has a considerable bearing on suitability for certain treatment process or end uses. Also identify and report the moisture content of the timber.
5) PTG Treatments recommends a form of words such as 'Timber to be treated to a 15 year service life in Use Class 4 conditions. The species is pine and the moisture content is lower than 28%.'
6) Specify whether a Treatment Certificate is required.

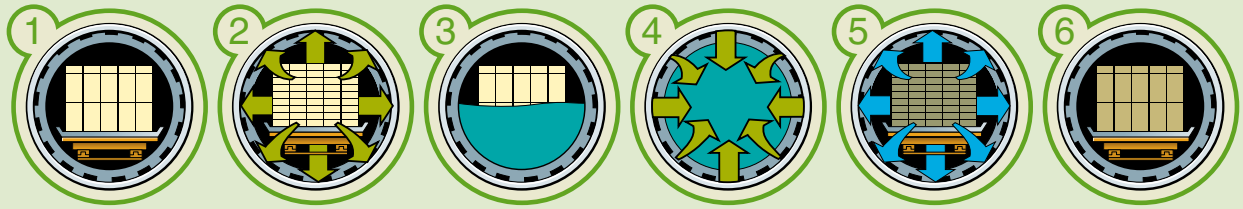
USE CLASS TABLE

Use Class (UC)	Use
1	Above ground, covered. Permanently dry, insect risk.
2	Above ground, covered. Occasional risk of wetting.
3a	Above ground, coated. Exposed to frequent wetting.
3b	Above ground, uncoated. Exposed to frequent wetting.
4	In contact with ground or fresh water. Permanently exposed to wetting.

Preparation of timber prior to treatment

1) Timber packs must be of the correct moisture content in order to allow sufficient penetration into the wood fibre. Below 28% moisture content is the recommendation.
2) Timber must be debarked and, as far as possible, free from sawdust and debris. Plastic wrapping should be removed. Packs that have been very tightly banded should have the bands cut prior to treatment to allow free passage of the fluid into the packs.
3) All possible working of the timber should be performed prior to treatment
4) If timber shows signs of incipient attack from fungus or insects it should not be treated.
5) A small amount of blue-stain is not critical.
6) Where possible, space the packs with laths in order to allow free passage of the fluid and to aid the drying process afterwards.

The Treatment Process



1. The timber is transferred into the treatment vessel.
2. A vacuum pulls the air out of the vessel.
3. Osmose Naturewood solution fills the vessel.
4. The vessel is pressurised forcing the solution into the timber.
5. The solution is removed and final vacuum is applied removing excess.
6. The timber has now been treated with Osmose Naturewood solution.

Collection of treated timber

Treated timber should always be allowed to dry sufficiently before it is despatched. In general a period of not less than 24 hours should elapse. This is typically a minimum requirement and timber packs should be touch dry with no free fluid in the packs at all. It should be remembered that timber will also swell to some extent during treatment and should be allowed to dry at a natural rate until it has reached its pre-treatment moisture content.

Re-working of treated timber

Occasionally it may be necessary to re-work treated timber. Every effort must be made to avoid this but if it must be done the following should be observed.

1) Any surface exposed by drilling or cutting must be coated with a cut end preservative. Failure to coat will affect the value of the preservative. It is recommended that the coated ends are not put in the ground or in direct contact with water. Rip sawing, thicknessing and planing are not permitted unless the timber is subsequently processed to the original specification.
2) Never place a re-treated end in ground contact.
4) Where any working is carried out, read and follow the health and safety instructions in the Health and Safety section of this guide.

Gluing

Celcure AC-500 preserved wood can be glued with most commonly used adhesives once dry. Always follow the adhesive manufacturer's recommendations.

Which metal fixings can I use?

Certain metal products (including fasteners, hardware and flashing) may corrode when in direct contact with wood treated with copper based preservatives. To prevent premature corrosion and failure it is important to follow the recommendations of the manufacturer for all metal products. Do not use preserved wood in direct contact with aluminium.

Appearance of Osmose Naturewood

Osmose Naturewood products will initially have a green appearance that highlights the natural variations of the wood; this will weather to an attractive natural honey brown colour before finally fading to a driftwood grey after long term exposure to the sun.
Osmose Naturewood products can be stained to match any outdoor colour scheme. Always follow manufacturer's recommendations.

Osmose Naturewood®-treated timber is also available with a brown colour. As with the natural green colouration of treated timber, the brown colour will fade after a period of time. The rate of fading will depend on the end use application and environmental conditions.

Can I paint and stain this timber?

Yes. Osmose Naturewood-treated timber can be painted using most standard wood coating systems. It is important that the timber should be dried sufficiently following treatment. In general that means that timber should be less than 20% moisture content, at the time of painting. Both water-based and oil-based systems are compatible but advice should be sought from the coatings supplier before application.

Cutting

Preserved wood should not be cut or otherwise reworked as this will expose unpreserved wood. If cutting cannot be avoided, then precautions should be taken to keep airborne dust levels below the Workplace Exposure Limits for wood dust. In particular, avoid inhalation of dust when using high speed cross-cut saws or mechanical sanders. Any surface exposed by drilling or cutting must be retreated with a cut end preservative. Failure to do this will reduce the effectiveness of the preservative. It is recommended that the re-preserved ends are not put in the ground or in direct contact with water. Rip sawing, thicknessing and planing are not permitted unless the timber is subsequently re-preserved to the original specification.

Important Information

- Do not burn preserved wood.
- Wear a dust mask and goggles when cutting or sanding wood.
- Wear gloves when working with wood.
- Some preservative may migrate from the treated wood into soil/water or may dislodge from the treated wood surface upon contact with skin. Wash exposed skin areas thoroughly.
- All sawdust and construction debris should be cleaned up and disposed of after construction.
- Wash work clothes separately from other household clothing before re-use.
- Preserved wood should not be used where it may come into direct contact or indirect contact with drinking water, except for uses involving incidental contact such as fresh water docks and bridges.
- Do not use preserved wood under circumstances where the preservative may become a component of food, animal feed, or beehives.
- Do not use preserved wood for mulch.
- Only preserved wood that is visibly clean and free of surface residue should be used.
- Do not use preserved wood in direct contact with aluminium.
- If wood is to be used in an interior application and becomes wet during construction, it should be allowed to dry before being covered or enclosed.
- Disposal Recommendations: Preserved wood may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with National and Regional regulations.
- If you desire to apply a paint, stain, clear water repellent or other finish to your preservative treated wood, we recommend following the manufacturers instructions and label of the finishing product. Before you start, we recommend you apply the finishing product to a small test area before finishing the entire project to ensure it provides the intended result before proceeding.
- Certain metal products (Inc fastener, hardware and flashing) may corrode when in direct contact with wood treated with copper based preservatives. To prevent premature corrosion and failure it is important to follow the recommendations of the manufacturer for all metal products.
- Mould growth can and does occur on the surface of many products, including treated or untreated wood, during prolonged surface exposure to excessive moisture conditions. To remove mould from treated wood surfaces, wood should be allowed to dry. Typically, mild soap and water can be used to remove surface mould.
- For more information visit www.osmose-europe.com