



External timber Preservation

Timber preservation & fire retardant treatments



Sentrin Preserve HP, (high pressure), treated timber has built in long term protection against fungal decay and insect attack. It is suitable for use in external situations such as fencing, decking, landscaping and structural components. It can be used in or out of ground contact and is also suitable for general construction timber. Timber is treated under high pressure to achieve a penetration and preservative retention specification and the service life is dependent on the timber species and intended use. Correct specification will ensure the correct level of protection and desired service life.

How do I specify the correct treatment?

1. Firstly identify the end use of the timber.
2. Identify the Use Class corresponding to the end use.
3. Highlight any specific service life or warranty requirements.
4. Identify and report the species of timber to be used.
5. Specify whether a treatment certificate is required.

What is the Service Life of the treated wood?

Service life is the length of time the correctly specified treated wood would be expected to last under normal conditions. Untreated perishable softwood timber in ground contact (UC4) would be expected to last around 5 years before failing to decay. Pressure treatment can extend this to 15 years. Timber used in UC1 or 2 would have a service life in excess of 60 years and in UC3, 15 to 30 years.

BS 8417 describe different services lives depending on the treatment specification and timber species. Contact us for more detailed information and specification help.

Are service life warranties available?

An anticipated service life is not a warranty, as there is no control over installation. However warranties are available to provide either 15 or 30 years service life. Contact us for further information about Sentrin Preserve 15 or Sentrin Preserve 30.



Use Class Table (BS-EN 335-1)

Use Class	Use
1	Above ground, covered. No risk of wetting.
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.

What is the appearance of the treated timber?

Sentrin Preserve HP treated timber will initially have a green colour that will gradually weather to a honey brown appearance before finally fading to a driftwood grey after long term exposure to UV light.

If a different colour is preferred a water repellent colour coating can be applied following the preservative treatment. Please contact us about Sentrin shades.



Example Specification clause:

An example specification for fence posts would be:

"The timber (as detailed including species) to be treated to a 15 years service life for use in Use Class 4"

There are a number of British and European standards that deal with the treatment of timber and the correct specification of preservative.

PTG Treatments has interpreted these standards to produce simple treatment codes that can be used to specify the correct type and level of treatment.

These codes are applicable to common

softwood species where the moisture content is below 28%. For detailed specification information or different timber species, contact PTG

Treatments

Treatment Code	Use Class	Typical Applications	Service life
PT1	I & 2	Internal construction timber, timber frame, roofing and tile battens, sole, flooring joists.	60 years
PT2	3	Fence rails, deck boards and garden timbers. Exposed cladding, soffits, fascias. Sole plates above DPC. Shingles and shakes.	15 to 30 years
PT3	I, 2 & 3	Exterior grade (WBP) plywood. Moisture resistant plywood may also be suitable depending on end use	60 years (UC1/2) 15 years (UC3)
PT4	4	Fence posts, and all timber in contact with the ground. Any timber used in freshwater contact or subject to prolonged and frequent wetting.	15 years
PT5	N/A	Australian Quarantine Regulations. Packaging timbers destined for import to Australia to meet regulations.	N/A
PT6	I to 4	Preservative protection with added brown colour. Fencing timber, feather edge boards.	15 to 30 years
PT7	4	Sentrin Preserve 15. Ground contact timber with a 15 year performance warranty	15+ years
PT8	4	Sentrin Preserve 30 Ground contact timber with a 30 year performance warranty	30+ years

Construction Products Regulations and CE marking

Under the [EU Construction Products Regulation](#) (CPR), from 1 July 2013 a construction product will need to be CE marked and accompanied by a declaration of performance if it is to be placed on the market in the European Economic Area and it is covered by either a harmonised European Product Standard or a European Technical Assessment. It is the responsibility of the company or person placing the product on the market for the first time to ensure the CE mark is correct and accurate. PTG Treatments can supply the information required to complete a Declaration of Performance (DOP).

Biocidal Product Regulation (EU 528/2012) Article 58

Sentrin Preserve HP treated wood is a “treated article” which incorporates biocidal products and is protected against wood destroying insects and fungi. Contains: Copper Carbonate / Copper Hydroxide (1:1), Propiconazole, Tebuconazole, Didecylidimethylammonium Chloride, Didecylidimethylammonium Carbonate Wear gloves when handling freshly treated wood. Avoid breathing dust when cutting treated or untreated wood. Dispose of off-cuts responsibly. Do not burn treated wood. PTG Treatments can attach BPR information labels to treated timber on request.

User Guide



Storage of treated timber

Treated timber may require further drying to reach the in service moisture content. It should be stored in well ventilated conditions, open stacked and not be wrapped to promote airflow and good drying conditions. This will also reduce the risk of mould growth on the surface of the wood caused by poor storage conditions.

Re-working of treated timber

Where possible timber should be fully machined before treatment. Occasionally it may be necessary to re-work treated timber and the following should be observed: Any surface exposed by drilling or cutting must be coated with a cut end preservative to maintain the integrity of the treatment. Coated ends should not be placed in ground or water contact. If rip sawing, planing or pointing of posts is required, the timber should be retreated to the original specification. Where working is carried out, read and follow the health & safety instructions detailed in this guide.

Fixtures, fittings and gluing

Certain metal products including fasteners, hardware and flashing, may corrode when in direct contact with treated wood. Aluminium fixtures should not be used. Sentrin Preserve HP treated wood can be glued with most common adhesives. Follow the fixture or glue manufacturers recommendations.

Painting and staining

Sentrin Preserve HP treated timber can be painted using most standard coating systems. It is important that the timber is sufficiently dry following treatment. Samples should always be tested as the green colour of the treated timber may affect the final appearance.



Treatment Process

Treatment is carried out in high pressure autoclaves to force the preservative deep into the timber for long lasting protection. Timber is loaded into the treatment vessel and the door sealed. A vacuum is then created inside the to remove air from the timber. The vessel is flooded with preservative before pressure is applied to force the liquid into the wood. After the solution is removed a final vacuum is created to remove excess preservative. The preservative is returned to storage and there is no waste generated from the process. The freshly treated timber is then held undercover until it is dry before being dispatched. Process times vary with the treatment specification but are typically between 90 and 300 minutes.

Health Safety and Environmental

Sentrin Preserve HP treated timber has been pressure treated with a waterbased preservative that contains copper and organic biocides. The preservative ingredients chemically bond to the timber and are resistant to leaching. Many of the health & safety recommendations are the same as those for working with untreated wood.

Health & Safety

- Wear a dust mask, eye protection and gloves when working with wood.
- Preserved wood should not be used where it may come into direct or indirect contact with drinking water; except for uses involving incidental contact such as fresh water docks and bridges.
- Do not use preserved wood where the preservative may become a component of food, animal feed or beehives.
- Do not use preserved wood for mulch.
- Wash exposed areas of skin following handling or working with treated timber.
- Launder heavily soiled clothes separately after working with treated timber.



Waste Disposal

Sentrin Preserve HP treated timber is not considered as hazardous waste. Dispose of treated wood and waste according to local authority regulation. Treated wood can be burned in commercial incinerators or boilers according to local regulations. It should not be used as fuel in cooking stoves or barbeques.

Industrial Emissions Directive

Wood treatment facilities are covered by EU Industrial Emissions Directive (IED) which promotes best environmental techniques to reduce and control the impact of industrial emissions. All PTG treatment centres comply with the requirements of the IED.

Further information

For further information on any aspect of timber protection, contact PTG Treatments. Our literature is constantly updated to reflect regulatory changes. This document is uncontrolled so please make sure you have the latest version which can be downloaded from www.ptgtreatments.co.uk.



TREATMENTS

Timber Preservation & fire retardant treatments

Contact Us

Telephone 08000 886032

Email info@ptgtreatments.co.uk

Web www.ptgtreatments.co.uk

Treatment Centres	Tilbury	01375 858700	tilbury@ptgtreatments.co.uk
	Hull	01482 329114	hull@ptgtreatments.co.uk
	Cumbernauld	01236 720992	cumbernauld@ptgtreatments.co.uk
	Methil	07896 638877	methil@ptgtreatments.co.uk