

# Internal timber Preservation

Timber preservation, fire retardants and coatings







### **Treated Timber Specification**

Sentrin Preserve LP, (low pressure), treated timber has built in long term protection against fungal decay and insect attack. It is suitable for use in weather protected applications above damp proof course such as timber frame construction, roofing timbers and coated external joinery components. Timber is treated under vacuum and low 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?

- I. Firstly identify the end use of the timber.
- 2. Identify the Use Class corresponding to the end use.
- 3. Highlight any specific service life 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. In general Sentrin Preserve LP treated timber can be expected to last in excess of 60 years when used in Use Class I or 2. Those timbers exposed to weathering and used in Use Class 3a will achieve service lives of between 15 and 30 years. Care should be taken to ensure timbers used in Use Class 3a have a properly maintained surface coating applied to protect them from direct wetting.

Most commercially available softwood and hardwood species are suitable for treatment. Contact us for more detailed information and specification help.

#### Are service life warranties available?

An anticipated service life is not a warranty, as their is no control over installation and any required maintenance, especially surface coatings However, warranties are available for specific applications. Contact us for further information about Sentrin Preserve LP warranties.

### Use Class Table (BS-EN 335-1)

Use Class	Use	
1	Above ground, covered. No risk of	
	wetting.	
2	Above ground, covered. Occasional risk	
Z	of wetting.	
20	Above ground, coated. Exposed to	
୍ୟ	frequent wetting.	

#### What is the appearance of the treated timber?

Sentrin Preserve LP treated timber has a yellow tint to allow it to be distinguished from untreated timber. As with untreated timber there may be slight colour variations due to the species, heartwood/sapwood content and banding tightness of the packs. Trials should be undertaken with representative samples to ensure any shade changes are acceptable.

As the treatment is waterbased, allowance should be made for potential temporary swelling especially in joint areas of high tolerance joinery. Treated timber is regularly used for external joinery but depending on the species, de-nibbing may be required if grain raising occurs.

#### **Example Specification clause:**

An example specification for timber frame construction would be:"The timber, (as detailed), to be treated to a 60 years service life for use in Use Class 2. The species is European whitewood and the moisture content is lower than 28%"



## **Specification Codes**

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	Use	Typical Applications	Service life
Code	Class		
PVI	1&2	Internal construction timber, timber frame, flooring joists, sole plates above	60 years
		DPC, internal cladding.	
PV2	3	Fence rails, deck boards and garden timbers. Exposed cladding, sofits, fascias.	15 to 30 years
		Sole plates above DPC. Shingles and shakes.	
PV3	1,2&3	Exterior grade (WBP) plywood. Moisture resistant plywood may also be suitable	60 years (UC1/2)
		depending on end use	15 years (UC3)



#### Construction Products Regulations and CE marking

Under the <u>EU Construction Products Regulation</u> (CPR), from I 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 LP treated wood is a "treated article" which incorporates biocidal products and is protected against wood destroying insects and fungi. Contains: Permethrin and Penflufen.

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 especially when used for high tolerance joinery components. It should be stored in well ventilated conditions, open stacked and not be wrapped to promote airflow and good drying 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. If rip sawing, planing or thicknessing is required, the timber should be retreated to the original specification following re-working. Where re-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 that is exposed to water. Fixings should be used as recommended by the manufacturer and in compliance with building regulations for the intended use. Sentrin Preserve LP treated wood can be glued with most common adhesives. Where components are assembled and glued before treatment, a suitable waterproof adhesive should be used. PVA, or urea

formaldehyde adhesives are not recommended.

#### Painting and staining

Sentrin Preserve LP 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 yellow marker colour of the treated timber may affect the final appearance.





### **Treatment Process**

Treatment is carried out in low pressure autoclaves to penetrate preservative into the timber and provide an 'envelope' of 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 which penetrates up to 3mm into the timber. 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 45 and 90 minutes.



### Health Safety and Environmental

Sentrin Preserve LP treated timber has been pressure treated with a waterbased preservative that contains 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.
- 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 LP 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.



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# **Contact Us**

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