



 **BASF** Group

Wolmanit[®] CX High-Pressure Treatment



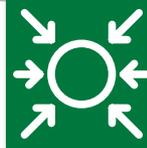
**Important
information for customers**

 **BASF**

The Chemical Company

What is Wolmanit® CX?

Wolmanit® CX is a range of liquid wood preservatives based on copper and organic biocides. These preservatives do not contain chromium or arsenic. They have been used for more than 20 years across continental Europe and the UK. Dr Wolman GmbH has been at the forefront of development of this genus of wood preservative for over 100 years. Wolmanit® CX products are based on copper-hydroxide carbonate and Wolman's patented active ingredient copper-HDO. The products have proven efficacy in Use Classes 1-4 and have a proven track record in various climatic conditions.



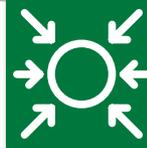
Scope of use

Wolmanit® CX can be used to treat all timber in use classes 1-4. That is to say it can be used for all applications including timber in permanent ground contact. The product is ideal for treating timber in outdoor conditions where service lives of up to 20 years are required

Information on the Use Class system is available from Wolman or from BS EN 335-1. Wolmanit® CX appears in the WPA 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 will last in excess of 60 years. Those timber exposed to weathering but installed above ground may achieve service lives of around 15-30 years. Timbers serving in-ground such as fence posts can achieve service lives of around 20 years. However care should be taken to choose the correct species for the end-use and to specify the correct level of treatment.



How do I specify treatment with Wolmanit® CX?

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 your treatment partner or Wolman for special 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. Wolman 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.

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 drying afterwards.

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.

Immediately after treatment, packs should be tilted in order to allow free flow of the fluid from inside. During this time the timber should be protected from rainfall and all drips should be collected and recycled.



Re-working of treated timber

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

1. All cut ends should be re-treated with a proprietary cut-end treatment such as Wolmanit CandT®. This product is available in both green and brown and will protect any untreated surfaces that have been revealed.
2. Never place a re-treated end in ground contact.
3. If heavy working is required such as thickening or planing, the timber must be re-treated in order to regain the necessary durability.
4. Where any working is carried out, read and follow the health and safety instructions in the Health and Safety section of this leaflet.

Gluing

Wolman has tested many glue systems and reports that once Wolmanit® CX treated timber is dried, most common wood glues will bond it successfully. These include resorcinol and formaldehyde resins and well as glues based on PVA and isocyanates. Care should be taken to dry the timber to its 'in service' moisture content before gluing.

Please consult glue manufacturers for advice on the load bearing qualities of specific formulations.

Treatment of pre-glued constructions and assemblies

Wolman recommends that this kind of work only be performed using glues based on phenol-formaldehyde formulations. If another type of glue is to be used, please consult both the glue manufacturer and Wolman before treatment.

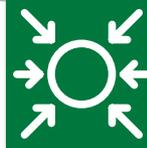
It is ALWAYS necessary to allow the glue to fully and dry and to cure before it is exposed to the vacuum-pressure process.

Which metal fixings can I use?

Wolman recommends the use of stainless steel or hot-dip galvanised fixings wherever possible. Wolmanit® CX is not corrosive to ferrous metals. Indeed certain species such as spruce actually become less corrosive following treatment. Extensive corrosion testing both in-house and by third parties have shown that Wolmanit® CX does not increase the rate of rusting in metal fixings. It has been shown however that certain electro-plated fixings have been shown to corrode due to atmospheric moisture and should be avoided.

Where possible, fixings should be put on to the wood after the treatment process. Always use the appropriate fixings such as proprietary deck screws for attaching deck boards to sub-frames.

To ensure stability, fixings should be added once the treated timber has been re-dried to a moisture content similar to its typical 'in-service' moisture content.



If the timber will serve in very moist conditions then the contractor should seek specialist advice from the fixings manufacturer to ensure suitability of the fixings for the environment.

Guidance on the suitability of various fixings for both indoor and outdoor use can be found in EUROCODE 5 (BS EN 1995).

What is the appearance of Wolmanit® CX-treated timber?

Wolmanit® CX-treated timber has a green background colouration. This is mainly as a result of the copper compounds in the wood. The colour is a result of permanent chemical reactions in the wood fibres. This colour will typically last for 6 months to one year after treatment. The intensity of the colour depends upon a number of factors including the initial application rates and the finish of the timber.

After a certain time the timber will fade to a brownish colour and eventually will become silver like all other weathered timber products. This does not affect the performance of the preservative.

Wolmanit® CX-treated timber is also available with a range of colour additives. The Wolmanit® ProColor range includes dyes and pigments designed to impart colouration to the timber. These products tend to be used to colour the timber brown but other colours are also available. In general the products incorporate dye mixtures but, where durability of colour is very important, pigment systems can be used. It is possible too blend these systems together to create unique colours and add longevity.

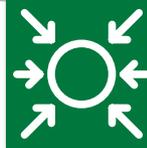
Colouration of timber can be maintained using Wolwax® REFRESH. This product imparts both fresh colouration and water resistance to timbers used outdoors such as for decking and cladding applications

Can I paint and stain this timber?

Yes. Wolmanit® CX-treated timber can be painted using most standard wood paint 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 paint supplier before application.

How do I handle Wolmanit® CX-treated timber safely?

Treated timber should be dried by the time you receive it. However there is always the possibility that some fluid will be present in packs. Therefore it is necessary to take precautions when handling the treated product. If timber shows any presence



of free fluid, then it should be left 'in stick' until it has sufficiently dried.

1. Always wear gloves.
2. Do not drink, eat or smoke whilst handling the product.
3. Always wear a mask and goggles when rip-sawing treated timber.

It is very unlikely that any sensitisation will occur but very rarely this may be the case in a small number of individuals. For this reason care should be taken to avoid instances of splinters or scrapes. In this case...

1. Wash with lots of clean water.
2. Treat sensitised area with a soothing skin cream.
3. Consult a doctor.

How should I dispose of treated timber?

Wolmanit® CX-treated timber is not classified as being hazardous waste. However there are a number of issues of Regulatory significance that must be remembered when disposing of treated waste.

- 1) Wherever possible, care should be taken to remove or reduce the possibilities for production of treated waste.

- 2) This means that timber products should be recycled wherever there is a chance to do so.
- 3) Any substantial amount of waste should be removed using a licensed waste contractor and full details of the chemical product should be provide to them. The product will either be taken for landfill or alternatively burnt in a licensed biomass reactor or similar.
- 4) Do not use this timber for animal bedding
- 5) Do not use this timber to burn on domestic fires or in barbeques.

This information and all other technical advice reflects our current knowledge and experience and is only valid in connection with the disclaimer for advertising on our homepage www.wolman.de



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Use wood preservatives safely. Always read the label and product information before use.

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