

Renovating with timber? Choose the right product for the job.

Including Timber Selection poster for your workshop



Select the right timber for the job

Treating timber with chemical preservatives protects it from damage by insects such as borers and termites, as well as decay from fungi. This extends the life of the timber and the ways it can be used.

Some timber preservatives, particularly copper chrome arsenate (CCA), may harm people or the environment if not handled or disposed of properly.

CCA-treated timber contains arsenic, which can cause cancer. It is no longer used for high contact surfaces such as garden furniture, picnic tables, exterior seating, play equipment, handrails, patio and domestic decking.

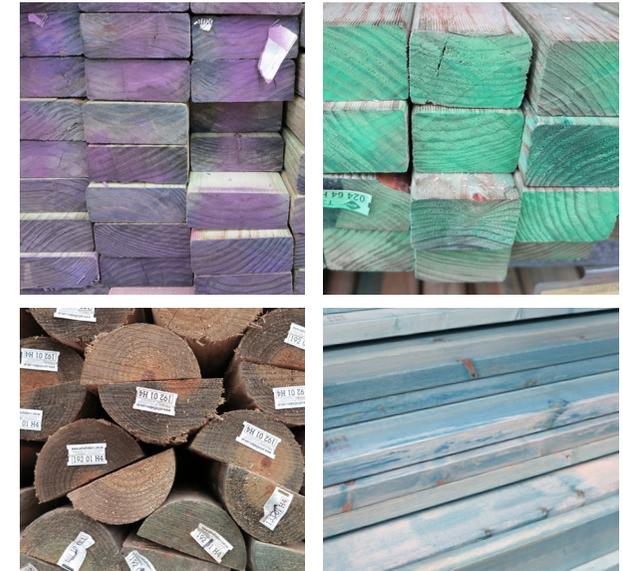
Exposure to the chemicals in treated timber can happen when working with it at home or at work, or from treated timber ash or smoke. It can also occur during contact with soil or mulch containing treated timber woodchips or sawdust.

It's important to select the right treated timber product for the job and, if possible, choose arsenic-free.

Preservative types that are arsenic-free include boron, blue pine (timber treated with synthetic pyrethroids or imidacloprid), copper azole (CA), alkaline copper quaternary (ACQ) and light organic solvent preservatives (LOSPs).

To help choose which type of treated timber is suitable for a particular job, a system of six main hazard (H) levels has been established depending on which environment the timber will be placed in and the kinds of pests it will be exposed to. See our table inside this brochure for more information on H levels, treatment types and treated timber labelling.

It's often thought that all green-tinged timber is treated with CCA, but other treatments that do not contain arsenic may also appear green. Treated timber manufactured to Australian Standards is branded or labelled to describe the preservative used and show what hazards the timber is able to withstand. Labels on individual pieces of CCA-treated timber, except small items like fence palings, must also include the words 'Treated with copper chrome arsenate'.



Not all green-tinged timber is CCA. Check the label or ask the hardware store.

As labels, brands and stains on treated timber may be removed or fade with time, identification after purchase can be difficult. If you're unsure about the kind of treated timber you're dealing with, you should handle it as if it is CCA.

Note: You can choose to use alternatives to treated timber such as hardwoods with natural termite and decay resistance, or cypress pine. There are also plastic, aluminium, concrete or other composite 'wood-look' products available.

Handle treated timber safely

When working with all types of treated timber:

- Avoid inhaling sawdust.
- Wear gloves – recommended at all times when handling any timber product.
- Use a P1 or P2 dust mask when cutting or machining.
- Wear protective goggles.
- Work outside or use dust extraction devices.
- Don't allow sawdust to accumulate.
- Wash your hands and face thoroughly before eating, drinking, going to the toilet, or smoking.

Treated timber already in place should not be ignored:

- You can seal treated timber with oil-based polyurethane products or paints.
- Line CCA vegetable garden structures with plastic.
- Don't put food in direct contact with treated timber surfaces. Use a tablecloth.
- Wash children's hands after contact with treated timber, particularly before eating.
- Don't allow water run-off from treated timber, particularly CCA-treated timber, to be used as drinking water.



Don't put food in direct contact with treated timber surfaces.



Dispose of treated timber properly

- Small amounts of treated timber offcuts can go in your bin.
- Treated timber from larger jobs must be disposed of at licensed landfill sites.
- Don't burn treated timber or use it to cook food.
- Don't use treated timber products (including sawdust or wood shavings) for mulch, compost or animal housing or bedding.
- Don't leave treated timber where others may use it for firewood.
- Don't mix treated timber products with other timber products destined for recycling. Most treated timber can't be recycled.



Top: You can choose arsenic-free treated timber for fences or other structures. Bottom: Treated timber waste disposed of incorrectly in firewood bin.

Protect yourself from toxic ash

Ash from burnt CCA-treated timber is toxic and may contain more than 10% of its weight in heavy metal residue, including arsenic. Large amounts of toxic ash can be a big problem when properties are damaged following bushfires. Wear personal protective equipment (mask, goggles, gloves) to clean it up, double-bag it and take it to a licensed landfill site.

Breathing CCA-treated timber smoke or exposure to ash are the most common ways of being exposed to arsenic. Symptoms include pins and needles, nausea, vomiting and diarrhoea. If you think you've been exposed, seek medical advice.

Top cover photo: Lisa Madden/OEH
Photos: Simon Luckhurst/EPA

This project has been assisted by the New South Wales Government through its Environmental Trust

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Published by Environment Protection Authority,
59 Goulburn St, Sydney NSW 2000
Phone: 131 555 (environment protection and publications requests) TTY users: phone 133 677, then ask for 131 555
Speak and listen users: phone 1300 555 727, then ask for 131 555
Email: waste@environment.nsw.gov.au
Web: www.epa.nsw.gov.au

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ISBN 978 1 925688 26 9
EPA 2017P0280; October 2017

Printed on environmentally sustainable paper

Select the right treated timber for the job – and if possible, choose an arsenic-free alternative

Hazard level	Exposure	Biological hazard	Typical uses	Preservative currently used for hazard level
H1	Inside, above ground	Lyctid borer	Borer susceptible hardwood used for dry interior framing, flooring, furniture and joinery	Boron
H2	Inside, above ground	Borers and termites	Framing, flooring, joinery, etc. used in interior dry situations	Boron (south of the Tropic of Capricorn only), synthetic pyrethroids, imadacloprid
H2F	Inside, above ground	Borers and termites	Framing used in interior dry situations (south of the Tropic of Capricorn only)	'Blue Pine' (synthetic pyrethroids, imadacloprid)
H2S	Inside, above ground	Borers and termites	LVL/Plywood (glue-line treatment) in dry situations (south of the Tropic of Capricorn only)	Synthetic pyrethroids, imadacloprid
H3	Outside, above ground	Moderate decay, borers and termites	Weatherboard, fascia, pergola posts (above ground), window joinery, framing and decking	ACQ, CA, CCA (not residential decking), LOSP
H3A	Outside, above ground (protected by paint)	Moderate decay, borers and termites	Fascia, bargeboards, exterior cladding, decking, window and door joinery and veranda posts	LOSP
H4	Outside, in-ground	Severe decay, borers and termites	Landscaping timbers, fence posts and pergola posts (in-ground)	ACQ, CA, CCA, creosote (farm fencing only)
H5	Outside, in-ground, contact with or in fresh water	Very severe decay, borers and termites	Retaining walls, piling, house stumps and building poles	ACQ, CA, CCA, creosote (power poles)
H6	Marine waters	Marine wood borers and decay	Boat hulls, marine piles and jetty cross bracing	CCA, creosote (in waters above Batemans Bay only in combination with CCA)

ACQ: alkaline copper quaternary

CA: copper azole

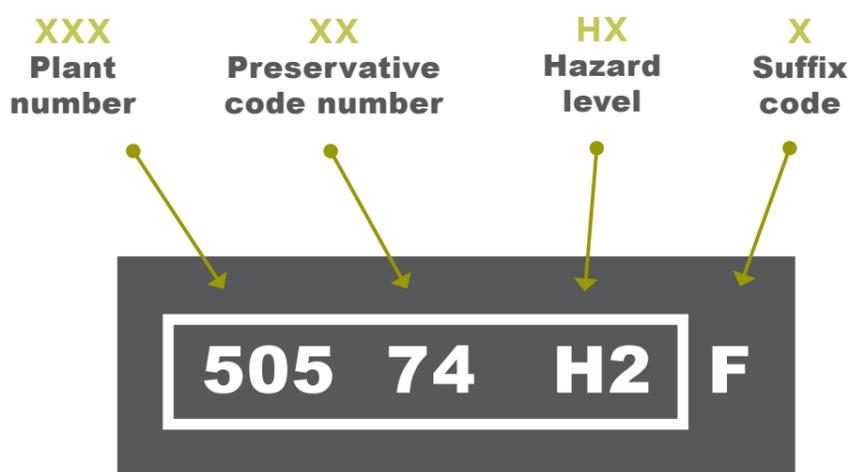
CCA: copper chrome arsenate

PEC: pigment emulsified creosote

LOSP: light organic solvent preservative

LVL: laminated veneer lumber

Identifying the chemicals used to treat timber



A typical treated timber label

Preservative code numbers

CCA: 01, 02, 03, 14, 15, 16, 31, 32, 33, 34, 38, 40, 43, 51, 55

Synthetic pyrethroids: bifenthrin 73, 75; permethrin 70, 74

Copper quaternary: 89

Copper azole: 58

LOSP: tebuconazole + propiconazole + permethrin 64; imidacloprid 59, 60

Boron: 9, 10, 11

ACQ: 90

Creosote: 20; PEC 45