

Timber Treatment

The use of CCA (Copper Chromium Arsenate) treatment for some types of timber products is restricted in Australia. Please consider the following information when choosing timber for construction.

What is CCA?

Timber is a common material used when constructing play spaces. The life of timber is significantly increased when treated with a preservative, from a few years to 25 years or more. Preserving treatments protect the timber from decay, fungi, wood boring insects and termites. Australia's most widely used wood preservative to date has been CCA (Copper Chromium Arsenic). CCA uses copper to control fungi, arsenic to control termites and chromium to fix the copper and arsenic in the wood.

In Australia the use of CCA and other preservatives are approved and regulated by the Australian Pesticides and Veterinary Medicines Authority (APVMA). Treatment specifications are set by Australian Standards.

Why has it been banned?

The APVMA completed a review of CCA treated timber and announced in April 2005 that CCA treated timber shall no longer be used for new construction of playground equipment, domestic and patio decking, handrails, garden and park furniture, picnic tables and exterior seating. The major concern has been the potential for leaching out of arsenic from the treated timber.

While the APVMA did not find evidence to conclude that CCA treated timber posed unacceptable risks to the community, neither could they find sufficient quality scientific evidence supporting its safety in certain situations, particularly those where direct and frequent contact with children was likely.

This follows trends in both Europe and America. The APVMA has no regulatory authority over existing CCA treated items and has made no recommendation for the dismantling of existing structures.

When is it appropriate to use CCA treated timber?

For typical outdoor situations such as fencing, deck supports and substructure, landscaping sleepers and logs, and other cases where minimal direct human contact is expected, CCA treated timber products are appropriate and readily available.

However, where frequent direct human contact is expected or the end user prefers a non arsenic containing product, timber treated with alternative preservation technologies are available.



Timber is one of Australia's favourite building products.

- Get in touch with local timber suppliers, building, design and landscaping specialists
- Determine what types of timber are suitable for your project and where to get it
- Use sound building practices during construction
- Follow basic safety precautions when cutting or using timber

What are the alternatives?

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) have assessed a number of alternative preservatives to treat timber to replace CCA that are appropriate for applications in playgrounds as they do not contain chromium or arsenic. According to the CSIRO the alternative timber treatments such as ACQ (Ammoniacal Copper Quat) and CA (Copper Azole) have both have been extensively tested and generally perform as well as CCA. Other preservatives suitable for out of ground contact uses include LOSP (Light Organic Solvent Preservative) formulations.

Alternative timber preservatives are now widely used, although timber treated with them has generally been more expensive than CCA treated timber. The increased use of alternative timber preservatives may assist in reducing their cost. When purchasing timber for the construction of play spaces ensure that the products are treated with an APVMA approved preservative (such as ACQ, CA and LOSP) that does not contain arsenic compounds or purchase timber that has natural resistance to rotting and termites. Retain treated timber purchase documentation in your playground records.

To find out what timbers have natural rot resistance and are recommended for landscape applications contact your nearest timber supplier. All timber must be landscape grade and should be dressed to eliminate splinters (all nails, screws etc must be galvanised). Be careful of using timber that is becoming rare or endangered. For further information go to csiro.com.au



What is recommended for pre-existing CCA treated timber structures?

As a precaution if you do have play equipment constructed with CCA treated timber that is in good condition the NSW Department of Health suggests that these should be maintained with a coating of oil-based polyurethane or paint. It is also recommended to ensure children wash their hands thoroughly with soap after contact with CCA treated timbers and avoid eating while around it. For further information go to health.nsw.gov.au

All forms of timber are safe to use if handled correctly in accordance with good building and occupational health and safety practices.

Working Practices with CCA

If using CCA treated timber in construction projects, ensure that necessary personal protective equipment is worn such as gloves, dust mask, goggles and ear plugs. Also ensure all timber debris and saw dust is appropriately disposed of, do not burn or compost for mulch.

These precautions will reduce your exposure from inhaling or ingesting sawdust, protect your eyes from flying particles, and prevent exposure to toxic smoke and ash.

Further Information

Australian Pesticides and Veterinary Medicines Authority: apvma.gov.au

Timber Preservers Association of Australia: tpaa.com.au

Arch Wood Protection: archchemicals.com

Timber and Building Materials Association: tabma.com.au