# Insight

Keeping you informed of the latest Koppers Performance Chemicals and Industry News.





### Issue 11 - May 2021

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- Timber and Preservative Treatment
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## TIMBER IN BUSHFIRE

Nick Livanes represents the Timber Preservers Association of Australia (TPAA) on the Australian Standards Committee responsible for AS3959 – Construction of Buildings in Bushfire Prone Areas

Timber has been the material of choice for construction of the vast majority of Australian houses over many decades and that preference continues to this day because of timbers' combination of cost effectiveness, ease of construction and significantly its environmental footprint. Many homes are built in Bushfire Prone Areas (BPA) and may be between 10 and 15% of all housing stock so that bushfire is a concern and a design requirement for a significant number of homes every year. Designing for BPA's will add cost to the house construction ranging from modest in BAL Low (Bushfire Attack Level expressed in Radiant Heat) to very significant at BAL FZ.

Timber can be used as a framing material in BPA's because it is protected by the envelope of the building which can range from timber cladding in low BAL's to full fire rated construction at the highest BPA's. Steel framing is also protected by the envelope of the building as while steel framing is not combustible, it is made from thin gauge material which loses its strength at fairly low temperatures leading to buckling and collapse. Witness in the recent catastrophic Australian bushfire season the number of collapsed outbuildings and sheds made from steel framing and cladding where the fire has directly impacted the building or found its way inside through large gaps and non-fire rated windows.

In terms of general construction, the Australian Standard focuses on the accumulation of embers and of direct radiant heat and flame so that construction of decks, cladding and of window and door materials become a concern not only on material choice but also on gaps and sealing, spacing of deck elements and whether embers may accumulate under decks and also the main house if it is a suspended floor. Timber can meet some of these requirements as some species are deemed as "bushfire resisting" and also timber can be fire retardant treated as long as it meets challenging weathering requirements. A fire retardant pine decking product is currently being sold on the Australian market.



#### **Challenges for Timber Construction**

While the Australian Standard may be referenced by State Authorities and Councils, the State bushfire authorities also produce specifications and guides for building in BPA's that may be a regulatory requirement. Some bushfire authority and local council guidelines have advice on the materials used outside of the building including retaining walls and fences.

It is most likely that the Australian Standard will incorporate advice on these areas and at the moment this will be based on information from bushfire authorities and anecdotal evidence. Some state bushfire guides have even erroneously suggested that steel framing is a recommended material in BPA's. Alternative material industries have been capitalising on some of the advice being offered.

Recent work by FWPA assisted by Koppers and others shows how important these markets are for the wider timber industry not only in dollar terms but also as a necessary part of efficient sawmill recovery. Proposals for research into the bushfire performance of outdoor uses of timber from FWPA and AFPA co-developed and supported by Koppers and the TPAA have been considered by the timber industry and are now moving forward for funding and project implementation as we write. Investigation and research will be crucial to retaining these markets in BPA's and possibly the wider market.

#### For more information on the above article contact Nick Livanes

#### **Timber and Preservative Treatment – A Great Partnership**

Timber is a great material, renewable and sustainable – a carbon store, preferred by tradespeople and homeowners alike because of its tactility and warmth, it makes you feel good. It can be used for a myriad of uses from furniture to house frames to retaining walls to marine piles.

Timber preservation and protection has been essential for the successful use of timber to enhance its durability, whether the early use of natural oils and derivatives such as linseed oils and turpentines to more sophisticated chemical compositions such as MicroPro.



Preservative treatment extends timber's natural abilities and enables it to continue to be the material of choice for builders and homeowners alike. Traditional and new age preservative treatments include: • A range of outdoor treatments. CCA, ACQ and LOSP from pergolas and decks to utility poles and wharf

H2F Blue Framing - Has protected Australian house and multi-residential frames for nearly 20 years
 Innovations for engineered wood products - H2F treatment utilising glueline additives sometimes in
 combination with envelope systems

combination with envelope systems

MicroPro® preservative technology. Awarded green building and environmental certifications

 An extensive range of complementary products including water repellents, fire retardants and micronised colouring systems

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In recent years the scope and of preservative treatments has been widened as reconstructed and engineered timber products have become an increasingly important part of the industry. Blue envelope treatments protect house framing, meeting the challenges of alternative materials.

**Preservative treatment** is an integral and essential part of the timber industry and Koppers is proud to work with its customers and colleagues in developing new products and systems and working to meet current and future challenges. Preservative treatment is an essential partner in the timber industry, working together for an even better sustainable industry.

#### Timber is Great, Preservative Treatment makes it Even Greater



# Working with Timber Queensland to Improve Detailing and Specification of Timber

Koppers PC is again working with Timber Queensland to present a webinar aimed at specifiers, designers, councils and timber industry personnel to improve detailing and specification of timber including treated timber.

Koppers will give an overview of preservative treatment options with particular emphasis on correct specification, resealing and labelling. Naturally MicroPro treatment technology will be a focus. You are most welcome to attend, see the **registration link below** and **register before Tuesday 25th May 2021**.

Event Type:SeminarDate:Wednesday 26th May 2021Location:Webinar via Zoom

Koppers Performance Chemicals Australia Pty Ltd Level 5 53 Walker Street North Sydney NSW 2060 Telephone 1800 088 809 www.kopperspc.com.au



**Register Now** 



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