

# Media Release

PAGE 1 OF 1

**7 MARCH 2008**

## Guide helps make best timber choices

World-first Australian research that will help select timber best suited to specific local conditions has been launched nationally this week.

An estimated \$3.7 billion worth of timber is used in construction in Australia each year and the launch of the *Timber Service-Life Design Guide* is expected to improve performance and safety, and reduce long term costs, by assisting the most appropriate timber selection.

The guide and related *Timberlife* education software and associated timber design procedures are the result of a 10-year, multi-million-dollar collaboration between scientists at CSIRO, state forestry agencies and the timber industry. The timber durability design project was conceived in 1996 and led by internationally recognised CSIRO building engineer Dr Robert Leicester, with funding from CSIRO, industry and Forest and Wood Products Australia.

Dr Leicester said the design guide took the uncertainty out of using timber by applying structural engineering criteria and predictive modelling to assess how long different timbers would last in a wide range of conditions.

"The effective service life of timber can range anything from one year to more than 100 years, depending on the conditions it encounters," Dr Leicester said.

"There is a wide natural variation between different timber species, the effectiveness of timber treatments and climatic conditions. What will perform for 50 years in Alice Springs may not necessarily perform that well in Queensland's Airlie Beach, for example.

"Our work has the potential to cut costs on construction projects by choosing the right materials and treatments for the conditions. It can help preserve timber in-use by indicating the best maintenance treatments, and what can be done to reduce the risks of decay and pest attack. It also has the potential to provide planners with estimates of replacement times for various infrastructure components," he said.

The research has rated 80 timber species used in Australia into durability categories for each of five key hazards, and also developed geographic risk zones. Dr Leicester said the five key hazards considered likely to reduce the service-life of timber were in-ground decay fungi, above-ground decay fungi, marine borers, subterranean termites and corrosion of fastener systems.

FWPA Managing Director Dr Glen Kile said the design guide and accompanying *Timberlife* software were important in making wood and engineering expertise more accessible to a greater number of people within the building industry. The guide integrates and synthesises the results of trial work undertaken over the past 30 to 40 years.

"The software, in particular, will allow users to trial a series of "what if" scenarios to test the durability of their timber selections," Dr Kile said.

"This is advanced information on timber properties and structural engineering which we are making available free, through the internet, to ensure the greatest number of people have access to it as possible.

"As a government and industry-funded body, FWPA wants to ensure the best possible use of timber, and the

### FURTHER INFORMATION:

FWPA  
Dr Glen Kile, Managing Director,  
T +61 (0)3 9614 7544

CSIRO  
Dr Robert Leicester  
T +61 (0)3 9252 6102 M 0422 232 196.



design guide and software can help improve the safety and performance of timber in construction. It will reduce the risk of using inappropriate timber, and help to ensure there are no surprises about how long timber will last in a given situation," Dr Kile said.

More than 300 engineers, building and construction practitioners and timber industry experts attended the launch workshops in Melbourne, Sydney and Brisbane this week and welcomed the design guide, saying it gave them greater certainty in choosing the right timber for their future construction projects. The calculations underpinning the design guide and software are detailed in a series of companion technical manuals and a draft structural design procedure has also been developed for use with the current Timber Engineering Design Code AS1720, for use by professional structural engineers. This is expected to become part of the Australian Building Code in due course.

The *Timber Service-life Design Guide* is available from the FWPA website ([www.fwpa.com.au](http://www.fwpa.com.au)). The *Timberlife* educational software and the technical manuals will soon be available from [www.timber.org.au](http://www.timber.org.au).

## FURTHER INFORMATION:

FWPA  
Dr Glen Kile, Managing Director,  
T +61 (0)3 9614 7544

CSIRO  
Dr Robert Leicester  
T +61 (0)3 9252 6102 M 0422 232 196.

