



High-pressure Fire Retardant Timber Treatment Technology

) Preservatives

# ) Fire Retardant

) Coatings

) Anti-Slip

In partnership with



At WJ FireWright we are specialists in Fire Retardant Timber & Plywood treatment. We have a dedicated facility specifically for the purpose of impregnating fire retardant solution to a variety of timber species using Burnblock<sup>®</sup> Fire Retardant Solution.

### Specification of INT1, INT2 & EXT

Burnblock<sup>®</sup> Fire Retardant Solution is applied using the latest high-pressure, environmentally friendly treatment technology. All our processes are audited by a third party notified body, ensuring every piece of treated wood consistently meets the required standard.

WJ FireWright and Burnblock  $^{\circledast}$  have tested and classified a long list of wood species to the highest possible standard;

- BS EN 13501-1 Fire classification of construction products and building elements.
- EN 45545:2015 R1&R10 Railway applications. Fire protection on railway vehicles. Requirements for behaviour of materials and components.
- EN 16755:2017 Durability of Reaction to Fire Performance.

The lead time for the treatment process is determined by the timber / plywood species, thickness and end use. WJ FireWright require a minimum of 3 weeks to successfully complete the process of treating and kiln drying the timber/plywood to the required classification.

INT1	Formerly DI: Dry Interior. For dry interior applications.
INT2	Formerly HR: Humidity Resistant. For humid interior or fully covered exterior applications.
EXT	Formerly LR: Leach Resistant. For all interior and exterior applications.

WJ FireWright are able to ensure that treatment using Burnblock<sup>®</sup> achieves the required standards and fire classifications through our factory-controlled processes and computer controlled equipment, ensuring the exact amount of Burnblock solution is impregnated into the timber / plywoods.

### Kilning

All solid wood and panels are kiln dried post treatment unless requested otherwise. The kiln drying process is performed to bring the wood back to its equilibrium moisture content for the environment it is going to be used in.

To control the kiln drying process we need to monitor the moisture content by placing probes into the product. To achieve this sacrificial timber is required, unless the probe holes are acceptable in the treated product.







# **CE Marking**

WJ FireWright have been independently audited and certified under the Construction Regulation (CPR) in accordance with AVCP system 1. The legal requirements audit factory production control of the fire retardant facility and ensure the consistency of performance of the manufactured products.

Certificates of Constancy of Performance:

- Solid wood panelling and cladding EN 14915:2013 + A1:2017
- ) Wood based panels EN 13986:2004 + A1:2015

We provide a Declaration of Performance, in line with our CE Mark certification for each of our fire retardant treatments.



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#### What is Burnblock®?

Burnblock® treated timber has been pressure impregnated with a highly effective and non-toxic fire retardant consisting of purely natural ingredients combined together using their patented formula. Burnblock® effectively prevents oxygen from reaching the treated object – without oxygen there is no fire! A highly effective and well documented fire retardant, it is an invisible treatment that when applied correctly leaves no greasing, no staining and no trace.

Once absorbed by the treated material, Burnblock<sup>®</sup> leaves behind a surface that can char and release water upon the application of heat, absorbing a portion of the heat applied which helps prevent the further spread of fire. Therefore, materials treated with Burnblock<sup>®</sup> are protected from combustion and spread of flame is reduced.

## **Burnblock® Lifespan**

Although Burnblock<sup>®</sup> is 100% natural and biodegradable, once impregnated into timber it will last the lifespan of the timbers we are certified to treat. This is a result of the pressure impregnation process. When timber becomes saturated it opens its cell structure allowing Burnblock<sup>®</sup> to bind with the cells. Once this process is complete the timber is placed in the kiln to bring the timber back to its equilibrium moisture content and close the cell structure, locking the Burnblock<sup>®</sup> Fire Retardant solution within the timber.

 $\mathsf{Burnblock}^{\circledast}$  will also achieve the same fire classification throughout the life of the timber.

#### **Health Risks**

Burnblock® requires no specific safety equipment, however some data indicates slight irritation should Burnblock® come into direct contact with the eye. The Danish Technological Institute assess this effect to be less than that of natural lemons and fruit juice. The health assessment shows there are no components listed with any significant health risks in Burnblock® solution.



### Cradle to Cradle Certified™

Burnblock<sup>®</sup> Fire Retardant Powder is Cradle to Cradle

**Certified™ at 'Gold Level'** which makes our product the very first Fire Retardant in the *Cradle to Cradle Certified*<sup>™</sup> Products Program. Part of the sustainability certification includes a Platinum status for Material Health – the highest level of certification possible. Cradle to Cradle Certified<sup>™</sup> model products are designed in a way so that at the end of their initial life they can be readily reused or recycled and therefore avoid landfill altogether. This guides designers and manufacturers through the continual improvement process that looks at a product through five quality categories: material health; material reutilization; renewable energy and carbon management; water stewardship; and, social fairness.



#### For further information, please call, click or visit:

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