



## FIRE RETARDANT TREATED TIMBER AND PANEL PRODUCTS

# Proven fire protection

When fire takes hold, time is everything. Precious minutes can mean the difference between life and death. The ingredients in DRICON fire retardant treated timber dramatically reduce the surface spread of flame, heat and smoke release during a fire, giving you the time you need to get out safely.



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When fire takes hold, time is everything.



- Commercially proven, global brand, backed by extensive independent certification including 25 years of BBA accreditation and more than 30 years of fire performance experience.
- Produced in a stringently controlled, factory process at a specialist treatment centre – the only one of its type in the UK, operating with ISO 9001 and ISO 14001 accreditations.
- Impregnated on all faces with no need to re-apply fire retardant throughout the life of the timber. Independent test data demonstrated no change in fire performance of treated timber after 21 years in use.
- Provides consistent, reliable performance; dramatically slows down fire spread and reduces heat and smoke generation; saves lives and restricts fire damage costs.
- Proven stability - non hygroscopic and non efflorescent treatment; treated timber can be painted or glued.
- Provides greater design flexibility with timber - nature's own, sustainable material.

**DRICON is unique. The one and only type HR (humidity resistant) fire retardant treatment to carry the following list of accreditations . . .**

- The **only** BBA (British Board of Agrément) certified fire retardant treatment for timber (Certificate No. 87/1841) - certified since 1987.
- Wood Protection Association (WPA) approved status type HR (humidity resistant) fire retardant product.
- Applied in compliance with the WPA quality scheme. With DRICON and NON-COM Exterior, Lonza Wood Protection is the only timber treatment company operating to this scheme and with ISO 9001 and ISO 14001 accreditation.
- Fully approved by London Underground and complies with LUL Standard 1-085 'Fire Safety Performance of Materials'.
- Fully tested by Exova Warrington Fire Research with independent Euroclass Classification Reports for each timber species and timber thickness, for use with or without air gaps - BS EN 13501-1
- Independently assessed and listed treatment by the American Wood Preservers' Association (AWPA). Also approved by the US military.
- Earned the Good Housekeeping Award; a widely recognised and respected symbol in the USA.
- Certification of the fire retardant treated timber as a Sustainable Building Material by the Dutch Institute of Building Biology and Building Ecology.
- Independently assessed by Chiltern International Fire in the 6 storey timber frame TF2000 (Staircase 2001) study and found to satisfy the functional fire safety requirements of the UK Building Regulations.
- Recommended by the National Access & Scaffolding Confederation for the treatment of scaffold boards.





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Precious minutes can mean the difference between life or death.

Ensuring an effective fire protection specification is vital; it can be a matter of life or death. Specifiers have a duty of care to ensure that fire performance in a building is not compromised.

DRICON treated timbers and sheet materials have a proven track record and can be used with real confidence for all interior situations and weather protected exterior applications.

#### What is DRICON?

DRICON pressure treated timber and sheet materials have been impregnated with DRICON fire retardant under controlled conditions in an industrial vacuum pressure timber plant, followed by kiln drying to return the material to an acceptable or specified moisture content.

DRICON fire retardant is an advanced, type HR (humidity resistant), waterborne fire retardant which does not contain halogenated products, formaldehyde, heavy metals, sulphates, ammonium phosphates, cyanides or VOCs.

#### What does DRICON do?

- Dramatically reduces the rate of flame spread and heat release to allow people more time to escape a fire and limit fire damage.
- Significantly reduces smoke emission - smoke inhalation is the primary cause of death in fires. Can achieve the lowest smoke classification (s1) in Euroclass testing and meets the stringent requirements for railway rolling stock and the London Underground.
- Substantially extends the period before 'flashover' occurs - the simultaneous ignition of the combustible materials in a confined space.
- Proven fire performance in action, saving buildings and reconstruction costs.

#### More reasons to have confidence

- Fire performance that lasts. An independent study by the WPA and subsequent fire testing by Warrington Fire confirmed the initial fire performance of DRICON was maintained after 21 years of internal exposure.
- BBA and WPA approvals take into account other properties to ensure DRICON is fit for purpose - smoke generation, humidity resistance, durability, timber strength, corrosion resistance and performance in service.
- Provides enhanced biological durability to the timber without the need for any preservative treatment.
- Proven stability. DRICON is resistant to humidities (non-hygroscopic) in excess of 90%. No exudation of treatment chemicals ensures the treated timber is non-corrosive to metal fixings and can be painted and glued.
- Approved by the WPA for high humidity end uses and classified as a type HR treatment 
- DRICON treatment does not significantly affect the strength properties of timber and board materials, unlike standard inorganic salt treatments. The re-drying process does not affect the mechanical properties of DRICON treated materials compared to untreated material.



#### Fire certification

- Fully tested in accordance with the most up to date European Standards (Euroclasses) under the Construction Products Directive and classified in accordance with EN 13501-1. Euroclass C/B fire performance can be achieved for a wide range of timber and plywood species. Contact Lonza for more information.



#### Produced with quality in mind

- Treatment and third party auditing to the highest level of accreditation. Lonza Wood Protection operates the only fire retardant treatment site in the UK that complies with ISO 9001 and is further supported by ISO 14001, BBA, CE and WPA quality scheme requirements.
- Audited factory production control systems are a requirement for CE marking.
- Treatment provides a consistent and assured protection, which may not be achieved with the use of brush applied fire retardant products.



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# DRICON fire retardant treatment is unique in providing the ultimate protection and ensures that extra time is available.

## Standards

The fire performance typically required for wall and ceiling linings is:

### Euroclass C in accordance with BS EN 13501-1

The fire performance typically required in higher risk areas such as escape routes and staircases is:

### Euroclass B in accordance with BS EN 13501-1

Euroclasses C and B are accepted by UK Building Regulations for timber and plywood in place of the National Standards of Class 1/0.

Once treated, Euroclass C/B treated timber cannot be sold as Class 1/0 respectively, and vice versa.

## C E marking

In line with the requirements of the Construction Products Regulation from July 2013 certain fire retardant treated timber and plywood commodities may need to be CE marked. Please contact Lonza for further details.

## Specifications

Some typical end use examples include:

- **Permanent constructions:** residential and commercial projects, internal claddings and linings, external coated claddings.
- **High humidity applications:** swimming pools, lifeboat stations.
- **Smoke critical situations:** transport and rail industry timbers, railway and underground stations.
- **High strength requirements:** scaffold boards, staircases, storage and pallet systems.
- **Refurbishment projects:** listed buildings, churches.

For specification the following wording is recommended:

The timber as detailed...*(insert species, type, grade, quantity, dimensions)* is to be used in...*(insert end use description or description of component)* and is to be vacuum pressure impregnated with DRICON fire retardant and subsequently kiln dried in accordance with the DRICON manufacturer's specification to meet...*(enter appropriate standard and treatment class)*.

Full assistance with specification writing is available on request. Contact us as early as possible in the design phase and we can work together to prepare a specification that fully supports your needs. For NBS Plus users, specification clauses are available for our products. Please contact us to confirm details.

Lonza Wood Protection offers specifiers a RIBA approved CPD technical presentation on fire retardant treatments for timber.

For further information contact Lonza on 01977 714000.



## Suitable timbers and sheet materials

A wide range of timber species and sheet materials can be treated with DRICON fire retardant. Performance is fully backed by independent test certificates and European Classification Reports for solid timber and sheet materials of different species, thicknesses and particular end use situations. We advise you to contact us with your requirements and we will explore what options are available for you.

## Producing DRICON treated timber and sheet materials

DRICON fire retardant is factory applied under controlled conditions in a vacuum pressure timber impregnation plant, followed by kiln drying to return the timber to an acceptable or specified moisture content.

The treatment process operates with ISO 9001 and ISO 14001 accreditation and conforms to the WPA Quality Scheme for fire retardants.

Moreover, every aspect of DRICON processing, including raw materials, product manufacture, management systems, treatment, drying, product performance and properties is the subject of a British Board of Agrément assessment under certificate number 87/1741. A copy of the BBA certificate is available on request.

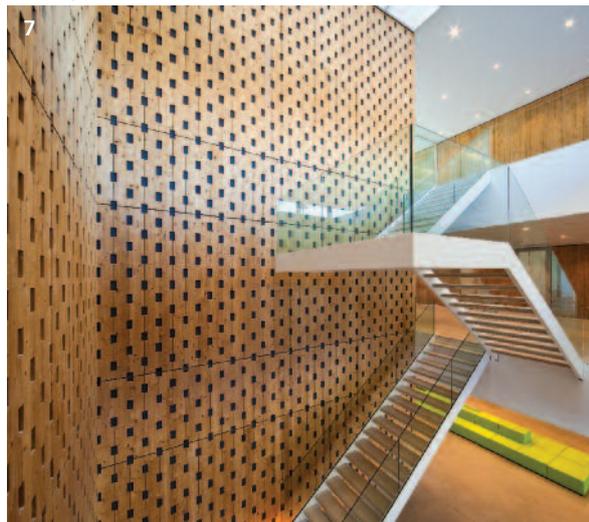


## Availability

Treatment is only available from Lonza Wood Protection's Service Treatment Centre at Castleford. Where required, timber materials can be supplied to specification in addition to treatment. It is advisable to contact Lonza Wood Protection for advice on lead times well before the timber products are required on-site.

## Further Documentation

A Code of Practice and Technical Information Sheets for DRICON fire retardant treated timber are available on request.



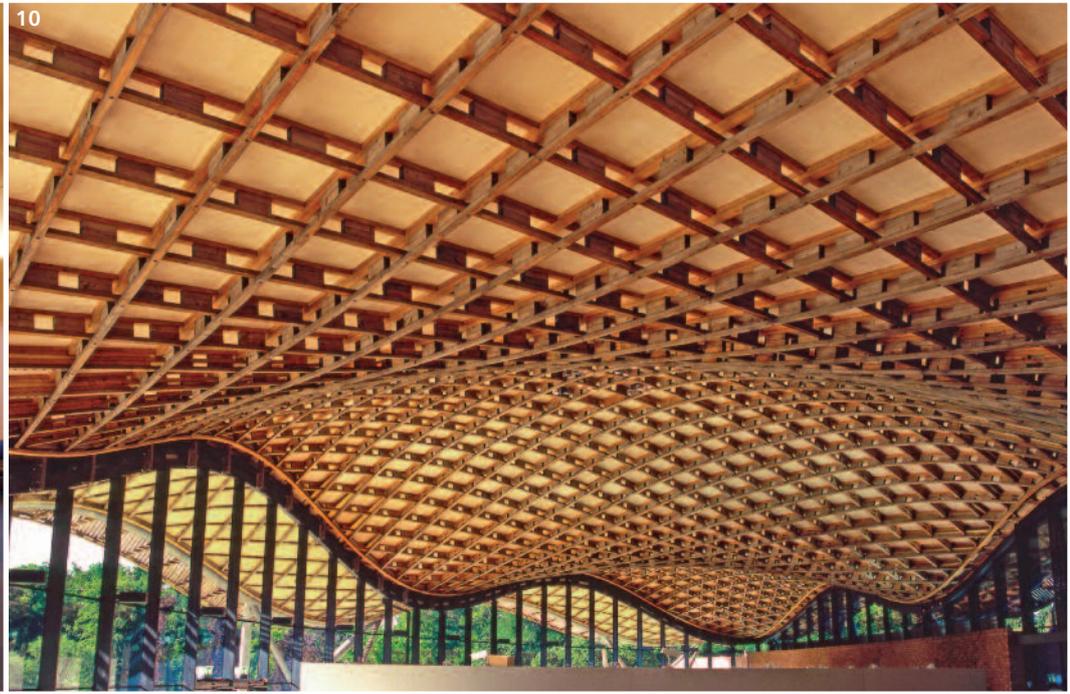
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# PROVEN FIRE PROTECTION FOR TIMBER



FIRE RETARDANT TREATED TIMBER  
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FIRE RETARDANT  
TREATED TIMBER



ACCEPTED BY  
NHBC BUILDING  
CONTROL SERVICE



## Lonza

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### Photographs

- 1 Robin House Children's Hospice, Balloch.
- 2 National Assembly for Wales, Cardiff.
- 3 St. Anne's Church, Belfast.
- 4 Passmore's Academy, Essex.
- 5 RNLI Station, Hoylake.
- 6 Victoria Leisure Centre, Nottingham.
- 7 NIOO-KNAW - Institute for Ecology of the Royal Dutch Academy of Sciences.
- 8 Glass & Timber House, Dulwich.
- 9 Borerraig, Isle of Skye.
- 10 The Savill Building, London.
- 11 Battlefield Visitor Centre, Culloden.
- 12 Stirling Castle, Scotland.
- 13 State Laboratories, Ireland.

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