HR-Prof

Clear Flame Retardant Treatment for Wood

PRODUCT DESCRIPTION

HR-Prof is a non-toxic eco-friendly flame retardant treatment for internal and external timber substrates that require BS EN 13501-1 Euro Class B Reaction to Fire performance. This product is water based and easy to apply, possessing high diffusion properties it quickly penetrates the surface of the substrate. It does not require a protective finishing coat and can be left natural.

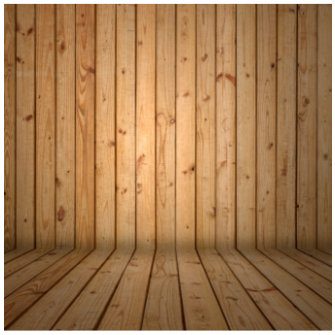
Once absorbed into the surface of the wood HR Prof combines chemically within the cell structure, but does not form a surface finish, which allows the wood to breathe naturally.

In the event of fire, carbon char is restricted to the immediate area restricting the spread of flame.

Wood treated with HR Prof complies with EU Construction Products Regulations, enabling customers to apply for a CE mark on treated timber. HR Prof is certificated according to EU Regulation No: 305/2011 (Construction Products Regulation)

FEATURES

- For **internal** and **external** use
- Water-based
- Colourless and odourless
- Non-toxic – No Solvents
- Eco friendly
- Timber treated with HR-Prof does not react with galvanised steel, gun nails or zinc coated screws
- Durability, hygroscopicity and corrosivity are not compromised
- Enhances timber (may slightly darken certain timbers)



HR-Prof has non-flammable properties which restrict ignition and the spread of flame. It will not wash out once dry, it is not converted into smoke when exposed to high temperatures, and carbon char is restricted to the immediate area. When exposed to increased temperatures during a fire, materials treated with HR-Prof are subject to charcoal forming, restricting the spread of flame.

TYPICAL APPLICATIONS

HR-Prof is used on cladding, staircases, trusses, joists, walls, log cabins, garages, pool enclosures, saunas and many other projects both **internal** and **external**.

STANDARDS

HR-Prof has undergone testing by an independent test laboratory and was awarded a pass for the following standards:

- BS EN 13823 & BS EN 11925-2 SBI Euro Class B-s1-d0
- NT 053 & NT054 Accelerated weathering of Fire-Retardant treated wood for fire testing
- For substrate performance information refer to BM Trada certificate No: TT-PRS-0111 Issue No: 6 Date: 02.06.2020

Building Regulations: Euro Class certifications are formally incorporated into Approved Document B and regulations in the UK are legally bound to accept them in lieu of national test methods.

PREPERATION OF SUBSTRATE

The substrate must be dry, clean, without bark, paints or varnishes and free from contamination. Existing coatings must be removed by stripping or sanding. Moisture content should be 20% or less. It is recommended before full application that a sample of the substrate is coated to establish both absorption properties and possible colour change.

APPLICATION INSTRUCTIONS

HR Prof works on the basis of absorption, not on the number of coats, the absorption rate for HR Prof on most wood species is 300 gms per m2 (270 m/l) 3.7 m2 per litre, in the case of Western Red Cedar the absorption requirement is higher, 400 gms (360 m/l per m2) 2.75 m2 per litre.

Application by Brush, Roller, Spray, Dip or Vacuum.
The rate of absorption will vary dependent on a number of factors i.e. wood species, rough sawn wood, planed all round (PAR) wood, and moisture content, which should be below 20%. Cut ends should have HR Prof re-applied with a minimum of two coats.

Example: 100 m2 of Siberian Larch face area would require the application of 27 litres of HR Prof plus 5% extra for overspray/spillage, if rough sawn wood 3 coats should be sufficient to absorb the full 27 litres - PAR wood may require additional coats to achieve the same amount of absorption.
However many coats are applied ALL of the liquid must be used on a given m2 face area.

In a factory-controlled environment, the application rate may be governed by weight to assess and confirm the correct take-up of the liquid.

The substrate to be treated must be dry, clean, without bark, paints or varnishes and free from contaminants. In some instances, there may be colour change after application.

Do not apply to wet or frozen wood and do not mix HR Prof with other products.

Do not mix with other solutions, stir well. Use brush, roller, spray (use appropriate mask when spraying), dip or vacuum method. Minimum temperature for application 5ºC.

HR Prof enhances timber and may slightly darken timber. A trial area is always recommended before complete application.

DRYING TIMES

A minimum of 1 hour between coats. Full drying time approximately 24 hours at +20ºc / 65 relative humidity. Drying times are dependent on absorption of the substrate and drying conditions (temperatures and humidity). Maximum fire retarding capabilities will be achieved after 7 days.

DURABILITY

External usage efficiency according to accelerated endurance of fire retardant treated wood for fire testing according to NT FIRE 053 & NT FIRE 054.

STORAGE

HR-Prof has a shelf life of 24 months and should be stored upright. The product should be stored at temperatures above zero.

TO ORDER

HR-Prof is available in 1 litre containers, 5 litre and 20 litre drums.

TECHNICAL ASSISTANCE

Assistance can be obtained by calling the technical team on 02476 422200 or visiting www.firestoppingshop.com

HEALTH AND SAFETY

During application avoid contact with open wounds, eyes and mouth. In the event of accidental contact wash the affected area immediately with clean water. Safety goggles and gloves should be worn when handling and applying the material. Adequate ventilation and appropriate mask required when spraying.

A separate Material Safety Data Sheet is available.