



# TRANSPARENT BY NATURE

*Create beautiful, healthy and sustainable wood buildings  
with equivalent standards of fire protection.*



## PUUKUOKKA

Jyväskylä, Finland

OOPEAA

Fire protected:  
Larch facades



## TREKOLI

Pori, Finland

Architects  
Rudanko-Kankkunen

Fire protected: Facade

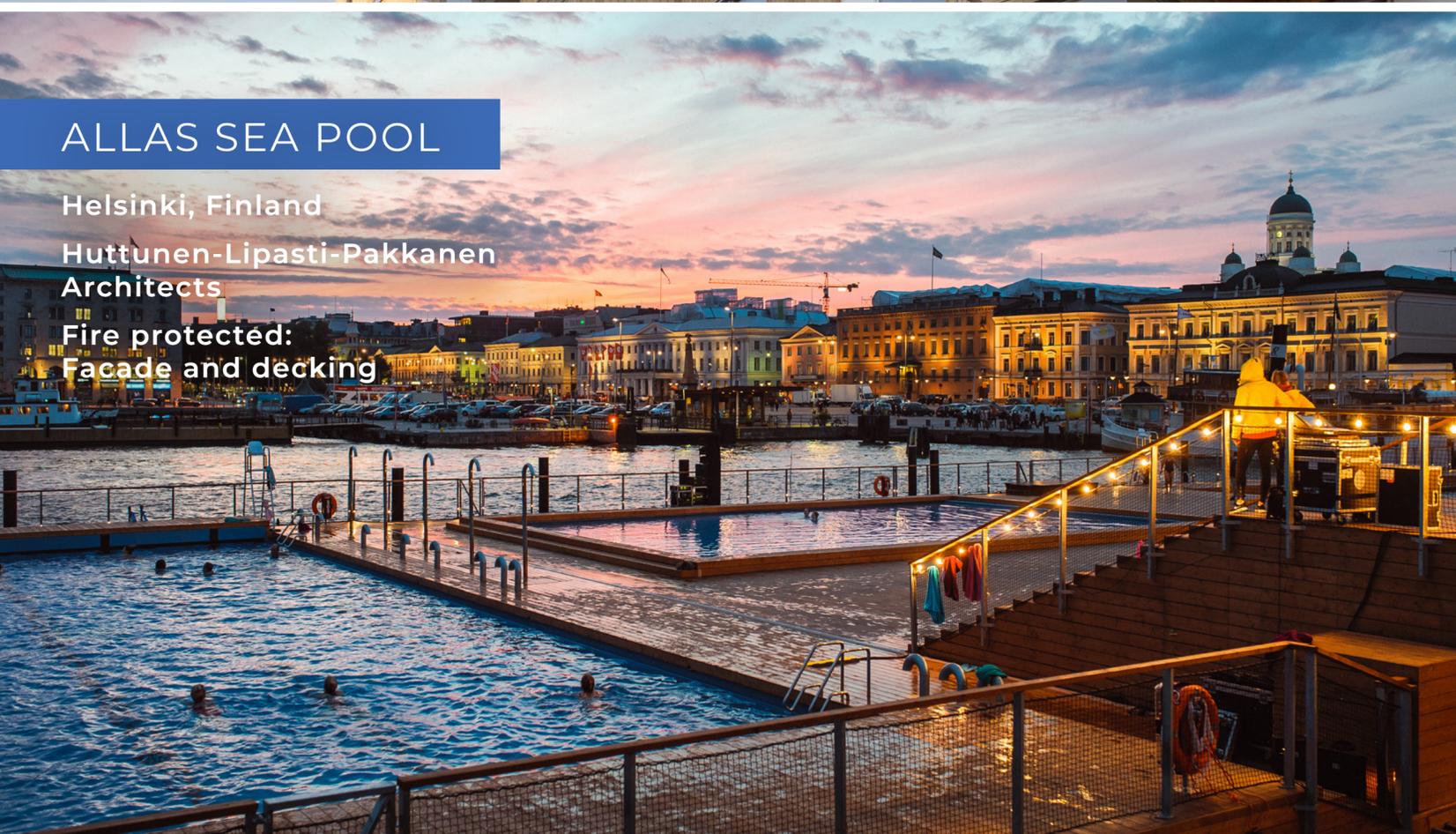


## ALLAS SEA POOL

Helsinki, Finland

Huttunen-Lipasti-Pakkanen  
Architects

Fire protected:  
Facade and decking



## KOAS SEMINAARINMÄKI

Jyväskylä, Finland

Verstas Architects

Fire protected: Facade  
and CLT staircase walls



# FIRE PROTECTION FOR SUSTAINABLE WOOD CONSTRUCTION

*We believe in natural wood as a healthy and sustainable building material. Our passion is to secure the fire safety of wooden construction products by environmentally friendly fire retardants featuring excellent, certified performance.*

Versatile wood has many advantages: it is a durable, energy-efficient and renewable building material with proven positive impacts on health and the environment. It inspires architects with unlimited possibilities of form, pattern and color, resulting in comfortable interior and attractive exterior designs.

**CERTIFIED FIRE SAFETY WITHOUT COMPROMISES IN DESIGN AND ENVIRONMENTAL VALUES ENHANCES THE RISE OF SUSTAINABLE WOOD CONSTRUCTION.**

Wood is increasingly used in multi-storey public, commercial and residential buildings. This has created demand for durable and ecological fire protection methods of wood. We at Nordtreat have developed an outperforming solution which enhances fire safety, aesthetics and environmental values of wood but is also economical to use.



JÄRVEVANA 7B

Tallinn, Estonia

Architectural  
Design Office Pluss

Fire protected:  
Wooden facade  
and interior panels

## VILLA RIIHI

Seinäjoki, Finland

Seppo Mäntylä

Fire protected:  
Interior wood



# PERFORMANCE WITH HIGH STANDARDS

Transparency is a feature of our clear and translucent fire retardants, but it tells also about our way of working. We are proud to share information of our pioneering, widely certified work for high performing, environmentally friendly fire retardants.

## NON-TOXIC, CERTIFIED FIRE SAFETY

Excellent fire safety should not lead to compromises in other areas of product performance. An ideal solution does not harm people, animals or the nature. It is durable, beautiful, cost-efficient and easy to apply.

## NORDTREAT FIRE RETARDANTS

- Fulfill EN 13501-1 standard fire classification B-s1, d0
- Are water-based pH-neutral solutions containing patented food grade compounds and non-toxic additives
- Are suitable for interior use due to low VOC emissions
- Have been tested according to EN 16755 for permanent use in interior and exterior applications
- Do not include harmful boron, bromides, formaldehyde, phosphates or ammonia
- Enhance wood material's natural resistance against moulds and fungi

# ESKOLANTIE APARTMENT BLOCKS

Helsinki, Finland

Matti Iiramo

Fire protected:  
CLT-elements

## OPERATING MECHANISM

When applied according to certified methods, Nordtreat fire retardants influence the pyrolysis of wood by creating a protective char layer. Treated wood also releases water vapor, which decreases the temperature of the combustion reaction, thus slowing down the spreading of fire.

The use of high-performing pigments and latest binder technologies provide a stable, long-lasting decorative finish. Industrial treatment also means that wood products are ready to use – there is no need for additional treatment e.g. with paint or lacquer. This enables savings for wood products manufacturers, treaters and construction companies.

## OUTSTANDING DURABILITY

Applied for interior use, Nordtreat fire protection remains effective throughout the life-time of the wood product. No other treatment is needed. In exterior use, Nordtreat fire retardants require maintenance treatment between 5-15 years depending on the product type and treatment method

Read more: [www.nordtreat.com](http://www.nordtreat.com) →





MONIKKO

Nurmijärvi, Finland

Linja Architects

Fire protected:  
Wooden facade

# FIRE PROTECTED WOOD PRODUCTS AND DESIGNS

Securing visually attractive and reliable fire protection for wood constructions is now possible with industrially treated ready-to-use wood products. The applications vary from visible bearing structures to interior panels and exterior cladding.

The leading industrial manufacturers are already producing CE marked wood panels and elements with Nordtreat fire retardant certifications. In the case of load bearing and more complex wood products, we create a customized fire retardant solution which will be tested and certified accordingly.

**"FIRST OF ALL, OUR FIRE PROTECTION METHOD OF WOOD PANELS MUST FULFIL STRICT BUILDING REGULATIONS. WITH NORDTREAT FIRE RETARDANTS, THE PANELS ARE ALSO COMPLETELY READY TO USE AFTER OUR TREATMENT. THIS IS WHY OUR TRANSLUCENT FIRE SAFE FACADE CLADDINGS HAVE BEEN CERTIFIED WITH NORDTREAT PRODUCTS."**

– Niko Eiserbeck, Sales Director, Siparila Oy

The color of the fire retardant treatment can be chosen from thousands of semi-translucent tones. As the tone of selected wood specie influence the final look and feel, we will provide samples treated with the preferred tones for architects and manufacturers.

# NT DECO IN A NUTSHELL

NT DECO is a water-based fire retardant designed for comprehensive protection of wooden construction products. It suits perfectly for interior and exterior applications. The Euroclass reaction to fire classification is B-s1,d0 (EN13501-1) and DRF classes INT, INT2 and EXT (EN16755).

The product is not hazardous to people, animals or the environment. NT DECO does not corrode wood, fixings or application equipment. Furthermore, the proprietary Weather Guard™ technology provides UV protection and enhances woods natural resistance against moulds and fungi. In interior use, the product has M1 emission class.

Extensive certification covers wood panels and boards as well as a variety of wood species, thicknesses and mounting methods. NT DECO suits also for fire protection of wood elements.

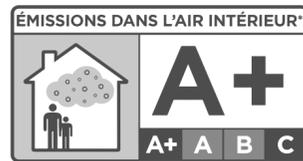
NT DECO is perfect for decorative protection of natural wood. It is available in thousands of translucent and semitranslucent tones.

**A sample kit with chosen wood species treated with desired tones can be ordered from Nordtreat website →**



## NT DECO

- Product type: Fire retardant for wood products
- Finishing: Clear / Transparent
- pH value: 8
- Density at 20°C: 1,15 g/ cm<sup>3</sup>
- Euroclass: B-s1,d0 (EN13501-1)
- DRF Class: INT, INT2, EXT (EN16755)



Patented Nordtreat fire retardants and wood products treated with them have been tested by the leading research laboratories and then certified by third parties. This helps architects and builders to choose best performing products for their projects.

# NT DECO FOR CERTIFIED FIRE SAFETY

NT DECO fire protects wood interiors, facades, bearing elements (e.g. Glulam, LVL and CLT elements), plywood and other wooden construction products used in multi-storey buildings like apartment houses, hospitals, schools and other public buildings.

NT DECO has a resistance to fire rating to EN 11925-2:2010, EN 13823:2010, EN 13501-1, EN ISO 1182, CEN/TS 16516, ISO 16000 and EN 16755 (NT FIRE 054). The Euroclass B-s1,d0 (EN13501-1) means that wood products treated with NT DECO contribute in the fire to a very limited extent, their smoke production is very limited and no flaming droplets occur.

The product has undergone extensive testing to ensure safe interior use in residential, public and commercial buildings. NT DECO's emission class is M1. It is also Indoor Air Comfort @ certified, BREEAM classified and LEED v4 compliant.

## CE CERTIFICATION

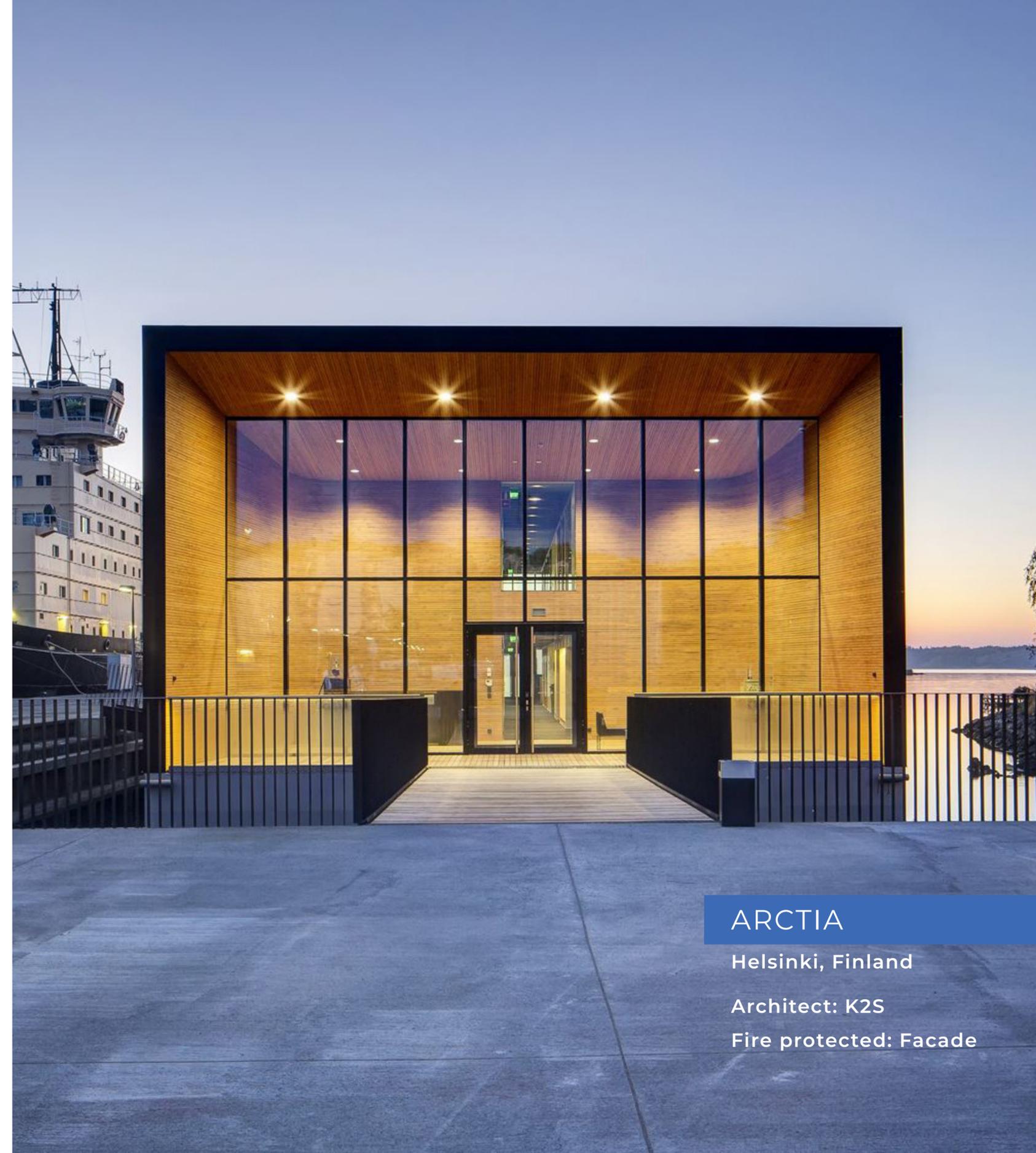
Wood product manufacturers and treaters can integrate Nordtreat fire-retardant treatment into their CE certified production of wooden construction products, according to EN 14915: 2013.

# NORDIC QUALITY WITH PROFESSIONAL SERVICE

Nordtreat is a green chemicals company. We develop and produce environmentally friendly fire retardants for construction materials made of natural wood. Our competence and service is characterized by the long and tight cooperation with the globally leading research laboratories, strict production control and extensive third party certification.

All Nordtreat fire retardants are produced in our own factories located in Finland and Estonia. Our experience and knowledge about fire protection of wood has evolved for more than 10 years, so we can provide great benefits for our customers. Wood product suppliers can apply our certified processes or develop and certify an optimal fire protection solution together with us.

**Contact sales, technical support or  
customer service to start cooperation →**



ARCTIA

Helsinki, Finland

Architect: K2S

Fire protected: Facade



**Nordtreat**

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