

NORFLAM® solutions



Bio-based fire protection

for wood cladding, panelling and ribbons



Bio-based flame retardant technology

for wood-based construction materials

NORFLAM® is the only bio-based flame retardant technology applicable to a large selection of solid wood products as well as wood-based construction materials. The unique technology is more than 95% based on non-fossil materials, with more than 40% of raw materials being bio-based.



NORFLAM® flame retardants provide the required reaction to fire class for solid wood cladding, panelling and ribbons, and modified wood cladding, contributing to the fire protection and the safety of the building. The principle of NORFLAM® flame retardants is to absorb into the wood material and reduce the ignition of the wood surface in the event of a fire.

NORFLAM® solutions have been tested according to various European and International standardised test methods:

- EN 13501-1
- EN 13823
- EN 11925
- EN 16755 (NT FIRE 054)
- CEN/TS 16516

Key benefits

for wood cladding, panelling, ribbons and modified wood cladding



Euroclass compliant

Reaction to fire performance options to meet B-s1, d0, C-s1, d0 or D-s1, d0 (EN13501-1) requirements in exterior (EXT), internal humid (INT 2) and internal dry (INT 1) conditions.



Sustainable fire protection

Bio-based, LEED-certified solutions are not harmful to people or the environment and have a carbon handprint of 2 kg CO₂e/m² (EN 15804+A2 & ISO 14025 / ISO 21930).



Low VOC emissions

A+/M1 emission classes result in good interior air quality and work safety.



UV protection

NORFLAM® solutions provide UV protection in exterior use while maintaining their reaction to fire properties (EN 16755).



Natural look & feel

Beautiful wooden surfaces remain visible with clear or translucent colours. An opaque finish is available only for thermally modified spruce.



Industrial, off-site & on-site treatment

Certified fire protection can be reached industrially, off-site or on-site. The treatment must be certified by a notified body.

Certified

fire protection solutions

NORFLAM® flame retardant solutions are used by leading industrial wood products and wood-based materials manufacturers and treaters around the world. Some of the world's largest wooden buildings feature wood products treated with NORFLAM® flame retardant solutions.



NORFLAM® solutions for solid wood cladding, panelling and ribbons



NORFLAM® W310

Use NORFLAM® W310 for interior and exterior cladding, panelling and ribbons made from spruce, larch, western red cedar or Douglas fir to reach Euroclass B-s1, d0 reaction to fire performance (EN13501-1). This tintable semi-translucent flame retardant is a one-pot solution and does not need a topcoat.



NORFLAM® W311

Use NORFLAM® W311 for exterior and interior cladding made from spruce, pine or thermally modified spruce to reach Euroclass C-s1, d0 reaction to fire performance (EN13501-1). This tintable semi-translucent flame retardant is a one-pot solution and does not need a topcoat.



NORFLAM® W319

Use NORFLAM® W319 for exterior cladding made from thermally modified spruce to reach Euroclass D-s1, d0 reaction to fire performance (EN13501-1). This opaque flame retardant is a one-pot solution and does not need a topcoat.

NORFLAM® standard colours

NORFLAM® solutions for solid wood cladding, panelling and ribbons are available in clear or semi-translucent colours as standard. * For special cases, NORFLAM® flame retardants can be custom-toned. This enables the toning of the wood surfaces to match the surrounding materials.

The colours displayed here have been produced digitally. Digitally produced colours are no substitute for real colour samples. Please contact Nordtreat technical service for more information. Colour samples of wood treated with NORFLAM® solutions can be ordered at www.nordtreat.com.

**) An opaque finish is available only for thermally modified spruce.*



Order standard colour samples of fire-protected wood from our website!

Other popular shades

				
NTD01	NTD03	NTD04	NTD06	NTD07
				
NTD08	NTD09	NTD10	NTD11	NTD12
				
NTD13	NTD14	NTD15	NTD16	NTD17
				
NTD18	NTD19	NTD20	NTD21	NTD22
				
NTD24	NTD25	NTD26	NTD27	NTD28
				
NTD29	NTD32	NTD60	NTD62	NTD63
				
NTD02	NTD05			
				
NTD23	NTD30			
				
NTD31	NTD33			
				
NTD34	NTD35			

NORFLAM® treatment methods and packaging options

There are three ways to reach the required Euroclass reaction to fire performance with NORFLAM® solutions. NORFLAM® flame retardants are easy and safe to use in industrial treatment processes, as well as off-site and on-site treatments.

Industrial fire protection of solid wood cladding and ribbons

All NORFLAM® flame retardants can be industrially applied through spray, vacuum spray, and flow-coater applications. Our technical support will happily help you get your treatment processes certified and fire-protected solid wood cladding products CE-marked.

Off-site and on-site fire protection of wood cladding and ribbons

All NORFLAM® flame retardants can be applied off-site or on-site by spraying and brushing. Nordtreat strongly recommends using a flame retardant treatment partner trained and approved by Nordtreat. Please get in touch with technical support for more information.

Maintenance of fire-protected surfaces

In exterior conditions, like facade cladding, the maintenance interval of NORFLAM® flame retardant treatment is between 5 and 10 years, depending on the structure, weather stress and treatment. After 5 years treated surfaces should be inspected for maintenance needs. Affected surfaces should be maintenance-treated by the same flame retardant that was originally used.

In indoor conditions, maintenance service is only needed if the treated wood surface is mechanically damaged. When needed, the maintenance treatment should be done with the same flame retardant product that was originally used.

Packaging options

- 1000 litre IBC
- 5–200 litre canister





– transparent by nature

Nordtreat provides the only bio-based alternative for fire-protecting wood-based construction materials. The NORFLAM® technology developed by Nordtreat is based on the innovative use of non-fossil and bio-based raw materials. Together with thorough testing and certification of the products and processes this forms the core of Nordtreat's existence.

We do not make compromises on certified fire protection performance. Our goal is to minimise the environmental impacts of flame retardant production and fire-protected wood-based construction materials throughout their lifecycles.

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