

# WISA<sup>®</sup>-Spruce<sup>FR</sup>

WISA-Spruce<sup>FR</sup> is a fire-retardant plywood product for use in construction. The fire retardant treatment significantly improves fire resistance properties of the product without compromising the plywood panel's excellent technical properties. WISA-Spruce<sup>FR</sup> works equally as well as the base product – WISA-Spruce – in all kind of construction, especially in structural uses and load bearing structures.

## Base panel

WISA-Spruce

## Bonding

Weather resistant gluing according to EN 314-2/class 3 Exterior. WISA-Spruce<sup>FR</sup> fulfils the requirements of EN 13986 E1 low formaldehyde emission class.

## Surface

Face veneer grades II and III (comply with standard EN 635-3).  
Additional grade G (improved/solid grade II).  
Fire retardant treatment is applied on both surfaces.

## Fire classification

According to standard EN 13501-1+A1:  
B-s1, d0 (roof and wall structures)  
B<sub>fl</sub>-s1 (floors)

## Fire protection ability of a covering (K-class)

According to standard EN 13501-2:2016 (CWFT):  
K<sub>2</sub>10 & K<sub>1</sub>10

## Machining

Tongue & Groove on request

## Thicknesses and weights

Nominal thickness (mm)	Number of plies	Thickness (mm)		Weight kg/m <sup>2</sup>
		Min	Max	
15	5	14.3	15.3	6.8
18	7	17.1	18.1	8.6

Sizes and thicknesses relating to moisture content 8–10 %.

Thicknesses and tolerances fulfil EN 315 requirements.





### Panel sizes

**Standard sizes:** Length from 2400 to 2500 mm  
Width from 1200 to 1250 mm

**Size tolerances:**

< 1000 mm	+/- 1 mm
1000–2000 mm	+/- 2 mm
> 2000 mm	+/- 3 mm

**Squareness tolerance:** +/- 1 mm/1000 mm

### Strength values and technical properties

WISA-Spruce<sup>FR</sup> is CE marked according to AVCP System 1.

Fulfils EN 1084, Class A and EN 13986, class E1

Plywood for use in humid conditions (EN 636-2)

Service class 2 (EN 1995-1-1)

Biological hazard class 2 (EN 335-3)

For all detailed technical values, please see product-specific DoP (Declaration of Performance) on [www.wisaplywood.com/dop](http://www.wisaplywood.com/dop).

### Storage instructions

Panels should be stored horizontally on a level surface in a dry, covered area.

### Installation instructions

The panels can have dimensional changes due to changes in air humidity. Please leave 1–2 mm/m expansion gaps between panels during installation.

### Environment

WISA products are manufactured in Europe according to the strictest sustainability principles. By choosing WISA, our customers can have the confidence that their plywood and veneer come only from legal sources and conform to all relevant standards and regulations, including the European Union Timber Regulation (EUTR).

UPM leads the integration of bio and forest industries into a sustainable future characterised by innovation, responsibility and resource efficiency.

### Additional information

Wood being a living material, every panel is unique. So a photograph or a sample piece cannot represent all panels, colours, shades, graining, knots etc.

For further information on installation, maintenance, disposal, environmental matters etc. please contact your supplier or visit [www.wisaplywood.com](http://www.wisaplywood.com).



UPM Plywood

[www.wisaplywood.com](http://www.wisaplywood.com)  
[www.upm.com](http://www.upm.com)

UPM policy is one of continuous development. We reserve the right to amend specifications without notice or obligation.