

# WISA<sup>®</sup>-Spruce

WISA-Spruce is a truly versatile plywood panel for numerous end uses. The panel is light in weight yet strong and rigid – therefore most suitable in structural uses and load bearing applications like roofing, flooring, wall sheathing, packaging and joinery. The wide size range with several thicknesses and sizes, the CNC machining possibilities in addition to three different surface qualities widen the usage potential beyond traditional end uses. Moreover, our customers appreciate the sustainability of the product as it is made from environmentally certified Nordic Spruce and meets all the relevant environmental requirements.

## Bonding

Weather resistant glueing according to EN 314-2/class 3 Exterior. WISA-Spruce fulfills the requirements of EN 13986 E1 low formaldehyde emission class. On request deliveries according to CARB Phase II/JAS Four Stars.

## Surface

Face veneer grades II and III (comply with standard EN 635-3). Additional grade G (improved/solid grade II).

## Machining

Edge machinings available on request.

## Thicknesses and weights

Nominal thickness (mm)	Number of plies		Thickness (mm)		Weight (kg/m <sup>2</sup> ) abt	
	Thick ply	Thin ply	Min	Max	Thick ply	Thin ply
5	-	3	4.8	5.6	-	2.6
9	3	5	8.8	9.5	4.1	4.5
12	5	7	11.5	12.5	5.5	6.4
15	5	7	14.3	15.3	6.8	7.3
18	7	9	17.1	18.1	8.6	8.7
21	7	11	20.0	20.9	9.7	10.3
24	9	13	22.9	23.7	11.0	11.0
27	9	13	25.2	26.8	12.0	13.3
30	-	15	28.1	29.9	-	14.5

Other thicknesses (up to 50 mm) and constructions available on request.

Sizes and thicknesses relating to moisture content 8 - 10 %.  
Thicknesses and tolerances fulfil the EN 315 requirements.





## Panel sizes

### Thin ply construction standard sizes

1200/1220/1250/1500/1525 x 1200/2400/2440/2500/3050 mm  
 also long grained 2400/2440/2500 x 1200/1220/1250 available.  
 Other sizes on special request.

**Max panel size** 1525 mm x 3660 mm

### Thick ply construction standard sizes

Length from 2400 to 2500 mm  
 Width from 1200 to 1250 mm  
 Tongued and grooved 2400/2440 x 600/1200

<b>Size tolerances</b>	< 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 is CE marked according to AVCP System 2+.  
 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)  
 Reaction to fire class D-s2, d0 (EN13501-1)

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

## Storing instructions

Panels should be stored in a covered and dry place and to be kept flatwise.

## Installation instructions

The panels can have dimensional changes due to changes in the air humidity. Please leave 1 mm/m expansion gaps between panels in the installation. The boards can be worked with ordinary hand tools.

## Additional information

All WISA spruce plywoods are made of PEFC certified wood.  
 Wood being a living material, every panel is unique. Thus a photograph or a sample piece cannot represent all the panels, as regards colours, shades, graining, knots etc.

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

