



# Finnforest Spruce Flex

## - softwood plywood with thermoplastic overlay

Finnforest Spruce Flex is thick-veneer softwood plywood with a thermoplastic overlay, suitable for both interior and exterior use.

Finnforest Spruce Flex is an all-purpose construction panel that can be used for example in roofing, walls, shelters and packaging. Easy to clean, it is well suited to use, for example, in the interior cladding of cattle houses. In addition to its excellent technical properties, Finnforest Spruce Flex has a high-quality appearance.

### Basic plywood

The Finnforest Spruce Flex basic plywood is softwood plywood with a thick-veneer structure. The phenolic-resin glue bonding of the panels is weather- and boil-proof.

### Overlay

The top surface of the panel has a lightly textured thermoplastic overlay. The grade class III back panel is coated with a backing film and therefore not recommended as a use surface. Overlays are bonded to the plywood with a weather-resistant glue.

### Overlay colour

The standard overlay colours are white and grey. Other colours are available upon special order. The overlay retains its colour better than traditional phenolic overlays when exposed to sunlight.

### Edge sealing

The panel edges are sealed against moisture with an acrylic-based colourless paint.

## Surface properties

The overlay is highly durable and easy to clean, and it withstands most chemicals. The overlay has excellent weather resistance. Finnforest Spruce Flex panels can be fastened with conventional brackets such as screws, bolts, rivets and nails.

## Properties of the Finnforest Spruce Flex overlay

- Taber value is approx 2000 R depending on overlay
- Colour stability 6-7 according to DIN 54404
- Colour change  $\Delta E < 1$  according to ISO 4892-2 (600 h)
- Crack resistance EN13696 no cracks
- Impact resistance Class IC3 according to EN438-2
- Overlay bonded to plywood with weather resistant glue (EN 204 durability class D4)

The values are normative and apply to unused panels

As Finnforest Spruce Flex is a wood-based panel, special attention must be paid to the design and structure of the end product. Excessive moisture entering the product may change its appearance. When used in exteriors, moisture seeping in at the edges and brackets can cause damage and ruin the appearance.

## Formaldehyde emissions

Phenolic-resin glue is used in the Finnforest Spruce Flex basic plywood and therefore it meets the requirements of standard EN 13986, Class E1 regarding formaldehyde emissions.

## Bonding

The weather- and boil-proof phenolic-resin glue used in the Finnforest Spruce Flex basic plywood meets the bonding requirements of the following international standards:

- SFS-EN 314-2/Class 3 (exterior)
- BS 6566 Part 8/Type WBP
- DIN 68705 Teil 3/BFU 100

## Panel strength properties

The strength and elasticity properties of the Finnforest Spruce Flex plywood are the same as for uncoated Finnforest Spruce plywood. The strength and elasticity values of plywood can be found in VTT certificate no. 4/95.

## Thickness, structures and thickness tolerances

mm	9	12	15	18	21	24	27	30
Number of veneers	3	4	5	6	7	8	9	10
Maximum, mm	7.0	10.0	13.0	16.0	19.0	21.5	24.5	27.5

## Panel size

The first measurement is in the lengthwise direction of the face veneer.

- 2440 x 1220 mm, 2400 x 1200 mm

## Panel tolerances

Length / width	Tolerance
< 1000 mm	$\pm 1\text{mm/m}$
1000...2000 mm	$\pm 2\text{mm/m}$
> 2000 mm	$\pm 3\text{mm/m}$
Right angles	$\pm 0.1\%$ or $\pm 1\text{mm/m}$
Edge straightness	$\pm 0.1\%$ or $\pm 1\text{mm/m}$

## Packages

Panel size	mm	Number of panels in a package (by thickness)			
		9	12	15	18
2440/2400 x 1220/1200	kpl	100	75	60	50

Panel size	mm	Number of panels in a package (by thickness)			
		21	24	27	30
2440/2400 x 1220/1200	kpl	45	40	35	30

METSÄLIITTO COOPERATIVE

Finnforest, Plywood Sales

Askonkatu 4

FIN-15100 Lahti

Tel. +358 10 4650 499

Fax +358 10 4650 490

[www.finnforest.com](http://www.finnforest.com)

