

# ASSORTMENT

## NOVATOP SWP – 3-layer solid wood panel

### Spruce

#### Standard formats

■ Spruce Local ■ Spruce Nordic

Thickness Quality	14 mm (4-6-4)	16 mm(5-6-5)	19 mm (6-7-6)	21 mm (6-9-6)	27 mm (6-15-6)	27 mm (9-9-9)	32 mm (9-14-9)	42 mm (9-24-9)	50 mm (9-32-9)	60 mm (9-42-9)
Pcs. in packet	37	30	25	20	18	18	15	12	10	8
A/B										
A/C										
AB/B										
AB/C										
B/B										
B/C										
B/D										
C/C										
C/D										
D/D										
2,5 x 5	2,5 x 4	2,5 x 2,75*	2,5 x 2,5		2,1 x 5	2,1 x 4	2,1 x 2,75*	2,1 x 2,5		
1,25 x 5	1,25 x 4	1,25 x 2,75*	1,25 x 2,5		1,04 x 5	1,04 x 4	1,04 x 2,75*	1,04 x 2,5		

\* Formats 2,75 m only local spruce to thickness 27 mm

#### Formats in length 6 m

Thickness Quality	19 mm (6-7-6)	21 mm (6-9-6)	27 mm (6-15-6)	27 mm (9-9-9)	32 mm (9-14-9)	42 mm (9-24-9)	50 mm (9-32-9)	60 mm (9-42-9)	
Pcs. in packet	25	20	18	18	15	12	10	8	
B/C									
B/D									
C/C									
C/D									
2,5 x 6	2,5 x 3		2,1 x 6	2,1 x 3		1,25 x 6	1,25 x 3	1,04 x 6	1,04 x 3

### Silver fir

#### Standard formats

Thickness Quality	19 mm (6-7-6)	27 mm (6-15-6)	
Pcs. in packet	25	18	
AB/C			
1,25 x 5	2,5 x 5	1,25 x 6	2,5 x 6
2,5 x 3	1,25 x 3		

### Siberian larch

#### Standard formats

Thickness Quality	19 mm (6-7-6)	27 mm (9-9-9)	
Pcs. in packet	25	18	
AB/C			
1,04 x 5	1,25 x 5	2,1 x 5	2,5 x 5

# ASSORTMENT

## NOVATOP STATIC – 5-layer solid wood panel

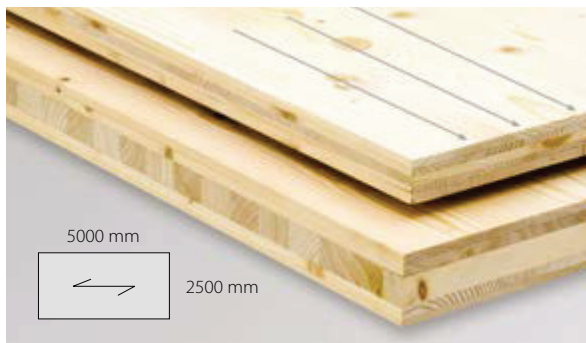
### Spruce

#### Standard formats

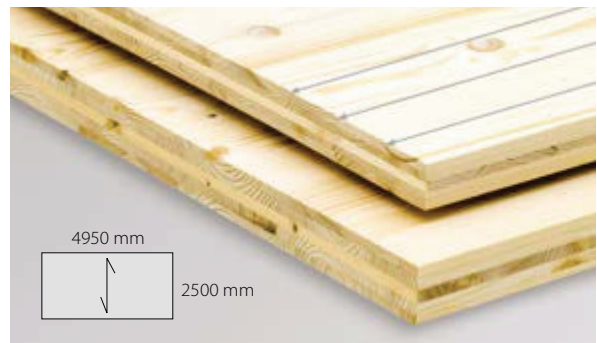
Thickness Quality	45 mm (9-9-9-9-9)	60 mm (9-9-24-9-9)
Pcs. in packet	10	8
B/B		
B/C		
B/D		
C/C		
C/D		
D/D		

2,5 x 5	2,1 x 5	1,25 x 5	1,04 x 5
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2,5 x 6	2,1 x 6	1,25 x 6	1,04 x 6
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NOVATOP STATIC L  
Longitudinal direction of the grain of the surface lamellas



NOVATOP STATIC Q  
Transverse direction of the grain of the surface lamellas

# TECHNICAL SPECIFICATIONS

## NOVATOP SWP

NOVATOP SWP – Multi-layer solid wood panel	
<b>Description</b>	Multilayer panels NOVATOP SWP are made of coniferous sawnwood dried to 8% (larch 12%). Each layer of the panel consists of lamellas of massive solid wood. The three-layer panel consists of two outer layers and one middle layer with the fibres perpendicular to the course of the fibres of the surface layers. The five-layer panel has two parallel upper layers from each side and one middle layer with the fibres perpendicular to the course of the fibres of the surface layers. The thickness of the layers can differ and determines the final thickness of the panel. The lamellas of the middle layer are glued longitudinally, and lengthwise they are connected with the butted joint or they can be continuous. Their thickness is a maximum of 42 mm. The outer layers are made of continuous lamellas with a thickness of 6 or 9 mm and a width of 93–143 mm. On every panel, there is always the same width of the surface lamellas whose right side faces the surface. The longitudinal joints of the lamellas are glued together. The adhesive used is waterproof and the gluing of the surface lamellas corresponds with AW 100 or D4 according to EN 204. The quality of sanding corresponds to the grain size of 100 (coarser sanding is made to order).
<b>Technical background</b>	EN 13353  EN 13986 Ö-Norm B3022 DIN 68800
<b>Technical classes of the panels</b>	SWP/1 – solid wood panels for internal use in dry areas SWP/2 – solid wood panels for internal use in damp areas SWP/3 – solid wood panels for external use
<b>Processed wood species</b>	Local spruce, Nordic spruce, Siberian larch, Silver fir
<b>Surface</b>	All NOVATOP SWP panels sanded, with a grain size of 100 by default, rough surface with a grain size of 50 on request. The thickness tolerance for sanding is $\pm 0.2$ mm.
<b>Panel formats</b>	The NOVATOP SWP is large-format sheet material according to EN 12775 made in standard sizes and construction according to the "Assortment tables". Dimensional tolerances according to EN 13353 Nominal width and length tolerance $\pm 2$ mm Side perpendicularity: 1 mm/m Rectangularity: 1 mm/m
<b>Surface lamella width</b>	93–143 mm
<b>Surface quality</b>	The NOVATOP SWP surface is classified into 4 basic quality grades - A, B, C, D and combinations thereof. The classification parameters are in the table "CLASS ATTRIBUTES". The quality grades of surface lamellas are classified according to EN 13017-1, and AGROP NOVA a.s. technical procedures.


# TECHNICAL SPECIFICATIONS NOVATOP SWP

## NOVATOP SWP – Multi-layer solid wood panels

<b>Sawn wood for production</b>	The sawn wood for NOVATOP SWP production originates from permanently managed forests from suppliers certified for PEFC.
<b>Glueing</b>	NOVATOP SWP are glued in all joints. The glueing process meets the following requirements: AW100 according to DIN 68705 and B3008 D4 according to EN 204 The surface lamellas are glued together and to the surface of the middle layer with melamine adhesive. The middle layer lamellas are glued with PVAc adhesive. The patching of natural knots is glued with PVAc.
<b>Patching material</b>	putty, patching of natural knots with diameter ranging from 10 to 40 mm
<b>Emissions</b>	HCHO - NOVATOP SWP are virtually free of formaldehyde, see the data sheets. SWP are made without pentachlorophenol, wood protection agents and organic solvents.
<b>Other SWP parameters</b>	The mechanical and physical properties of the individual panel types and constructional technical values are provided in the respective data sheets.
<b>Certificates</b>	NATUREPLUS – Certificate PEFC – Certificate ISPM – Certificate Declaration of properties NOVATOP SWP Declaration of properties NOVATOP STAT Declaration of properties NOVATOP STATIC Declaration of properties NOVATOP FREE Certificate of conformity of the factory production control SWP/1, SWP/2, SWP/3 – Certificate Certificate of conformity of the factory production control SWP/1 SD, SWP/2 SD, SWP/3 SD – Certificate Emissions of harmful substances – Test Emissions analysis – Test Formaldehyde emission – Test Steam diffusion – Test
<b>Waste</b>	The product packaging material is to be disposed of as per the applicable regulations valid in the customer's country. The waste produced during the product processing may be incinerated in any equipment designated for incinerating wood material.

# TECHNICAL DATA SHEET

## NOVATOP SWP

NOVATOP SWP – Bearing and non-bearing 3-layer solid wood panel according to EN 13986	
<b>Requirements</b>	EN 13353, EN 13986 
<b>Operation classes</b>	SWP/1, SWP/2, SWP/3 according to EN 13353
<b>Technical classes</b>	SWP/1 NS, SWP/2 NS, SWP/3 NS, SWP/1 S, SWP/2 S, SWP/3 S
<b>Wood species</b>	Local spruce, Nordic spruce, Siberian larch
<b>Glueing</b>	AW100 according to DIN 68705, SWP/3 according to EN 13354
<b>Adhesive</b>	Melamine adhesive
<b>Standard formats (mm)</b>	thickness: 14, 16, 19, 21, 27 (6-15-6), 27 (9-9-9), 32, 42, 50, 60 width: 1040, 1250, 2100, 2500 length: 2500, 2750, 3000, 4000, 5000, 6000, 7000, 8000, 10000
<b>Surface</b>	sanded – K 50, 100
<b>Moisture</b>	spruce 8±2%, larch 12±2%
<b>Density</b>	spruce cca 490 kg/m <sup>3</sup> , larch cca 580 kg/m <sup>3</sup>
<b>Formaldehyde emission class</b>	EN according to EN 717-1, EN16516 for values refer to the test reports
<b>Reaction to fire</b>	D-s2, d0 according to EN 13 501-1
<b>Design value of thermal conductivity (λ)</b>	for spruce 0,13 W/mK at a density of panels 490 kg/m <sup>3</sup> according to EN ISO 10456 for larch 0,15 W/mK at a density of panels 580 kg/m <sup>3</sup> according to EN ISO 10456
<b>Factor of diffusion resistance (μ)</b>	200/70 (dry/wet) according to EN ISO 10456
<b>Sound absorption</b>	250 – 500 Hz – 0,1 1000 – 2000 Hz – 0,3
<b>Airborne sound insulation (dB)</b>	$R = 13 \times \log(m_a) + 14$ $m_a$ – surface weight kg/m <sup>2</sup>
<b>Specific thermal capacity (c<sub>p</sub>)</b>	1600 J/kgK according to EN ISO 10456

Requirements for density and characteristic strength values according to EN 13353

Property	Testing method	Panel nominal thickness [mm]				
		>12 ≤ 20	>20 ≤ 30	>30 ≤ 42	> 42	
<b>Stress perpendicular to the panel plane [N/mm<sup>2</sup>]</b>						
$f_{m,0,k}$	Bending strength parallel to the fibres of the outer layers	EN 789	35	30	16	12
$f_{m,90,k}$	Bending strength perpendicular to the fibres of the outer layers	EN 789	5	5	9	9
$E_{0,mean}$	Modulus of elasticity parallel to the fibres of the outer layers	EN 789	8500	7000	6500	6000
$E_{90,mean}$	Modulus of elasticity perpendicular to the fibres of the outer layers	EN 789	470	470	1300	1300

Certificates

SWP/1	1393-CPR-0018
SWP/2	1393-CPR-0019
SWP/3	1393-CPR-0020