

# Superplex™ Plywood

**Eco Friendly - GPF**  
**PEFC Controlled**  
**Source Certified**



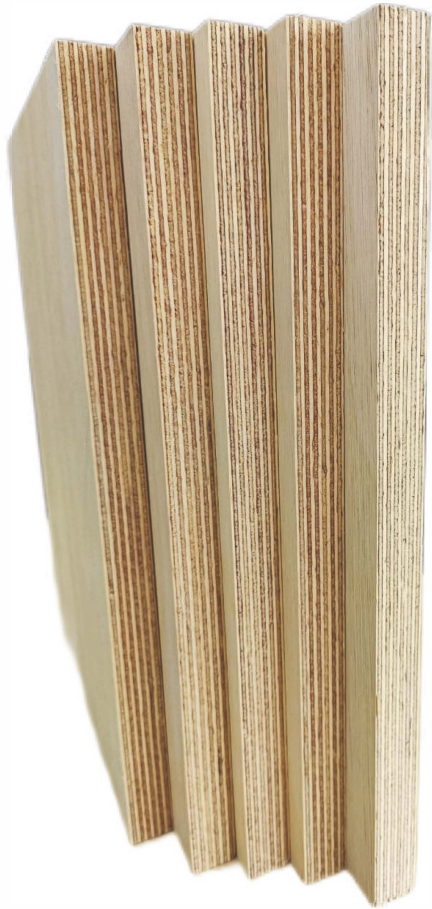
## Rubberwood aka "Malaysian Oak".

**An Optimal base for different overlaying Methods**

Designed and tailor-made to serve in demanding applications, Superplex plywood can be ordered with special oriented veneer structures to provide even higher strength and stiffness properties.

# SP Natural

Plywood is produced from rubberwood, which is used extensively in the furniture industry, and also for exterior application. Rubberwood, which is renowned for its density and hardness, offers a great level of strength as well as attractive grain contrast and patterns. Its comparatively lower cost makes rubberwood a popular hardwood of choice for affordable flooring and furniture.



## Major Advantages

- Strong and rigid
- Dimensionally stable
- Excellent strength-to-weight ratio
- Water- and boil-proof bonding
- Environmentally friendly - Green PF
- PEFC Controlled Source Certified

## + Application

Furniture, cabinets, lamination, building applications, exterior application and other general usages.



## SP Natural



### Bonding Classes

SP Natural plywood panels are bonded with a weather- and boil resistant phenol formaldehyde adhesive. The gluing meets the requirements of the standard EN 314-2 / Class 3 (exterior).



### Panel Strength Properties

SP Natural plywood is a CE marked product. The strength and elasticity properties are specified according to standards EN 789 and EN 1058



### Machining

SP Natural plywood can be machined according to customer specification on request.



### Formaldehyde Emissions

SE0



### Panel Size

1220mm x 2440mm

Surfaces Properties: Both sides of plywood panels have been sanded to provide a smooth, sturdy surface.



# SP Natural



## Product Grade:

- B/BB
- BB/BB
- BB/CP

## Size Tolerances

Measured in accordance with standard EN324, the plywood size and squareness tolerances meet EN 315 requirements.

### LENGTH/WIDTH

### TOLERANCE

<1,000 mm	±1mm
1,000-2,000mm	±2mm
>2,000 mm	±3mm
Squareness	±0.1% or ± 1mm/m
Edge Straightness	±0.1% or ± 1mm/m





# SP Natural



## Thickness, Structures and Thickness Tolerances of the Panels

Length/Width (mm)	Number of Plies (pcs)	Thickness Min.(mm)	Tolerance Max.(mm)
9	7	8.8	9.5
12	9	11.5	12.5
15	11	14.3	15.3
18	13	17.1	18.1

\*\*Moisture content of the product affects its dimensions.

\*\*Average density of SP Natural Plywood is 690-775 kg/m<sup>3</sup> air dry.

\*\*Customize tolerances are possible but must be agreed separately.

\*\*Special Structures and thickness are available on request.



## SP FORM

SP Form plywood is rubberwood Plywood, in which both sides are overlaid with phenolic film and the edges are sealed. It is an ideal formwork panel for smooth surfaced concrete elements.



### Major Advantages

- Strong and rigid
- Dimensionally stable
- Withstands impacts
- Easy clean and re-use
- Excellent strength-to-weight ratio
- Weather- and boil-proof bonding
- Environmentally friendly - Green PF
- PEFC Controlled Source Certified



### Application

Concrete Formwork  
Transport Industry  
Building Applications and others



## SP FORM



### Bonding Classes

SP Form plywood panels are bonded with a weather- and boil resistant phenol formaldehyde adhesive. The gluing meets the requirements of the standard EN 314-2 / Class 3 (exterior).



### Panel Strength Properties

SP Form plywood is a CE marked product. The strength and elasticity properties are specified according to standards EN 789 and EN 1058



### Machining

SP Form plywood can be machined according to customer specification on request.



### Formaldehyde Emissions

SE0



### Panel Size

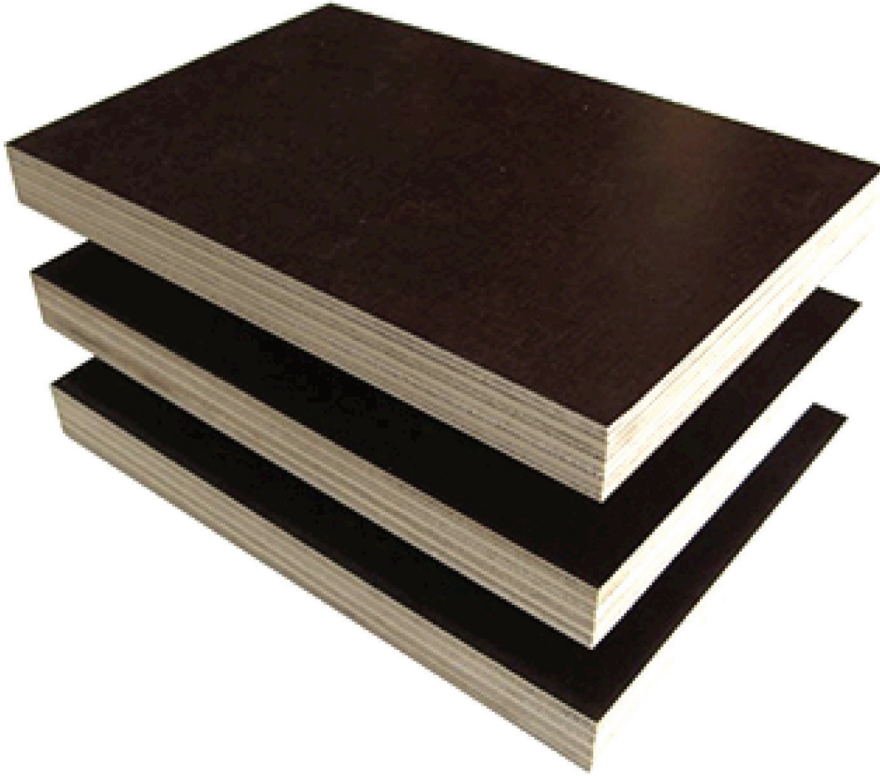
1220mm x 2440mm  
1250mm x 2500mm

Surface Properties: F/B (Smooth / Smooth)

Both sides are covered with a smooth film. The film surface is semi-glossy and smooth. It is easy to clean with water or steam.



## SP FORM



Product  
Grade:  
-G2S



### Size Tolerances

Measured in accordance with standard EN324, the plywood size and squareness tolerances meet EN 315 requirements.

#### LENGTH/WIDTH

#### TOLERANCE

<1,000 mm	±1mm
1,000-2,000mm	±2mm
>2,000 mm	±3mm
Squareness	±0.1% or ± 1mm/m
Edge Straightness	±0.1% or ± 1mm/m





# SP FORM



The durable overlay ensure smooth concrete cast finish and multiple use. The number of uses can rise up to 30-100 times and it is highly dependent on the site practice , requirements of concrete finish, used overlay, handling and storage practices.

## Thickness, Structures and Thickness Tolerances of the Panels

Length/Width (mm)	Number of Plies (pcs)	Thickness Min.(mm)	Tolerance Max.(mm)
15	11	13.7	15.3
18	13	16.5	18.1
21	15	19.4	20.9

\*\*Moisture content of the product affects its dimensions.

\*\*Average density of SP Natural Plywood is 690-775 kg/m<sup>3</sup> air dry.

\*\*Customised tolerances are possible but must be agreed separately. \*\*Special Structures and thickness are available on request.



# Comparison Between Rubberwood and Birch

Type of plywood Characteristics	Rubberwood Plywood	Birch Plywood
<b>Appearance</b>	More texture, has a nice deep dark colour	Less texture and lighter in colour
<b>Type</b>	Hardwood	Hardwood
<b>Durability</b>	Quite durable	Quite durable
<b>Wood colour</b>	Medium brown	Light reddish-brown
<b>Workability</b>	Excellent workability	Easy to work
<b>Resistance to the elements</b>	Resistant to burning and eco-friendly	Less resistant to fire
<b>Availability</b>	Easily available	Abundantly available
<b>Rot Resistant</b>	Low natural rot-resistant properties	Does not have rot-resistant properties
<b>Allergies/Toxicity</b>	Not harmful	Skin and respiratory irritation

# Phenol Formaldehyde

**Good runnability;  
High resin reactivity**



**Non-toxic and  
non-hazardous**

**FSC\*  
Certified  
Forests**



**Lower Carbon  
Footprint**



**Meets  
Stringent  
Emission  
Standards**



**Stable Glue mix,  
workable up to many hours**

**Comprising of sustainable, non-fossil and renewable material  
.i.e. Lignin, as it replaces about 50% of Phenol by weight ratio.**

**Potential application extends beyond plywood to OSB, particleboard,  
laminated veneer lumber, high pressure laminates & surface films.**

## Technical Data Sheet (Performance Characteristic) Rubberwood VS Medium Light Hardwood

Plywood Type :		18 mm Rubberwood Plywood	18 mm BB/CC Plywood		
Species		Rubberwood	Medium Light Hardwood		
Panel Size		1220mm x 2440mm			
No. of Plies		13	7		
Bonding / Adhesive		Water Boil Proof (WBP) /Phenol Formaldehyde			
Property	Test Method	Value of Test			
Moisture Content	EN 322	12.0 %	9.2 %		
Density	EN 323	767 kg/m <sup>3</sup>	689 kg/m <sup>3</sup>		
Modulus of Rupture (MOR)	Parallel	EN 310	39.9 N/mm <sup>2</sup>	25.2 N/mm <sup>2</sup>	
	Perpendicular		45.4 N/mm <sup>2</sup>	47.9 N/mm <sup>2</sup>	
Modulus of Elasticity (MOE)	Parallel		3601 N/mm <sup>2</sup>	2269 N/mm <sup>2</sup>	
	Perpendicular		4644 N/mm <sup>2</sup>	5162 N/mm <sup>2</sup>	
Class Grade		F30/25 E40/30	F15/30 E20/50		
Bonding Quality (Shear Strength)	EN 314 -1	100%	Requirement ≥ 90%	100%	Requirement ≥ 90%
	EN 314 -2				

This performance characteristic is according to the standard BS13986:2004 + A1:2015 & JIS A 1460:2015.  
 All figures shown in the report revealed the physical properties of sample plywood, not necessarily the actual plywood you received

Date : 28/7/2022

Prepared by:

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