

Riga Combi

A blend of birch and alder plywood





As a trusted manufacturer of high-quality birch throughout Riga Wood plywood, we are pleased to offer our customers a durable and versatile option for their plywood needs. In Riga Combi the qualities of both birch and alder are blended together to create a panel that is strong, stable and easy to work with.

One of the key features of our birch-alder plywood is that it has two external birch veneer layers on each side. This construction method is important for maintaining the strength and stability of the plywood, as birch is a strong and durable wood that can withstand significant loads and stress.



Riga Combi is a plywood composed of birch and alder veneer layers, available as Riga Ply Combi, Riga Form Combi and Riga Tex Combi.

Thin and strong

Riga Combi is made from thin veneer plies, making the plywood more flexible and less prone to cracking and splitting. This makes our birch-alder plywood more durable and reliable, especially in applications where it may be subjected to stress or movement. Second, thin plies are lighter in weight and easier to handle, making Riga Combi easier to transport and install. Finally, thin plies allow more precise and detailed machining, which can be important for certain applications.

Construction of Riga Combi

Mixed construction plywood, composed of 1.45 mm birch ("/" – cross grain; "-" – long grain) and 1.45 mm alder (" \int " – cross grain) veneers by cross bonding in accordance with the following lay-up scheme:

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15 mm / - ʃ - ʃ - ʃ - ʃ - /
18 mm / - ʃ - ʃ - ʃ - ʃ - ʃ - /
21 mm / - ʃ - ʃ - ʃ - ʃ - ʃ - ʃ - /
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Face veneers: birch, core veneers: birch and alder





Riga Combi is a durable panel, designed for a wide range of demanding applications where lightweight but strong construction is required.



HEAVY BUILDING

Formwork systems Loose shuttering Precasting Scaffolding



LIGHT BUILDING

High-end flooring
Industrial wall & Ceiling linings
Joinery, furniture & Shopfittings
Parquet
Stage systems & Industrial flooring

Major advantages

- Constant and reliable product quality
- Two external birch veneer layers on each side
- Made of a mixture of thin birch and alder plies
- Weather resistant gluing and water resistant surface
- Resistant to commonly used chemicals and surface impact
- Can be reused for shuttering many times
- Easy to clean for repeated uses
- Sustainable product with long lifespan

Overlaying

Uncoated or overlaid with resin impregnated film, which is hot-pressed onto the sheet surface.

- Riga Ply Combi WG grade plywood
 Riga Form Combi overlaid with dark
 brown phenol film (120, 220 g/m²)
- Riga Tex Combi overlaid with dark brown phenol film with a rough wire mesh pattern (120, 220 g/m²)

Edges are sealed with orange (RAL 1007) moisture resistant acrylic paint.

Gluing classes

Riga Wood plywood is glued with weather and boil-proof lignin phenol formaldehyde or phenol formaldehyde resin adhesive according to EN 314/Class 3 Exterior.

Controlled emissions

Riga Wood plywood meets the formaldehyde emission requirements of EN 13986 Class E1. Test method EN ISO 12460-4:2016.

Sustainability

We strongly believe that wood-based products in industrial use are a great option for carbon storage and a big part of the solution to achieve climate change mitigation. The key principles of sustainability and responsible governance are deeply rooted in our company's traditions and we aim to further develop our initiatives by actively engaging with stakeholders, material suppliers and clients.

Tolerance

Nominal thickness, mm	15	18	21
Number of plies	11	13	15
Lower limit, mm	14.3	17.1	20
Upper limit, mm	15.3	18.1	20.9

Parameter	Tolerance
Length, width (mm) < 1000	± 1 mm
Length, width (mm) – 10002000	± 2 mm
Length, width (mm) > 2000	± 3 mm
Squareness tolerance	± 1 mm/m
Edge straightness	± 1 mm/m

Size, squareness and thickness tolerances fulfil the requirements of EN 315.

Average density 670 kg/m³

Panel sizes

1250 mm × 2500 mm / 1500 mm × 3000 mm

Mechanical performance

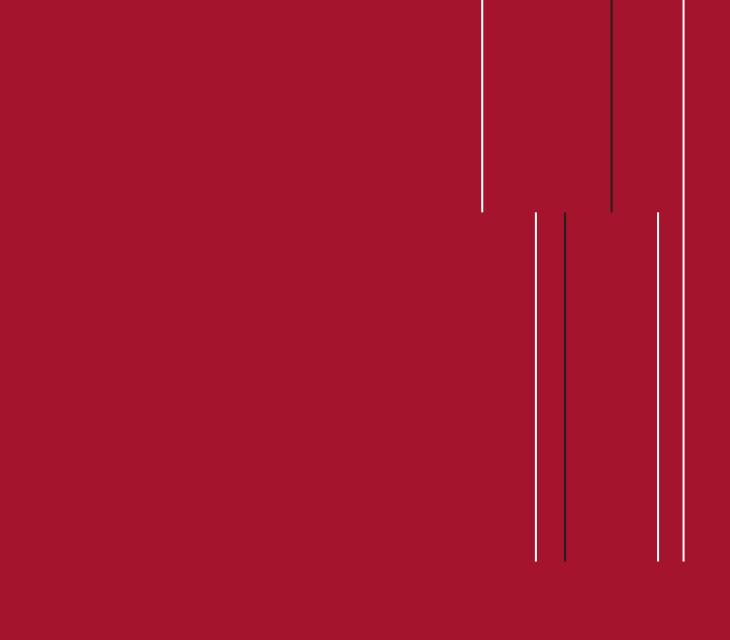
Riga Ply Combi (birch-alder plywood) compared with Riga Ply (birch throughout plywood)

Properties	Plywood	Results											
		15 mm			18 mm			21 mm					
		II		1		II		Т		Ш		Т	
Modulus of Elasticity, Class & N/mm², EN 636, at least	Combi	E70	6300	E50	4500	E70	6300	E50	4500	E70	6300	E50	5400
	Birch	E80	7200	E60	5400	E80	7200	E60	5400	E80	7200	E60	5400
Bending strength, Class & N/mm², EN 636, at least	Combi	F30	52	F30	45	F30	45	F30	45	F30	52	F30	45
	Birch	F40	60	F35	52	F40	60	F35	52	F35	52	F30	45
Bonding quality, Class, EN 314	Combi	Class 3 (EXT)											
	Birch												
Free formaldehyde emissions, Class, EN ISO 12460-3	Combi												
	Birch	Compliant with E1											

^{*} Plywood moisture content 9 ± 3 %

 ^{□ =} parallel to the face grain

 $[\]perp$ = perpendicular to the face grain



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