Riga Wood
Latvijas Finieris Group

Riga Silent

Riga Silent is a birch throughout plywood composite panel with sound reduction material core, designed to provide improved sound insulation and absorb vibrations.

Applications

Riga Silent is a perfect solution for applications that require increased sound insulation, high strength and elasticity – the panel is ideally suited for end uses where lightweight but strong construction is required.

RAIL TRANSPORT
Passenger wagons
Cargo wagons

ROAD TRANSPORT
Buses

SEA TRANSPORT
Yachts & Boats

Major advantages

- Good sound absorption and noise insulation properties
- Improved damping of vibration
- Withstands large mechanical loads, excellent strength-to-weight ratio
- High quality durable surface with various overlaying possibilities
- Good machining qualities with conventional woodworking equipment
- Sustainable product with long life span

Face options

Riga Silent can be combined with most other Riga brands, either uncoated or overlaid. Depending on the overlay used, abrasion, crack, UV resistance and other different properties can be achieved.
Riga Wood experts will advise the most appropriate overlay depending on the end use.

Airborne sound insulation

Airborne sound insulation according to EN ISO 717, reaches 31 dB (100-5000 Hz) and higher. The sound insulation performance may vary depending on the thickness and construction of the plywood.

Further processing

Panels can be further processed according to customer's specification with: cut-to-size, CNC, drilling, milling, jointing, edge machining, and assembling in sets. Following any on-site cutting, machining and drilling, all exposed edges should be thoroughly sealed.

Surface properties

For Riga Silent either uncoated or coated panels can be used. Riga Ply is sanded on both faces, suitable for a variety of finishes. Overlaid, film faced or coated panels surfaces improve panel resistance against mechanical damage and wear. It resists abrasion, commonly used chemicals and is weather and moisture resistant.

Base plywood

Composite panel made of 1.45 mm cross-bonded birch veneer and 2 or 3 mm sound insulation material. Customised constructions available upon request.

Edge sealing

The edges can be sealed upon request.

Panel sizes

- 1220 / 1250 mm × 2440 / 2500 / 2745 / 2750 / 3000 / 3050 / 3340 / 3660 mm
- 1500 / 1525 mm × 2440 / 2500 / 2745 / 2750 / 3000 / 3050 / 3340 / 3660 mm

Standard thicknesses

Riga Silent thickness	Thickness of sound insulation material	Plywood thickness (the upper layer)	Plywood thickness (the lower layer)
15 mm	2 mm	6.5 mm	6.5 mm
16 mm	3 mm	6.5 mm	6.5 mm
18 mm	3 mm	6.5 mm	9 mm
21 mm	3 mm	9 mm	9 mm

Other plywood and sound insulation material core thicknesses upon request.

Riga Silent

Gluing classes

Riga Wood birch plywood is glued with weather and boil-proof phenol formaldehyde or lignin phenol formaldehyde resin adhesive according to EN 314/Class 3 Exterior.
The cork/rubber insert is bonded using an emulsion polymer isocyanate (EPI) adhesive with hardener intended for end-uses, where high water and weather resistance is needed.

Formaldehyde emission

Riga Wood birch plywood formaldehyde emission level is significantly below EN 13986 Class E1 and complies with new REACH Formaldehyde Restriction Regulation EU 2023/1464, EPA TSCA Title VI and CARB Phase 2.

Compliance to REACH

Riga Wood birch plywood meets all the requirements of the REACH Regulation. It does not contain SVHC (Substances of Very High Concern) listed on the REACH candidate list for authorisation exceeding concentration 0.1 % by weight.

Fire classes/resistance

Fire performance is in accordance with EN 45545-2 R10: HL1 to HL3 for Railway industry. Particular product classification available on request.

Tolerance

Parameter	Tolerance
Length, width (mm) < 1000	± 1 mm
Length, width (mm) – 1000..2000	± 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.
Customised tolerances available on request.

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.

Storage

Plywood must be stored in a well ventilated, weather protected area with the panels stacked both horizontally and level.

Additional information is available in the Riga Wood plywood handbook:
https://www.finieris.com/en/downloads/brochures