

Riga Smooth Mesh

Riga Smooth Mesh is a birch throughout plywood, overlaid with a hard wearing special smooth wire mesh phenol pattern, combining both functionality and a decorative visual appearance.

Applications

Riga Smooth Mesh is a durable panel for demanding applications; it can be used anywhere a heavy-duty, high wear resistant and decorative appearance is required.



LIGHT BUILDING

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



ROAD TRANSPORT

Passenger cars

Major advantages

- Decorative finish with smooth, visually attractive surface
- Durable and heavy-duty with high wear resistance
- Excellent strength-to-weight ratio
- Weather resistant gluing and water resistant surface
- Surface is resistant to commonly used chemicals and surface impact, easy to clean for repeated uses
- Sustainable product with long life span

Further processing

Riga Smooth Mesh 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.

Overlaying

Overlaid with resin impregnated film, which is hot-pressed onto the panel surface, using a wire net. Depending on the application, films impregnated with modified phenolic or melamine resins can be applied.

Face: smooth wire mesh pattern

Reverse: smooth film, and, if specified, both sides can be covered with a wire mesh pattern

Wire mesh pattern availability:

- Small Mesh - 4.5 mesh per 1 cm
- Large Mesh - 2.5 mesh per 1 cm

To enhance performance and appearance it is possible to use multi-layer films.

Surface properties

The wire mesh overlay improves panel resistance against mechanical damage and wear. It resists abrasion, commonly used chemicals and is weather and moisture resistant. Depending on the film used (modified phenolic or melamine), abrasion, crack, UV resistance and other properties can be significantly improved. Riga Wood experts will advise the most appropriate overlay depending on the end use.

Wear resistance

Taber test (EN 438-2) up to 2,500 revolutions depending on the coating.

Dark brown 120 g/m² up to 400 revolutions
Dark brown 220 g/m² up to 900 revolutions
Dark brown 440 g/m² up to 2,500 revolutions

Film colour

Based on phenolic resin:

- dark brown
- black
- green*
- light brown*
- yellow

Based on melamine resin:

- silver grey
- honey*
- opal white*
- light grey
- blue

Film weights from 120 g/m² to 440 g/m².

*With BB grade veneer under these translucent films.

Edge sealing

The edges are sealed with colour matched moisture resistant paint. Other colours are available upon request.

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Panel sizes

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

Standard thicknesses

6.5, 9, 12, 15, 18, 21, 24, 27, 30, 35, 40, 45, 50 mm
Other thicknesses available on request.

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.

Tolerance


Nominal thickness, mm	4	6.5	9	12	15	18	21	24	27	30	35	40	45	50
Number of plies	3	5	7	9	11	13	15	17	19	21	25	29	32	35
Lower limit, mm	3.5	6.1	8.8	11.5	14.3	17.1	20	22.9	25.8	28.7	33.6	38.4	43.3	48.1
Upper limit, mm	4.1	6.9	9.5	12.5	15.3	18.1	20.9	23.7	26.8	29.9	35.4	41.2	46.4	51.5

Moisture content affects plywood dimensions; indicated sizes and thicknesses relate to a moisture content $9 \pm 3\%$.

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.

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

The provided information is for reference only and Riga Wood reserves the right to amend and supplement the specifications of manufactured products without prior notice. Wood is a living material; therefore, each panel is unique and minor differences are possible. Riga Wood does not guarantee a product's compliance with the requirements of any specific purpose.

Bonding with moisture resistant low emission melamine-urea-formaldehyde resin according to EN 314 / Class 1 and BS 1203 / H1 possible.

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.

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.