



**Riga Wood**  
Latvijas Finieris Group



# Riga Poliform

Riga Poliform is a birch throughout plywood, overlaid with a high performance and highly durable wood-plastic composite (WPC) material.

## Applications

Riga Poliform is a specialty formwork panel with superb mechanical properties and is designed to last longer with as many as 300 uses dependant on specific end use and site practice.



**HEAVY BUILDING**  
Formwork systems  
Precasting

## Major advantages

Tough and impact resistant surface for smooth concrete finish  
No rippling As many as 300 reuses when correctly installed  
Recycled wood fibres utilised in the wood-plastic overlay Water resistant surface and weather resistant gluing Surface is resistant to commonly used concrete release agents, diluted acids and alkalis, easy to clean with water or steam for repeated uses Special solutions are available for applications requiring a higher surface elasticity such as nailing Easy to machine and fix on site Variety of standard sizes, cut-to-size and jointed panels available Sustainable product with long life-span

## Further processing

Riga Poliform can be further processed according to customer's specification with: cut-to-size, CNC, drilling, milling, jointing, edge machining, and assembling in sets.

## Coating

The composite material is made of wood fibres and polypropylene, overlay thickness 0.8 mm or 1.6 mm. The coating covers both faces, upon request it is possible to coat the reverse side with film.

Two coating types available:

WPC SP1 – high surface hardness for durability

WPC SP2 – higher surface elasticity for nailing applications

## Surface properties

The wood-plastic composite coating offers a highly durable, hard and dense surface, increasing panel resistance against mechanical damage and wearing. It resists concrete release agents, cement alkalis and other corrosive chemicals.

The panels can be used within a temperature range from –40 °C up to +80 °C. Cold temperatures can reduce WPC flexibility making it less suitable for nailing. After use, panels release well and maintain their performance for a long time.

Riga Wood experts will advise the most appropriate overlay depending on the end use.

## Wear resistance

Surface hardness (Shore D Durometer) for WPC SP >72 HD; WPC SP2 >62 HD

Taber test (EN 438-2) up to 17,000 revolutions

## Film colour

The standard colour is matt grey, other colours – blue, green, yellow, red, natural (without colour pigment).

## Edge sealing

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

## Panel sizes

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

## Standard thicknesses

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

# Riga Poliform

## 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 overlay is bonded with a combination of melamine-urea-formaldehyde (MUF) 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 EPA TSCA Title VI and CARB Phase 2.

## Tolerance

Nominal thickness, mm	9	12	15	18	21	24	27	30	35	40	45	50
<b>Number of plies</b>	5 + 2×WPC	7 + 2×WPC	9 + 2×WPC	11 + 2×WPC	13 + 2×WPC	15 + 2×WPC	17 + 2×WPC	19 + 2×WPC	21 + 2×WPC	25 + 2×WPC	29 + 2×WPC	32 + 2×WPC
<b>Lower limit, mm</b>	9.3	12	14.7	17.5	20.3	23.2	26.1	29	31.9	36.8	41.6	46.5
<b>Upper limit, mm</b>	10.1	12.7	15.7	18.5	21.3	24.1	26.9	30	33.1	38.6	44.4	49.6

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

Parameter	Tolerance
<b>Length, width (mm) &lt; 1000</b>	$\pm 1$ mm
<b>Length, width (mm) – 1000..2000</b>	$\pm 2$ mm
<b>Length, width (mm) &gt; 2000</b>	$\pm 3$ mm
<b>Squareness tolerance</b>	$\pm 1$ mm/m
<b>Edge straightness</b>	$\pm 1$ mm/m

Size and squareness 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>

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.

# Riga Poliform Good Site Practice

## Storage

- Plywood must be stored in a well-ventilated, weather-protected area with the panels stacked both horizontally and level.
- Direct sunlight should be avoided as well.
- Riga Poliform should be acclimatised to local environmental conditions prior to installation. During acclimatisation, plywood absorbs air humidity which helps minimise swelling.

## Formwork preparation

- The number of re-uses depends on correct handling, preparation, installation, and good site practice in general.
- Riga Poliform edges are sealed with moisture-resistant paint to reduce water absorption, and following any on-site cutting or machining, all exposed edges should be thoroughly sealed with moisture-resistant paint.
- To achieve the maximum number of re-uses, face damage should be avoided. Therefore, using screws and nails is not recommended. Where face fixing is unavoidable, screws, rather than nails, are recommended to avoid damaging the WPC overlay and allowing water penetration.
- The release agent must be used in accordance with the suppliers' recommendations – incorrect application may have a detrimental effect to the concrete finish.
- The panels can be used within a temperature range of -40 °C up to +80 °C. Cold temperatures may impact WPC surface hardness, making it unsuitable for nailing.

- Since moisture may affect plywood dimensions, it is recommended that joints are sealed with a silicone filler.
- Concrete surface colour may vary over a panel's lifetime.
- Long-term direct sunlight may damage the Riga Poliform faces and should be avoided – UV damage to the surface can appear on the finished concrete face.

## After use

- Proper care and maintenance of panels increases the number of uses.
- Riga Poliform should be cleaned immediately after use, and panels should be re-oiled before each subsequent cycle.
- Panel repair is possible with suitable fillers or plugs.

## Recycling

- At the end of their lifespan, Riga Poliform panels should be disposed of according to local legislations.
- All Riga Wood plywood packaging should be recycled in the appropriate waste stream.

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