

Technical data sheet

RePanel sheets — 100% recycled polystyrene (rPS). Made in Russia. Every sheet's pattern is unique.

Specifications

Composition	100% recycled polystyrene (rPS).
Sheet formats	2200 × 1100 mm and 1000 × 1000 mm.
Thicknesses	12–40 mm. In stock: 12 / 16 / 18 / 20 / 30 / 40 mm.
Density and weight ¹	1.0–1.1 g/cm³; 13–42 kg/m² depending on thickness.
Strength ¹	Tensile 22–26 MPa, flexural 49–56 N/mm², modulus of elasticity 2100–2240 MPa.
Hardness ¹	Shore D 73–74.
Heat resistance ¹	HDT 72–86 °C, Vicat softening 95–98 °C. Keep away from direct heat sources.
Fire rating	EN 13501-1 — Class E uncoated (laboratory test report available).
Moisture and fungi ¹	Water absorption <0.01%, fungal resistance 0% growth (ASTM G21-15).

¹ Typical values for recycled polystyrene (rPS) sheets from published manufacturer data; RePanel's own testing covers fire rating EN 13501-1 Class E (laboratory report).

Colours and finishes

Core finishes	Translucent, colour flecks; white, colour flecks; clear, light-blue flecks; blue, white flecks; grey, white flecks; black, colour flecks; white, black flecks.
Made to order	12 core combinations, mixes of in-stock colours, RAL / Pantone dyeing (from 500 kg).
Maps for rendering	Seamless, 500 × 500 mm tile: re-panel.ru/for-architects

Lead times

Sheets from stock	from 3 working days
Sheets made to order	10–14 working days
Custom colour: a mix or RAL / Pantone dyeing, matching included	from 3 weeks
HoReCa ready-made pieces	10–15 working days
Furniture from the shop and the configurator — made to your size	from 45 working days
Small objects — in batches	30–45 days

Delivery is separate — a manager will quote it.

Machining

Sawing	Circular saw, band saw, jigsaw. Carbide-tipped tooling.
Milling	CNC and hand router: shapes, grooves, sink cut-outs.
Drilling	Standard wood and metal drill bits. Doesn't crack.
Sanding	P80–P320 abrasives; restores the matte finish.
Thermoforming	Smooth bends and radii when heated.
Bonding	MMA adhesives (such as Plexus) and MS polymers; mechanical fixings with slotted holes to allow for expansion.

Use and care

Water	Doesn't absorb water, swell or rot — fine for wet areas.
Light	Moderate UV resistance: no limits indoors; under constant direct sun the shade may change over time.
Heat	Expansion ≈ 2 mm per metre per 10 °C — fix through slotted holes. Keep away from direct heat sources.
Care	Microfibre and a neutral, ammonia-free cleaner. Never: solvents (acetone, white spirit, petrol), alcohol over 70%, bleach.
Scratches	Sand out with a random-orbit sander, P120 → P2000, without overheating.
Take-back	Clean offcuts and end-of-life panels are taken back and recycled into new sheets.

re-panel.ru

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PRODUCT
RePanel rPS sheet

THICKNESS, MM
12–40

DOCUMENT
Data sheet

FIRE RATING
EN 13501-1 · E

SHEET
1 / 1

REVISION
09.10.2026