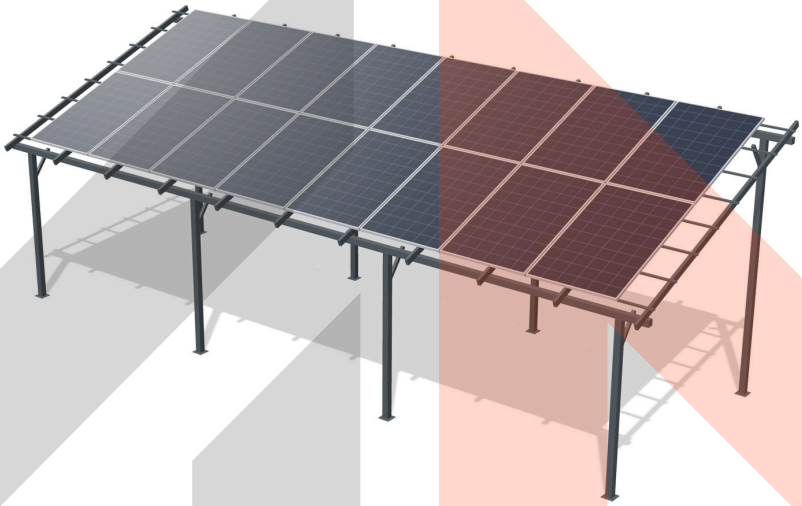
MinerTech Solar carport frame

CP-B 10×4 m

A carport for 2 cars whose roof is a ≈ 7.2–7.56 kW solar plant.



Main specifications

Footprint / area	**10 × 4 m · 40 m²**
Car spaces	**2**
Height low / high	**2140 / 3620 mm**
Panels on the roof	**up to 16 pcs 1134 × 1762 mm or 12 pcs 630 W**
Tilt angle	**20°**
Design snow load	**up to 130 kg/m² (≈ 1.3 kPa)**
Frame weight	**≈ 560 kg (calculated from profile lengths)**

Series B

Beam series B: rafters of 80 × 40 × 2 mm steel box section rest on 80 × 80 mm main beams. A simple, reliable design with the lowest structure height and the lowest price.

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Frame specification

Footprint / area	**10 × 4 m · 40 m²**
Car spaces	**2**
Height low / high	**2140 / 3620 mm**
Roof structure	**beam type: rafters of 80 × 40 × 2 mm tube**
Tilt angle	**20°**
Design snow load	**up to 130 kg/m² (≈ 1.3 kPa)**
Posts 80 × 80	**4 + 4 pcs, wall 3 mm, base plates 150 × 150 × 6 mm**
Main beams 80 × 80	**4 × 3413 + 2 × 3173 mm, wall 2 mm**
Rafters	**11 pcs × 3900 mm (80 × 40 × 2)**
Purlins 40 × 20 × 2	**8 × 4000 + 8 × 6000 mm**
Fasteners included	**bolts and nuts 76, washers 152, screws 88**
Connection	**bolted, no welding on site**
Frame weight	**≈ 560 kg (calculated from profile lengths)**
Finish	**powder coating, any RAL colour**
Frame warranty	**2 years**

Panels and energy

Panels 1134 × 1762 mm (≈ 450 W), portrait	**up to 16 pcs · ≈ 7.2 kW · ≈ 7 000 kWh per year**
Panels 2383 × 1133 mm (630 W, e.g. Tadiran TD630), landscape	**12 pcs · ≈ 7.56 kW · ≈ 7 400 kWh per year**

Estimated yield: London, panels facing south, 20° tilt, ≈ 1 000 kWh per year per kW of panels. A 6.2–6.5 kW hybrid inverter suits these outputs (or 11–12 kW with a margin).

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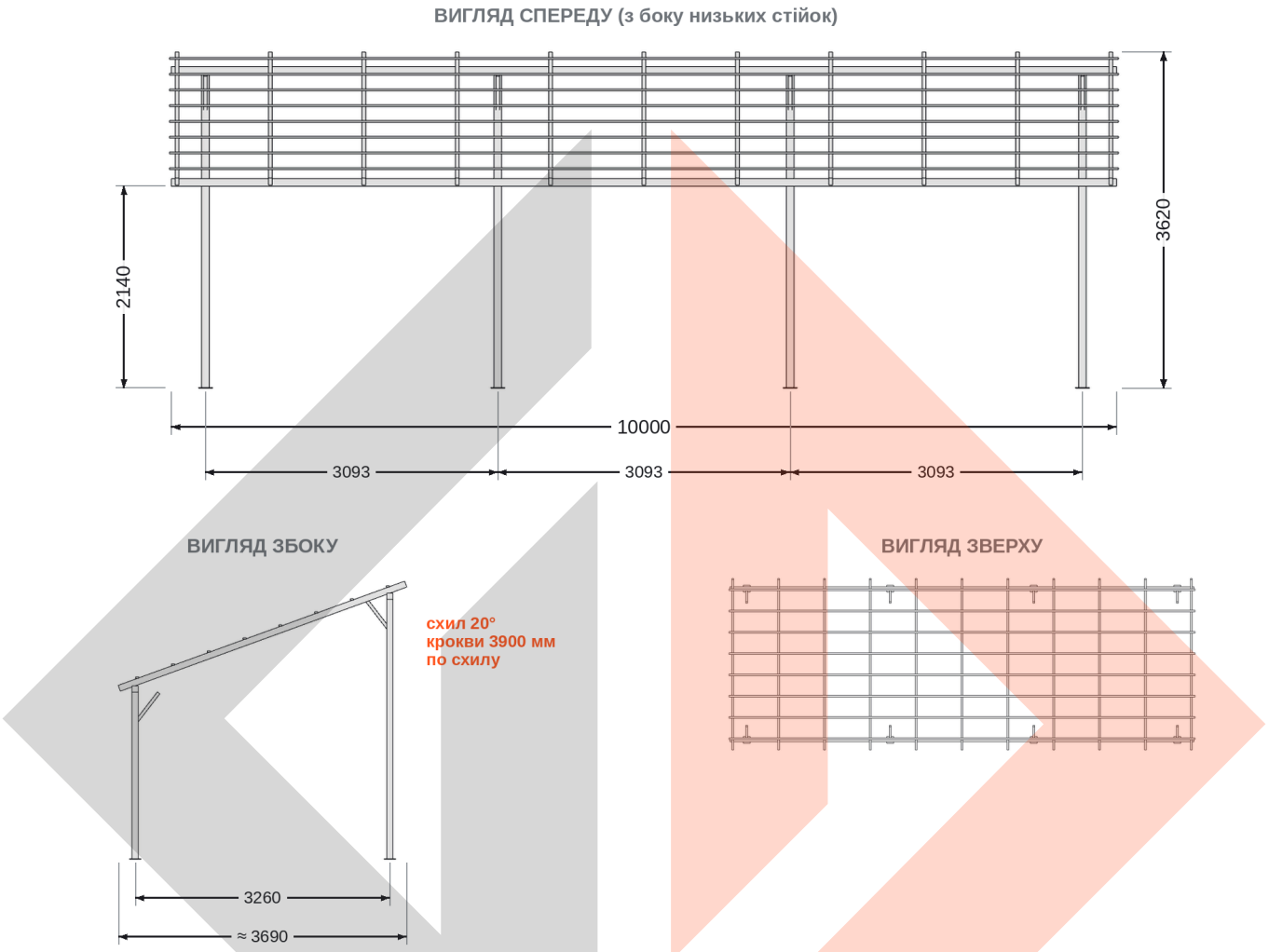
Drawing

MinerTech Навіс СР-В 10×4 м · креслення каркаса — розміри в мм



Розмір / площа	**10 × 4 м · 40 м²**
Стійки 80×80	**4 + 4 шт, стінка 3 мм, основи 150×150×6**
Схил / сніг	**20° · до 130 кг/м²**
Панелі	**до 16 шт 1134×1762 або 12 шт 2383×1133 (630 W)**
Маса каркаса	**≈ 560 кг**

Dimensions in millimetres. Heights low / high: to the top of the structure on the side of the low and high posts.

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Base and assembly

- Under each post: a concrete footing below the frost depth (for Dnipro ≈ 0.8–1.0 m) or a solid slab; the 150 × 150 × 6 mm base plate is fixed with anchors.
- Setting out: the distance between post rows and the post spacing as per the drawing; the diagonals of the rectangle must be equal.
- Assembly order: posts → main beams → rafters → purlins → panels on clamps. All joints are bolted.
- Gaps of ≈ 20 mm remain between the panels. For a fully dry carport, polycarbonate or profiled sheeting is laid under the panels.
- The frame and panel frames must be earthed; cables from the panels run along a rafter in conduit or a tray.
- 2140 mm clearance is enough for cars and crossovers; for a minibus, check the height.

Supplied

Included: metal frame (posts with base plates, main beams, rafters, purlins), fasteners (bolts and nuts 76 each, washers 152, screws 88), powder coating in any RAL colour.

Not included: solar panels and their clamps, roofing, foundation, installation, delivery.

Colour

RAL 9005 RAL 9016 RAL 7016 RAL 7035 RAL 9006 RAL 8017 RAL 5010

Other sizes for your plot or number of panels made to order. Frame warranty: 2 years.



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