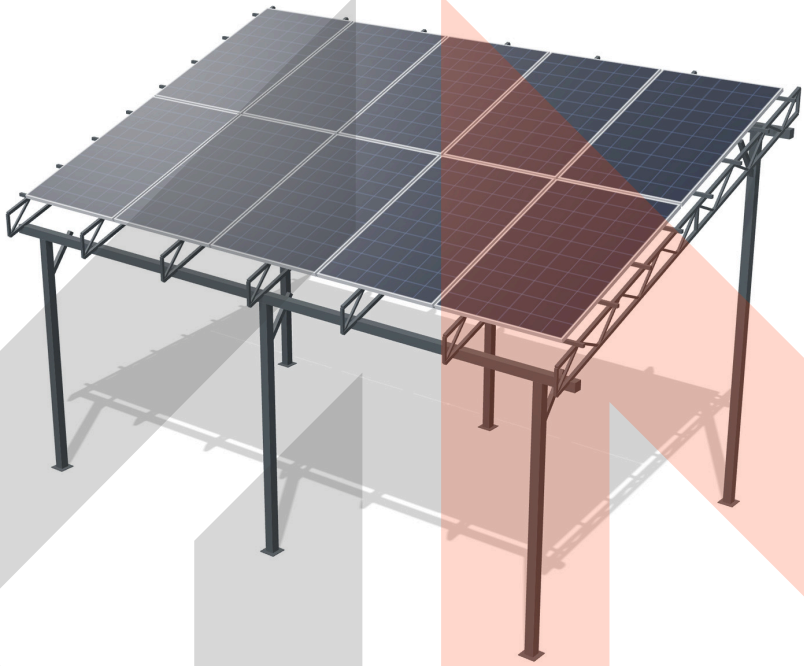
MinerTech Solar carport frame

CP-T 6×4 m

A carport for 1 cars whose roof is a ≈ 3.78–4.5 kW solar plant.



Main specifications

Footprint / area	**6 × 4 m · 24 m²**
Car spaces	**1**
Height low / high	**2300 / 3780 mm**
Panels on the roof	**up to 10 pcs 1134 × 1762 mm or 6 pcs 630 W**
Tilt angle	**20°**
Design snow load	**up to 130 kg/m² (≈ 1.3 kPa)**
Frame weight	**≈ 390 kg (calculated from profile lengths)**

T series

Truss series T: each rafter is made of two half-trusses of 30 × 30 × 2 mm tube, 230 mm deep. A lattice truss is stiffer than a solid tube of the same weight, sags less under snow; clearance under the roof is 2300 mm.

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Frame specification

Footprint / area	**6 × 4 m · 24 m²**
Car spaces	**1**
Height low / high	**2300 / 3780 mm**
Roof structure	**truss: each rafter is two half-trusses of 30 × 30 × 2 mm tube, 230 mm deep**
Tilt angle	**20°**
Design snow load	**up to 130 kg/m² (≈ 1.3 kPa)**
Posts 80 × 80	**3 + 3 pcs, wall 2 mm, base plates 150 × 150 × 6 mm**
Main beams 80 × 80	**2 × 6000 mm, wall 2 mm**
Rafters	**7 rafters = 14 half-trusses × 1950 mm (30 × 30 × 2, h 230)**
Purlins 30 × 30 × 2	**8 × 6000 mm**
Fasteners included	**bolts and nuts 66, washers 132, screws 56**
Connection	**bolted, no welding on site**
Frame weight	**≈ 390 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 10 pcs · ≈ 4.5 kW · ≈ 4 400 kWh per year**
Panels 2383 × 1133 mm (630 W, e.g. Tadiran TD630), landscape	**6 pcs · ≈ 3.78 kW · ≈ 3 700 kWh per year**

Estimated yield: London, panels facing south, 20° tilt, ≈ 1 000 kWh per year per kW of panels. A 4–6.5 kW hybrid inverter suits these outputs.

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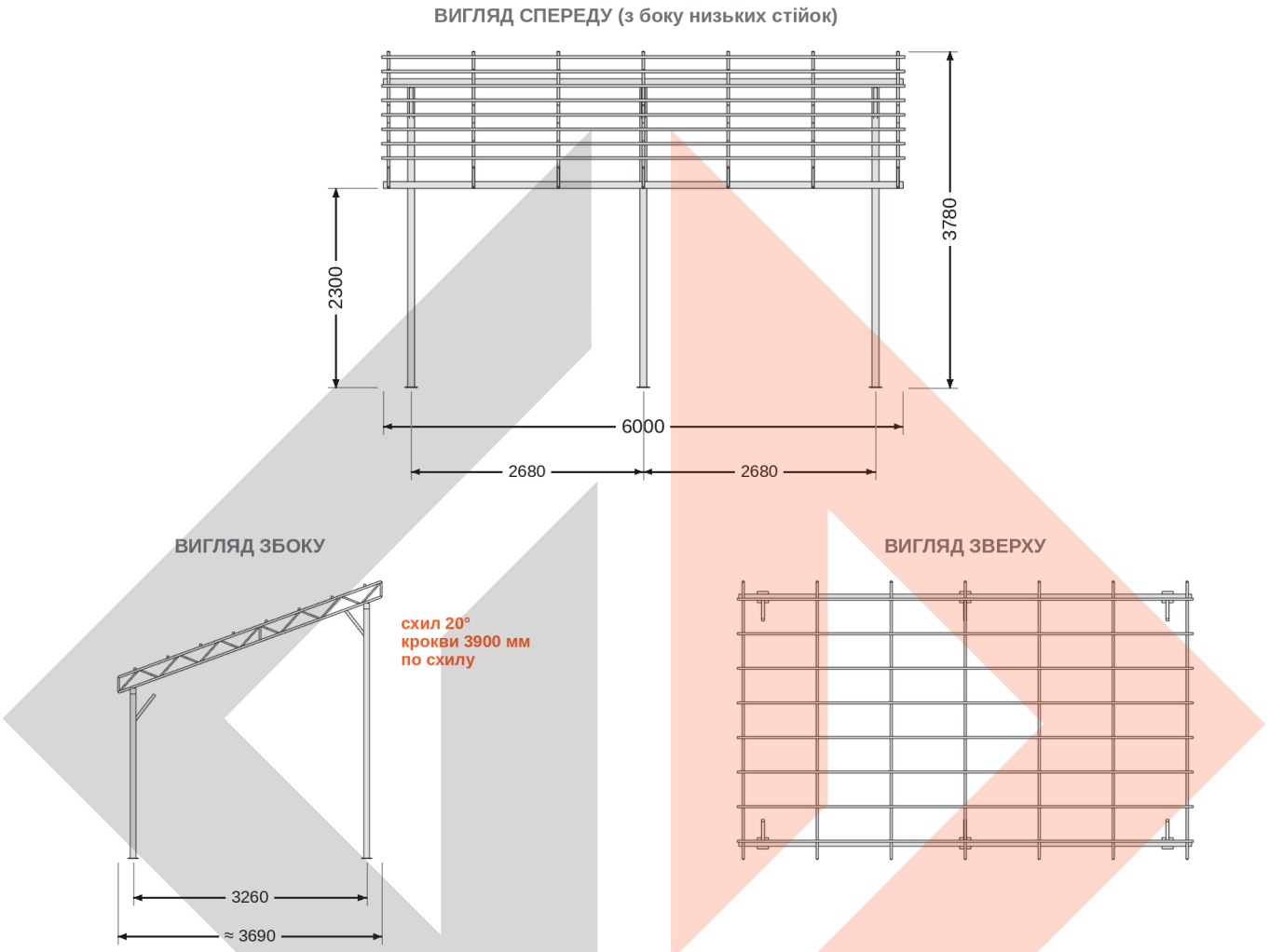
Drawing

MinerTech Навіс СР-Т 6×4 м · креслення каркаса — розміри в мм



Розмір / площа	**6 × 4 м · 24 м²**
Стійки 80×80	**3 + 3 шт, стінка 2 мм, основи 150×150×6**
Схил / сніг	**20° · до 130 кг/м²**
Панелі	**до 10 шт 1134×1762 або 6 шт 2383×1133 (630 W)**
Маса каркаса	**≈ 390 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.
- 2300 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 66 each, washers 132, screws 56), 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.

