ECOCOCON KIT HOUSE

SOLAR C

With 61 m2 of floor area, the Solar C is a small home with solar-optimised roof.



What is an EcoCocon Kit House?

EcoCocon Kit Houses:

- » are a ready-made solution for people looking for a modern, comfortable, and healthy housing at a smaller scale;
- » include all materials necessary to erect the rough structure of the house (exterior walls and roof), and fit comfortably into one lorry, shipped just in time when your foundation is ready;
- » provide quality off-the-shelf architecture easily adapted to your taste, saving you time and energy by supplying detailed architectural drawings;
- » can be realised by any company specialised in wood construction and are particularly well suited to the needs of self-builders;
- » allow for a high level of customisation. All interior and exterior finishes are chosen by the client, making every EcoCocon kit house one-of-a-kind.

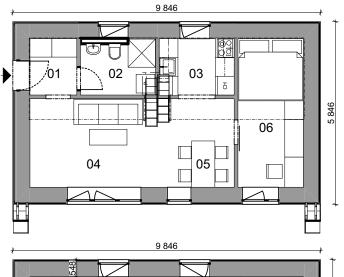
Solar C

KIT PRICE: 27 500 € EXCL. VAT

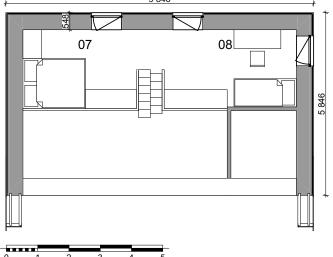
The Solar C kit house is a small home with solar optimised roof inclination and shaded windows to the south. There is one closed bedroom on the ground floor, and a large multifunctional gallery on the first.

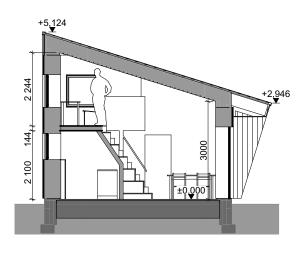
The treated floor area is 61 m².





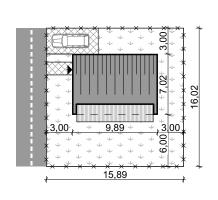
Room	Description	Size (m²)
01	Entrance	3.0
02	Bathroom	4.1
03	Kitchen	4.3
04	Dining Room	5.9
05	Living Room	12.6
06	Master Bedroom	10.1
07	Sleeping Gallery 1	9.8
08	Sleeping Gallery 2	11.2
:	TOTAL	61.0

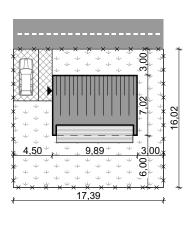


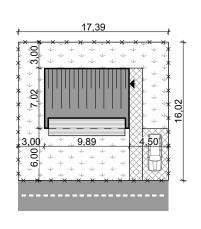


MINIMUM PLOT SIZE

Depending on access to your home, this is the minimum plot size we recommend. The house can also be delivered as a mirrored version. The glazed front should always be oriented to the south.

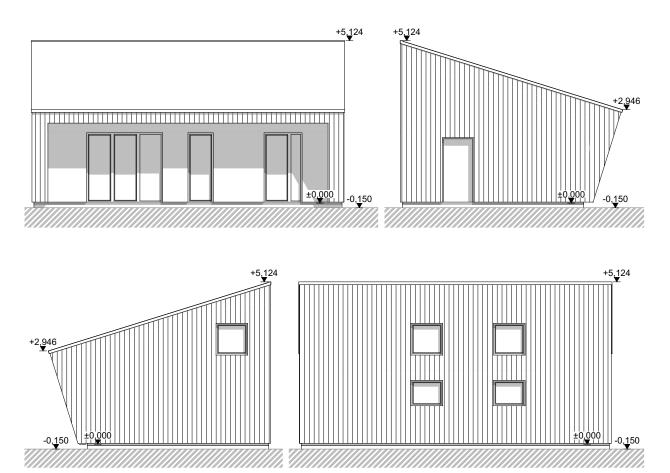








ELEVATION



The height of the building can vary slightly depending on the type of foundation you decide to use.

KIT CONTENT

The kit contains all necessary materials to build the airtight shell of the house - structural, insulating and vapour-permeable EcoCocon walls with a U-value of 0.13 W/m2K U-value and a roof structure ready for roof cover.

All other elements need to be selected by the client, sourced locally and performed by an external company.

Materials included in the Kit price:

Exterior walls	
EcoCocon wall panels	89.27 m ² Structural timber-straw wall elements
Plywood 21 mm	12 m ² Support for lintels on side of openings
Wood screws 6x60 mm	200 pcs For mounting plywood in widnow openings
Wood screws 8x100	1000 pcs For assembling panels and noggings
Wood screws 8x140	250 pcs For assembling panels and roof plates

Steico Protect 60 mm	150 m²	Outside wood fibre insulation
Base plate		
Base plate 45x95 mm	66 m	Anchoring ring beams, C24
Extruded polystyrene 20 mm	14.4 m ²	Precut width for insulation in 2 layers between the base plates
Anchoring screws 12.5x120 mm	100 pcs	For fixing the base plate
Humidity barrier 300 mk (50 cm wide)	50 m	Hydroinsulation for concrete foundations, to be placed under the base plates
Bituminous rubber mass for humidity barrier		For ensuring airtightness between the barrier and the foundation
Airtightness		
EcoCocon breather membrane	225 m²	Outside and top wrap for panels, Pro Clima Mento 1000
Air-sealing tape Tescon Invis 60 mm	330 m	For airtight taping of EcoCocon membrane
SIGA Primur tubular bag	4 pcs	Airtight sealing glue for the airtight membrane
Plywood 0.65 cm, strips 90 mm wide	180 m	To fix EcoCocon membrane to the panels
Plywood 0.65 cm, strips 45 mm wide	64 m	To fix EcoCocon membrane to the panels
Roof construction		
Roof plates	4 pcs	Roof plates with precut inclined top
I-beams Steico Joist 45/360	17 pcs	Roof load-bearing elements, pre-cut and reinforced, ready for installation
Wood screws 5x90 mm	200 pcs	For mounting interior roof membrane placeholder
Corner ABR90	64 pcs	I-beam connectors
Wood screws 5x40 mm	800 pcs	For attaching ABR90 corner
Steico Universal 22 mm	85.5 m ²	Roof undercover boards
Screws 6x60 mm	400 pcs	For fixing VestaEco LDF Uni
ProClima Intello 1.5 m	75 m ²	Breathable interior roof membrane
Timber 28x45	90 m	Interior roof membrane placeholder
Noggings for wall extensions	4 pcs	Prefabricated elements ready for mounting
Noggings under roof	13 pcs	Prefabricated elements ready for mounting
Weather protection		
Protective tarpaulin	150 m²	Weather-tight cover for short-term storage of panels on site
Cardboard corner protections	8 pcs	To prevent panel corners from piercing the tarpaulin
Project		
Architectural project	1 set	Basic project drawings for download (needs to be adjusted by local architect for building permit)
Assembly manual	1 set	Delivered as PDF for printing



We will also be happy to deliver these additional materials if required:

ltem	Price w/VAT	Description
Interior clay plaster		
White clay plaster	€495	final top layer for exterior walls, 22 packs x 25 kg, base coat to be sourced locally
Wood fibre panels 5 mm	€30.8	for clay plastering on wood, 27.6 m ²
Windows and door		
Windows and external door	Upon request	Wooden frame, triple glazing, overall U-value min 0.80 W/ m²K for windows and 1.00 W/m² K for door

Other elements and materials you will need to source locally:

ltem		Description
Concrete or wooden foundations		Choose from 2 different foundations, follow exact measurements from project and include all necessary installations
Temporary weather protection		Thin tarpaulin, for fixing on the inside of EcoCocon walls in case of rain before the roof is on
Roof insulation	21 m³	Blown cellulose or wood fibre roof insulation (cavity size)
Roof cover	75 m²	Any ventilated roof from tiles or metal sheet. Need to provide all material necessary above the VestaEco LDF Uni layer
Exterior cladding or render	123 m²	Use render system certified for wood fibre boards (w value < 0.1) or a ventilated facade of your choice, surface includes 7 m² roof extension ceiling
Final floor cover above foundations	40 m ²	Any floor cover, max. 2 cm on top of foundation
Mezzanine construction	22 m²	Wooden construction covered with boards of your choice
Inside partition walls	36 m²	Partition walls covered with boards of your choice (surface for one side)
Interior finish for EcoCocon		Clay plaster, gypsum plaster, gypsum board or gypsum fibre board
Staircase	1 pc	Staircase from material of your choice
Inside doors	2	Doors to bedroom and bathroom
Installations		Electrical installation, plumbing and ventilation have to be provided by local professionals
Outside terrace	optional	Terrace made from wooden floor boards
External shading	optional	In some climates, we recommend adding external shading elements on the south facade

HOW CAN YOU ORDER?

When you decide on a particular kit design, get in touch with your local EcoCocon partner. Once a preliminary contract has been signed, we will provide you with detailed drawings your architect can use. After you arrange your building permit, you can ask for an invoice and make a 50% down payment. We will then let you know the lead time, which is usually between 4 to 12 weeks.

The exact delivery date can be agreed upon with your construction company around 2 weeks in advance. After making the final payment, all materials are brought directly to your building site by lorry.



Transport is calculated separately for each delivery. You can check the guide for approximate transport costs <u>here</u>. A larger lorry is required for delivery of materials.

WHAT WILL THE FINAL PRICE BE?

Providing the architectural design and the materials for the structure of the house, the final price will depend mainly on the finishes you choose and labour costs in your country. We estimate all work necessary to install kit materials at approximately 2 weeks for a 3 - 4 person team of carpenters. Some of our local partners are able to provide a fixed price for assembly.

WHAT IS NEEDED FOR ASSEMBLY?

Assembling EcoCocon walls requires only basic carpentry tools: an impact screw driver & long bit holder, a circular saw, hammer, clamps, ladder, cutter/scissors, measuring tape, glue gun, pneumatic air staple gun and 30 mm staples. We also recommend having a lifting tool on site, such as a forklift, crane or truck with hydraulic arm for the easier unloading and manipulation of panels. After unloading, we recommend verifying the straw humidity with a humidity metre.

An assembly guide, which can be used by your builder, can be downloaded from our website.

ABOUT THE ARCHITECT

Createrra is an architectural studio which is the leading passive house expert in Slovakia, providing energy-passive buildings built using quality, sustainable materials. Founded in 2004, the company was set up to provide pleasing aesthetics which satisfy comfort, health and sustainability needs. It now has experience in more than 100 passive house projects.

By using techniques such as optimised thermal bridges, the right airtight envelope, and ventilation with heat recovery they provide both a higher standard of living and beautiful architecture.



ABOUT US

EcoCocon is an international company that manufactures and sells an innovative straw-based wall construction system. Our unique structural panels contain 98% natural renewable materials and have excellent insulation properties. The system holds several certificates including Cradle to Cradle and the German Passivhaus standard.

As a company, we strive to make plant-based construction mainstream and promote solutions that are healthy both for people and the planet.

