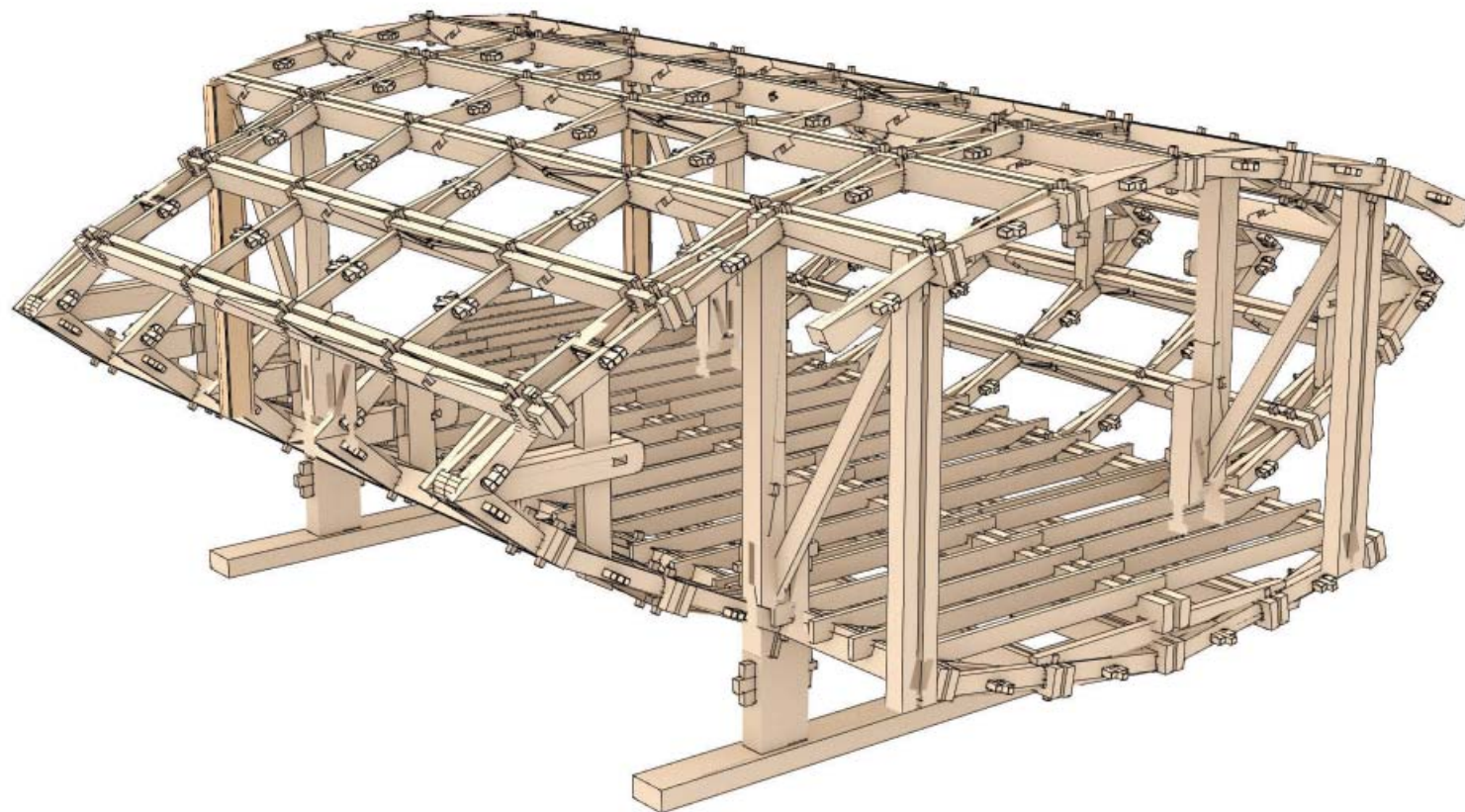




land**ARK**™
THE OFF GRID CABIN

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Practice Philosophy

The LandARK concept is designed to be a semi-permanent structure therefore the complex planning of a permanent building is reduced and it allows siting in areas of outstanding natural beauty.

The ethos of 'tread lightly' is key to the design which means major groundworks and grid services were ruled out during the design process. Yet the landARK is a robust year-round solution.





landARK™ THE OFF GRID CABIN

INTRODUCTION

landARK™ - the ZEDfactory zero carbon off grid home kit for individuals

If you have a scrap of land, maybe a back garden, a hillside, a coppice clearing, or maybe even a corner of somebody's car park, and you have a spare few weeks holiday, or some good friends,





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LANDARK LAUNCHES AT ECOBUILD 2009

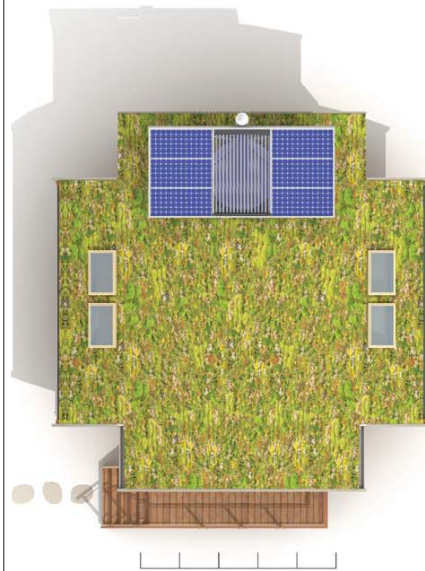
LandARK was launched to the public at ecobuild 2009. The timber frame was erected in 4 days by a team of 5. The frame combines medieval jointing techniques & wedges with a CNC - machined frame to create a robust locked chain frame without any metal fixings.





landARK™ THE OFF GRID CABIN

- Works well as a home or office.
- Sleeps up to 8 people as a shorter stay cabin.
- Is cosy in winter and cool in summer
- Is made from healthy natural materials such as FSC timber.
- Perches on the land without needing expensive foundations or concrete.
- Runs off logs in winter or uses the summer sun to provide a hot shower.
- Is powered from sunlight for most of the year, or mid winter wind.
- Doesn't need a connection to the drains or the meter, unless you do.
- Includes water tanks with options to connect to a standpipe.
- Blends into the landscape with weatherboarding and a sedum roof.
- Will last many generations if it is loved.



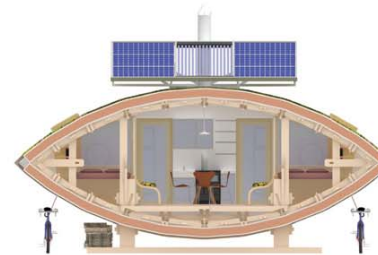
Plan



Plan interior



Rear elevation



Section



Side elevation



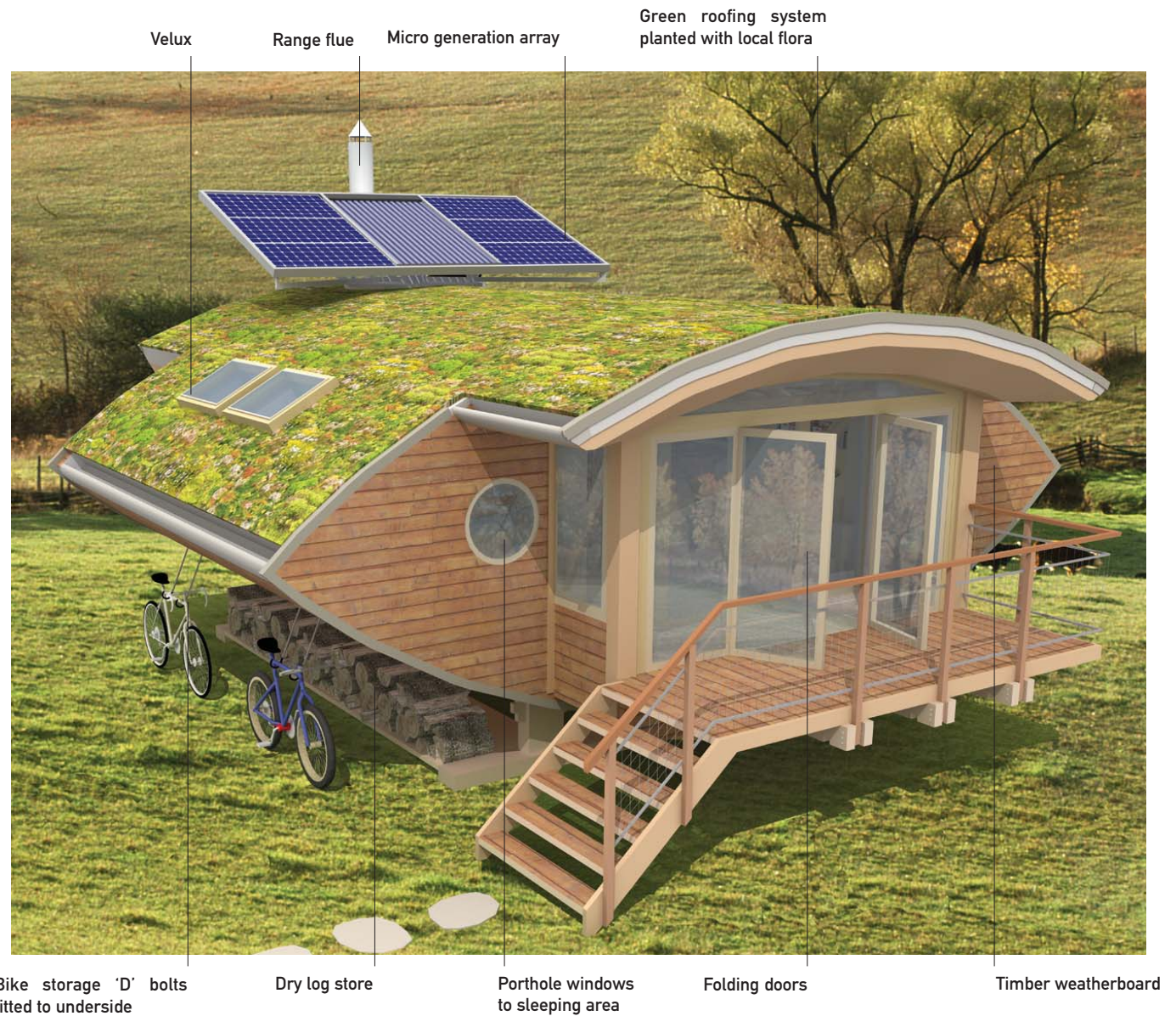
Front elevation



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INTERPRETATION

FRONT VIEW - SERVICES





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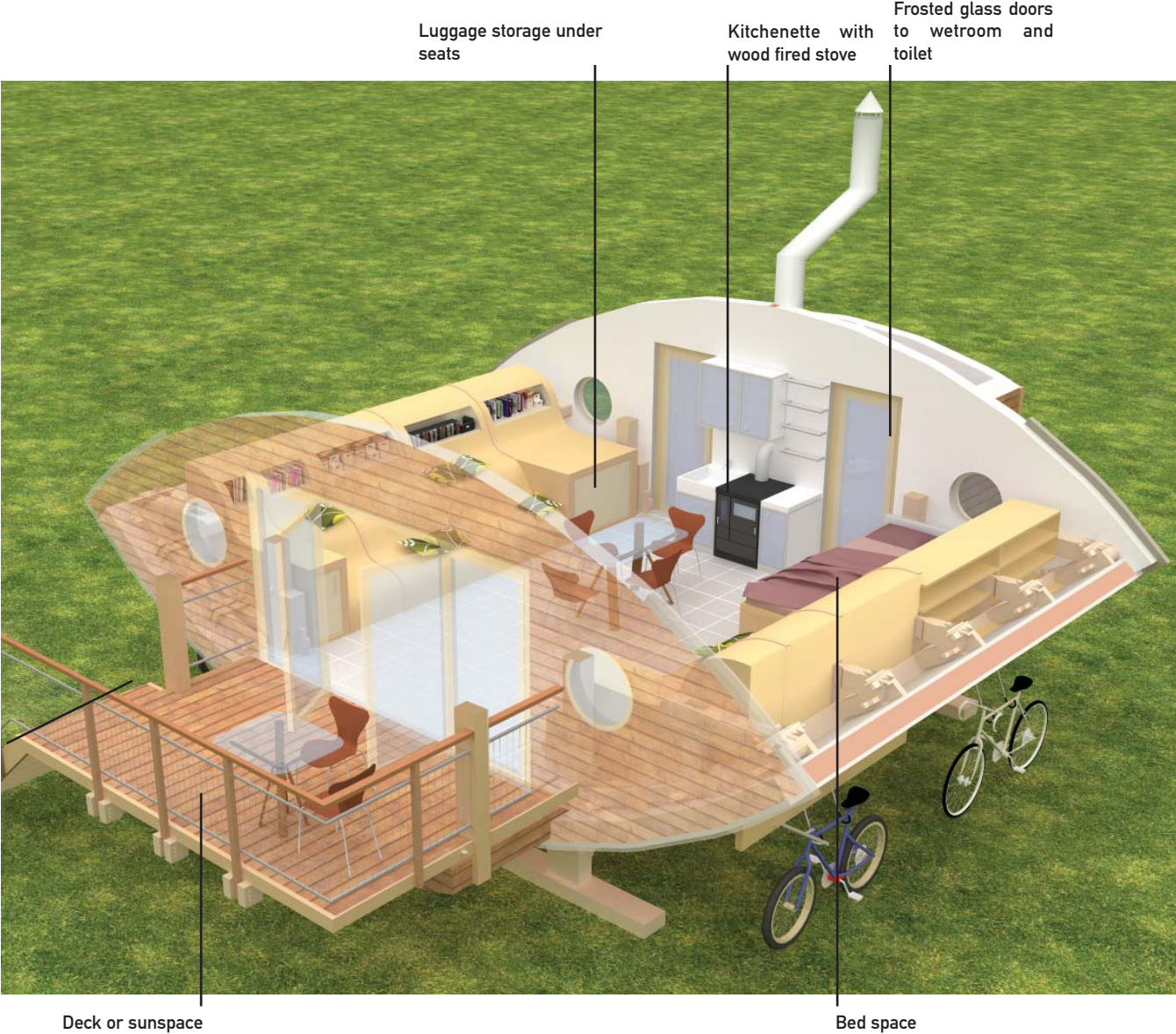
REAR VIEW WITH BATHROOM WALL REMOVED





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BASIC INTERIOR -
OPEN PLAN LIVING/SLEEPING SPACE





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What is an off grid building?

An off grid building is a building which is unconnected to the utilities network providing its own power and heat, water resource, and disposing of its own waste.

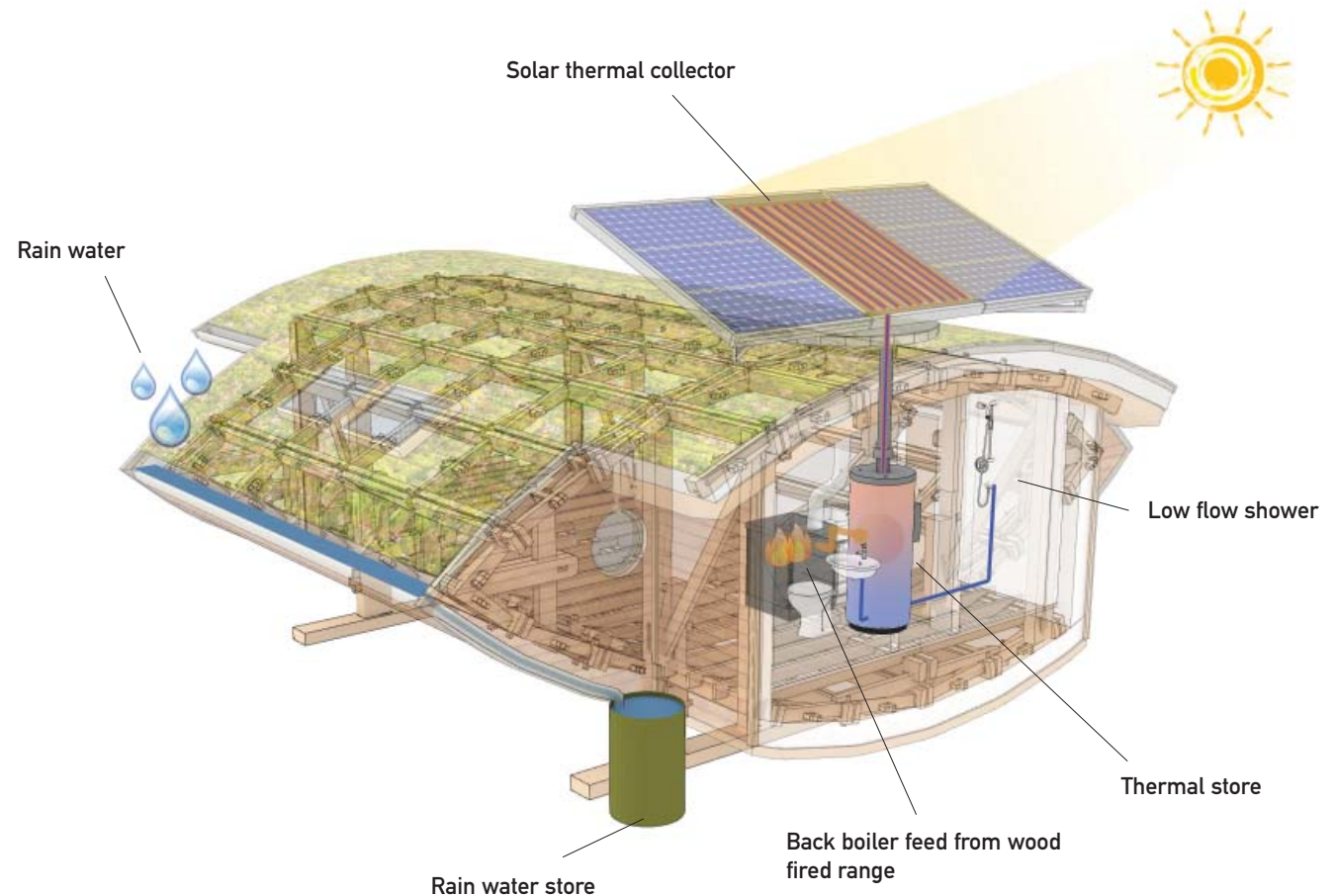
Heat is usually provide by burning a biomass fuel, which can range from logs and woodchip through to specially pressed pellets. This heat can be used for space heating, secondary water heating and cooking.

Primary water heating is provided by a solar thermal array capturing free solar energy to heat water for 2/3 of the year, using the biomass for top up in winter.

LandARK hotwater

- 1no ZEDfabric solar thermal array
- 1no ZEDfabric thermal store
- On demand 12v pumped supply from hot water cylinder. (if off grid)
- Back boiler feed from range.

Drinking water tanks can be supplied by bowser if a water connection is unavailable. Depending upon the climate conditions at site, rain water can be harvested in storage tanks. This water can be used directly for irrigation.



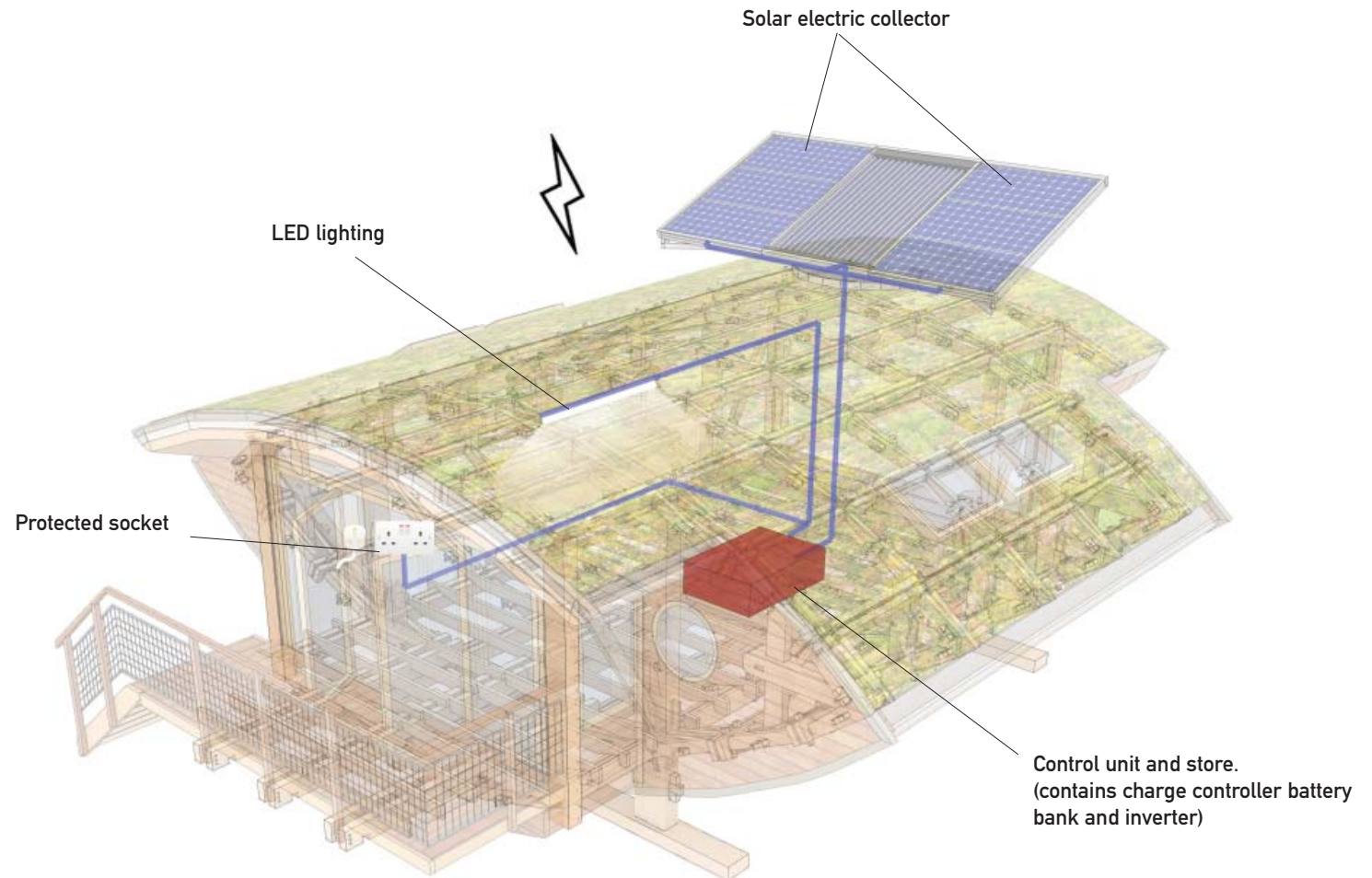


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In most circumstances this means the use of photovoltaics and/or wind turbines to provide electricity with battery storage.

LandARK electric

- 6no 83W panels providing approx 0.5KWh output.
- 4no 6V 330 Ampere Hour Dryfit Solar Block Batteries SB6 330A wired to produce 12V DC
- Charge controller (Steca PR3030)
- Ring Powersource Pro MSW 2000W inverter
- 240V 13A prefab wiring loom sockets with overload warning labels
- optional wind turbine could be fitted on suitable sites individually or to provide communal power.





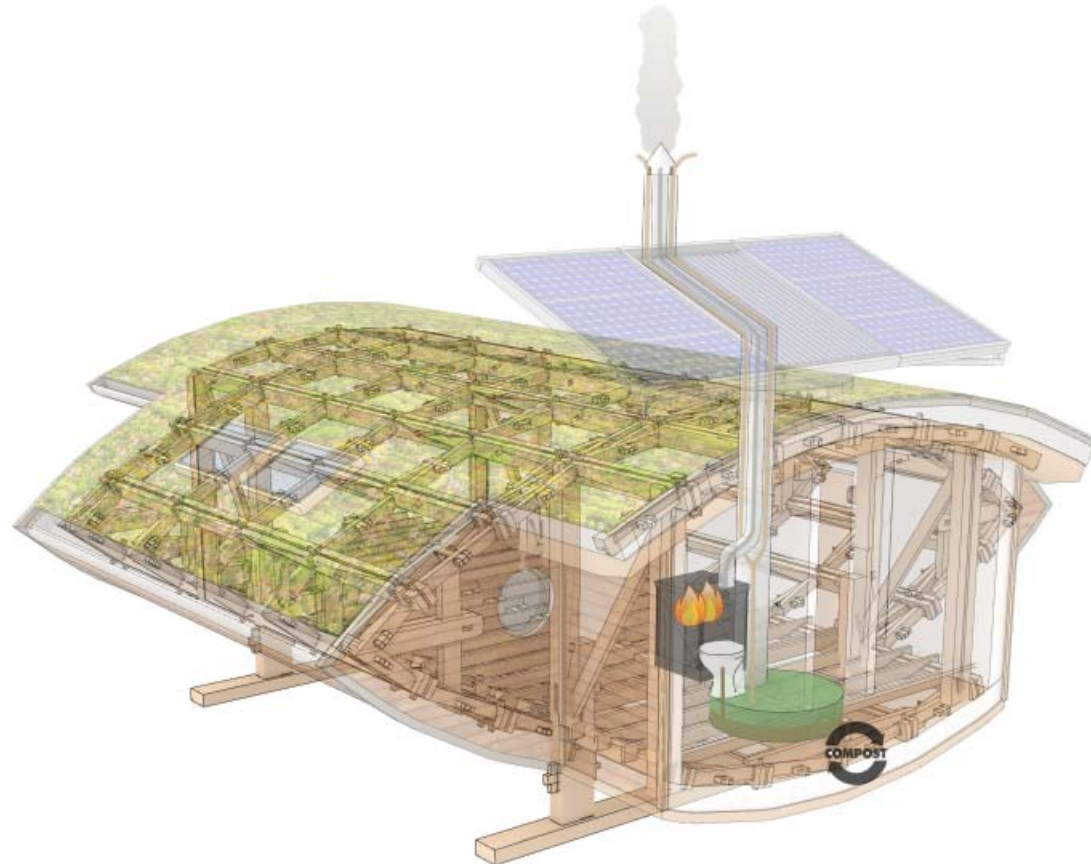
landARK™ THE OFF GRID CABIN

Waste in this context is sewage but could include household refuse and compostables. Sewage can be treated in either a reed bed system or if space is at a premium a composting system would be more suitable.

The toilet ventilation utilises the triple core sleeve of the flue.

LandARK waste

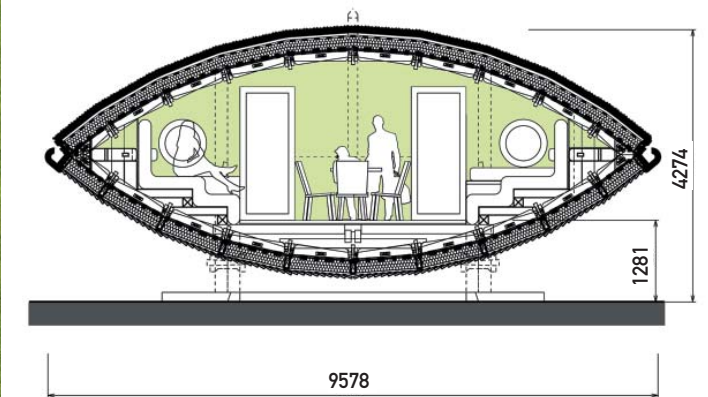
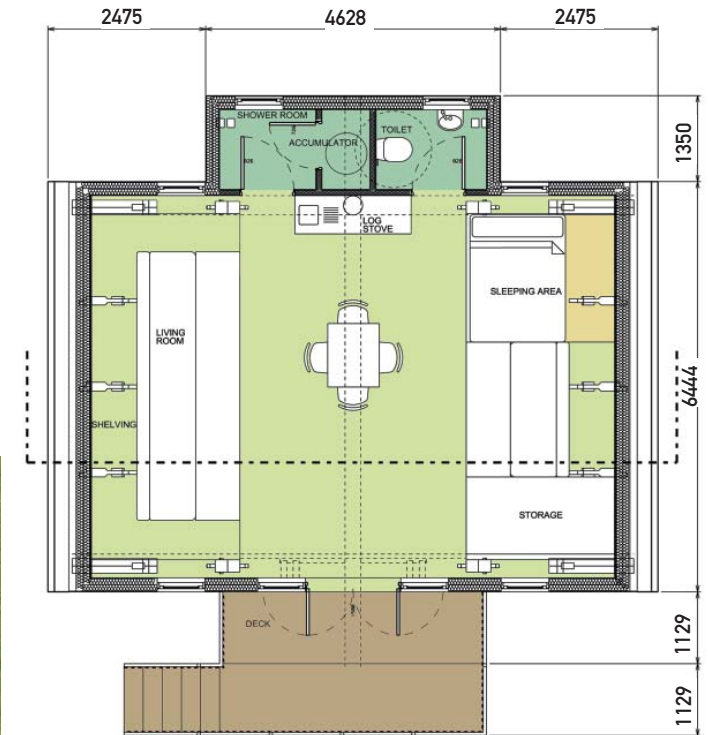
- 1no Biolet seperera composting toilet.
- or
- 1Rotaloo composting toilet - if site conditions allow.
- Can be fitted with a flush toilet if required.





landARK™ LAYOUT 1

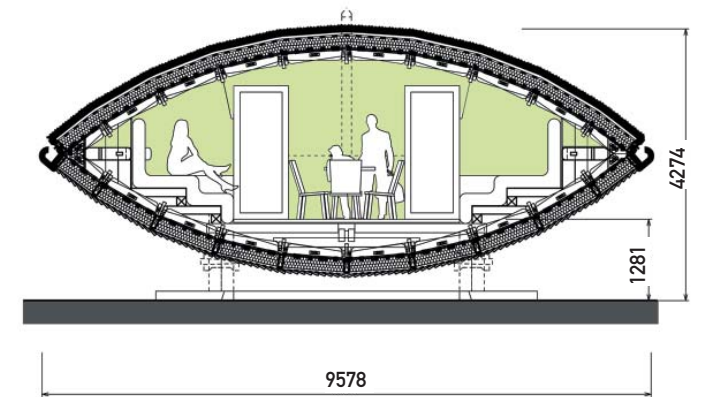
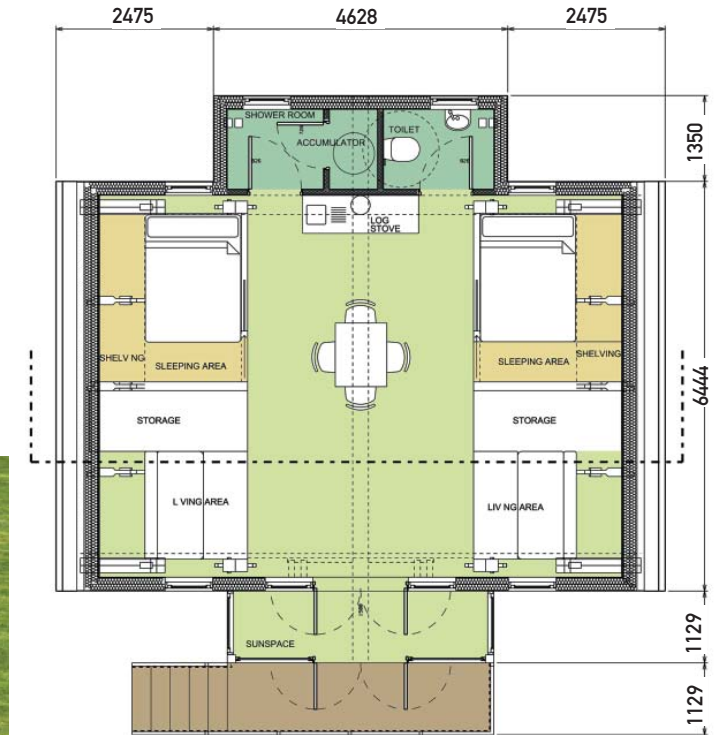
This option has 55m² of internal space, and is designed for a couple to holiday somewhere in the countryside or as a hideaway studio flat. It has one double bed and a large living area space. The rear contains a shower room, the hot water store and a self composting toilet.





landARK™ LAYOUT 2

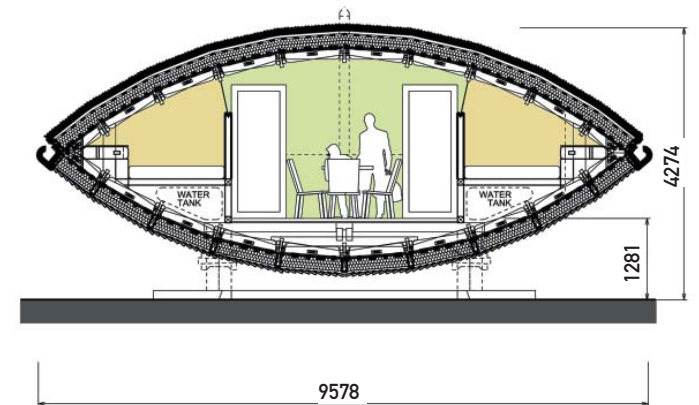
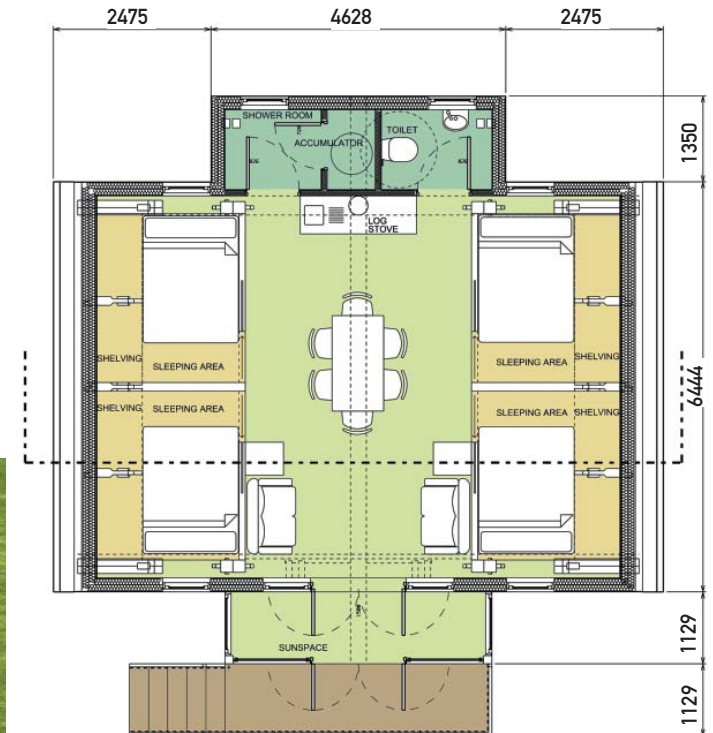
This option has 60m² of internal space, with a sunspace at the front of the cabin. It is designed for a small family or children of a larger family to take up permanent residence, utilising the back garden or perhaps on some other spare land. It has two double beds which are partitioned off from the main living space. The rear contains a shower room, the hot water store and a self composting toilet.





landARK™ LAYOUT 3

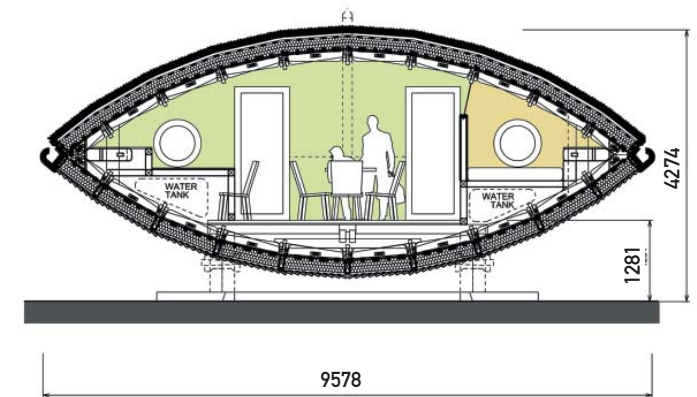
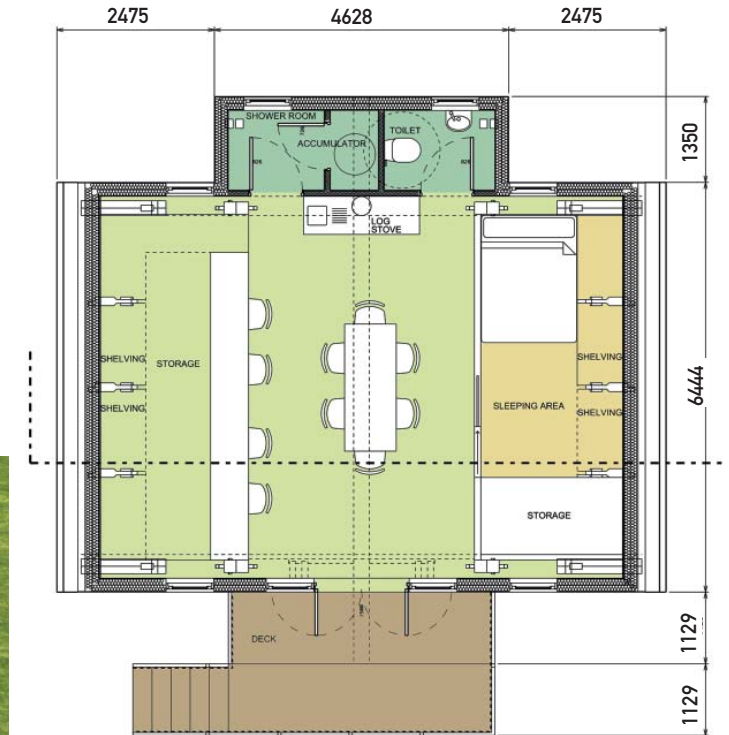
This option has 60m² of internal space, with a sunspace at the front of the cabin. It is designed for a medium sized family to holiday somewhere in the countryside. It has four double beds which are partitioned off from the main living space. The rear contains a shower room, the hot water store and a self composting toilet.





landARK™ LAYOUT 4

This option has 55m² of internal space, and is designed for a small company or a person working from home to set up, utilising the back garden or perhaps on some spare land. It has one double bed which is partitioned off from the main work space, and plenty of desks and storage space. The rear contains a shower room, the hot water store and a self composting toilet.





landARK™ SPEC

Specification:

includes - Shell, Internal fitout, Microgeneration package, Composting toilet, Rain water harvesting, Lighting, Basic furnishing, Kitchen, Wetroom, Sedum roof.

excludes - Sunspace optional, Delivery, Erection.

We offer feasibility and planning submission in the UK.

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image above shows an older design