# Malvern Hills Cabin Specification

## Chassis and subfloor

- This cabin is built upon a designed 9m x 3m, all steel chassis made by UE group in Corby. This features two principle 9m – 200mmx 100mm box sections running the entire length and a 120mm x 60mm x 5mm ring beam & floor joists.
- The chassis sits upon a detachable set of triple axles.
  We have designed the chassis with jacking points around the perimeter, which allows us to insert four 4 ton side winding jacks. We can then raise the entire cabin up, unbolt the axle dolly and remove this completely. Allowing the cabin to be lowered to ground level or 350mm lower than when it is on its wheels.
  Conversely, we can raise the cabin back up onto the axle dolly and relocate to a different location if necessary.
- On top of the chassis is a layer of 5mm recycled black plastic stokboard, acting as a primary protective and damp proof layer. There is then a secondary polythene damp proof membrane sandwiched between the stokboard and sips panels.
- The floor of the cabin is made out of 3m long 122mm thick SIPs panels. (structural insulated panels 11mm OSB 100mm insulation 11mm OSB).
  Joined together by a series of 100x100mm timber floor joist splines.
- The sole plate for all the walls are then fixed down via 300mm long coach bolts that go through the sole plate, sips panels, 5mm stokboard and chassis ring beam. Connecting it all together as one.
- An additional damp proof membrane has been laid over the top of the sips floor panels.
- 18mm caberfloor sheets screwed down to create a smooth subfloor.
- Throughout the entire internal floor area A waterproof, stable mineral composite herringbone flooring (blanched oak) with built in underlay has been laid.

# Walls -

- The front and side wall are all 122mm thick Sips panels.
- Internally, the sips are covered with a vapour proof membrane. Then battened to create a service void for electric cables. On top of this there is another layer of 11mm OSB board onto which 10mm matchlined moisture resistant mdf is bonded.
- The moisture resistant mdf is then finished in 2 coats of primer and a final top coat of paint.
- Externally, the sips are sealed with a uv resistant rainscreen cladding membane. With all laps sealed with a uv protected tape.
- The membrane is then cross battened to give a 45mm ventilation gap between the sips panels and the rear face of the cladding.
- Cladding on the front and side elevations is Siberian Larch (sorced pre conflict). Fixed with specialist L-GoFix® A2 stainless steel cladding screws.

- The larch has also received a 2 part coating system called SiOO:x <u>https://www.russwood.co.uk/cladding/coating/sioox/how-does-sioox-work/</u>
- SiOO:X Wood Protection eliminates differential weathering, meaning you can achieve a consistently weathered look without the wait. Made from natural and non-toxic ingredients, SiOO:X repels moisture, forming a natural protective barrier to timber cladding
- The rear wall, is of 95 x 45mm tanalised stud wall design, with studs at 400mm centres. Sheathed both sides with 11mm OSB, a Vapour proof membrane internally and a breather membrane externally.
- The majority of the electrical wires are in this wall.
- There is 100mm rockwool insulation in this wall.
- The rear wall is clad in slate blue 0.7mm plasticol coated corrugated tin.
- Internally, matchlined moisture resistant mdf is bonded to the OSB sheathing finished in 2coats primer, 1 coat topcoat Farrow and Ball Ammonite.

## The roof

- The main structure of the roof is built around a series of curved 145mm x 85mm Glulam radiused beams, spaced at 850mm centres. These are then noggined out with 145 x 45mm timber.
- 200mm of fibreglass insulation
- vapour proof membrane to both the top and underside of the roof structure.
- The deck of the roof that the sedum sits upon, is constructed by cross laminating and bonding 3 layers of 6mm plywood down to the main roof structure.
- The roof is finally waterproofed by way of a 1.5mm thick EPDM rubber roof.
- The finishing touch are the 152 self contained sedum module trays, that sit upon the finished roof structure.
- Galvanised 120mm guttering and downpipe.
- Internally, the ceiling is made from sanded roughsawn joinery grade redwood finished with 2 coats of white hard wax oil.

## Windows and doors

- All windows are aluminium double glazed 28mm toughened units, where there is an opener. The windows are top hung, have a trickle vent and are lockable. Anthracite grey. (RAL 7016)
- The main 2.4m wide Aluminium sliding doors, open both ways. 28mm toughened argon filled units. Independently lockable. Anthracite grey (RAL 7016).
- All window openings have solid european oak reveals and window cills.

## Outdoor bath

- The cabin incorporates a large double ended 300ltr acrylic bath as a built in feature. This is filled directly off the lpg combi boiler and can be isolated via isolator valves inside the cabin.
- The bath sits upon a siberian larch deck and is also clad in with siberian larch, treated with SIOO:X.

## Kitchen

- Handmade kitchen cabinets constructed from Finsa Hidrofugo high density MDF. Frontals in Dusk blue (RAL7000), internals in farrow and ball ammonite.
- Solid oak doors and drawer fronts.
- Solid oak worktop

- 1 / 500mm sink unit, with Grohe mono tap, fridge frezer, 500mm 3 drawer unit, a 600mm whirlpool combination oven/ grill/ microwave, with pan drawer below,. A beko 2 ring ceramic hob. Overhead built in extraction hood. A 600mm double door highline cupboard. Oak shelf over sink.
- All doors and drawers are soft close.
- Full height Toughened glass cooker splash back.
- Undercupboard light.
- Solid oak breakfast bar, with 300mm cupboard unit underneath.

#### Shower room

- 1000mm x 800mm shower tray with bifold door.
- Mira Atom thermostatic shower and seperate handset.
- Handmade oak wash stand with handbasin and mono tap.
- 218mm x 1600mm vertical column radiator,
- Back to wall dual flush toilet.
- Mains Stop tap is located in 'pull door' cupboard beside toilet.
- Extractor fan,

#### Heating & hot water.

- The cabins heating demands are met by a Baxi 30kw lpg combi boiler. (15ltr/min hot water rate). Located behind the oak sliding door in the shower room.
- This boiler needs to be commisioned on site so that the final owner benefits from the 7 year warranty that accompanies this boiler.
- The boiler supplies the hot water to the kitchen sink & the outdoor bath.
- The boiler also provides the heat for the shower room radiator and living room radiators.
- Room temperature is set and can be programmed via the room thermostat mounted on the side of the wardrobe in the main living area.

#### Main living area.

- King sized bed, with under bed drawer storage.
- Salamander Hobbit wood burning stove on a raised slate hearth. With matt black twin wall flue pipe.
- 2 seat Sofa Marks and spencer sofa (142cm wide)
- bed side cabinet
- Bluetoothe 8 inch wall stereo speaker
- Provision for internet connection
- Wall mounted 24" led tv
- Book shelves at bottom of bed
- 400mm wide Wardrobe, drawer and general storage cupboard.
- Smoke alarm

#### Lighting

- 3 outdoor, up and down led wall lights, switched from inside the cabin.
- 2 flush ceiling lights (grey) with large exposed filament led bulbs in the living area and 1 flush ceiling light in the shower room.
- 3 directional reading lights ( 2 bedside & 1 over breakfast bar)
- Under cupboard light in kitchen.

# Dimensions

Overall cabin length	9.3m
Outside bath area length	1.3m
Width at roof overhang level (excluding gutters)	3.5m
Width of cabin body (outside wall to outside wall)	3.17m
Overall Height with axle dolly	3.41m
Height without wheels	3.06m
internal floor to ceiling height	2.41m
Overall internal length (Living area & shower room) Internal width	7.35m 2.72m
Weight with axle dolly and without green roof	7.8 ton
Weight with green roof	9.3ton