

# Directions of use

Please read this document carefully as it holds important information about your house.

## **Driving speed**

The house is intended mainly for stationary use. This is the permissible transport speed of the house:

- ordinary asphalt roads up to 50 km/h
- motorways up to 80 km/h

## Before transport

Empty the water boiler, turn off the gas and secure all moving objects.

## **Ground preparation**

Your house requires flat and solid ground to stand on. The ground should not be too moist and have good drainage. The ground where the house is placed can have a maximum slope of 0.12 meters at a length of 8 meters. It is also advantageous if there is no vegetation that can grow up against the house.

If you choose to improve the surface with, for example, a layer of gravel, preferably do it in an area that is a little larger than the house surface itself. The gravel should be leveled and pressed with a roller.

We ask you to buy at least 16 concrete blocks, minimum 35 cm x 35 cm with a minimum thickness of 5 cm, as a base for the support legs that come with the house. Here is an example of what they can look like:

https://www.bauhaus.se/marksten-benders-slat-fasad-helplatta-gra-350x350x50mm

## Setting up your house the first time

If nothing else is agreed, our "installation service" is included in the cost of your house. It is estimated that the installation service should take 3 hours. If complications occur due to unforeseen conditions at the desired location,  $50 \in \text{per}$  additional hour will be charged to perform this service.

### The installation service includes the following points:

- Parking the house in the preferred spot
- Leveling of the house in it's position
- Checking and adjusting windows and doors (it's normal that they might need adjustments after a long journey)
- Connecting water, drainage & electricity
- Together with you: checking for damages, missing things (furnishing or other)
- You yourself are responsible to prepare the necessary connections for electricity, water and drainage. Find instructions further below.



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You have the right to resign from the delivery and installation service and organize it yourself without giving us any specific reason. You need to inform us about such a cancellation at least two months before the agreed delivery date. We will in this case refund you the cost for delivery.

You are responsible for ensuring that the following conditions are met:

- Providing us with a video showing the location, where the contract item will be parked, as well as the way leading from the main road to this parking spot. This should happen as soon as possible but no later than 2 months before the delivery date.
- Organizing a tractor which (if necessary) can help pulling the contract item to the preferred parking spot.
- Organizing a tractor with forks in case you have ordered the exterior hallway.
- If it is dark during the time of delivery there must be electricity at the property. In case there are no electrical connections you are obliged to inform us beforehand.
- Preparing the ground so delivery and installation of your house is possible, in particular, ensuring:
  - that the ground is prepared as described above
  - that the road clearance for transporting the contract item is no less than 4.2 m high and 3 m wide
  - that the road clearance is free from hanging cables, tree branches or shrubs.

If the above conditions are not met, the house will be parked at the nearest convenient place and we will reimburse you for the cost of the installation service.

### **Setting up your house yourself**

Whenever parking your house the first time, you will have help from our specialist (if you have not chosen to resign from the included installation service). But for the future keep this in mind: When parking your house it is necessary that the house is supported with the eight supporting legs included. When leveling the house, make sure to lift the supports one at a time, little-by-little to avoid breaking any of the supports. Keep in mind to adjust the door and windows again if necessary.

## Support legs

The support legs can show surface rust a few weeks after the delivery. This is nothing that affects their function and you don't need to worry about it.

Here is a video explaining in detail how to setup your house correctly: <u>how to setup your tiny house</u>

### **Electricity**

As a standard, the house is either equipped with an European 400V, 3-phase, 32A or 16A outside connection or a 230V, 1-phase, 16A outside connection. Internal and external



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sockets, ceiling lamps, pump, smoke (and optional gas and CO2 alarms), the kitchen and bathroom fans all work on 230V (if you did not choose differently).

If there is no 3-phase installed on the plot where you intend to set up your house, you can ask us to prepare a 1-phase, 230V connection instead before we start building your house.

If the tiny house has a solar system, the lighting and a designated part of 230V sockets can be powered directly from a solar system. In case the system is discharged, an alarm will be activated and you should switch to main power using a switch in the fuse box. If you have ordered an alternative inverter the switch between solar and main power will happen automatically.

The fuse box is located in the cabinet to the left of the front door *OR* in the stairs leading up to the loft above the bathroom, depending on the model.

For warranty issues regarding electricity and plumbing to be valid, it is your responsibility to connect the house to electricity and plumbing no later than 5 days after delivery.

On the outside of your house you will find a socket. You need to connect an European 400V three-phase 32A (or depending on your order 16A cable) with 5 contact pins to this socket.







Here are two examples of a cable you can buy:

- Example 16A
- Example 32A

In Norway the electrical standard is different to the rest of Europe. There are two electrical systems in Norway: IT (230V) or TN (400V). Norway is unique with its IT system which is common in most places. But in some new residential areas it is 400V. You need to check whether we should prepare your house for the IT or the TN system. The socket in Norway is



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therefore also slightly different for the IT system and a 230V three-phase 32A cable needs to be procured:

• Example Norwegian connection

#### Water

Below the house is a water inlet to which you can connect a water pipe or garden hose. The water inlet into the houses is a 15 mm copper pipe:



You should either prepare a 19 mm garden hose or a 32 mm PEM hose. We will bring the necessary connection for both options. Note: A garden hose is only suitable for use when it is not freezing. For a year-round water supply we advise you to prepare a PEM hose dug underneath the ground at a suitable depth to prevent freezing, with any parts above this point insulated and heated with a heating coil..

Here are two examples for the water connections that you can prepare:

- 1) A 19 mm garden hose
- 2) A 32 mm PEM hose

All external water pipes and the external faucet must be properly insulated in case minus temperatures can occur in the place where the house is parked. It is also advised to install a heating cable preventing the external pipes from freezing. To prevent freezing of the internal water pipes, make sure that the room temperature is at least 5°C at any given time, starting no later than 5 days after delivery, as stated in the contract. Vagabond Haven cannot take any responsibility for any damage caused by freezing of internal or external water pipes.

If the house has a water storage system, it is equipped with a 200 or 400 l water tank, a 230V pump, a smaller accumulation tank (which ensures regular water flow and extends the life of the pump) and a 230V 50-liter water heater. On this water heater a safety valve is installed, which ensures that the pressure in the tank does not increase too much.

The house has two ways to supply you with water:

1) Fill the water tank and then disconnect the garden hose. The system is then powered by your pump until the tank is empty. The pump will stop working when the tank runs out of water. There is a water level indicator in the cupboard under the bathroom sink. The water tank should be regularly cleaned with a treatment meant for water tanks.



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Make sure that the water heater is never empty when it is turned on, otherwise it will break! This should not happen because the pump fills the water heater automatically when it is empty.

2) If the water pipe leading to the house is frost-resistant (by cladding it with a heating cable and insulating it), you can bypass the tank by turning the valve next to the tank to "closed"; the pump should then be turned off.

## Drainage

The water drainage pipe (40 mm) is located underneath the house next to the water inlet. This can be connected to an existing sewage system. You should prepare a connection between the 40 mm pipe that comes from the house to the dimension of your sewage system. If you only have greywater from the shower and kitchen (not a WC) and have been given the allowance to let it drain into the ground, you don't need to connect the house to a sewage system.

#### Gas

This is applicable in case there are gas appliances in the house.

The outside connection for the gas appliances is a  $\frac{1}{2}$  inch pipe. You will need to provide an adapter that connects your gas tanks to this pipe.

In each room with a gas appliance, there is a gas alarm and a smoke and carbon monoxide detector that activate in the event of a gas leak, smoke detection or if there is too little oxygen. Please check regularly that these alarms still work. If you are going away for a longer period of time, always turn off the gas located under the house or the appliance shed on the drawbar.

#### Air circulation and ventilation

In case of insufficient air circulation, moisture may appear in the house. Do not block the ventilation openings in the house.

#### Wood

Any wooden surfaces should be protected with appropriate oils, stains or colors when needed.

### Keep in mind

You are responsible for finding out about the particular rules that apply where you will set up or live in your house and how to drive it legally. This includes for example: trailer registration, chimney installation and safety, correct waste and waste water disposal, valid insurance coverage...