

# Mobilbox Containers Usage Instructions

The primary aim of Mobilbox Ltd is the complete satisfaction of our customers, and their ensuing loyalty to return and use our products. To ensure that Mobilbox containers retain their perfect condition and remain usable throughout their optimal lifetime, please be sure to fully comply with the below instructions. This also is a requirement for the warranty.

#### 1. Transportation of the containers

- 1.1 The optimal solutions for container transportation are the container chassis and open trucks with a width of 2.5 m.
- 1.2 Before moving the containers, all moving parts shall be firmly fixed. All wall, floor and roof elements shall be properly fixed. Fixing the containers on standard trucks shall be done by way of fixing straps, with plastic washers being placed in between the straps and the container. The exterior painting of containers may be damaged by the side panels of the truck or by the sidewall fixing columns. To protect the painting, avoid any possibility of friction between the truck and the container. The truck driver shall make arrangements for placing appropriate protective packing materials between the container and the truck's parts.
- 1.3 A crane with a proper lifting capacity is required to handle the containers.
- 1.4 The length of the crane rope (or chain) has to be selected based on the distance between the corners of the container. The angle between the ropes has to be a maximum of 60 degrees. The ropes have to be longer than the distance between the container's corners. It is very important to have all 4 ropes of equal length! A stretched rope or an improperly set chain arrangement may in all cases damage the edges of the roof plate.
- 1.5 The crane rope shall be attached only to the upper corners of the container.
- 1.6 Containers can also be moved by way of a forklift. If possible, the forks of the forklift have to be at least as long as the entire width of the container, but the absolute minimum allowed fork length is 3/4 of the container width. (This means a minimum fork length of 1825 mm for a 2438 mm wide container, and a minimum fork length of 2245 mm for a 2990 mm wide container. These lighter requirements are only valid, if the containers are completely empty and equipped with forklift pockets.)





1.7 After unloading the container from the truck, a handover protocol shall be recorded. Any potential deficiencies or damages have to be entered into this protocol. If possible, photo evidence shall also be attached to the protocol.

#### 2. Installation

- 2.1. Containers shall be placed on flat concrete surfaces, reinforced as per the below:
- a) for container lengths under 5 m: supported under the container's corners, that is a total of 4 points;
- b) for container lengths between 5.5 and 8 m: supported under the container's corners as well as the midpoints of the longer sides, that is a total of 6 points;
- c) for container lengths between 8.5 and 10 m: supported under the container's corners as well as the trisecting points of the longer sides, that is a total of 8 points;
- d) for container lengths between 10.5 and 12 m: supported under the container's corners as well as the quarter points of the longer sides, that is a total of 10 points;
- 2.2 In order to achieve a proper consistency of the concrete, the base shall be constructed in advance, at least one week before the placement of the container in the summer, or 10 days in the winter.
- 2.3 The concrete base must conform to local soil conditions. On request, Mobilbox will provide you a layout showing the proper support points.
- 2.4 The concrete base platform must be flat and horizontal with a tolerance of +/- 5 mm. Before the installation of the containers the base has to be levelled to have a surface with a tolerance of maximum +/- 1 mm. If the base is not adequately levelled, the door and the windows might not open or close properly, and it may also cause cracks in the drywall joints.
- 2.5 In case the container is placed on a non-concrete base, it shall be placed on a correspondingly stable and flat surface, in order to prevent the deformation of the container and other potential damages to it.





#### 3. Ventilation

- 3.1 A minimum distance of 150 mm shall be kept between the bottom of the container and the ground, in order to establish a proper space for ventilation to protect the container against surface humidity and water inflow into the container's floor insulation in the event of heavy raining.
- 3.2. The containers shall be kept at a proper temperature and shall be regularly ventilated to keep their internal relative humidity under a level of 60%. A higher value may damage the laminated chipboard surfaces. In case of sanitary containers, special care shall be taken to clean spilled water up as soon as possible. If the water spill is not due to use but to some instance of malfunctioning, the supplier shall be informed immediately.

### 4. Dewatering

4.1. The proper disposal of rain water from the container roof shall be ensured, and the surrounding area shall be designed so that water will not flow below the container.

#### 5. Public utility connections

## I/ Electrical connections / grounding

- 1. Before the first usage or at the time of deployment, after the tenant or buyer (operator) has had his own electrical equipment installed, the operator is required to carry out the below safety checks and provisions, due to legal requirements:
  - electric shock protection test;
  - deployment test:
  - other fire protection, safety and health standards.

When using a container, all safety checks due to legal requirements are to be carried out by the tenant / buyer (operator). Such checks and tests shall be carried out by the tenant / buyer (operator) before starting to use the container.





- 2. The grounding of the container shall be made according to the current laws and regulations in effect. The grounding screws can be fixed in the positions provided by the manufacturer, or in the container's bottom corners. In all cases, the grounding positions shall be protected against corrosion.
- 3. Any type of cabling at hand can be utilised for grounding (e.g. metal water pipes, steel structures) that has a measurable grounding potential. However, in no case can gas pipes or pipes for other explosive substances be used for grounding.
- 4. Connecting the container to the electrical network shall be done by expert personnel only. The electrical supply has to comply with the safety and technical requirements. The total current rate of all the equipment installed within the container shall not exceed the capacity of the fuse. For the load, care must be taken to distribute the phases equally. (The power connector shall have maximum 32A protection. Containers can be connected in a line, depending on load but to a maximum of 4 containers. It is forbidden to connect any further units from the last container for any reason.)
- 5. Operating conditions of electric appliances:

In the electrical connector plugs only appliances conforming to their appropriate nominal loads can be connected.

Electronic appliances (computers, servers, X-ray machines etc.) can only be operated via such uninterruptible power supplies that have surge protection.

- 6. In order to prevent accidents, the safety regulations of electronic appliances must be followed.
- 7. In case a water heater is built into the container, the device shall be filled with water before connecting it to the power grid, in order to prevent the destruction of the heating element.
- 8. For lighting equipment, it is required to ensure a proper air circulation and heat dissipation. Opening the cover of the lamps or placing flammable materials around is prohibited.
- 9. Only qualified service technicians shall perform repairs, and only with the prior permission of Mobilbox.
- 10. The electrical equipment and the electrical network shall be protected from mechanical damage, as well as from any such effects that may cause damage to the insulation (e.g. radiant heat, chemicals etc.).





- 11. Before starting up the system or after any modifications or extensions, a revision protocol shall be taken. The electrical inspection shall be repeated at regular intervals as specified in the regulations.
- 12. In case a container or a container building is not in use for a longer period, it is recommended to turn off the electrical equipments. Before recommissioning, the devices should be checked again, as their safe operation can only be guaranteed this way.
- 13. In case of any deficiency, the proper necessary actions for its prevention shall be made without delay.
- 14. The electrical equipment cannot, in any form, come in contact with water.
- 15. All electrical equipment shall be used as specified in the instructions by its manufacturer.
- 16. It is forbidden to cover the radiator blowholes, and it is strictly prohibited to dry clothes or heat fluids over them. The heating shall be kept at a minimum safety distance of 500 mm from furniture and other equipment. The manufacturer's other general safety instructions shall be kept.
- 17. The integrity of power points and connectors shall be checked regularly.
- 18. The FI relay shall be checked once a month, switching on and off twice repeatedly.

## II. Plumbing

- 1. The containers can be connected to the water network by properly authorized qualified personnel only.
- 2. The operation of the pressure relief valve and the cleanliness of the filters shall be checked.
- 3. After connecting the container to the water network, the external drains and water pipes must be insulated in order to avoid damages due to frost. During winter use of the containers, an internal temperature of at least +5 °C shall be maintained. If the container is not in use, water shall be released from all pipes and equipment before the onset of the frost in order to prevent frost damages and defects.
- 4. Before making any modifications in a sanitary container already in use, the water shall be released from all pipes, storage and heating equipment, in order to prevent potential damages.





- 5. The continuous cleaning of accessories and the testing of their proper working is recommended. It is forbidden to drain granular material (e.g. sand, soil etc.) in the toilet or the sink, because these may cause blockage.
- 6. The fastening of the pipes and the smooth flow of the drains shall be continuously checked.
- 7. The water heater's thermostat and safety valve, namely the normal operation of the water heater, shall be checked regularly in order to prevent damages caused by its possible overheating.

#### 6. Maintenance

- 1. The roof, gutters and rain guards shall be cleaned regularly. The blockage of the rainwater pipes or frost damage to the rain guards may result rain water getting into the container. Damaged roof painting shall be repaired immediately in order to prevent the spreading of corrosion.
- 2. In order to maintain the loadability of the container, the roof is not to be loaded with a huge quantity of snow.
- 3. After transporting and storing the containers, it may happen that the doors and windows are malfunctioning. It may therefore be necessary to adjust the hinges, primarily by levelling the container and secondarily by adjustment screws. Adjusting and regularly checking the windows and doors shall be carried out.
- 4. External mechanical damage on the outside of the container must be repaired (cleaned, degreased, painted, varnished etc.) immediately to avoid corrosion. The breaking or damage of the sealing at the windowsill shall be repaired by applying elastic sealant (polyurethane foam, silicone).
- 5. The cleaning of the external and internal surfaces of the container may be carried out using general cleaning supplies. Acid or alkaline cleaners are not to be applied to galvanised chrome-plated surfaces. Cleaning the container with high pressure water is not allowed. Mobilbox will always deliver clean and cleared up containers, but we cannot guarantee that the containers remain uncontaminated during transport, especially in the winter.

Mobilbox Ltd. 1 August 2011

