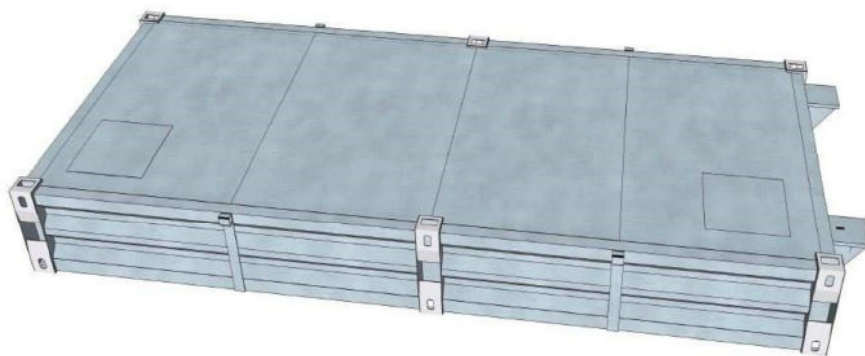


**Instructions for use, maintenance,
handling and storage**
Septic tank



Producer: Bauechnik Služby spol. s r. o.
Cesta do Hanisky 5
040 15 Košice – Šaca
Slovakia

Drawn up by: Jozef Štefan
Applicable from: November 2017

1. Generic data

Septic tank, hereinafter only as “container”, is designed to be installed under standard ISO 10', 16', 20', 24', 30' sanitary containers for collection of sewage and subsequent disposal.

Dimensions (mm) and weight (kg):

Type	External dimensions				
	Length	Width	Height	Capacity ca.	Weight
Septic tank 10'	2 989 mm	2 435 mm	650 mm	3,5 m ³	502,7 kg
Septic tank 16'	4 885 mm	2 435 mm	650 mm	6 m ³	822,1 kg
Septic tank 20'	6 055 mm	2 435 mm	650 mm	8 m ³	959,5 kg
Septic tank 24'	7 355 mm	2 435 mm	650 mm	9 m ³	1 201,2 kg
Septic tank 30'	9 120 mm	2 435 mm	650 mm	12 m ³	1 407,3 kg

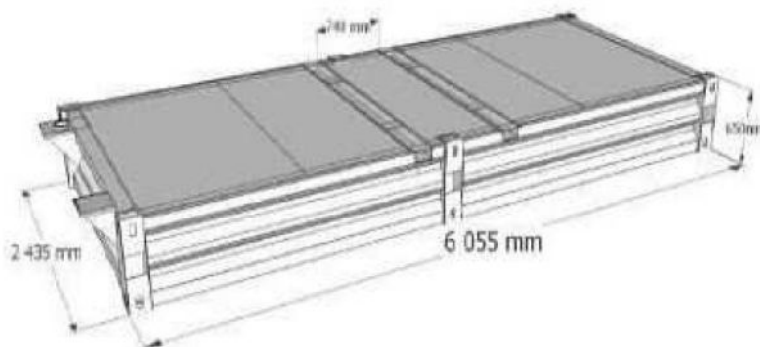
It is necessary to add inlet to the external length, for 10', 16', 20' containers it is normally +250 mm, for 24' and 30' containers it is +500 mm. This dimension may vary according to the order.

Equipment:

Basic stairs order name SCH3

Stairs with platform order name SCH3POD

Model 20' septic tank with pads for handling with HSSWT.



2. Transport and handling

Septic tanks are usually completely empty, clean and correctly secured for transport.

Unloading and installation requires a crane vehicle, LKW with telescopic forklifts or HSSWT, if the tank is equipped with pads.

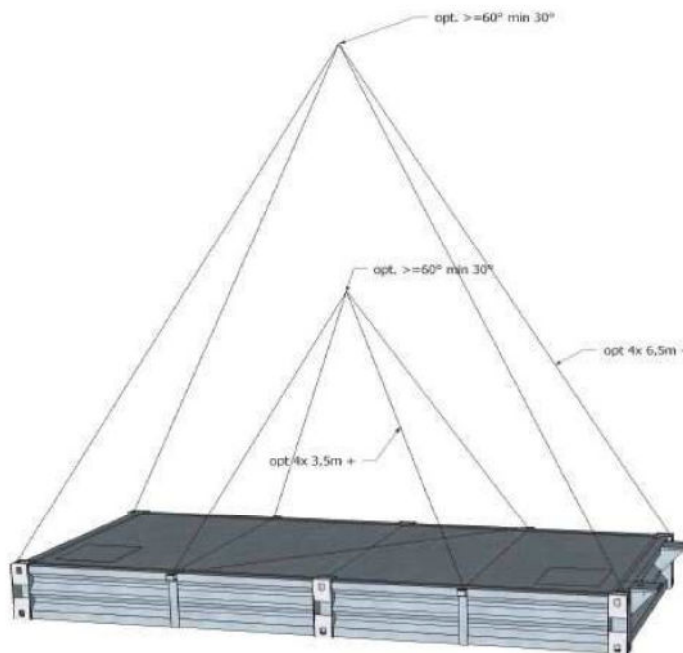
Access road must be reinforced and well accessible because of storage and discharge.

For manipulation with container we normally use plugs in corners of the upper frame.

For binding you can use steel wire ropes, chains or textile straps in form of sling – four strands terminated by a hook.

Handling empty container and container containing up to 10% of its volume and load capacity.

In this case it is possible to use both slings in corners of upper frame and slings in upper frame in place of auxiliary reinforcements.



It is necessary to choose the length of binding means and their load capacity according to the actual situation. The angle between edge and branch of binding mean to the sling cannot be less than 30°. The recommended angle is of 60° and more.

In exceptional cases, in case of use of textile binding means, it is possible to clamp hooks into the plugs in underframe.

On demand some containers are equipped with reinforced flooring or pads in upper part for handling empty container with HSSWT. Reinforced places are marked with a label.

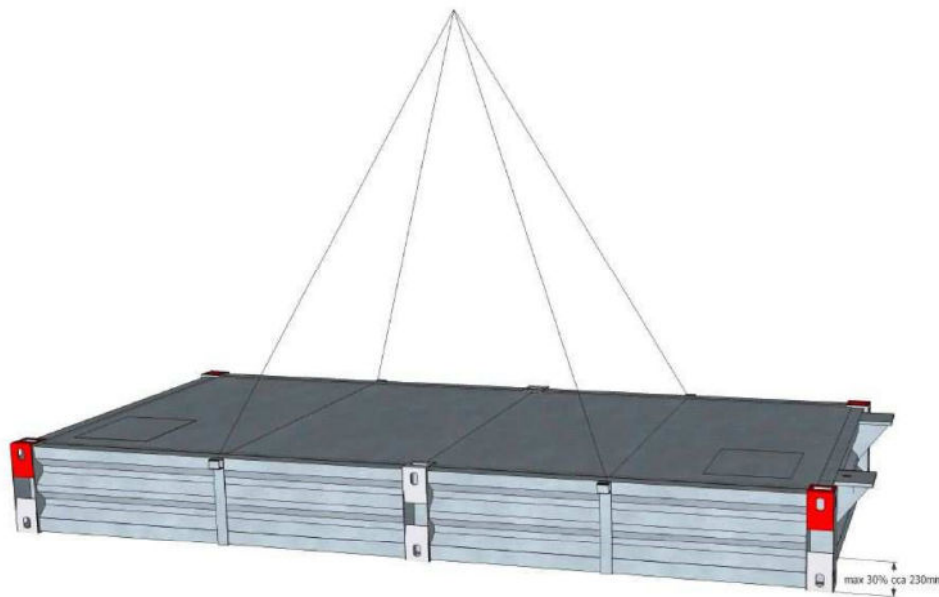
In case of handling using HSSWT it is necessary to increase caution, since flooring is reinforced only against disruption, but there are no barriers against slipping and roll-over to the sides.

After deposition it is only necessary to realize external connections and the use can start.

Handling containers that contain 30% of their volume, load capacity

In this case it is possible to use only marked places in upper frame in places of auxiliary reinforcement. It is not allowed to use slings in corners of container.

With this type of handling it is important to ensure that the content is not transferred to the one side of container and there is no damage to binding means or container and no subsequent threat to bystanders.



Handling container filled over 30% of its volume and load capacity.

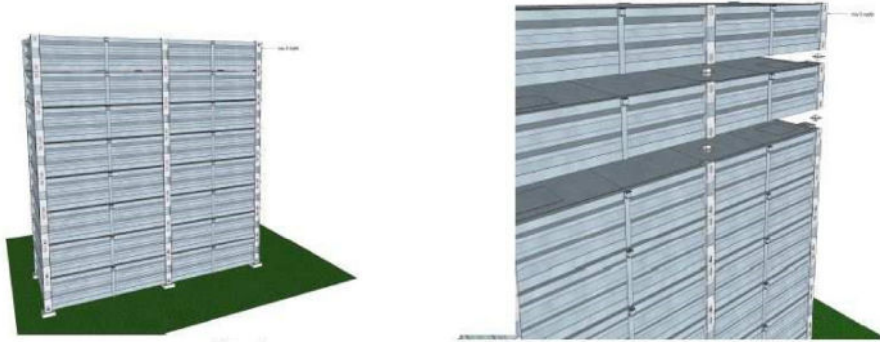
It is forbidden to handle such loaded containers.

WARNING: Any handling of container may be executed only by professionally authorised person with appropriate education and authorisation.

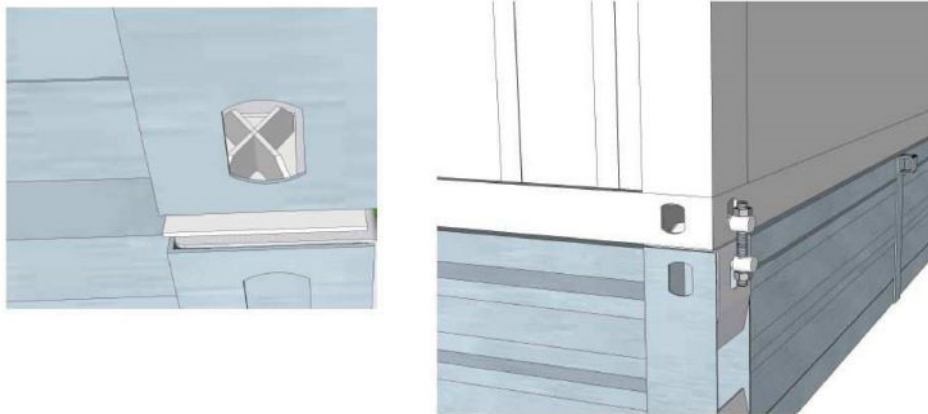
After deposition it is only necessary to realize external connections and the use can start.

3. Storage

Containers need to be stored as empty as possible, supported on six points, bases, on a level reinforced ground.



They can be nested, max. 8 pieces together, in such case it is necessary to secure containers against sliding using boundary pads. It is also necessary to secure nested containers against wind.



4. Installation

It is recommended to install septic tank on benches, bases or base plate. It is necessary to support septic tank in all six points, bases. Support of at least these points must be ensured also in case of placing container into the ground, below the level of surrounding terrain. In such case it is also necessary to pour sand of fraction 0-4 mm (not sharp edged aggregates) to ditch and if possible, give the same treatment to the walls of container that come in contact with surrounding soil. If this is not possible, it is recommended to use a geotextile of min. 200 g/m². During installation it is important to ensure that the sanitary container is evenly fitted on septic container on all bases, not only at corners.

Possibilities of combination of sanitary container and septic tank:

10' sanitary container can be fitted only on 10', 16', 20', 24' a 30' septic tank

16' sanitary container can be fitted only on 16' septic tank

20' sanitary container can be fitted only on 20', 24' a 30' septic tank

24' sanitary container can be fitted only on 24' septic tank

30' sanitary container can be fitted only on 30' septic tank

When fitting containers on septic tanks it is important to ensure that pressure on single base is as even as possible, and it cannot exceed 40 kN on corner feet and 30 kN on inner feet.

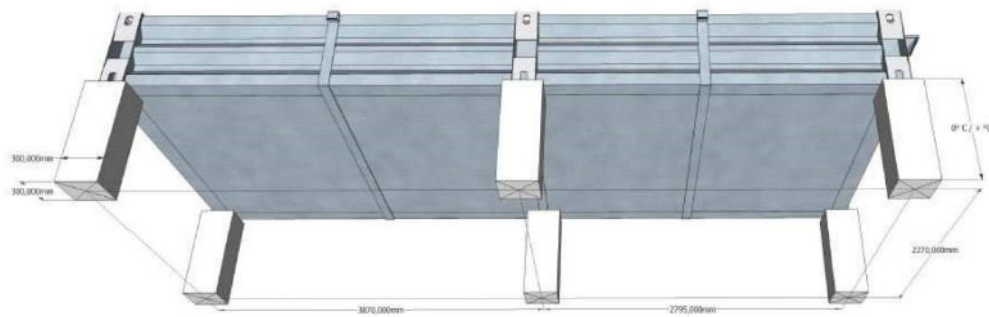
10' septic tank 160 kN

16' septic tank 220 kN

20' septic tank 220 kN

24' septic tank 280 kN

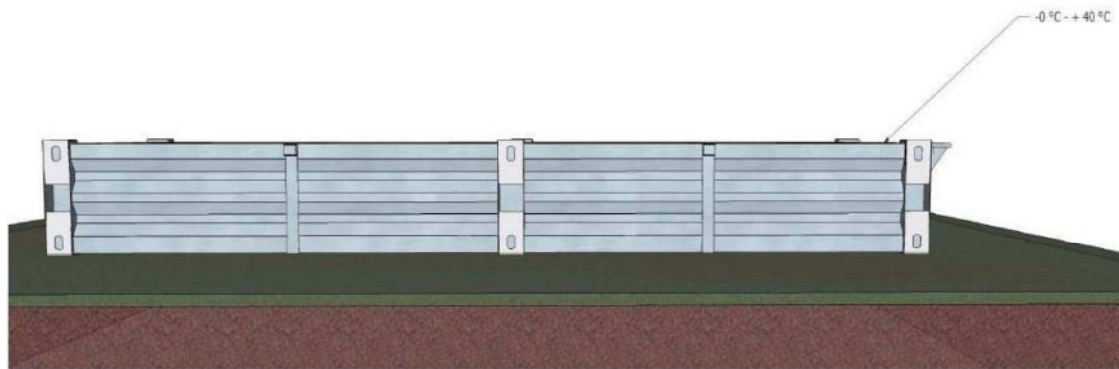
30' septic tank 280 kN



Example of concrete bases used under 20' septic tank.

On request we will send you recommended dimensions of bases or benches to be used under all dimensions of septic tanks free of charge.

External temperature when used above ground: 0 - +40°C.



External temperature when covered with soil: -5 - +60°C.

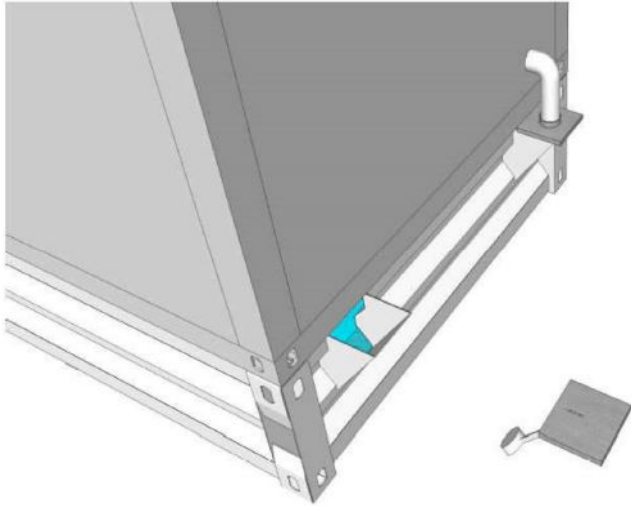


The use with temperature below 0°C is possible, if the surrounding soil does not freeze to depth of more than 30 cm. The use with lower temperature is possible only with additional thermal insulation, heating or by digging it deeper and it is always solved individually.

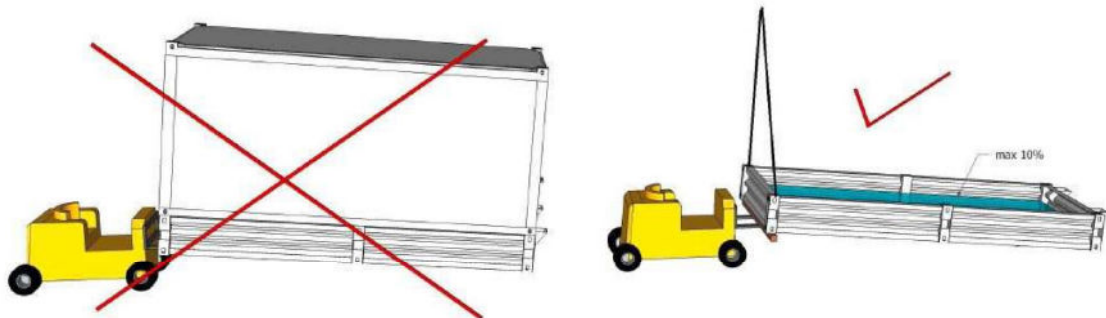
After deposition and during use there must be an air gap between the floor of sanitary container and upper wall of septic container.

5. Discharge

Normally upper plugs, located on the short side of container, serve for discharging container. Suction hose from fecal suction truck or slurry pump is inserted in free plug.



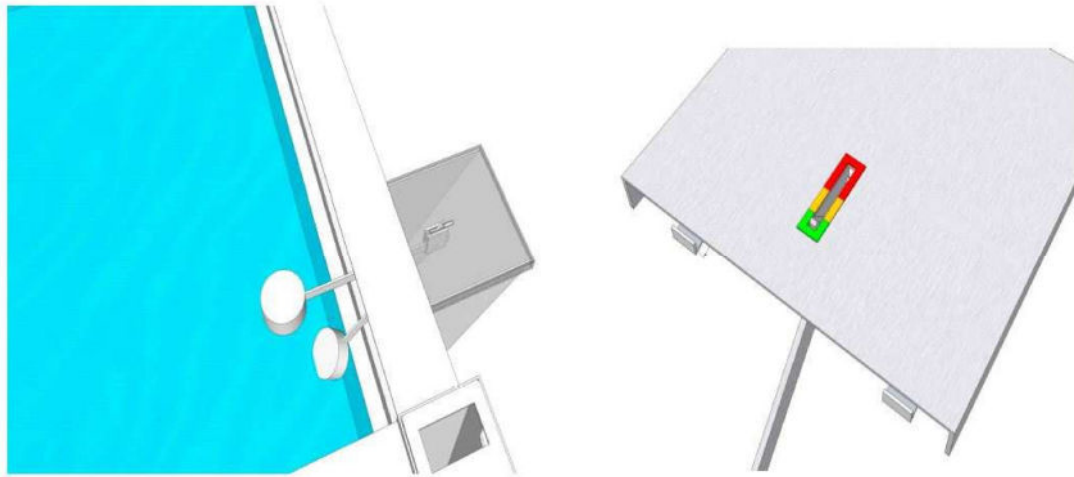
For perfect discharge it is possible to tilt container by slightly lifting (max. 15°) the opposite side in order to transfer its content to place of suction.



Lifting can be done by using slings in upper frame of container. In exceptional case it is also possible to lift it from below, using HSSWT, in such case it is important to ensure that no damage occurs to the bottom of container, and to place plastics, fabric or wood between pads and the bottom of container.

WARNING: It is possible to tilt container when it is filled up to 10% of its volume and to tilt only the container itself, without sanitary container placed on the top!

Some container types are equipped with float load indicators. If the container is empty, indicator is hidden and it is not visible. Progressively with filling up to approximately 70% of volume it is in the green area, when container is filled up to 90%, it is in the yellow area and if it is situated in the red area we recommend immediate discharge since there is a risk of overflow.



6. Treatment of damaged surface coating and maintenance

Before each season it is necessary to locate leak places, signs of ageing or possible damages to the construction and ensure repair.

Leakage tests are done with water.

Container's inner side is treated with two layers (basic and external) of epoxy coating, normally Hempel Hempadur 45 143, shade RAL9007.

External side is treated with one layer of epoxy coating and a top layer of polyurethane coating in RAL shade according to customer's requirement.

In case of mechanical damage it is necessary to clean concerned place, degrease it, get rid of rust and apply a protective layer again as soon as possible.

Critical places on internal surface of container are normally sufficiently treated with bituminous coating.

Stripping and progressive release of bituminous coating during the operation is acceptable and depends on the external temperature, used chemical detergents and it is not a defect.

Life of septic tank strongly depends on way of use and maintenance.

Minimum life with routine maintenance is about 5 years.

Incorrect stowage, handling, use of strong chemicals and insufficient maintenance may rapidly shorten life.

7. Environmental protection and recycling

Container is made from non-toxic material, and after the end of life it is 100% recyclable. Way and type of recycling depend on conditions in the country concerned.

8. Information on use and maintenance

Besides its filling the frequency of discharge depends on:

- External temperature
- Frequency and type of use
- Location of septic tank

We recommend discharge at least every 3 months.

Benefits of regular discharge are:

- Health safety, small air circulation, humidity and heat create in the long term culture medium for undesirable bacteria;
- Prevents fix deposition of sediments that cannot be consequently removed.

Container is resistant to all common detergents and its resistance to chemicals and weak acids is given by used coating, normally Hempel Hempadur 45 143.

In order to eliminate odour we recommend application of freely available enzyme and bacterial preparations into septic tank during the use.

List of used chemical detergents and washing agents must be adapted to specific used preparation. In principle it is not allowed to use chlorine-based agents.

It is necessary to note that some chemical agents become more aggressive with increased temperature.

In order to protect it against damage due to frost during storage it is appropriate to use antifreeze compounds for passenger car's windscreen washers with an alcoholic base. In extreme case it is possible to use antifreeze compounds for coolers in class G 10, G 11, G 12. However, in such case it is necessary to perform disposal according to the conditions of producer.

For perfect cleaning and maintenance there are two service ports on the upper side of container.

For perfect removal of deposits and impurities we recommend washing with pressurised warm water and plastic brushes and scrapers. We do not recommend use of steel brushes and scrapers during routine cleaning. It is necessary to remove common damages to the coating according to the point 6, we recommend repair of bigger superficial damages, dent and disruption of external sheets by professional. Bigger dents and damages of main supporting elements, bases, their deformation or other damage must be assessed by an expert as well as designed and performed way of repairing.

9. Conclusion

Producer reserves the right to modify and innovate the product.