

Container handling

One container body weighs 3,200–3,500 kg. Ensure that the capacity of the lifting equipment is sufficient. During installation, take special care and observe lifting safety regulations. Wear appropriate personal protective equipment. **Do not under any circumstances go under the load during lifting.** The lifting equipment must comply with the regulations and be in good working order. Inspect the equipment before each lift. The container body is lifted using a lifting frame or cable loops and a chain. The bolts in the frame are fastened to the RD16 inserts in the upper corners of the container body so that the lift can be safely performed as a four-point lift. Alternatively, cable loops can be used; **The cable loops are attached to the four inserts in the upper corners of the container. Ensure that all four cable loops are fully screwed into the insert. The lifting chains must be at least 3,000 mm long.** If there is snow or ice in the insert, defrost it with a gas burner or other similar tool before lifting. Note! The load securing loops on the sides of the container must not be used for lifting, they are intended for securing the load during transport. Figure 1 shows the correct way to lift the container.



Figure 1. Correct lifting method

Contents of the delivery

Lids, quick systems, as well as lifting bags and other accessories included in the delivery are delivered on a separate pallet. Lifting containers are usually delivered inside the container. **NOTE!** Small parts, along with the picture of the ordered container group, can be found in the accessory box on the pallet.



Figure 2. MolokDomino installation video

Installation location

Choose an installation location where the surface water drains away from the container, and make sure that rainwater is not directed to the planned installation site. Check the excavation potential, cables, pipelines and other things to consider in advance at the installation site. Position the container so that there is enough space around and above the container for emptying. Also take into account eaves, branches, air cables, etc., according to Molok Ltd's recommendations. The minimum distance between the containers and fixed structures, for example, fences that are higher than the container, is 500 mm. Take into account the space required by the emptying truck, as well as access to the containers for maintenance purposes, even in winter conditions. If the containers are equipped with a hinged lid (1/3), take into account the space required for opening the hinge to the side. Observe fire safety and consult the fire department to determine a safe installation location.

Installation pit

- Depth of the pit: 1,600 mm from final ground level. Width: 2,400 mm.
- Maximum groundwater height from the bottom of the container 0.5 m.
- The length of the installation pit is determined as follows: 1690 mm x number of containers + 800 mm
- Prepare the bottom of the pit so that it is perfectly level. Use fine gravel or coarse sand to make it perfectly horizontal.
- Compact the bottom carefully.

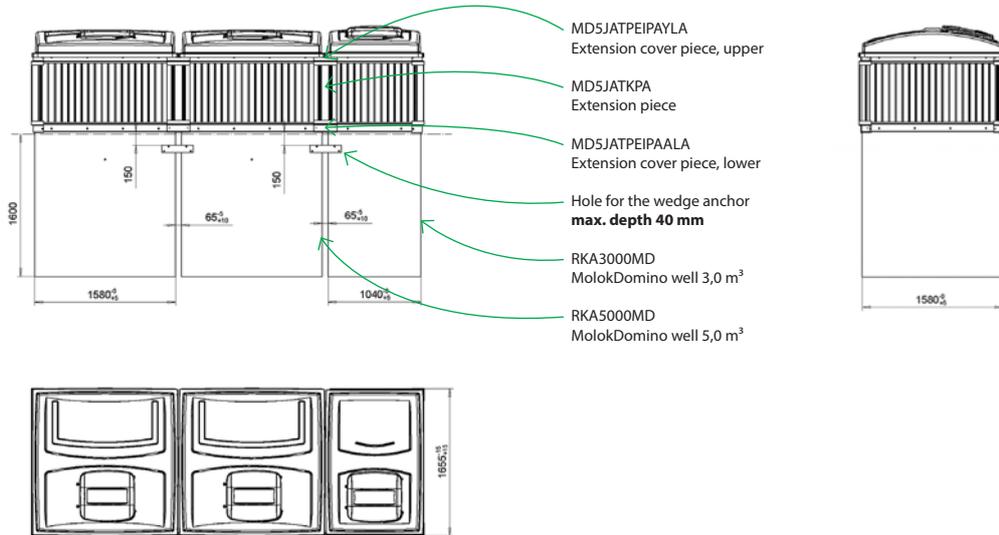


Figure 3. Example: installation of a group of three container bodies ($5\text{ m}^3 + 5\text{ m}^3 + 3\text{ m}^3$) on level ground. Be sure to attach the extension pieces of the framing as well as the extension cover pieces at the installation site.

Installation on a slope

- If you intend to install the containers on a slope, please indicate this at ordering phase, so that special finishing parts can be included in the delivery.
- In slope installation, the gap between the wells is slightly larger than in installations on level ground; 80–100 mm (65 mm on level ground)
- If the height difference is less than 12 cm, upper support profiles for the framing is installed between the containers, on the container body that is higher
- If the height difference is more than 12 cm, the upper container body needs to have an entire framing element also between the containers.
- For slope installation, corner pieces are used at all corners between the container bodies to achieve a neat finish.

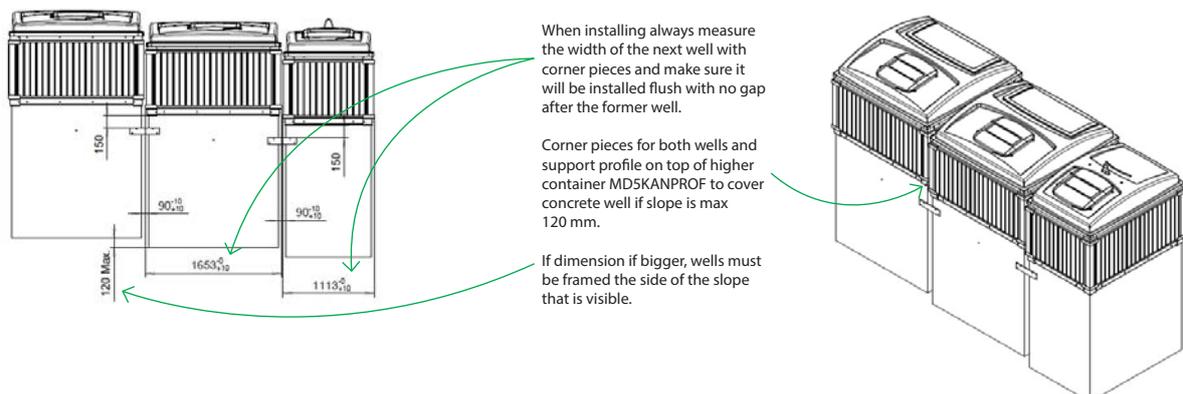


Figure 4. Example: installation of a group of three container bodies ($5\text{ m}^3 + 5\text{ m}^3 + 3\text{ m}^3$) on a slope.

Lowering the container bodies into the installation pit

- Lift the container bodies using a lifting frame or cable loops and chains. Observe the correct dimension of the chains (min. 3,000 mm) and the lifting force of the lifting equipment. Perform the lift calmly, avoiding sudden movements. Do not apply tension to the lifting equipment by twisting or turning the containers during lifting. Always observe occupational safety and **do not under any circumstances go under the container body during lifting**.
- Observe the correct order of the containers. As a rule, container body number 1 is placed on the left-most side of the group. Container body 2 to the right of this, etc. A picture of the order and delivery package can be found in the accessory box. The container numbering is also shown in the picture.
- **Leave 65 mm between the container bodies, measuring the distance at the bottom (at the top, the distance between the containers should be at least 45 mm to ensure that the lids fit). Make sure to leave a 65 mm distance also on the back sides of the wells, when installing containers back-to-back.**
- Tip: Before starting, prepare 65-mm blocks of wood that you can use to ensure the correct distance between the containers.
- Check the straightness of the container group with a spirit level or laser on top of the framing.
- Make sure that the container bodies are completely straight.

Tying the container bodies together

- The container bodies are connected to each other with metal plates mounted on the sides of the bodies, fastened using 10 mm wedge anchors, the **maximum drilling depth is 40 mm**. Attach the plate at all four points.
- The installation height of the metal plates is approximately -150 mm from the final ground level.

Filling the installation pit

- You can use the excavated soil as backfill. However, the soil used should be frost-resistant, so do not use clay, silt or mud as backfill. Remove any stones larger than 100 mm in diameter.
- Filling is carried out in layers of 200–300 mm with moderate compaction.
- When filling, fill the gaps between the wells with Leca® gravel. Fine sand can also be used for filling. Fill the gaps up to the final ground level.
- The installation site can be finished with fine crushed stone, paving, asphalt, etc. The asphalt should not cover the bottom of the framing.
- Make sure that surface water flows away from the containers.



Figure 5. Checking the straightness



Figure 6. Tying the container bodies together



Figure 7. Filling and finishing

Finishing the framing

- The short horizontal extension cover pieces (A and C) are attached to the aluminium support profiles of the framing with rivets. Attach the lowest extension cover piece (A) directly in line with the lower edge of the framing element. Place the vertical extension piece (B) in place and attach the upper extension cover piece (C). Finish by attaching the vertical extension piece (B) to the extension cover pieces (A and C) with rivets. Make sure the vertical extension piece (B) is installed straight.
- **Do not attach the extension pieces (A, B, C) directly to the framing boards**
- When installing on a slope, corner pieces are used instead of extension pieces.

Installation of lids and bags in container bodies

- Lids and bags are delivered separately as sets, on their own pallet.
- Check that the bottom of the lifting bag is closed tightly and the rope is in place according to the instructions on the bag. The closing mechanism of an empty bag may open during transportation.
- Put the lids with their quick systems and bags into place and make sure that the bag is installed correctly.
- Especially for smaller bags, make sure that the bag is not left crumpled after transport and installation.
- Install the right lid and bag in the right position in the container group. The correct installation location within the group is marked both on the container bodies and the lid sets. **In divided containers, installing the lid in the right place is important for the functioning of the product.**
- You can check the correct location in the picture in the accessory box.
- If the lid is not attached to a quick system, secure the lid with M8 x 35 torx screws. There are 3 screws per lid; the small lid is secured with one screw. Install a cover plate on the lifting handle opening, fasten the fitting with a screw; see picture 11.

BioSystem lifting container instead of a lifting bag

- The 1/6 BioSystem containers (500 litres) are always placed at the end of the container row and are used with a separate side hinge instead of the quick system. Hinge installation instructions are below.
- The 1/3 BioSystem container (1,000 litres) may also be located in the middle of the container row. Please note that the 1/3 container is delivered with the lifting loop detached. Installation instructions for the lifting loop are on the next page.

Securing the side hinge

- The side hinged lid is always located at the end of the container row, usually on the 1/6 BioSystem container. Note that opening the lid and using the product as intended requires approximately 50 cm of free space beyond the edge of the container.
- Connect the hinge parts of the lid and the container body with 8 mm bolts.
- The side hinge stop chain is secured to the support beam in the container. Attach the other end of the chain to the lid with a 6x30 mm locking bolt as shown. If the container row includes a 1/6 BioSystem™ inner container for biowaste, install the first Bioska® disposable bag in the BioSystem container and secure the bag with the rubber band (in the accessory box) as shown in image 12.

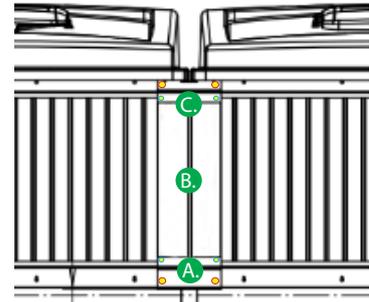
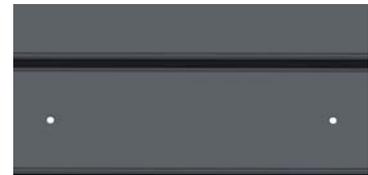


Figure 8. Finishing the framing

Lower extension piece A



Upper extension piece C

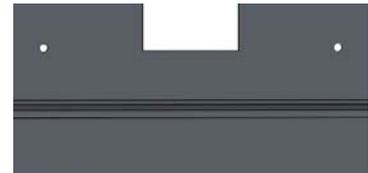


Figure 9. Framing extension pieces A and C



Figure 10. Lids and lifting accessories for a container body that is divided into three parts. In divided containers, it is important to install the lids correctly. Please note that the components intended for different locations are different.



Figure 11. Quick system loop and cover plate

Lifting loop to the 1/3 BioSystem container

The container is transported with the upper lifting loop bar detached. The bolts needed for the installation are taped to the side of the container or can be found in the accessory box. Attach the upper lifting loop bar with two 8x25 locking head bolts (+ nyloc nuts 8 mm) to the lifting container. Lift the lid onto the container and insert the lifting loop through the hole in the lid. Make sure that the lid is straight and fasten the cover plate of the quick system with an 8x90 hex socket round head bolt. Tighten the bolts so that the cover plate tightens slightly against the surface of the lid (the upper bar has a thread for the 8x90 bolt). Then, lock the 8x90 bolt to the upper bar with an 8 mm nyloc nut from below.

Finishing

Make sure that the containers remain neat after installation, the framing extension pieces are in place, and the lids fit well in their correct places, with the hinges correctly installed. Marks left during installation or transport must be wiped off the lids as well as the framing, and the numbering tapes used for marking the location are also removed from the lids. Make sure, that no water remains in the containers after installation and transport. Any water must be removed from the container before handing the installation over to the customer.

Note!

If the containers are stored without lids before installation, you must cover the containers with plastic or plywood boards or the like to prevent rainwater from accumulating inside the container. If water gets in the container, remove it by pumping. Do not make holes in the container to drain the water. If the lids, quick systems and bags are bundled together with a tight band/plastic for transport, remove the band before storage.

Parts and accessories included in the delivery

Note! Small parts are in a separate accessory box.

- Container body with framing, with waste type sign attached
- Finishing parts for the framing
- Lids, bags and quick systems
- Wedge anchors and other fastening accessories
- Leca® gravel for gap between containers
- Possible BioSystem™ inner container and, for a 500-litre BioSystem container, a disposable bag and rubber band for securing the bag

Parts and tools needed in the installation

- Drill and torx heads • Hammer drill, 5 mm and 10 mm bits for concrete
- Wrenches 17, 10 and x 2 13 • Riveting pliers and heads
- Spirit level • Iron bar • Shovel • Street brush • Ladder 3 m • Hammer

Instructions are made in Finland. Always follow local laws and regulations and follow good installation practices. Pay attention to different soil types at different locations. Contact your local dealer for further information. Contact info available at www.molok.com.



Figure 12. Installation of the side hinge chain and disposable bag

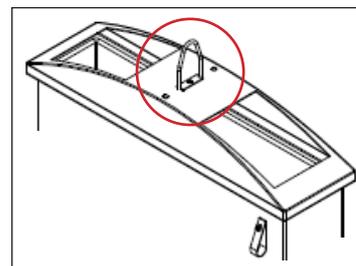


Figure 13. The 1/3 BioSystem container comes with the lifting loop detached

Additional instruction: Deployment instruction for KHF and 2-hook lifting containers

For transportation reasons, lifting containers are delivered with the upper beams, lifting beams, lids and cover plates detached.

First install the concrete wells according to the installation instructions above and make the backfill for the pit. Then lift the lifting container out of the concrete well from the beam on the upper part. This needs to be done before the delivery truck leaves the site, as the crane is needed for this.

Installation of the beams KS 1/1, 2/3, 1/2, 1/3

- With the help of the crane in the truck, lift the upper beam on top of the container and guide it into position.

Notice that the beam can weigh up to 35 kg.

- Connect 2x M12x40 locking bolts on the container to install the beam on both sides. In total 4 bolts. Place the lid on top of the container.
- Install the lifting beam (2-hook or KHF mushroom) through the upper and lower beams. **Make sure the beams are aligned properly.**
- Install the M16x80 bolt + M16 lock nut through the beam. The filling lid must be opened, and the work must be done through the filling opening. Note to place the bolt so that the bolt head faces the filling lid, this prevents the waste from getting stuck on the bolt. Tip for installing the bolt M16x80: Insert the bolt into the hole in the beam, but don't install the nut yet. Raise the lifting loop so that the weight of the container is slightly on the bolt. This tension keeps the bolt in place without tools. Now you can easily install the nut from the front side by hand and then tighten it with tools. If the filling opening is small or a vertical opening is used this can be hard and special tools might be needed!

Installation of the lids KS 1/1, 2/3, 1/2, 1/3

- There is a large hole in the lid to make space for installing the KHF mushroom. In the 2-hook version there is only space for the hooks to go through the lid.

Do not fix the main lid to the container to allow free movement of the lid during emptying.

- In Kinshofer versions, use the larger covering plate to cover the large hole in the lid. Fix the covering plates for the lifting loop/KHF mushroom with the designated rivets or bolts to the lid and then use the smaller covering plate to cover the gap in the larger cover plate.
- In the 2-hook version the small cover plate is installed with rivets under the fixed hook.
- Special mentions for the 1/3 containers:
Place the lid on the container and position it so that the holes align with the lifting beam. **Notice that the holes in the lid are in a different position (left or right side or middle) if the container is installed in the sides or in the middle of the body well.**

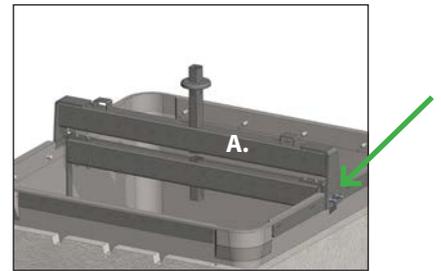


Figure 14. Upper beam (A) is fastened with 2 bolts at both ends.

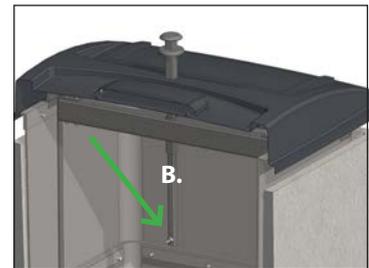


Figure 15. When the lid is placed on the container, the lifting beam (B) is installed, and secured with a M16x80 bolt + M16 nut .

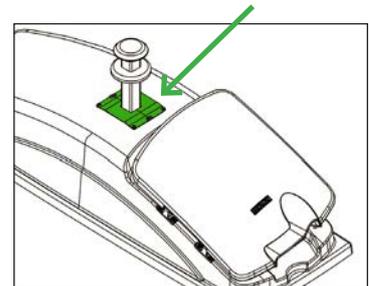


Figure 16. Cover plates for Kinshofer, instructions behind the QR code

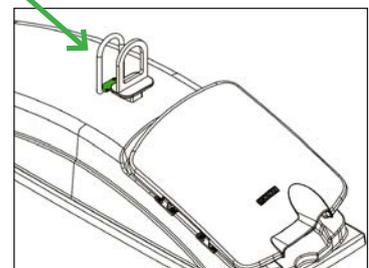


Figure 17. Cover plate for 2-hook (only for the fixed hook)