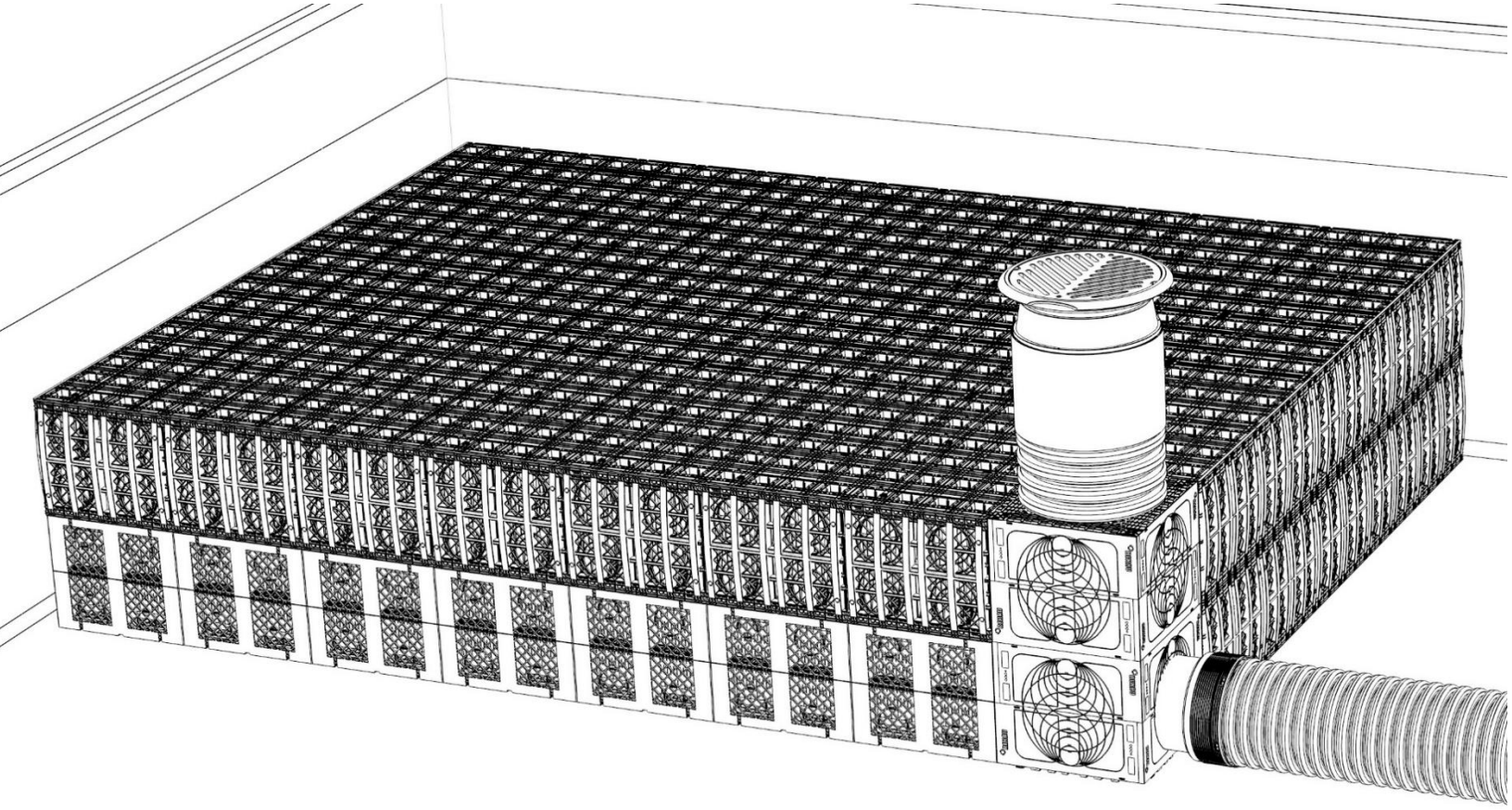


RAUSIKKO^{MD} GEOCELLULAR BASIN

INSTALLATION GUIDE

INSTALLATION INSTRUCTIONS FOR RAUSIKKO^{MD} RETENTION BASINS

STEPS

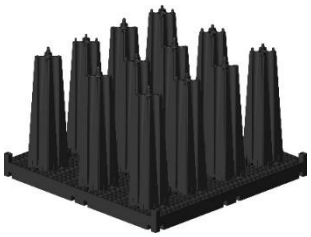
1. Pre-installation Preparations
2. Excavation and Base Preparation
3. Placement of Geotextile Below the System
4. Unloading of Components
5. Assembly of Modules
6. Installation of Access shafts and Side Grills
7. Connection of Side Inlets/Outlets
8. Wrapping with Geotextile
9. Backfilling

STEP 1

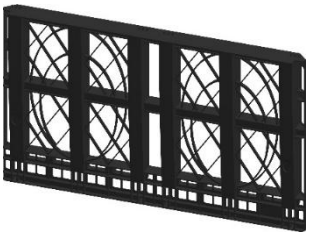
PRE-INSTALLATION PREPARATION

If there is any discrepancy between the information in this guide and the project's plans and specifications, please contact your **Soleno representative** for clarification.

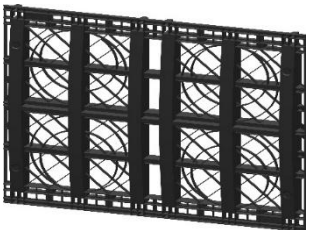
Upon receiving the materials, inspect all items to ensure that everything listed in the **shop drawing bill of materials** has been delivered and is in good condition. A visit from a Soleno representative is **strongly recommended** either upon delivery or prior to the start of installation. Please contact your representative **at least 48 hours in advance** to arrange this visit.



Basic Element SX/HX*



SX/HX* 8.3 Side Grid



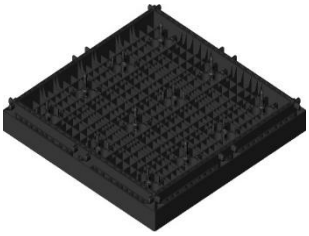
SX/HX* 8.6 Side Grid



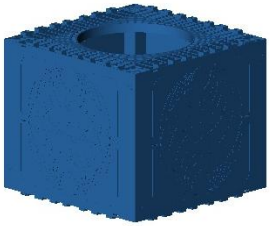
End Grid



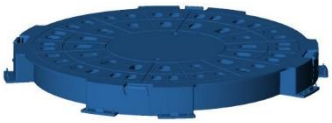
Sedimentation box 8.6 SC



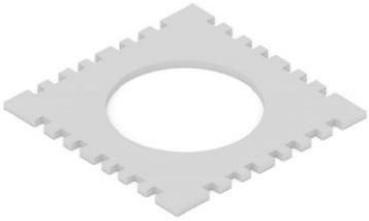
SX/HX* 8.3 Cover Plate



Rising box C3 8.6



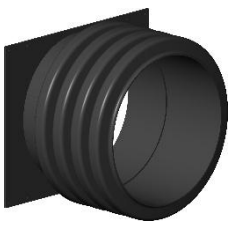
Cap C3



C3 8.3 Cover Plate



Adapter C3



Adapter SX/HX8.6



Adapter for Side Grid

*The SX elements are black while the HX elements are blue.

STEP 2
EXCAVATION AND BASE PREPARATION

- Excavate the trench according to the approved shop drawings and project plans. The base of the trench must be dry, flat, level, and free of stones or debris.

NOTE: Refer to the shop drawings and plans for the required thickness of the stone bedding layer.



- Level the stone bedding and compact it to 90% P.M. using a vibratory plate compactor.





STEP 3
PLACEMENT OF GEOTEXTILE BELOW THE SYSTEM

- Unroll the TX-90 separation geotextile, ensuring a 300 mm (12 in) overlap at all joints. Allow sufficient excess material to cover the sides and top of the system once installation is complete.



STEP 4
UNLOADING OF COMPONENTS

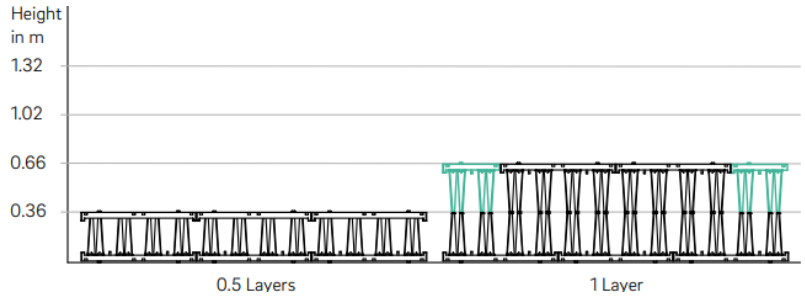
- Carefully place the storage units (boxes) into the trench.



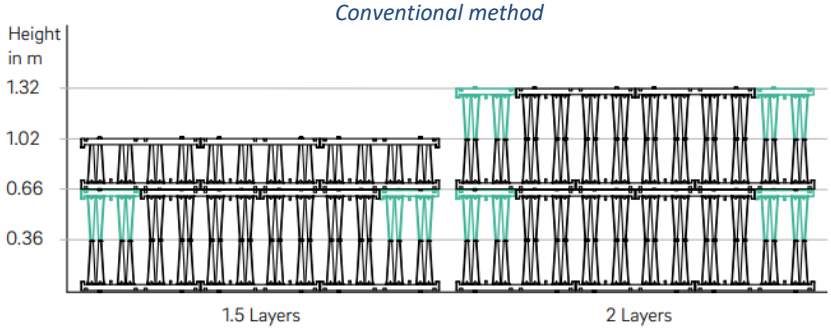


STEP 5
ASSEMBLY OF MODULES

- For basins with more than one layer, use the masonry wall assembly method as recommended.



Conventional method

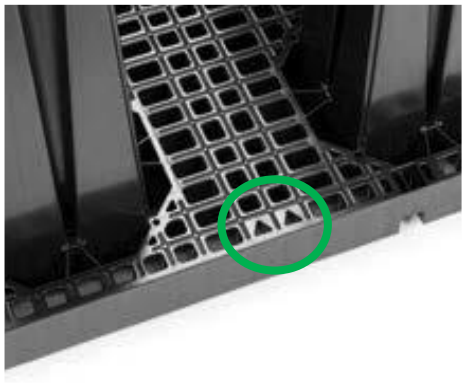


Masonry wall assembly method

STEP 5
ASSEMBLY OF MODULES (CONTINUED)

- According to the instructions on the assembly plan attached to the workshop drawing, cut the openings in the C3 boxes.
- Following the provided assembly plan, install the boxes by stacking them, the pieces fit together with light vertical pressure, and no additional accessories are required. Ensure that orientation markings on all boxes within the same row point in the same direction.











STEP 5
ASSEMBLY OF MODULES (CONTINUED)

- If applicable, place the boxes for the next layer into the trench. Install them using the same method as the first layer, ensuring that their orientation aligns with the boxes in the layer below.









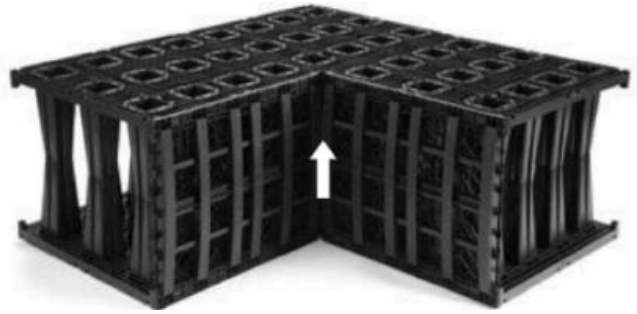
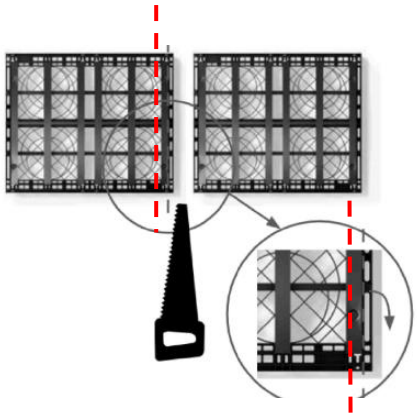
STEP 6
INSTALLATION OF ACCESS SHAFTS AND SIDE GRIDS

- Insert the adapter on top of the box designated for the chimney.
- Insert the HDPE chimney into the adapter.
- Install the side grids around the perimeter of each layer. The grids are secured by inserting them into the predefined notches. Everything fits together with light horizontal pressure.



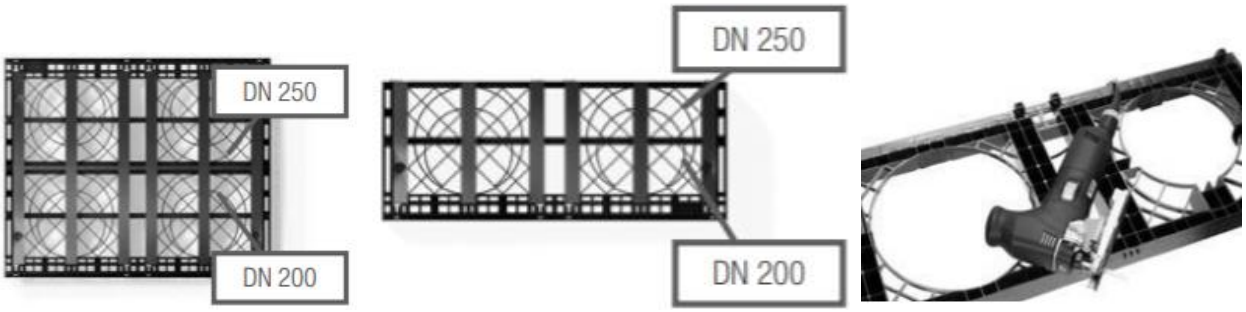



- Inner corner: The edge of one of the two adjacent side grids must be carefully cut using a fine-toothed saw.

STEP 7
CONNECTION OF SIDE INLETS/OUTLETS

- For 250 mm and smaller (≤ 10 in): Cut the side grid to the intended elevation, then insert the adapter.





- For 300 mm to 600 mm (12 to 24 in): Instead of a side grid, position the 600 mm (24 in) adapter and screw it in place (screws not included). Insert the reducer (if applicable) according to the planned connection diameter and rotate the adapter to the intended elevation.



STEP 7
CONNECTION OF SIDE INLETS/OUTLETS (CONTINUED)

- For Rising box C3: Insert adapter until the green bell is in contact with the box and ensure that the smooth section entering the C3 box does not exceed 150 mm (6 in). Shorten the smooth section if necessary.



STEP 8
WRAPPING WITH GEOTEXTILE

- Raise the TX-90 geotextile on all sides and over the top of the system, ensuring an overlap of 300 mm (12 in) at all joints.



STEP 9
BACKFILLING

- Laterally, backfill in uniform layers of at least 300 mm (12 in) using granular material with particles 20 mm (3/4 in) or smaller, compacted to 90% P.M. Ensure the vibrating plate compactor does not come into direct contact with the boxes. IMPORTANT: The use of a jumping jack compactor is prohibited.



- On top of the system, apply a 100 mm (4 in) layer of sand, then complete the initial 300 mm (12 in) of backfill with compactable granular material.

  NOTE: No compaction equipment can be used on the basin until a minimum of 300 mm (12 in) of compacted fill is in place

- Complete the final backfill in accordance with the plans and specifications, ensuring a minimum cover of 0.8m is achieved before allowing any form of traffic.



  NOTE: If the cover is expected to be less than the minimum, please contact your Soleno representative.