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RecoCrate

Recycled Plastic Stormwater Attenuation Crates

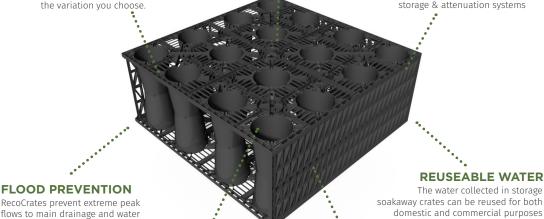
Our RecoCrate soakaway crates are used to create permeable infiltration schemes, underground water storage and attenuation systems. They are versatile products that can be used under car parks, landscaped areas and heavy duty projects within residential, retail, commercial and industrial areas. RecoCrates are available in five different load bearing capacities. All crates have a high void ratio that allows the creation of effective underground water storage or drainage. The installation of soakaway crates decreases the possibility of localised flooding during heavy rain fall and are perfect for use of on difficult development sites where drainage and flooding may have previously been an issue.

LIGHTWEIGHT

Weighing just 16kg per crate, they can be moved and installed by hand removing the need for machinery

VERSATILE

RecoCrates can be used on a number of different projects to create effective storage & attenuation systems



HIGH VOID RATIO

Our soakaway crates have void ratio of up to 95% meaning there is more room for water to be stored

HIGH CAPACITY

Able to hold up to 400 litres per crate, RecoCrates have an amazing water holding capacity

KEY FACTS

Height: 1000mm

STRONG

purification systems

RecoCrates are able to withstand upwards of 20 tonnes dependent on

Width: 1000mm

Depth: 400mm

Volume: 400 litres

Weight: 16kg - 30kg

Weight bearing: 20-100t

Pallet quantity: 5 crates

Void ratio: 94%+

Manufactured to: ISO9001

APPLICATIONS



WATER STORAGE

Collected water is stored underground and can be reused to water plants, flush toilets and in washing machines



WATER DRAINAGE

To prevent flooding, collected water is released at a steady rate to allow the ground to absorb the liquid safely



LANDSCAPED AREAS

Used under gardens & landscaped areas to help protect the area from flooding or to collect reusable water



DEVELOPMENT SITES

Used to meet SuDs regulations on new developments, RecoCrates aid in reducing the chance of floods



CAR PARKS

The strength of the RecoCrates mean they can be used under car parks driven in by cars, vans and HGVs



POOR DRAINAGE

Used in poor draining areas to reduce the pressure on the ground to absorb all of the water that falls on it

Installation Instructions

- 1. Measure out and excavate your installation area to the required dimensions before levelling the exposed base. Ensure that plant/equipment can access the sides of the system to compact the backfill material (500mm minimum for light to moderate use, 750mm minimum for intensive & HGV use above the system). Make sure the base is smooth and level with no sharp protrusions or obstacles. The slopes must be at a safe angle or adequately supported to allow site personnel to enter the excavation.
- 2. Inspect the base for any soft spots. If there any, excavate them and replace with compacted granular fill material. Then lay a 75mm sharp sand bedding layer to the base of the excavation and level.
- **3.** Lay a geotextile protection fleece (non-woven, thermally bonded) ensuring a minimum 150mm overlap. **This is required for both attenuation & infiltration systems.** (For **water storage:** Lay a non-permeable geomembrane over the geotextile and sand bedding layer and up the sides of the excavation).
- **4.** Assemble the SC units and install within the void in accordance with the design, specification and any regulations applicable to the installation site. Special clips are provided to join the units together and prevent displacement. Single clips for adjacent units (*3 per unit*) and double clips for all multi-layer applications (*1 per unit*).
- 5. Complete the geotextile and/or geomembrane encapsulation to the sides and the top of the installation, ensuring that the protection fleece has the 150mm overlap mentioned earlier. The geomembrane should be welded with double seams and inspected for damage, testing the welds as required.
- **6.** Connect the drainage connections to the installation using proprietary adaptors. Alternatively for infiltration systems, use flange adapters and attach them to the crate units with self-tapping screws. For attenuated systems, it is recommended that all connections and air vent installations are achieved using sealed drainage connections into a preformed socket using proprietary seals (*top-hats*).
- **7.** Backfill around the sides of the installation with a type 1 or 2 sub base, compacting in layers of 150mm, until reaching the top of the RecoCrates, in accordance with the Highway Works specification.
- 8. Place a 75mm sharp sand protection layer if required over the top of the crates and continue to backfill as follows:

For trafficked areas: Type 1 or 2 sub base material compacted in 150mm layers in accordance with the Highway Works specification. Compaction equipment used on top of the system should not exceed 2,300kg per m2.

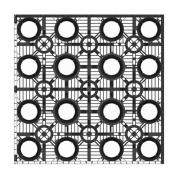
For landscaped & non-trafficked areas: Selected "as dug" material with a unit size of no more than 75mm compacted to 90% maximum dry density. Compaction equipment used on top of the system should not exceed 2,300kg per m2.

Finalise the pavement construction or landscaping over the crate system. (E.g. Ground Reinforcement Grids)











PRODUCT CODE	COLOUR	DESCRIPTION	CAPACITY (L)	DIMENSIONS (mm)	PACK SIZE	PALLET QTY	UNIT WEIGHT (kg)
SC20T-10040	Black	RecoCrate - 20 Tonne	400	1000 x 1000 x 400	1	5	16
SC30T-10040	Black	RecoCrate - 30 Tonne	400	1000 x 1000 x 400	1	5	20
SC50T-10040	Black	RecoCrate - 50 Tonne	400	1000 x 1000 x 400	1	5	22
SC60T-10040	Black	RecoCrate - 60 Tonne	400	1000 x 1000 x 400	1	5	26
SC100T-10040	Black	RecoCrate - 100 Tonne	400	1000 x 1000 x 400	1	5	30