StormMaster Installation Instructions FULL CRATE SYSTEMS



Pre-installation notes:

For attenuation systems: Position the inflow and outflow connections level with the base of the StormMaster structure

For infiltration systems: Position the inflow connection at the top of the StormMaster structure.

Installation Instructions:

- 1/. Excavate to the required length, width and depth and level the base. Ensure area is enough to allow plant access around sides to compact the backfill material (500mm minimum). Ensure base is smooth and level with no sharp protrusions. Cut back slopes to a safe angle or adequately support and allow safe access for site personnel.
- 2/. Inspect the base for soft spots and if any are present, excavate and replace with compacted granular fill material.
- 3/. Lay 75mm sharp sand bedding layer to the excavated base and level off. Lay the geotextile protection fleece (non-woven, needle punched), ensuring a min. 150mm overlap. This is required for both attenuation and infiltration structures.
- 4/. Lay the geomembrane (if attenuation) over the geotextile and sand bedding layer and up the sides of the excavation. Examine the geomembrane for damage and test all welds if apparent.
- 5/. Install the StormMaster units (1.0m x1.0m x 0.4m) within the void in accordance with the installation instructions supplied. Arrange the units so that the outlet positions are in correct alignment with the inlet and outlet pipes. In multi-layer installations use the shear connectors provided to secure the units against accidental displacement around the edges of the structure.
- 6/. Complete the geotextile and/or geomembrane encapsulation to the sides and top of the installation, ensuring 150mm minimum overlap for the protection fleece.

 Geomembrane should be welded with double seams and inspected for damage, testing the welds as required.
- 7/. Make drainage connections using proprietary adaptors. Ensure that the pre-formed socket positions are located correctly to receive the pipe-work. Alternatively for infiltration systems use flange adaptors and attach them to the StormMaster units with self-tapping screws. For attenuated systems, it is recommended that all connections and air vent installations are installed using sealed drainage connections into a preformed socket with proprietary seals.
- 8/. Backfill the installation sides with Type 1 or 2 sub base, compacting in 150mm layers, in accordance with Specification for Highway Works.

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9/. Place a 75mm sharp sand protection layer if required over the top of units and continue to backfill over units as follows:

For trafficked areas (car parks etc):

Type 1 or 2 sub base material compacted in 150mm layers in accordance with the Specification for Highway Works. Compaction equipment on top of the system not to exceed 2,300kg per metre width.

For landscaped and non-trafficked areas:

Selected "as dug" material with a unit size no more than 75mm compacted to 90% maximum dry density. Compaction equipment on top of the system not to exceed 2,300kg per metre width.