
Introduction

Roofdrain is a geocomposite roof drainage and water reservoir layer usually comprising a perforated cusped HDPE core bonded to a geotextile filter on each side. **Roofdrain** is supplied in a) narrow widths fully wrapped in geotextile b) sheet form with a light filter geotextile on the flat side of the core with an overlap flap and in some products with a heavier geotextile on the cusped side of the core. The **Roofdrain** sheet is laid with the heavy textile against the roof waterproofing system and the lightweight textile facing the soil fill. **Roofdrain** could have a geotextile on the flat side only or no textile at all. It is always laid cup shapes facing upwards to collect water to enable water storage to feed plants. The void on the underside helps transmit excess rainwater away. Its major application is as a lightweight extensive flat roof garden or reservoir roof drainage where lightweight vegetation is required.

Laying instructions

Roofdrain is supplied wrapped in lightproof bags that should only be removed just before installation.

1. **Roofdrain** can be carried or rolled but should not be dragged. Rolls should be harnessed when lifted by crane. Rolls, typical diameter 1.3m x 0.9m wide weigh approx. 75 kg.
2. **Roofdrain is laid with the geotextile filter on the flat side facing up** (with the holes in the core at the top) to receive the soil backfill and the cusped side against the roof waterproofing.
3. In choosing the commencing point and direction of laying, consider the intended access point for placing backfill material to avoid any unnecessary need to traffic over the **Roofdrain**.
4. **Roofdrain** is supplied in strips of the appropriate width for use on profiled metal roof systems and the strips are simply unrolled into position and cut to length.
5. When using **Roofdrain** in sheet form, unroll the first roll of **Roofdrain** into position such that the geotextile flap laps up onto a side wall. Rolls can be cut to length with a sharp knife. The flap can be held in position with mastic or jointing tape.
6. The adjacent roll is placed such that the cores butt together. The geotextile flap overlaps the adjacent sheet.
7. Installation continues to the far wall where a 500mm wide geotextile strip is used to flap over the core and up to the wall and sealed with mastic or jointing tape.
8. Special types of **Roofdrain** are used on steep sloping roofs. Unless other means of support are provided, the **Roofdrain** must be a continuous length over the apex of the roof with equal lengths both sides, otherwise an anchorage must be provided at the apex of the roof.
9. **Roofdrain** can be cut and sealed around columns and other roof slab penetrations.
10. Non load bearing walls and planters can be built off **Roofdrain** by providing a concrete pad that limits the compressive stress to 50 kPa. Otherwise, the cusps must first be filled with mortar. To do this the geotextile must be cut at one side, peeled back and mortar hand placed into the cusps taking care that mortar does not fall through the holes in the core. Finally the geotextile is replaced and the wall construction can commence.
11. **Before backfilling, inspect the installation to make sure that there are no gaps in the geotextile where soil can enter the core.** Ensure that water can exit freely from the **Roofdrain** if the outlets are along the ends or sides.
12. Backfill with good quality topsoil for planted areas or sand for feature paved pedestrian areas.
13. At least 150mm of temporary backfill material should be maintained over the **Roofdrain** where mechanical plant is working. Temporary access routes over **Roofdrain** for mechanical plant should be protected with boards.
14. If the **Roofdrain** geotextile cover is damaged small areas can be repaired using a patch of similar textile at least 300mm larger than the damaged area. Damaged drainage core is cut out locally and a similar shaped replacement is inserted.
15. Standard **Roofdrain** has UV stabiliser allowing exposed to sunlight for up to 14 days in temperate climates and 3 days in extreme sun exposure. Contact our technical department for details of special enhanced UV resistance.

Ancillaries and tools

Narrow roll of textile 500mm wide for edge detail. Sandbags for temporary ballast of overlaps and to prevent uplift by wind. Adhesive for special joint details, if required. Jointing tape to hold the geotextile flaps in position, Sharp knife.