



TECHNICAL MEMORANDUM 004 Soakaways

This is for general guidance and does not constitute a design for your particular circumstances. You must consult your designers for assistance.

Why use a soakaway?

Building Regulations require you to adequately dispose of stormwater from the building.

You must ensure water is dispersed into the ground evenly and quickly you must consider the use of a soakaway only when other options of rainwater disposal is not possible i.e. Surface drain, rainwater butt / harvester, river course etc.

You must use a soakaway only when design criteria can be met. **For instance you are unlikely to be able to use a soakaway in soil that is both impermeable and dense eg. Dense clay soils.**

Discharging stormwater into a drain will only be allowed if soakaways or other infiltration methods are not suitable.

Soakaways – how they work?

Soakaways store the immediate stormwater run-off to allow infiltration / percolate into the adjacent soil over a short period of time. They must discharge their stored water sufficiently quickly to provide the necessary capacity to receive run-off from a subsequent storm.

The time taken for discharge depends upon the soakaway, shape and size, and the surrounding soil's infiltration characteristics. Soakaways can be constructed in many different forms and from a range of materials, your designers should be able to assist you in those matters.

When can a soakaway be used? If you are planning to use a soakaway, there are certain things that you need to do, these being:

- Identify if a soakaway is the most suitable means of disposing of stormwater,
- Identify that the soil around the building is satisfactory for infiltration,
- The site is not on filled ground,
- The site does not slope towards the building,
- The water table is not too high.

Ensure soakaways can be sited at least **5 metres from any buildings**. If you are close to boundaries you should discuss this with your neighbour, otherwise it is recommended that they are sited at least **2m from a neighbours boundary**.

If you cannot meet these criteria stormwater can be disposed of via a storm drain. Foul or combined drains cannot be used.

How to construct surface water soakaways?

If it is not known whether the soil has an adequate degree of permeability or the roof area to be drained into the soakaway exceeds 100m² you will need to:

- Carry out an on-site percolation test
- Decide on the construction type for the soakaway i.e. concrete ring surrounds, or a proprietary manufactured cage containing graded granular fill etc
- Calculate the required storage volume
- Consider space requirements, site layout, topography, water table, subsoil type etc
- A typical depth of a soakaway serving small residential buildings (up to 100 sq.m) is approx. 1.5 x 1.5 m in plan area, and between 1.5 -2.5m deep in a permeable soil i.e. chalk, sand, gravel etc.

The above should be carried out in accordance with BRE Digest 365.

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