

# Soakaways

A soakaway is a hole excavated in porous ground which accepts rainwater discharged from roofs and paved areas. The hole is constructed so that water which collects in it is able to seep into the surrounding subsoil. To work effectively a soakaway must be designed with the following factors in mind:

- The absorption rate of the subsoil.
- The area to be drained.
- Whether the soakaway would be able to cope with a freak or ten year storm.

You should also contact the local authority as there may be set requirements as to how and where the soakaway must be constructed. You should also involve the local Building Control department as they may be able to advise you on water table height.

## Water absorption and different types of soil

The rate at which water is absorbed in to the ground is almost completely dependent upon the type of soil. Sandy and gravelly type soils are suited for use with a soakaway but clay type soils are not.

## Calculating the volume of soakaway

When calculating the volume of a soakaway, you must allow for a storage capacity that is equal to a third of the hourly rainfall experienced by the area to be drained. The rate of rainfall corresponding to a two hour storm occurring on average not more than once in ten years is 0.015m.

Therefore if the area to be drained is 150m<sup>2</sup>, the required capacity of the soak away is: 150m<sup>2</sup> x 0.015m = 3.375m<sup>3</sup>.

