

Warranty requirements for a soakaway

Introduction

This technical document provides additional guidance relating to how the Functional Requirements in the Technical Manual may be satisfied where soakaways are used, in particular this article will highlight the documents we need to assess before we can accept their use on site.

A soakaway is essentially a hole in the ground which is filled with coarse stone or plastic crates in order to slowly filter rainwater back into the ground. It's often seen as an alternative to draining surface water into a stream or sewer system. Before accepting their use, we need to review some key documentation, this article will discuss the documentation required in further detail. There is also consideration for the distance a Soakaway should be from any building and using soakaways in chalk

Documents we require

Site Investigation Report

Soakaways cannot be used on all sites, for example, they may not be compatible in certain soil conditions such as chalk or clay. In addition, other factors such as the position of the ground water table, if the site is in a Groundwater Source Protection Zone or contamination can also influence if a soakaway is viable on your site. We therefore always require a minimum Phase Two Site Investigation Report clearly stating the ground is suitable for a soakaway. Some site investigations may not explicitly detail this, in such situations written confirmation from the geotechnical engineer will be required.

On site percolation test

A percolation test will determine the size and depth the soakaway needs to be, however, before one is carried out, it's important to remember a percolation test **should not** be carried out during or just after abnormal weather conditions such as heavy rainfall or a drought as this may skew your results.

BRE Digest 365 should be referred to for guidance on how to carry out a percolation test along with details on how to interpret the data to determine the size and depth of the soakaway.

A copy of the percolation test results should be provided from a suitably qualified professional.

A soakaway design

A soakaway design in accordance with BRE Digest 365 should be provided. This must be from a suitably qualified professional and it may encompass the percolation test results.

Proposed drainage layouts

Proposed drainage layouts clearly showing the distance the soakaways are to be from any building must also be provided. In addition, invert levels, gradients and pipe diameters should be detailed on the proposed drainage layouts.

Other considerations

Soakaway position

Soakaways should be positioned so that they are:

- In a location lower than the area being drained
- At least 5m away from any building (BS 8301)
- Situated so that it will not saturate the foundations of any structure
- Situated so that the base of any soakaway/infiltration system is permanently above the water table
- Situated far enough away from other soakaways/infiltration systems to ensure that the capacity of those other systems and the ground itself is not impaired
- Situated so that there is no risk of contamination from pollutants

Soakaways in Chalk

For sites where chalk is prevalent, the CIRIA C574 Engineering in Chalk 2002 publication gives the following recommendations:

Concentrated ingress of water into the chalk can initiate new dissolution features, particularly in low-density chalk, and destabilise the loose backfill of existing ones. For this reason, any soakaways should be sited well away from foundations for structures or roads, as indicated below:

- In areas where dissolution features are known to be prevalent, soakaways should be avoided if at all possible but, if unavoidable, should be sited **at least 20m away** from any foundations
- Where the chalk is of low density, or its density is not known, soakaways should be sited at least 10m away from any foundations
- For drainage systems, flexible jointed pipes should be used wherever possible; particular care should be taken for the avoidance of leaks in both water supply and drainage pipe work
- As the chalk is a vitally important aquifer, the Environment Agency and Local Authority must be consulted when planning soakaway installations where chalk lies below the site, even where it is mantled with superficial deposits

Warranty position

This article has provided some guidance on the key documentation we require where soakaways are specified, details on soakaway positioning and specifying soakaways in chalk ground conditions. For further detailed guidance on soakaways, please see [Section 5 of the Premier Guarantee Technical Manual](#).

Please note: The above guidance is only in relation to how you can satisfy our warranty requirements. This may be different to you satisfy the requirements of your Building Control Body.

Every care was taken to ensure the information in this article was correct at the time of publication. Guidance provided does not replace the reader's professional judgement and any construction project should comply with the relevant Building Regulations or applicable technical standards. For the most up to date Premier Guarantee technical guidance please refer to your Risk Management Surveyor and the latest version of the [Premier Guarantee Technical Manual](#).

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