



Certification Performance Criteria Guidance

B3.1 Ground Investigation Reports

Performance Criteria

Certifiers shall check that an adequate ground investigation has been carried out and shall review the scope of the investigation and the contents of the report to satisfy themselves that the conclusions and recommendations are appropriate.

Certifiers shall check that the investigation takes account of the effect of any new building works on the stability of existing buildings in the vicinity of those works.

In those circumstances where it is considered that a ground investigation is not required Certifiers shall ensure that the reasons why it is not considered necessary are recorded.

Background

Requirement 1.2 requires that a building must be constructed so that, in so far as the risk can reasonably be foreseen, movement of the subsoil caused by landslip, swelling or freezing will not impair the stability of any part of the building.

Hence a suitable investigation must take account of the nature and use of the building together with its position relative to other buildings.

Certifiers need only certify the investigation in relation to the requirements for the design of the foundations; however the investigation must also have taken account of the need to investigate the presence of harmful or dangerous substances, including the presence of radon or other harmful gases.

Ground investigation evidence should comprise:

- a) Desk study to identify scope and extent of ground investigation.
- b) Factual report recording sampling and testing undertaken.
- c) An interpretive report containing recommendations for foundation design.

Certifiers must be able to show that the competence and experience of the organisation employed to undertake sampling and testing has been assessed.

Certifiers must be able to present evidence to show that they have studied the report and that the scope of the investigation and the recommendations in the report have been checked, either by

themselves, or by a suitably qualified and experienced person not involved with the design of the investigation and that they have satisfied themselves as to their adequacy prior to certification.

Minor Domestic Extensions

Ground conditions should be described on the plans. When this has not been based on a ground investigation then Certifiers must record how the ground conditions were determined and the reasons for not carrying out a suitable investigation. It is unlikely that this approach will be acceptable for anything other than the most minor of projects.

Specialist Advice

Where Certifiers declare that they have relied on the competence of others to provide advice on ground investigations then the Certifier's method of reviewing the report, in particular how the Certifier has satisfied themselves that the scope and methodology of the investigation is suitable, must be adequately recorded.

Guidance

Any ground investigation should be carried out using the methods described in BS EN 1997-2: 2007.

All aspects of the nature of the ground should be taken into consideration including ground movement caused by:

- swelling, shrinkage or freezing of the subsoil, or landslip

The Certifier should be able to present:

- Desk study to identify scope and extent of ground investigation factual report recording sampling and testing undertaken
- An interpretive report containing recommendations for foundation design

Certifiers must be able to show that the competence and experience of the organisation employed to undertake sampling and testing has been assessed.

Certifiers must be able to present evidence to show that they have studied the report and that the scope of the investigation and the recommendations in the report have been checked, either by themselves, or by a suitably qualified and experienced person not involved with the design of the investigation and that they have satisfied themselves as to their adequacy prior to certification.

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Examples of Major Non-conformances

Failure to demonstrate that an adequate ground investigation was undertaken in relation to the design of the foundations.

Failure to demonstrate that an adequate review of the findings/recommendations was carried out by the Certifier.

Examples of Improvement Issues

Deficiencies in the scope of the ground investigation in relation to the design of the foundations.

Absence of a record as to why a ground investigation was not carried out for a minor project.

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