Department of the Environment
and
The Welsh Office

The Building Regulations 1985

Materials and workmanship

APPROVED DOCUMENT to support Regulation 7

Her Majesty's Stationery Office
1985

PART 7

Materials and workmanship

APPROVED DOCUMENT

This publication includes the following Approved Document:

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This document has been approved by the Secretary of State as practical guidance to meeting the requirement of Regulation 7 of the regulations, but there is no obligation to adopt any particular solution in the document if you prefer to meet the requirement in some other way.

If a contravention of a requirement is alleged then, if you have followed the guidance in the document, that will be evidence tending to show that you have complied with the Regulations. If you have not followed the guidance then that will be evidence tending to show that you have not complied. It will then be up to you to demonstrate by other means that you have satisfied the requirement.

British Standards and British Board of Agrément Certificates

The relevant version of the named British Standard referred to in this Approved Document is that listed at the end of the publication. Other British Standards and Agrément Certificates referred to, are to the appropriate edition.

Building Regulations are made for specific purposes; health and safety, energy conservation and the welfare and convenience of disabled people. British Standards and Agrément Certificates are relevant guidance to the extent that they relate to these considerations. The Standards and Certificates themselves may address, also, other aspects of performance such as serviceability or aspects which although they relate to health and safety are ones which are not covered by the regulations.

Building Regulations – the Requirement

This Approved Document deals with Regulation 7 of the Building Regulations 1985:

Materials and workmanship

7. Any building work shall be carried out with proper materials and in a workmanlike manner.

Acceptable level of performance

0.1 To reduce the risks to the health and safety of persons in and about buildings and to conserve energy, materials should be:

(a) of a suitable nature and quality in relation to the purposes and conditions of their use, and

(b) adequately mixed or prepared, and

(c) applied, used or fixed so as to perform adequately the functions for which they are intended.

Materials include products, components, fittings, items of equipment and backfilling for excavations in connection with building work.

0.2 For Parts A to K of Schedule 1, the standards of materials and workmanship need be no more than is necessary to enable the completed work to be safe and not a danger to the health or safety of persons in or about the building.

0.3 For Part L of Schedule 1, the standards of materials and workmanship need be no more than is necessary to restrict the calculated heat loss to the levels set out in the Schedule.

0.4 For Schedule 2, the standards of materials and workmanship need be no more than is necessary to serve their purpose.

0.5 There are no provisions under The Building Regulations for continuing control over the use of materials following the completion of building work.

Section 1
Materials

1.1 Approved Documents contain references to materials and products that are likely to be suitable for the purposes of the regulations. These may take the form of references to materials or products covered by British Standards or by Agrément Certificates but the references are not exclusive and other materials or products may be suitable in the particular circumstances.

WAYS OF ESTABLISHING FITNESS OF MATERIALS

1.2 It may be useful to consider the following aids for establishing the fitness of materials:

(a) **Past experience** – The material can be shown by experience, such as in a building in use, to be capable of performing the function for which it is intended

(b) **Agrément Certificates** – The material is covered by an Agrément Certificate and the conditions of use are in accordance with the terms of the Certificate

(c) **British Standards** – The material conforms with a British Standard which is appropriate to the purpose for and the conditions in which the material is to be used

(d) **Independent Certification schemes** – One of the more widely used product certification schemes is the Kitemark scheme operated by the British Standards Institution. Any material which is Kitemarked *(see Diagram* **1***)* can be taken to conform with the relevant British Standard and to meet the requirements of The Building Regulations *(see* (c) above).

Materials which are not Kitemarked may still conform with the relevant British Standard

(e) **Quality assurance schemes** – The material is covered by a scheme which complies with the relevant recommendations of BS 5750 *Quality systems* such as one of the schemes of Registration of Firms of Assessed Capability operated by the British Standards Institution. The BSI schemes relate to specific groups of products or processes for which there may or may not be a British Standard

(f) **Tests and calculations** – It can be shown by tests, by calculation or other means, that the material is capable of performing the function for which it is intended. The NATLAS Accreditation Scheme for Testing Laboratories offers a way of ensuring that tests are conducted in accordance with recognised criteria

(g) **Sampling** – Local authorities have the power to take samples of materials used in building work. Regulation 16 allows them to take and test such samples as they consider necessary to establish compliance with the provisions of Schedule 1.

Diagram **1** **The BSI Kitemark**

BS 000

SHORT-LIVED MATERIALS

1.3 Some materials, in the absence of special care, may be considered unsuitable because of their rapid deterioration in relation to the life of the building. It is not possible to set down any specific criteria from which the length of life of a material can be considered against the requirements of the Regulations. Often the selection of materials will be influenced by economic judgments which will not be proper considerations as matters affecting health and safety of persons in and around the building.

1.4 A short-lived material which is readily accessible for inspection, maintenance and replacement **may** meet the requirements of the Regulations provided that the consequences of failure are not likely to be serious to the health and safety of persons in and around the building.

1.5 Where a short-lived material is **not** readily accessible for inspection and maintenance or replacement and the consequences of failure are likely to be serious for health and safety, it is unlikely that the material will be suitable. If the consequences of failure are likely to have only a minor effect on health and safety, the use of the material **may** be admissible.

RESISTANCE TO MOISTURE

1.6 Any material which is likely to be adversely affected by condensation, by moisture from the ground or by rain or snow will meet the requirements if:

(a) the construction will resist the passage of moisture to the material, or

(b) the material is treated or otherwise protected from moisture.

RESISTANCE TO SUBSOIL

1.7 Any material in contact with the ground, or in the foundations, will meet the requirements if it is capable of resisting attacks by deleterious material in the subsoil such as sulphates. *(see also* Approved Document C1/2/3 *Section 2)*

HIGH ALUMINA CEMENT (HAC)

1.8 HAC or any material which contains this cement will meet the Requirements of the Regulations only where it is used as a heat resisting material. It should **not** be used in structural work, including foundations.

HOUSE LONGHORN BEETLE

1.9 In the geographical areas specified in Table 1, softwood timber used for roof construction or fixed in the roof space, including ceiling joists within the void spaces of the roof, should be adequately treated with a suitable preservative to prevent infestation by the House Longhorn Beetle (Hylotrupes bajulus L).

Table **1** **Areas at risk from the House Longhorn Beetle**

Geographical area
The District of Bracknell
The Borough of Elmbridge
The Borough of Guildford (other than the area of the former borough of Guildford)
The District of Hart (other than the area of the former urban district of Fleet)
The District of Runnymede
The Borough of Spelthorne
The Borough of Surrey Heath
In the Borough of Rushmoor, the area of the former district of Farnborough
The District of Waverley (other than the parishes of Godalming and Haslemere)
In the Royal Borough of Windsor and Maidenhead, the parishes of Old Windsor, Sunningdale and Sunninghill
The Borough of Woking

Section 2
Workmanship

WAYS OF ESTABLISHING THE ADEQUACY OF WORKMANSHIP

2.1 It may be useful to consider the following aids for establishing the adequacy of workmanship:

(a) **Past experience –** It can be shown by experience, such as in a building in use, that the method of workmanship is capable of performing the function for which it is intended

(b) **Agrément Certificates –** The method is specified for a material covered by an Agrément Certificate and the conditions of use are in accordance with the terms of the Certificate

(c) **British Standards –** The method is included in the recommendations of a British Standard Code of Practice which is appropriate to the purpose for and the conditions in which the material is to be used

(d) **Quality assurance schemes –** The method is covered by a scheme which complies with the relevant recommendations of BS 5750 *Quality systems* such as one of the schemes of Registration of Firms of Assessed Capability operated by the British Standards Institution. These BSI schemes relate to products and processes for which there may also be a suitable British Standard

(e) **Tests –** Local authorities have the power to test sewers and drains in or in connection with buildings. Regulation 15 allows them to make such tests as they consider necessary to establish compliance with the provisions of Schedule 1 for –

(i) sanitary pipework and drainage, and

(ii) cesspools, septic tanks and settlement tanks, and

(iii) rainwater drainage.

Approved Documents H1 and H3 contain guidance on testing drainage installations in buildings.

These are the provisions under The Building Regulations that empower or require the testing of installations included in building work.

British Standards referred to

BS 5750 *Quality systems*

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