

States of Jersey Planning and Environment Committee

The Building Bye-Laws (Jersey) 1997. Code of Practice

TECHNICAL GUIDANCE DOCUMENT

Bye-Law 7
Materials and Workmanship

Contents

USE OF GUIDANCE	PAGE 2
MATERIALS AND WORKMANSHIP THE REQUIREMENT: BYE-LAW 7 GUIDANCE	2
Performance	3
Section 1: Materials	
Ways of establishing the fitness of materials Short-lived materials Resistance to moisture Resistance to substances in the subsoil High alumina cement (HAC)	4 4 5 5 5
Section 2: Workmanship Ways of establishing the adequacy of workmanship	6
Appendix: Abbreviations and glossary	7
Standards referred to	8

Technical Guidance Document Materials and Workmanship

Use of Guidance

THE TECHNICAL GUIDANCE DOCUMENTS

The Building Bye-Laws (Jersey) 1997, which come into operation on the twentieth day of February 1997, replace the Building Bye-Laws (Jersey) 1960 and consolidate all subsequent revisions to those Bye-Laws. This document is one of the series that has been approved by the Committee as practical guidance on meeting the requirements of the second schedule and Bye-Law 7 of the Building Bye-Laws (Jersey) 1997.

At the back of this document is a list of those documents currently published which have been approved for the purpose of the Building Bye-Laws.

The detailed provisions contained in the Technical Guidance Documents are intended to provide guidance for some of the more common building situations. In other circumstances, alternative ways of demonstrating compliance with the requirements may be appropriate.

Evidence supporting compliance

There is no obligation to adopt any particular solution contained in a Technical Guidance Document if you prefer to meet the relevant requirement in some other way. However, should a contravention of a requirement be alleged then, if you have followed the guidance in the relevant Technical Guidance Documents, that will be evidence tending to show that you have complied with the Bye-Laws. If you have not followed the guidance then that will be evidence tending to show that you have not complied. It will then be for you to demonstrate by other means that you have satisfied the requirement.

Other requirements

The guidance contained in a Technical Guidance Documents relates only to the particular requirements of the Bye-Laws which that document addresses. The building work will also have to comply with the requirements of any other relevant paragraphs in the second schedule to the Bye-Laws. There are Technical Guidance Documents which give guidance on each of the other requirements in the second schedule and on Bye-Law 7.

LIMITATION ON REQUIREMENTS

In accordance with Bye-Law 8, the requirements in parts 1, 2, 3, 4, 5, 6, 7, 9 and 10 of the second schedule to the Building Bye-Laws do not require anything to be done except for the purpose of securing reasonable standards of health and safety for persons in or about the building.

MATERIALS AND WORKMANSHIP

Any building work which is subject to requirements imposed by the second schedule to the Building Bye-Laws should, in accordance with Bye-Law 7, be carried out with proper materials and in a workmanlike manner.

You may show that you have compiled with Bye-Law 7 in a number of ways, for example by the appropriate use of a product bearing an EC mark in accordance with the Construction Products Directive (89/106/EEC), or by following an appropriate technical specification (as defined in that Directive), a British Standard, a British Board of Agrément Certificate, or an alternative national technical specification of any member state of the European Community which, in use, is equivalent. You will find further guidance in the Technical Guidance Document supporting Bye-Law 7 on materials and workmanship.

Technical specifications

Building Bye-Laws are made for specific purposes; health and safety, energy conservation and the welfare and convenience of disabled people. Standards and technical approvals are relevant guidance to the extent that they relate to these considerations. However, they may also address other aspects of performance such as serviceability or aspects which although they relate to health and safety are not covered by the Bye-Laws.

When a Technical Guidance Document makes reference to a named standard, the relevant version of the standard is the one listed at the end of the publication. However, if this version of the standard has been revised or updated by the issuing standards body, the new version may be used as a source of guidance provided it continues to address the relevant requirements of the Bye-Laws.

Bye-Law 7 The Requirement

This Technical Guidance Document which takes effect on 20 February 1997, deals with Bye-Law 7 of the Building Bye-Laws (Jersey) 1997.

Requirement

Limits on application

Any building work which is required to comply with any relevant requirement of the second schedule shall be carried out:

- (a) with materials which are appropriate; and
- (b) in a workmanlike manner.

Note: Attention is drawn to the requirements of Bye-Law 8 (Limitation on requirements) of the Building Bye-Laws (Jersey) 1996.

"Bye-Law 8, the requirements in parts 1, 2, 3, 4, 5, 6, 7, 9 and 10 of the second schedule shall not require anything to be done except for the purpose of securing reasonable standards of health and safety for persons in or about buildings and of others who may be affected by buildings or matters connected with buildings."

Guidance

Performance

- **0.1** In the view of the Committee the requirements of Bye-Law 7 will be met where materials are:
- 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, naturally occurring materials e.g. stone, timber and thatch, items of equipment, and backfilling for excavations in connection with building work.

- **0.2** For parts 1, 2, 3, 4, 5, 6, 7, 9 and 10 of the second schedule, the standards of materials and workmanship need be no more than are necessary to secure reasonable standards of health and safety for persons in or about the building.
- **0.3** For parts 8 and 11, the standards of materials and workmanship need be no more than are necessary to provide access and facilities for disabled people and to conserve fuel and power respectively.
- **0.4** There are no provisions under the Building Bye-Laws for continuing control over the use of materials following the completion of building work.

Technical Guidance Document

Materials and Workmanship

Section 1

MATERIALS

1.1 Technical Guidance documents contain references to materials or products covered by British Standards, by Agrément Certificates or by other technical specifications but the references are not exclusive and other materials or products may be suitable in the particular circumstances.

Ways of establishing the fitness of materials

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

A. Standards

- The material conforms to the relevant provisions of an appropriate British Standard; or
- ii. The material conforms to the relevant provisions of an equivalent standard which may include a national standard of any Member State of the European Community or elsewhere. It is up to the person intending to carry out the work to provide evidence that in use the material will be equivalent to A.i. above.

Note: Materials produced under the ægis of BS 5750: Quality systems or the equivalent ISO or CEN Standards can be expected to be of consistent quality although they may not necessarily conform to an appropriate standard.

B. Technical approvals

- The material is covered by an Agrément Certificate issued by the British Board of Agrément and the conditions of use are in accordance with the terms of the certificate.
- ii. The material is covered by an equivalent technical approval which may include a national technical approval of any Member State of the European Community or elsewhere. It is up to the person who intends to carry out the work to show that in use the material will be equivalent to B.i. above and the conditions of use are appropriate to that technical approval.

C. Independent certification schemes

There are many UK product certification schemes. One example is the Kitemark scheme operated by the British Standards Institution. Such schemes certify compliance with the requirements of a recognised document which is appropriate to the purpose for which the material is to be used. Materials which are not so certified may still conform to a relevant standard. Accreditation of such schemes in the UK is carried out by the National Accreditation Council for Certification Bodies (NACCB).

D. Tests and calculations

It can be shown by tests, by calculation or by other means that the material will be capable of performing the function for which it is intended. The Accreditation Scheme for Testing Laboratories run by NAMAS together with similar schemes run by equivalent certification bodies (including any EC Member State's certification body designated under the provisions of the Construction Products Directive) offer ways of ensuring that tests are carried out in accordance with recognised criteria.

E. 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.

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 Bye-Laws.
- **1.4** A short-lived material which is readily accessible for inspection, maintenance and replacement may meet the requirements of the Bye-Laws provided that the consequences of failure are not likely to be serious to the health or 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 or 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 or 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 substances in the 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.

High alumina cement (HAC)

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

Section 2

WORKMANSHIP

Ways of establishing the adequacy of workmanship

a. Standards

- The method of carrying out the work is included in the recommendations of a British Standard Code of Practice. Note that BS 8000: Workmanship on Building Sites gathers together guidance from other BSI Codes and Standards; or
- The method conforms to an equivalent technical specification which may include a national technical specification of any Member State of the European Community or elsewhere.

b. Technical Approvals

The workmanship is specified for a material covered by an Agrément Certificate issued by the British Board of Agrément, or is covered by an equivalent technical approval (including a technical approval of any other member of the European Organisation for Technical Approvals EOTA), which provides an equivalent level of performance, and the conditions of use are in accordance with the terms of the Certificate or technical approval. It is up to the person who intends to carry out the work to show that the method of workmanship will provide the equivalent level of protection and performance.

c. Management systems

The workmanship is covered by a scheme which complies with the relevant recommendations of ISO 9000/EN 2900/BS 5750: *Quality Systems* such as one of the schemes of Registration of Firms of Assessed Capability operated by the British Standards Institution. These schemes relate to products and processes for which there may also be a suitable British or other technical standard.

d. 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.

Appendix

ABBREVIATIONS AND GLOSSARY

BS

British Standards, issued by the British Standards Institution.

CFN

Comité Européen de Normalisation. The European standards body recognised by the Commission to prepare harmonised standards to support the Construction Products Directive. There are 18 members, comprising the standards bodies of all the members of the EC and EFTA (European Free Trade Area). The Member States are:

Austria Belgium Luxembourg Netherlands Denmark Finland Norway France Portugal Germany Spain Sweden Greece Switzerland Iceland Ireland United Kingdom

Standards are identified by 'EN' and a number, and an identical British Standard will probably exist.

CENELEC

The European standards body for electrical standards, analogous to CEN.

Commission

The executive organisation of the European Communities, based in Brussels.

Construction Products Directive

The Council Directive reference 89/106/EEC dated 21 December 1988 and published in the Official Journal of the European Communities No. 140/12 dated 11.2.89.

Construction Products Regulations

The Construction Products Regulations 1991 (SI 1991 No 1620) which come into force on 27 December 1991 and implement the Construction Products Directive.

EC

European Communities, which include the European Economic Community or Common Market. The twelve countries bound by the Treaty of Rome.

EC-mark

The EC conformity mark, more fully described in Annex III 'Attestation of conformity with technical specifications' of the Construction Products Directive. It will be accompanied by a reference to the technical specification to which it conforms, and where appropriate, by indications to identify the characteristics of the product.

EOTA

European Organisation for Technical Approvals. The umbrella organisation for bodies issuing approvals for individual products. Operates over the same area as CEN.

EOTC

European Organisation for Testing and Certification.

ISO

International Organization for Standardization. The worldwide standards organisation, some of whose standards may be adapted for use with the Construction Products Directive. Standards are identified by 'ISO' and a number.

NACCB

The National Accreditation Council for Certification Bodies.

NAMAS

The National Measurement Accreditation Service.

Standard

A BS or EN etc.

Technical specification

A standard or a technical approval.

Technical approval

An approval of an individual material or process issued by a member of EOTA.

Standards referred to

BS 5750: Quality Systems:

Part 1: 1987 Specification for design/development, production, installation and servicing. This standard is the same as ISO 9001 and EN 29001.

Part 2: 1987 Specification for production and installation. This standard is the same as ISO 9002 and EN 29002.

BS 8000: Workmanship on Building Sites:

Part 1: 1989 Code of practice for excavation and filling

Part 2: Code of practice for concrete work

Section 2.1: 1990 Mixing and transporting concrete Section 2.2: 1990 Sitework with in situ and precast concrete

Part 3: 1989 *Code of practice for masonry* Amendment slip 1: AMD 6195.

Part 4: 1989 Code of practice for waterproofing

Part 5: 1990 Code of practice for carpentry, joinery and general fixings

Part 6: 1990 Code of practice for slating and tiling of roofs and claddings

Part 7: 1990 Code of practice for glazing

Part 8: 1989 Code of practice for plasterboard partitions and dry linings
Amendment slip
1: AMD 6475.

Part 9: 1989 Code of practice for cement/sand floor screeds and concrete floor toppings

Part 10: 1989 Code of practice for plastering and rendering
Amendment slip
1: AMD 6476.

Part 11: Code of practice for wall and floor tiling Section 11.1: 1989 Ceramic tiles, Terrazzo tiles and mosaics

Section 11.2: 1990 Natural stone tiles

Part 12: 1989 Code of practice for decorative wallcoverings and painting

Part 13: 1989 Code of practice for above ground drainage and sanitary appliances

Part 14: 1989 Code of practice for below ground drainage

Part 15: 1990 Code of practice for hot and cold water services (domestic scale)

List of codes of practice currently issued or approved by the Planning and Environment Committee for the purpose of showing compliance with the Building Bye-Laws (Jersey) 1997.

Technical Guidance Document. Part 1 Structure Technical Guidance Document. Part 2 Fire Safety Heat Producing Appliances and Storage of Fuels Technical Guidance Document. Part 3 Technical Guidance Document. Part 4 Site Preparation and Resistance to Moisture Technical Guidance Document. Part 5 Ventilation Technical Guidance Document. Part 6 Drainage, Hygiene and Water Storage Technical Guidance Document. Part 7 Stairs, Ramps and Protective Barriers Technical Guidance Document. Part 8 Access and Facilities for Disabled People Technical Guidance Document. Part 9 Resistance to the Transmission of Sound Technical Guidance Document. Part 10 Glazing-Safety and Protection Technical Guidance Document. Part 11 Conservation of Fuel and Power Technical Guidance Document. Supporting Bye-Law 7. Materials and Workmanship