



Development &
Planning Authority

Guernsey Technical Standard

Toxic substances

The Building (Guernsey) Regulations, 2012

D

D1 Cavity insulation

2012 edition
With May 2016 amendments

MAIN CHANGES MADE BY THE MAY 2016 AMENDMENTS

1. Text changes made to reflect the new structure of government post May 1st 2016. All references to Departments have been removed.

MAIN CHANGES MADE BY THE FEB 2013 AMENDMENTS

2. The general guidance on materials and workmanship and the Construction Products Directive has been edited to reflect the new EU Construction Products Regulation.

MAIN CHANGES IN THE 2012 EDITION

3. This Guernsey Technical Standard which takes effect on 1st July 2012 is issued under the Building (Guernsey) Regulations, 2012. From this date all previous editions of documents approved under the Building Regulations, 1992 i.e. the UK Approved Document D will no longer be valid except in relation to building work carried out in accordance with full plans deposited with the States of Guernsey Building Control before that date.

How this Guernsey Technical Standard D differs from the UK Approved Document D

4. In general there are different legislative references reflecting Guernsey legislation.
5. The UK Building (Approved Inspectors, etc.) Regulations 2010 are not in force in Guernsey. Therefore approved inspectors are not recognised on the Island and all references have been removed.

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Introduction

What is a Guernsey Technical Standard?

This document has been approved and issued by the Development and Planning Authority to provide practical guidance on ways of complying with requirements D1 and regulation 11 of the Building (Guernsey) Regulations, 2012 (GSI 2012 No.11). The Building (Guernsey) Regulations, 2012 are referred to throughout the remainder of this document as ‘the Building Regulations’.

The intention of issuing Guernsey Technical Standards is to provide guidance about compliance with specific aspects of the Building Regulations in some of the more common building situations. They include examples of what, in ordinary circumstances, may be reasonable provision for compliance with the relevant requirement(s) of the Building Regulations to which they refer.

If guidance in a Guernsey Technical Standard is followed this may be relied upon as tending to show compliance with the requirement(s) covered by the guidance. Similarly a contravention of the standard may be relied upon as tending to establish a breach of the requirements. However, this is not conclusive, so simply following guidance does not guarantee compliance in an individual case or a failure to follow it meaning that there is necessarily a breach. It is also important to note that there may well be other ways of achieving compliance with the requirements. There is therefore no obligation to adopt any particular solution contained in this Guernsey Technical Standard if you would prefer to meet the relevant requirement in some other way. However, persons intending to carry out building work should always check with Building Control, that their proposals comply with Building Regulations.

The guidance contained in this Guernsey Technical Standard relates only to the particular requirements of the Building Regulations that the document addresses, (see ‘Requirements’ below). However, building work may be subject to more than one requirement of the Building Regulations and there may be an obligation to carry out work on a material change of use. In such cases the works will also have to comply with any other applicable requirements of the Building Regulations and work may need to be carried out which applies where a material change of use occurs.

This document is one of a series that has been approved and issued for the purpose of providing practical guidance with respect to the requirements of the Building Regulations in particular of regulations 6, 8 and 11 and Schedule 1.

At the back of this document is a list of all the documents that have been approved and issued for this purpose.

How to use this Guernsey Technical Standard

In this document the following conventions have been adopted to assist understanding and interpretation:

- a. Texts shown against a yellow background are extracts from the Building Regulations, and set out the legal requirements that relate to compliance with the **toxic substances** requirements of the Building Regulations. It should be remembered however that, as noted above, building works must comply with all the other applicable provisions of the Building Regulations.
- b. Key terms are defined in annex B at the rear of this document.
- c. Details of technical publications referred to in the text of this document will be presented in **italics** and repeated in standards referred to as an annex at the rear of this document. A reference to a publication is likely to be made for one of two main reasons. The publication may contain additional or more comprehensive technical detail, which it would be impractical to include in full in this Document but which is needed to fully explain ways of meeting the requirements; or it is a source of more general information. The reason for the reference will be indicated in each case. The reference will be to a specified edition of the document. The Guernsey Technical Standard may be amended from time to time to include new references or to refer to revised editions where this aids compliance.

Where you can get further help

If you require clarification of any of the technical guidance or other information set out in this Guernsey Technical Standard and the additional detailed technical references to which it directs you, there are a number of routes through which you can seek further assistance:

- The States of Guernsey website:
www.gov.gg/planning
- If you are the person undertaking the building work you can seek advice from Building Control Surveyors to help ensure that, when carried out, your work will meet the requirements of the Building Regulations.
- Businesses registered with a competent person self-certification scheme may be able to get technical advice from their scheme operator. A full list of competent persons schemes are included as Schedule 3 of the Building Regulations.
- If your query is of a highly technical nature you may wish to seek the advice of a specialist, or industry technical body, in the area of concern.

Responsibility for compliance

It is important to remember that if you are the person (e.g. designer, builder, installer) carrying out building work to which any requirement of Building Regulations applies you have a responsibility to ensure that the work complies with any such requirement. The building owner or occupier will also have a responsibility for ensuring compliance with Building Regulation requirements and could be served with a compliance notice in cases of non-compliance or with a challenge notice in cases of suspected non-compliance.

General Guidance

Types of work covered by this Guernsey Technical Standard

Building work

Building work, as defined in regulation 5 of the Building (Guernsey) Regulations, 2012, includes the erection or extension of a building, the provision or extension of a controlled service or fitting, and the material alteration of a building or a controlled service or fitting. In addition, the Building Regulations may apply in cases where the purposes for which, or the manner or circumstances in which, a building or part of a building is used change in a way that constitutes a material change of use.

Under regulation 6 of the Building Regulations 2012, building work must be carried out in such a way that, on completion of work,

- i. the work complies with the applicable Parts of Schedule 1 of the Building Regulations,
- ii. in the case of an extension or material alteration of a building, or the provision, extension or material alteration of a controlled service or fitting, it complies with the applicable Parts of Schedule 1 to the Building Regulations and also does so as satisfactorily as it did before the work was carried out.

Work described in Part D concerns toxic substances. Work associated with toxic substances covered in these sections may be subject to other relevant Parts of the Building Regulations.

Material change of use

A material change of use occurs in specified circumstances in which a building, or part of a building that was previously used for one purpose will be used in future for another, or is converted to a building of another kind. Where there is a material change of use, the Building Regulations set requirements that must be met before the building can be used for its new purpose.

Regulation 7 of the Building (Guernsey) Regulations, 2012 specifies the following circumstances as material changes of use:

- a building is used as a dwelling where previously it was not,
- a building contains a flat where previously it did not,
- a building is used as an institution where previously it was not,
- a building is used as a public building where previously it was not,
- a building is not described in Classes I to V or VI of Schedule 2, where previously it was,
- a building contains a room for residential purposes where previously it did not,
- a building contains an office where previously it did not,
- a building is used as an hotel or guest house, where previously it was not,
- a building is an industrial building, where previously it was not,
- a building contains a shop, where previously it did not,
- a building is used for the sale of food or drink, to the public in the course of a business and for consumption in that building and where there is a maximum capacity of 15 or more persons seated or standing, where previously it was not so used,
- the building, which contains at least one room for residential purposes, contains a greater or lesser number of such rooms than it did previously,

- the building, which contains at least one dwelling, contains a greater or lesser number of dwellings than it did previously.

Part D will apply to all the material changes of use mentioned above. This means that whenever such changes occur work involving the use of toxic substances are done so in accordance with Part D.

Protected Buildings and Monuments

The types of building works covered by this Guernsey Technical Standard may include work on historic buildings. Historic buildings include:

- a. a building appearing on the protected buildings listing
- b. a building or other structure appearing on the protected monument listing

When exercising its functions under The Land Planning and Development Law, the States has duties under s30(1), 34, 35 and 38(1) of that Law, to secure so far as possible that monuments are protected and preserved, that the special characteristics of protected buildings are preserved and to pay special attention to the desirability of preserving and enhancing the character and appearance of a conservation area. Building Control will need to comply with these duties when considering any decisions in relation to such buildings or buildings in such areas.

Special considerations may apply if the building on which the work is to be carried out has special historic, architectural, traditional or other interest, and compliance with the **toxic substances** requirements would unacceptably alter the fabric, character or appearance of the building or parts of it.

When undertaking work on or in connection with buildings with special historic, architectural, traditional or other interest, the aim should be to improve the **toxic substances** where and to the extent that it is possible provided that the work does not prejudice the fabric, character or appearance of the host building or increase the long-term deterioration to the building's fabric or fittings.

In arriving at a balance between historic building conservation and the **toxic substances** requirements advice should be sought from the historic building adviser.

Note: Any building which is a protected monument listed under Section 29 of The Land Planning and Development (Guernsey) Law 2005 is exempt from most Building Regulations requirements including those in Part D, (See regulation 13 and class V of Schedule 2 to the Building Regulations) unless the proposed works constitute a material change of use.

Notification of work

In almost all cases of new building work it will be necessary to notify Building Control in advance of any work starting. The exception to this: where work is carried out under a self-certification scheme listed in Schedule 3 or where works consist of emergency repairs.

Competent person self-certification schemes under Schedule 3

Under regulations 14(4), 17(4) and 19 of the Building Regulations it is not necessary to deposit plans or notify Building Control in advance of work which is covered by this Guernsey Technical Standard if that work is of a type set out in column 1 of Schedule 3 to the Regulations and is carried out by a person registered with a relevant self-certification (competent persons) scheme as set out in column 2 of that Schedule. In order to join such a scheme a person must demonstrate competence to carry out the type of work the scheme covers, and also the ability to comply with all relevant requirements in the Building Regulations. These schemes may change from time to time, or schemes may change name, or new schemes may be authorised under Schedule 3; the current list on the States's website should always be consulted. Full details of the schemes can be found on the individual scheme websites.

Where work is carried out by a person registered with a competent person scheme, regulation 19 of the Building Regulations requires that the occupier of the building be given, within 30 days of the completion of the work, a certificate confirming that the work complies with all applicable Building Regulation requirements. There is also a requirement that Building Control be given a notice that this has been done, or the certificate, again within 30 days of the completion of the work. These certificates and notices are usually made available through the scheme operator.

Building Control is authorised to accept these certificates as evidence of compliance with the requirements of the Building Regulations. However, inspection and enforcement powers remain unaffected, although they are normally used only in response to a complaint that work may not comply.

Exemptions

Schedule 2 to the Building Regulations sets out a number of classes of buildings which are exempt from majority of Building Regulations requirements including Part D.

Materials and workmanship

Any building work within the meaning of the Building Regulations should, in accordance with regulation 11, be carried out with proper materials and in a workmanlike manner.

You may show that you have complied with regulation 11 in a number of ways. These include the appropriate use of a product bearing CE marking in accordance with the Construction Products Regulation (305/2011/EU-CPR) as or a product complying with an appropriate technical specification (as defined in those Regulations), a British Standard or an alternative national technical specification of any state which is a contracting party to the European Economic Area which in use is equivalent, or a product covered by a national or European certificate issued by a European Technical Approval issuing body, and the conditions of use are in accordance with the terms of the certificate.

You will find further guidance in the Guernsey Technical Standard on materials and workmanship that provides practical guidance on regulation 11 on materials and workmanship.

Supplementary guidance

Building Control occasionally issues additional material to aid interpretation of the guidance in Guernsey Technical Standards. This material may be conveyed in official letters to relevant agents and/or posted on the States website accessed through: www.gov.gg/planning

Technical specifications

When a Guernsey Technical Standard makes

reference to specific standards or documents, 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 that it continues to address the relevant requirements of the Building Regulations.

Where it is proposed to work to an updated version of the standard instead of the version listed at the end of the publication, this should be discussed with Building Control in advance of any work starting on site.

The appropriate use of any product, which complies with a European Technical Approval as defined in the Construction Products Regulation, (305/2011/EU-CPR) as amended, repealed or replaced will meet the relevant requirements.

Independent schemes of certification and accreditation

Much of the guidance throughout this document is given in terms of performance.

Since the performance of a system, product, component or structure is dependent upon satisfactory site installation, testing and maintenance, independent schemes of certification and accreditation of installers and maintenance firms will provide confidence in the appropriate standard of workmanship being provided.

Confidence that the required level of performance can be achieved will be demonstrated by the use of a system, material, product or structure which is provided under the arrangements of a product conformity certification scheme and an accreditation of installer scheme.

Third party accredited product conformity certification schemes not only provide a means of identifying materials and designs of systems, products and structures which have demonstrated that they reach the requisite performance, but additionally provide confidence that the systems, materials, products and structures are actually provided to the same specification or design as that tested or assessed.

Third party accreditation of installers of systems, materials, products and structures provides a

means of ensuring that installations have been conducted by knowledgeable contractors to appropriate standards, thereby increasing the reliability of the anticipated performance.

Many certification bodies that approve such schemes are accredited by the **United Kingdom Accreditation Service**.

Certification of products, components, materials or structures under such schemes may be accepted as evidence of compliance with the relevant standard. Similarly the certification of installation or maintenance of products, components, materials and structures under such schemes as evidence of compliance with the relevant standard may be acceptable. Nonetheless Building Control will wish to establish in advance of the work, that any such scheme is adequate for the purpose of the Building Regulations.

Interaction with other legislation

This Guernsey Technical Standard makes reference to other legislation, including that listed below, the requirements of which may be applicable when carrying out building work. All references are to legislation as amended or repealed and replaced.

Note: All Laws, Ordinances and Statutory instruments can be accessed at;

www.guernseylegalresources.gg/

The Health and Safety at Work (General) (Guernsey) Ordinance, 1987 made under the Health and Safety at Work etc. (Guernsey) Law, 1979 and the Health, Safety and Welfare of Employees Law, 1950 applies to any workplace or part of a workplace. It applies to the common parts of flats and similar buildings if people such as cleaners, wardens and caretakers are employed to work in these common parts.

Mixed use development

In mixed use developments part of a building may be used as a dwelling while another part has a non-domestic use. In such cases, if the requirements of this Part of the Regulations for dwellings and non-domestic use differ, the requirements for non-domestic use should apply in any shared parts of the building.

D CAVITY INSULATION

The Requirement

This Guernsey Technical Standard deals with the following requirements from Part D of Schedule 1 of the Building Regulations

Requirement

Limits on application

Cavity insulation

D1. If insulating material is inserted into a cavity in a cavity wall reasonable precautions must be taken to prevent the subsequent permeation of any toxic fumes from that material into any part of the building occupied by people.

Guidance

Performance

D.1 The requirements of D1 will be met if in order to reduce the risks to the health of persons in buildings formaldehyde fumes given off by urea formaldehyde foams do not penetrate to the occupied parts of buildings to an extent which would give rise to an irritant concentration.

Urea formaldehyde (UF) foam

1.1 Insulating materials which give off formaldehyde fumes (either when used or later in normal use) may be used to insulate the cavity in a cavity wall where there is a continuous barrier which will minimise as far as practicable the passage of fumes to the occupiable parts.

Technical solution

1.2 A cavity wall may be insulated with UF foam where:

- a. the **inner leaf** of the wall is built of masonry (bricks or blocks); and
- b. the **suitability** of the wall for foam filling is assessed before the work is carried out in accordance with *BS 8208-1:1985 Guide to assessment of suitability of external cavity walls for filling with thermal insulants. Existing traditional cavity construction*; and
- c. the **person** carrying out the work holds (or operates under) a current Certificate of Registration of Assessed Capability for the work he is doing; and
- d. the **material** is in accordance with the relevant recommendations of *BS 5617:1985 Specifications for urea formaldehyde (UF) foam systems suitable for thermal insulation of cavity walls with masonry or concrete inner and outer leaves*; and
- e. the **installation** is in accordance with *BS 5618:1985 Code of practice for thermal insulation of cavity walls (with masonry or concrete inner and outer leaves) by filling with urea formaldehyde (UF) foam systems*.

Annex A - Standards referred to

BS 5617:1985

Specification for urea formaldehyde (UF) foam systems suitable for thermal insulation of cavity walls with masonry or concrete inner and outer leaves.

BS 5618:1985

Code of practice for thermal insulation of cavity walls (with masonry or concrete inner and outer leaves) by filling with urea formaldehyde (UF) foam systems. AMD 6262 1990, AMD 7114 1992.

BS 8208-1:1985

Guide to assessment of suitability of external cavity walls for filling with thermal insulants. Existing traditional cavity construction. AMD 4996 1985.

GUERNSEY TECHNICAL STANDARDS

The following documents have been approved and issued by the Development and Planning Authority for the purpose of providing practical guidance with respect to the requirements of the Building Regulations

Guernsey Technical Standard A: Structure, 2012 edition with May 2016 amendments.

Guernsey Technical Standard B: Fire Safety - Volume 1 - Dwellinghouses, 2012 edition with May 2016 amendments.

Guernsey Technical Standard B: Fire Safety - Volume 2 - Buildings other than dwellinghouses, 2012 edition with May 2016 amendments.

Guernsey Technical Standard C: Site preparation and resistance to contaminants and moisture 2012 edition with May 2016 amendments.

Guernsey Technical Standard D: Toxic substances 2012 edition with May 2016 amendments.

Guernsey Technical Standard E: Resistance to the passage of sound, 2012 edition with May 2016 amendments.

Guernsey Technical Standard F: Ventilation, 2012 edition with May 2016 amendments.

Guernsey Technical Standard G: Health, hygiene and water efficiency, 2012 edition with May 2016 amendments.

Guernsey Technical Standard H: Drainage and waste disposal, 2012 edition with May 2016 amendments.

Guernsey Technical Standard J: Heat producing appliances and fuel storage systems, 2012 edition with May 2016 amendments.

Guernsey Technical Standard K: Safe means of access and egress, 2012 edition with May 2016 amendments.

Guernsey Technical Standard L1: Conservation of fuel and power – Dwellings, 2012 edition with May 2016 amendments.

Guernsey Technical Standard L2: Conservation of fuel and power – Buildings other than dwellings, 2012 edition with May 2016 amendments.

Guernsey Technical Standard M: Access to and use of buildings, 2012 edition with May 2016 amendments.

Guernsey Technical Standard N: Glazing - Materials and protection, 2012 edition with May 2016 amendments.

Guernsey Technical Standard P: Roads - Layout design and construction, 2012 edition with May 2016 amendments.

Guernsey Technical Standard Regulation 11: Materials and Workmanship, 2012 edition with May 2016 amendments.



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