1990 No. 59

BUILDING REGULATIONS

Building Regulations (Northern Ireland) 1990

Made *21st February 1990*

Coming into Operation *1st June 1990*

ARRANGEMENT OF REGULATIONS

Part A: Interpretation and general

Part B: Materials and workmanship

Part C: Preparation of site and resistance to moisture

Part D: Structure

Part E: Structural fire precautions

Page

Schedule 2: Giving of notices and deposit of plans

Schedule 3: Timber boarding

Schedule 4: Rules for calculation of permitted limits of unprotected areas

Schedule 5: Notional designations of roof coverings

The Department of the Environment, in exercise of the powers conferred by Articles 3, 5(1), (2) and (3), 15(2) and (7), 16(1) and (2) and 17(1) and (2) of, and paragraphs 1 to 7, 9 to 13 and 17 to 22 of Schedule 1 to, the Building Regulations (Northern Ireland) Order 1979 **(a)** and now vested in it **(b)** and of every other power enabling it in that behalf, hereby makes the following regulations:–

(a) S.I. 1979/1709 (N.I. 16).
(b) S.I. 1982/338 (N.I. 6) Art. 5 and Sch. 1 Part II.

PART A

Interpretation and general

A1 Citation and commencement

These regulations may be cited as the Building Regulations (Northern Ireland) 1990 and shall come into operation on 1st June 1990.

A2 Interpretation

(1) In these regulations–

AGRICULTURE includes horticulture, fruit growing, seed growing, dairy farming and livestock breeding and keeping, the use of land as grazing lands, meadow land, market gardens and nursery grounds, and the use of land for woodlands where that use is ancillary to the farming of land for other agricultural purposes;

BOUNDARY means, in relation to a building, the boundary of the land belonging to the building (such land being deemed to include any abutting part of any street, canal or river but only up to the centre line thereof); and BOUNDARY OF THE PREMISES shall be construed so as to include any such part to the same extent;

CONSERVATORY means a conservatory of which the roof (and the ceiling, if any) is transparent or translucent;

DEPARTMENT means the Department of the Environment;

DISTRICT COUNCIL shall mean the district council having the function of enforcing these regulations;

DRAIN means any pipe or drain used solely for or in connection with the drainage of one building or of any buildings or yards appurtenant to buildings within the same curtilage;

DWELLING means a house, flat or maisonette;

ENACTMENT includes any instrument made under any statute;

GARAGE includes a carport;

HABITABLE ROOM means a room used or intended to be used for dwelling purposes but not any room used only for kitchen purposes;

KITCHEN PURPOSES means the purposes of preparing, storing, treating, cooking or manufacturing food or drink intended for human consumption or the cleansing of utensils or appliances which come into contact with such food or drink;

MATERIAL CHANGE OF USE has the meaning assigned to it by regulation A9(1);

NEWTON means that force which when applied to a body having a mass of one kilogramme gives it an acceleration of one metre per second squared;

NON-COMBUSTIBLE in relation to a material means capable of being classified as non-combustible if subjected to the test for non-combustibility prescribed in BS 476: Part 4: 1970 (1984) (and COMBUSTIBLE shall be construed accordingly), however, for the purposes of these regulations plasterboard conforming to BS1230: Part 1: 1985 which has a surface of Class 0 (as defined in regulation E15(1)(e)) shall be taken to be non-combustible;

PARTIALLY EXEMPTED BUILDING has the meaning assigned to it by regulation A5(2)(a);

PRIVATE SEWER means any part of a sewer within the curtilage of a building;

PURPOSE GROUP shall be construed in accordance with regulation E2;

SEWER includes all sewers, pipes or drains, other than a drain as defined in this regulation, and includes any apparatus used in connection with a sewer;

SITE, in relation to a building, means the area of ground covered or to be covered by the building, including its foundations;

STATUTORY UNDERTAKING means an undertaking authorised by any enactment being a railway, road transport, air transport, water transport, inland navigation, dock or harbour undertaking or any undertaking for the supply of electricity or gas or the Post Office;

SUBSTANTIVE REQUIREMENTS means the requirements of these regulations with respect to the design and construction of buildings and the installation of works and fittings, as distinct from procedural requirements;

UNDER FORMER CONTROL–

(a) used in relation to any building, refers to a building the erection of which was–

(i) completed before 1st October 1973;

(ii) completed on or after 1st October 1973 in accordance with plans deposited with the district council before that date with or without any departures or deviations from those plans; or

(iii) begun before but completed on or after 1st October 1973 (being a building the erection of which was exempt from compliance with the provisions of all relevant bye-laws in force immediately before that date); and

(b) used in relation to any alteration or extension of a building or the execution of any works or installation of any fittings refers to any such alteration or extension, execution or installation which was–

(i) completed before 1st October 1973;

(ii) completed on or after 1st October 1973 in accordance with plans deposited with the district council before that date, with or without any departures or deviations from those plans; or

(iii) begun before but completed on or after 1st October 1973 (being an alteration or extension, execution of works or installation of fittings which was exempt from compliance with the provisions of all relevant bye-laws in force immediately before that date);

WHOLLY EXEMPTED BUILDING has the meaning assigned to it by regulation A5(3)(a); and

WORK OF PUBLIC UTILITY means a pipeline, gas holder, gas main, electricity supply line and supports, water main, public sewer or telephone line and supports.

(2) For the purposes of these regulations any of the following operations shall be deemed to be the erection of a building–

(a) the re-erection of any building or part of a building when an outer wall of that building or (as the case may be) that part of a building has been pulled down or burnt down, to within 3 metres of the surface of the ground adjoining the lowest storey of the building or of that part of the building;

(b) the re-erection of any frame building or part of a frame building when that building or part of a building has been so far pulled down or burnt down, as to leave only the framework of the lowest storey of the building or of that part of the building; and

(c) the roofing over of any open space between walls or buildings.

(3) In these regulations any reference to a building shall extend to and include any part of a building, and any reference to the purpose for which a building is used shall extend to, include or mean the purpose for which it is intended to be used.

(4) In these regulations–

(a) BASEMENT STOREY (except in Parts E and EE) means a storey which is below the ground storey; or, if there is no ground storey, means a storey the floor of which is situated at such a level or levels that some point on its perimeter is below the level of the finished surface of the ground adjoining the building in the vicinity of that point;

GROUND STOREY (except in Parts E and EE) means a storey the floor of which is situated at such a level or levels that any given point on its perimeter is at or about but not below the level of the finished surface of the ground adjoining the building in the vicinity of that point; or, if there are two or more such storeys, means the higher or highest of these;

SINGLE STOREY BUILDING means a building consisting of a ground storey only;

UPPER STOREY means any storey other than a basement storey or ground storey; and

(b) except in Part D wherever these regulations describe a building or part by reference to a number of storeys, that number does not include basement storeys.

(5) In these regulations, any reference to a British Standard or British Standard Code of Practice shall be construed as a reference to–

(a) a British Standard or a British Standard Code of Practice published by the British Standards Institution; or

(b) a national technical specification, of a Member State of the European Community, which provides an equivalent standard of protection or performance.

(6) Any note in a Table or Schedule shall be treated for all purposes as a substantive provision.

(7) Any reference in these regulations, other than in paragraph (5)(b), to a publication shall be construed as follows–

(a) in regulation B3 and in any other case where no date is included in the reference, the reference is to the edition thereof current at 31 December 1988 together with any amendments, supplements or addenda thereto published at that date;

(b) in any case where a date is included in the reference, the reference is to the edition of that date, together with such amendments, as are mentioned in Schedule 8; and

(c) any reference to any publication is a reference to so much only thereof as is relevant in the context in which such publication is quoted.

(8) The abbreviations and symbols listed in the following Table are used in these regulations–

Abbreviation or symbol	Definition
BS	British Standard
CP	British Standard Code of Practice
dB	decibel
°	degree
°C	degree Celsius
Hz	hertz
kg	kilogramme
kN	kilonewton
kW	kilowatt
m	metre
m^2	square metre
m^3	cubic metre
mm	millimetre
mm^2	square millimetre
min	minute
N	newton
W	watt

(9) (a) For the purposes of this paragraph, the expression WORK SIZE in relation to a building component manufactured to comply with a British Standard means the size specified in the relevant British Standard as the size to which the component is required to conform, account being taken of any permissible deviations specified in that British Standard.

(b) Subject to the provisions of sub-paragraph (c), where in these regulations a size limit is expressly prescribed or necessarily implied for a dimension of a building component or assembly of such components, that limit shall apply as follows–

(i) if the dimension is that of a component complying with a British Standard which specifies a relevant work size, that limit shall apply to the relevant work size;

(ii) if the dimension is that of a timber component which does not comply with a British Standard relating to the particular component but consists of softwood which is dimensionally in

accordance with BS 4471: 1987, that limit shall apply to the basic size in the case of a sawn timber, and to the finished size in the case of planed timber;

(iii) if the dimension is the thickness of a wall or other assembly of bricks or blocks (being bricks or blocks complying with a British Standard which specifies a relevant work size) and that dimension is determined by one of the dimensions of a brick or block, that limit shall apply to the relevant work size of the brick or block; and

(iv) in all other circumstances, that limit shall apply to the actual size of the component or assembly of components.

(c) Notwithstanding the provisions of sub-paragraph (b), any reference to the internal diameter of a pipe shall be taken as a reference to its nominal diameter or size.

(10) For the purposes of these regulations, the installation of a cesspool, septic tank or similar structure shall be treated as the execution of works and not as the erection of a building.

A3 Deemed-to-satisfy provisions

Where any provision (in these regulations called a deemed-to-satisfy provision) states that the use of a particular material, method of construction or specification shall be deemed to satisfy the requirement of any regulation or part thereof, that provision shall not be construed so as to require any person necessarily to use such material, method of construction or specification.

A4 Transitional provisions

(1) In this regulation–

WORK means the erection of a building, the alteration or extension of a building, the execution of works, the installation of a fitting or the making of a material change of use.

(2) These regulations shall not apply to–

(a) plans which were deposited with the district council before 1st June 1990;

(b) work carried out in accordance with such plans with or without any departure or deviation from those plans; and

(c) work completed before that date.

(3) The Building Regulations (Northern Ireland) 1973 **(a)** shall continue to apply to–

(a) plans deposited in accordance with those regulations before 1st October 1977;

(b) work carried out in accordance with such plans with or without any departure or deviation from those plans; and

(c) work completed on or after 1st October 1973 but before 1st October 1977, other than work to which building bye-laws continue to apply in accordance with paragraph 2 of Schedule 2 to the Building Regulations (Northern Ireland) Order 1979.

(4) The Building Regulations (Northern Ireland) 1977 **(b)** shall continue to apply to–

(a) plans deposited in accordance with those regulations before 1st June 1990;

(b) work carried out in accordance with such plans with or without any departure or deviation from those plans; and

(c) work completed on or after 1st October 1977 but before 1st June 1990, other than work to which building bye-laws continue to apply in accordance with paragraph 2 of Schedule 2 to the Building Regulations (Northern Ireland) Order 1979 and work to which the Building Regulations (Northern Ireland) 1973 continue to apply by virtue of paragraph (3).

A5 Exemptions

(1) These regulations shall not apply to any of the following buildings or the execution of works or the installation of fittings in or in connection with such buildings–

(a) any buildings belonging to any statutory undertaking and held or used by them for the purposes of their undertaking provided that this exemption shall not extend to houses or buildings used as offices or showrooms other than to buildings so used which form part of a railway station;

(b) buildings used for the purposes of agriculture, other than dwelling houses, where constructed–

(i) more than one and a half times their overall height from the nearest part of a road (including footpaths, hard shoulders and the like) and the boundary of the land (excluding any

(a) S.R. & O. (N.I.) 1973 No. 105 as amended by S.R. & O. (N.I.) 1973 No. 506 and S.R. 1975 No. 112.

(b) S.R. 1977 No. 149 as amended by S.R. 1979 No. 79; S.R. 1980 No. 86; S.R. 1980 No. 332; S.R. 1982 No. 81; S.R. 1984 No. 295; S.R. 1984 No. 343 and S.R. 1987 No. 268.

abutting street, canal or river) on which the buildings are erected; and

(ii) so that no part is within the notional boundary, as determined by regulation E7, of any building of purpose group I, II or III.

(2) (a) For the purposes of this paragraph a PARTIALLY EXEMPTED BUILDING means any building, other than an air supported structure, which belongs to one of the classes described in Part A of Schedule 1.

(b) In the application of these regulations to–

(i) the erection of any partially exempted building; or

(ii) the execution of any works or installation of any fittings in connection with such building; or

(iii) the alteration or extension of such building in such a way that it will remain a partially exempted building, as so altered or extended,

it shall not be necessary to comply with any provisions of these regulations except–

(A) the provisions specified in columns (3), (4) and (5) of Part A of Schedule 1 in relation to the Class to which such building belongs (which in the case of an alteration or extension means the Class to which the building as altered or extended belongs); and

(B) regulations A10 and A11 if the proposal includes work to which any of the provisions specified in columns (4) and (5) of Part A of Schedule 1 apply.

(3) (a) For the purposes of this paragraph a WHOLLY EXEMPTED BUILDING means any building falling within one of the classes of building described in Part B of Schedule 1.

(b) These regulations shall not apply to–

(i) any wholly exempted building (including any services, fittings and equipment provided therein or in connection therewith); and

(ii) any porch which has a floor area not exceeding 4 m^2 and any greenhouse or conservatory which has a floor area not exceeding 20 m^2 which–

(A) is constructed as an annex to an existing building and is not less than 1 m from any boundary;

(B) is so situated or designed as not to enclose any opening provided for the purposes of regulations M3(e) or M4(2) or any inlet to a drain over which waste water is discharged;

(C) is so situated or designed as not to obstruct any access to an underground foul drain and the cover of such access is mechanically fixed and airtight; and

(D) (in the case of a greenhouse or conservatory) has a ventilation opening of sufficient size to comply with the requirements of regulation K2(3).

(4) For the purposes of Schedule 1–

(a) a building shall not be regarded as attached to another building solely by virtue of it being attached to a fence, garden wall or similar structure; and

(b) BUILDING TO WHICH THESE REGULATIONS APPLY means a building which, if it were being newly erected, would be subject to the control of any regulation in Parts C to L.

A6 Application to erection of buildings

Subject to the provisions of regulation A5, Parts A to L, regulation M15 and Part R shall apply to the erection of a building.

A7 Application to alterations and extensions

(1) Subject to the provisions of paragraph (4) and regulations A5 and FF1(2) and (3), Parts A to L, regulation M15 and Part R shall apply to–

(a) a structural alteration or extension of an existing building and to the alteration of an existing building by the insertion of material into a cavity in a wall for the purpose of insulation (irrespective of when the existing building was erected); and

(b) the existing building as affected by that alteration or extension to the extent (subject to the provisions of regulation A9) of prohibiting any alteration or extension which would cause a new or greater contravention of any regulation.

(2) In applying the regulations under paragraph (1)(a) the alteration or extension shall be treated as if it were part of a building being newly erected identical to and to be used for the same purposes as the building as altered or extended.

(3) In determining for the purposes of paragraph (1)(b) whether the alteration or extension would cause a new or greater contravention of any regulation, the following provisions shall apply–

(a) the regulations shall be applied in each of the following ways–

(i) to the building as altered or extended treated as if it were being newly erected in its proposed form for the purposes for

which it will be used when altered or extended; and

(ii) to the existing building treated as if it were being newly erected in its existing form but for the purposes for which it will be used when altered or extended; and

(b) the alteration or extension shall be regarded as being such as would cause a new or greater contravention if (when the regulations are applied as directed in sub-paragraph (a)) the building as altered or extended–

(i) contravenes any regulation which does not apply to the existing building;

(ii) contravenes any regulation which is satisfied by the existing building; or

(iii) contravenes to a greater extent any regulation which is contravened by the existing building.

(4) Part EE shall only apply to the alteration or extension of an existing building where Part EE applied to the existing building when it was erected.

A8 Application to works and fittings

Subject to any express provision to the contrary and to the provisions of regulations A5, S1 and T1–

Part A (Interpretation and general)

In Part B (Materials and workmanship) regulation B2

Part M (Heat-producing appliances and incinerators)

Part N (Drainage)

Part P (Sanitary appliances and unvented hot water storage systems)

Part S (Thermal insulation of pipes, ducts and storage vessels)

Part T (Control of space and water heating systems)

shall apply to the execution of any works and the installation of any fittings (whether by way of new work or by way of replacement) to which any of those Parts respectively relate.

A9 Application to material change of use

(1) For the purposes of these regulations a change in the purposes for which a building, or part of a building, is used shall be deemed to be a

material change of use in any one of the following cases but in no other case:

CASE A

Where a building or a part of a building, being a building or part which was not originally constructed for occupation as a house or part thereof or which, though so constructed, has been appropriated to other purposes, becomes used as a house or part thereof; and in such case the following provisions of these regulations shall apply–

Part A (Interpretation and general)

Part C (Preparation of site and resistance to moisture) except regulations C2 and C3

Part D (Structure) which shall apply to those parts of the building affected by any increase in imposed loading resulting from the change of use

Part E (Structural fire precautions)

Part EE (Means of escape in case of fire)

Part K (Ventilation)

In Part L (Chimneys, flue pipes, hearths and fireplace recesses)–

(a) buildings erected under former control:
regulations L1 to L3, L4 (except paragraphs (1)(c)(ii) and (1)(d)), L5, L7 to L13 and L15 to L22

(b) other buildings: all regulations.

CASE B

Where a building or a part of a building, being a building or part which was originally constructed for occupation as a house by one family only, becomes occupied by two or more families and is so altered or extended as to create separate dwellings; and in such case the following provisions of these regulations shall apply–

Part A (Interpretation and general)

Part D (Structure) which shall apply to those parts of the building affected by any increase in imposed loading resulting from the change of use

In Part E (Structural fire precautions)–

(a) buildings or parts of buildings which, as so altered or extended as aforesaid, comprise not more than one basement storey, a ground storey and two upper storeys:
all regulations except regulations E7, E9(6), E10(4), E13 and E15

(b) other buildings or parts of buildings:
all regulations except regulations E7 and E15

Part EE (Means of escape in case of fire)

Part J (Refuse disposal)

Part K (Ventilation)

In Part L (Chimneys, flue pipes, hearths and fireplace recesses)–

(a) buildings erected under former control:
regulations L1 to L3, L4 (except paragraphs (1)(c)(ii) and (1)(d)), L5, L7 to L13 and L15 to L22

(b) other buildings: all regulations.

CASE C

Any case not falling within the definition of any other Case specified in this paragraph, where the purpose for which a building, or part of a building, is used is changed to such an extent that the purpose group of that building or part, as determined by regulation E2, is changed; and in such case (subject to the provisions of regulation A5) the following provisions of these regulations shall apply–

Part A (Interpretation and general)

Part D (Structure) which shall apply to those parts of the building affected by any increase in imposed loading resulting from the change of use

In Part E (Structural fire precautions)–

(a) in every case other than those specified under sub-paragraphs (b) and (c): all regulations

(b) in any case where the purpose group of a building or part of a building is changed to purpose group II and, after any alteration or extension associated with the change of use has been completed, the height of that building or (if separated as described in regulation E5(1)(b)) that part does not exceed 15 m measured in accordance with regulation E3: all regulations except regulations E7, E9(6), E10(4) and E13 and except that regulation E5(2) shall not apply so as to require a minimum period of fire resistance of more than one hour for an element of structure forming part of a basement storey

(c) in any case where the purpose group of a building or part of a building is changed to purpose group IV, V, VI, VII or VIII and, after any alteration or extension associated with the change of use has been completed, the height of that building

or (if separated as described in regulation E5(1)(b)) that part does not exceed 15 m measured in accordance with regulation E3: all regulations except, in so far only as it relates to a compartment floor, regulation E9(6).

Part EE (Means of escape in case of fire)

CASE D

Any case not falling within the definition of Case A where either–

(a) the purpose for which a building or part was constructed to be used was such that it was expressly exempted from the requirements of all or any of the building bye-laws or building regulations in force at that time and the purpose for which it is used is changed to such an extent that, if it had been constructed for that purpose, it would not have been so exempted; or

(b) the purpose for which a building or part of a building is used is such that (irrespective of when that building or part was erected) it falls within any one of the descriptions of partially exempted buildings in Schedule 1 and the purpose for which it is used is changed to such an extent that it ceases to fall within that description;

and in such case (subject to the provisions of regulation A5) the following provisions of these regulations shall apply to the building or part of the building–

Part A (Interpretation and general)

Part B (Materials and workmanship)

Part C (Preparation of site and resistance to moisture) except regulations C2 and C3

Part D (Structure)

Part E (Structural fire precautions) except regulations E7 and E15

Part EE (Means of escape in case of fire)

Part G (Sound insulation of dwellings)

Part H (Stairways, ramps, balustrades and vehicle barriers)

Part J (Refuse disposal)

Part K (Ventilation)

In Part L (Chimneys, flue pipes, hearths and fireplace recesses)–

(a) buildings erected under former control: regulations L1 to L3,

L4 (except paragraphs (1)(c)(ii) and (1)(d)), L5, L7 to L13 and L15 to L22

(b) other buildings: all regulations.

(2) Where a material change of use neither involves nor is accompanied by an alteration or extension, the provisions referred to in paragraph (1) shall apply to the building or part of the building in which the change of use occurs as if it were a new building identical to the building as it exists and to be used for the same purpose or purposes as the building will have after the change of use.

(3) Where a material change of use involves or is accompanied by an alteration or extension–

(a) the provisions referred to in paragraph (1) (other than regulation A8) shall apply to the building or part of the building in which the change of use occurs as if it were part of a new building identical to the building as altered or extended and to be used for the same purpose or purposes as that building will have after the change of use; and

(b) the application of regulation A7 by paragraph (1) shall be effective to apply any requirements additional to those directly applied by that paragraph.

A10 Giving of notices and deposit of plans

(1) Subject to the provisions of paragraphs (2), (3) and (5) any person who intends to–

(a) erect any building;

(b) make any structural alteration of or extension to a building;

(c) execute any works or install any fitting in connection with a building; or

(d) make any material change of use of a building,

shall, if any provisions of these regulations apply to such operation or such change of use, give notices and deposit plans, sections, specifications and written particulars in accordance with the relevant rules of Schedule 2.

(2) The provisions of paragraph (1) relating to the making of a structural alteration shall not apply to the carrying out of structural work associated with an operation to which either paragraph (3)(a) or (3)(b) relates if the extent of the work does not exceed that described therein.

(3) The provisions of paragraph (1) relating to the installation of a fitting shall not apply to–

(a) the installation of an appliance to which Part M relates (other than a high-rating appliance described in sub-paragraph (b)) by way of replacement of an existing appliance if compliance with the relevant regulations in that Part does not require the carrying out of any structural work other than such work as may be necessary in order to comply with regulation M4(11);

(b) the installation, whether or not by way of replacement, of a Class II gas appliance or of a Class I or Class II incinerator which employs gas as a means of igniting refuse if compliance with the relevant regulations in Part M does not require the carrying out of any structural work other than the construction of the flue pipe which is wholly within the room or internal space in which the appliance is installed and conveys the products of combustion from the appliance to an existing flue in a chimney or flue pipe or to the external air through an existing opening in an external wall; or

(c) the installation of a fitting to which Part N or P (except regulation P5) relates by way of replacement of an existing fitting if compliance with the relevant regulations in that Part does not require the carrying out of any structural work.

(4) In paragraph (3) words and expressions have the same meaning as in Part M.

(5) The provisions of paragraph (1) where they relate to the execution of works to which Part S applies shall not apply where the works involve only the extension of an existing system and do not involve the carrying out of any structural work.

A11 Notice of commencement and completion of certain stages of work

(1) In this regulation–

(a) BUILDER means any person carrying out or intending to carry out any such operation as is referred to in regulation A10(1)(a), (b) or (c) to which any of these regulations apply; and

(b) in the calculation of a period of 48 hours in respect of the giving of 48 hours notice under paragraph (2), no account shall be taken of a Saturday, Sunday, Christmas Day, Good Friday, Bank or public holiday or day appointed for public thanksgiving or mourning.

(2) Subject to the provisions of paragraph (6), a builder shall furnish the district council with–

(a) not less than 48 hours notice in writing of the date and time at which the operation will be commenced;

(b) not less than 48 hours notice in writing before the covering up of any excavation for a foundation, any foundation, any damp-proof course or any concrete or other material laid over a site;

(c) not less than 48 hours notice in writing before any drain or private sewer to which these regulations apply will be haunched or covered in any way; and

(d) notice in writing not more than seven days after the work of laying such drain or private sewer has been carried out, including any necessary work of haunching or surrounding the drain or private sewer with concrete and backfilling the trench.

(3) If the builder neglects or refuses to give any such notice, he shall comply with any notice in writing from the district council requiring him within a reasonable time to cut into, lay open or pull down so much of the building, works or fittings as prevents the district council from ascertaining whether any of these regulations have been contravened.

(4) If the builder, in accordance with any notice in writing received from the district council which specifies the manner in which any building or works or fittings contravenes the requirements of these regulations, has altered or added to the building, works or fittings so as to secure compliance with these regulations, he shall, within a reasonable time after the completion of such alteration or addition, give notice in writing to the district council of its completion.

(5) Subject to the provisions of paragraph (6), the builder shall give to the district council notice in writing of–

(a) the erection of a building, not more than seven days after the completion, or (if a building or part of a building is occupied before completion) not less than seven days before occupation as well as not more than seven days after completion;

(b) any alteration or extension of a building, not more than seven days after completion; and

(c) the execution of works or the installation of fittings in connection with a building, not more than seven days after completion.

(6) The requirements of this regulation shall not apply to the installation of any fitting if the giving of notices and the deposit of plans, sections, specifications and written particulars are not required under the provisions of regulation A10.

A12 Testing of drains and private sewers

An authorised officer of the district council shall be permitted to make such tests of any drain or private sewer as may be necessary to establish compliance with any of the provisions of Part N.

A13 Sampling of materials

An authorised officer of the district council shall at all times be permitted to take such samples of the materials to be used in the erection, alteration or extension of a building, or the execution of works or the installation of fittings, as may be necessary to enable the district council to ascertain whether such materials comply with the provisions of these regulations.

A14 Exercise of power of dispensation or relaxation

The power under Article 15(1) of the Building Regulations (Northern Ireland) Order 1979 to dispense with or relax any requirement of the regulations specified below shall, in accordance with Article 15(2) of the said Order, be exercisable by the district council.

Part B (Materials and workmanship)

Part C (Preparation of site and resistance to moisture)

Part E (Structural fire precautions) and Part EE (Means of escape in case of fire) except in either case when applied to–

(a) a building, or part of a building, which exceeds 7,000 m^3 in capacity;

(b) a building, or part of a building, in any complex of buildings in multi-occupation, being a complex which exceeds 4,000 m^2 in area and consists of or incorporates a shopping precinct; or

(c) an air supported structure.

Part F (Thermal insulation of dwellings)

Part FF (Conservation of fuel and power in buildings other than dwellings)

Part G (Sound insulation of dwellings)

Part H (Stairways, ramps, balustrades and vehicle barriers)

Part J (Refuse disposal)

Part K (Ventilation)

Part L (Chimneys, flue pipes, hearths and fireplace recesses)

Part M (Heat-producing appliances and incinerators)

Part N (Drainage)

Part P (Sanitary appliances and unvented hot water storage systems)

Part R (Facilities for disabled people)

Part S (Thermal insulation of pipes, ducts and storage vessels) and

Part T (Control of space and water heating systems):

Provided that this regulation shall not apply to any application made by a district council.

A15 Application for dispensation or relaxation

(1) Any application for a direction dispensing with or relaxing any requirement of these regulations shall be submitted in duplicate.

(2) Before giving a direction the Department or, as the case may be, the district council may if it thinks fit send–

(a) to the applicant, a copy of its draft direction, and

(b) to any other person or body appearing to it to be interested, a copy of the application and of its draft direction,

inviting comment on the draft direction, and it shall take into account any comments received before making the direction final.

(3) Before giving a direction the Department or, as the case may be, the district council may if it thinks fit afford to the applicant or any other person appearing to it to be interested, an opportunity of appearing before and being heard by a person appointed by the Department or, as the case may be, the district council for the purpose.

(4) After giving a direction the Department or, as the case may be, the district council shall notify the applicant and any other person who received a copy of the draft direction under regulation A15(2), of the direction and its reasons therefor.

A16 Appeals and prescribed periods

(1) Where an applicant has a right of appeal under Articles 16 or 17 of the Building Regulations (Northern Ireland) Order 1979 **(a)** against a

---

(a) S.I. 1979/1709 (N.I. 16).

decision of a district council the notification of that decision to the applicant shall indicate–

(a) that there is a right of appeal;

(b) the prescribed period within which the appeal may be made; and

(c) the requirements of paragraph (2).

(2) An appeal to the Department shall set out the grounds of appeal and a copy shall be sent to the district council.

(3) The district council on receiving the copy of the appeal shall at once transmit to the Department a copy of the application and a copy of all documents furnished by the applicant for the purposes of his application.

(4) The district council shall at the same time give to the Department in writing any representations which it desires to make as regards the appeal and shall send a copy to the appellant.

(5) The prescribed period for the purposes of Article 16(1) of the Building Regulations (Northern Ireland) Order 1979 (appeal against refusal by a district council to relax regulations or against conditions attaching to a relaxation) shall be 56 days.

(6) The prescribed period for the purposes of Article 16(2) of the Building Regulations (Northern Ireland) Order 1979 (period for consideration of application for relaxation by a district council) shall be 56 days.

(7) The prescribed period for the purposes of Article 17(1) of the Building Regulations (Northern Ireland) Order 1979 (appeal against rejection of plans by a district council) shall be 56 days.

(8) The prescribed period for the purposes of Article 17(2) of the Building Regulations (Northern Ireland) Order 1979 (period for consideration of plans deposited with a district council) shall be 56 days.

A17 Revocations

Subject to the provisions of regulation A4 the regulations specified in the Table to this regulation are hereby revoked.

Table to Regulation A17

Regulations revoked (1)	References (2)
The Building Regulations (Northern Ireland) 1977	S.R. 1977 No. 149
The Building (Amendment) Regulations (Northern Ireland) 1979	S.R. 1979 No. 79
The Building (Amendment No. 2) Regulations (Northern Ireland) 1980	S.R. 1980 No. 86
The Building (Amendment No. 3) Regulations (Northern Ireland) 1980	S.R. 1980 No. 332
The Building (Amendment) Regulations (Northern Ireland) 1982	S.R. 1982 No. 81
The Building (Amendment) Regulations (Northern Ireland) 1984	S.R. 1984 No. 295
The Building (Amendment No. 2) Regulations (Northern Ireland) 1984	S.R. 1984 No. 343
The Building (Amendment) Regulations (Northern Ireland) 1987	S.R. 1987 No. 268

PART B

Materials and workmanship

B1 Interpretation

In this Part–

MATERIALS includes any fittings, components or other manufactured products.

B2 Fitness of materials and workmanship

(a) In the erection of a building;

(b) in the structural alteration or extension of a building;

(c) in the execution of works or the installation of fittings, being works or fittings to which any provision of these regulations applies; or

(d) in the backfilling of any excavation of a site in connection with any building or works or fittings to which any provision of these regulations applies–

any materials used shall–

(i) be of a suitable nature and quality in relation to the purposes for and conditions in which they are used,

(ii) be adequately mixed or prepared,

(iii) be applied, used or fixed so as adequately to perform the functions for which they are designed, and

(iv) not continue to emit any harmful substance longer than is reasonable in all the circumstances; and

the standard of workmanship of the completed work shall be sufficient to–

(A) ensure there shall be no danger to the health or safety of persons in or about the building; and

(B) further the conservation of fuel and power.

B3 Deemed-to-satisfy provisions regarding the fitness of materials and workmanship

The use of any material or any method of mixing or preparing materials or of applying, using or fixing materials which conforms with a–

(a) British Standard or a British Standard Code of Practice; or
(b) national technical specification, of a Member State of the European Community, of equivalent standard,

prescribing the quality or classification of material or standards of workmanship shall be deemed to be a sufficient compliance with the requirements of regulation B2 if the use of that material or method is appropriate to the purpose for and conditions in which it is used.

B4 Unsuitable materials

(1) No part of an external wall or roof of a building shall consist of flexible or rigid sheet material supported directly or indirectly by air or other gaseous substances.

(2) (a) Materials described in column (1) of the Table to this regulation shall only be used as the weather-resisting part of the external wall or roof of a building if they comply with the requirements specified opposite thereto in column (2) or (3) respectively; and

(b) in determining for the purposes of this regulation whether a material is suitable for use as the weather-resisting part of an external wall or roof no account shall be taken of that material being either–

(i) painted, or

(ii) coated, surfaced or rendered with any other material which, when so used, does not in itself constitute effective resistance against weather.

(3) Any material which depends on periodic maintenance, replacement or renewal for its suitability shall be readily accessible or positioned so that such maintenance, replacement or renewal is practicable.

Table to Regulation B4

Limitations on the use of certain materials as the weather-resisting parts of external walls and roofs

Description of material (1)	Location of material: External walls (2)	Location of material: Roofs (3)
1. Felt	Unsuitable without exception	Unsuitable except felt used in a roof covering of a type and construction complying with the recommendations of CP 144: Part 3: 1970
2. Timber Boarding	Unsuitable except boarding which– (a) is manufactured from– (i) the heartwood of timber specified in Table 1 to Schedule 3; or (ii) timber specified in Table 2 to Schedule 3 subjected to a preservative treatment; and (b) has in either case, a thickness of not less than– (i) in the case of feather-edge boarding, 16 mm at the thicker edge and 6 mm at the thinner edge; or (ii) in all other cases 16 mm	Unsuitable without exception
3. Fibre Building Board	Unsuitable except tempered hardboard which complies with the appropriate specification in BS 1142: Part 2: 1971	Unsuitable without exception
4. Plywood	Unsuitable except where not less than 8 mm thick and satisfactorily manufactured for external use	
5. Plastering or Rendering on Wood Laths or Metal Lathing	Unsuitable except a rendered finish on metal lathing which complies with the recommendations of BS 5262: 1976	

Table to Regulation B4 – continued

6. Sheet Steel	Unsuitable except galvanised sheet steel to BS 2989: 1982 sheet ZIG600 or Type 600 of BS 3083: 1980 or sheet steel vitreous enamelled or coated with bitumen or other organic substance of like durability during the course of manufacture	Unsuitable except galvanised sheet steel to BS 2989: 1982 sheet ZIG600 or Type 600 of BS 3083: 1980 or sheet steel vitreous enamelled or coated with bitumen or other organic substance of like durability during the course of manufacture
7. Fibrous-cement Sheets and Slates	Unsuitable except fibrous-cement sheets and slates complying with BS 690: Part 2: 1981, BS 690: Part 3: 1973 or BS 690: Part 4: 1974	Unsuitable except fibrous-cement sheets and slates complying with BS 690: Part 2: 1981, BS 690: Part 3: 1973 or BS 690: Part 4: 1974

B5 Urea formaldehyde foam

(1) Subject to paragraph (2), in situ foamed urea formaldehyde shall not be used in any work referred to in regulation B2(a) or (b).

(2) In situ foamed urea formaldehyde may be used for filling the cavity of a cavity wall having an inner leaf constructed of bricks or blocks, provided that it is manufactured, prepared and installed in accordance with BS 5617: 1985 and BS 5618: 1985.

PART C

Preparation of site and resistance to moisture

C1 Application and interpretation

(1) Regulation C4 in respect of resistance to ground moisture of floors and walls, and weather resistance of walls shall not apply where the building is intended to be used wholly for–

(a) storing goods, provided that any persons who are habitually employed in the building are engaged only in storing, caring for or removing the goods; or

(b) a purpose such that compliance with regulation C4 would not serve to increase protection to the health or safety of any persons habitually employed in the building.

(2) Regulation C6 applies only to a dwelling.

(3) In this Part–

DANGEROUS AND HARMFUL SUBSTANCES includes any substance which is or could become corrosive, explosive, inflammable, radioactive or toxic and includes deposits of faecal or animal matter;

FLOOR includes any base or structure between the surface of the ground, or the surface of any hardcore laid upon the ground, and the upper surface of the floor;

MOISTURE includes water vapour as well as liquid water; and

WALL includes piers, chimneys, columns and parapets which form part of the wall.

C2 Preparation of site

The site of a building and the ground adjacent to it shall be prepared and treated so as to prevent as far as reasonably practicable, any

harmful effect on the building or the health or safety of the occupants caused by–

(a) vegetable soil; and

(b) dangerous or harmful substances.

C3 Subsoil drainage

The site of a building and the ground adjacent to it shall be drained as far as reasonably practicable, or the building otherwise protected so as to prevent any harmful effect on the building or the health of the occupants caused by–

(a) ground water; and

(b) existing subsoil drainage.

C4 Resistance to ground moisture and weather

Every wall, floor and roof shall be constructed so as to prevent any harmful effect on the building or the health of the occupants caused by the passage of moisture to any part of the building from–

(a) the ground; and

(b) the weather.

C5 Deemed-to-satisfy provisions for resistance to ground moisture and weather

The requirements of regulation C4 in respect of walls and floors shall be deemed to be satisfied if they are constructed in accordance with DOE(NI) Technical Booklet C: 1990.

C6 Condensation

A building to which this regulation applies shall be designed and constructed so as to prevent, as far as reasonably practicable, any harmful effect on the building from moisture in the form of interstitial condensation.

C7 Deemed-to-satisfy provisions for condensation

The requirements of regulation C6 shall be deemed to be satisfied if the building is designed and constructed in accordance with BS5250: 1989, Clauses 9.1 to 9.5.

PART D

Structure

D1 Interpretation

In this Part–

DEAD LOAD means the load due to the weight of all walls, permanent partitions, floors, roofs and finishes, including services and all other permanent construction;

IMPOSED LOAD means the load assumed to be produced by the intended occupancy or use, including the weight of movable partitions, distributed, concentrated, impact, inertia and snow loads, but excluding wind loads; and

WIND LOAD means the load due to the effect of wind pressure or wind suction.

D2 Loading

The loads to which a building will be subjected shall be calculated in accordance with, in the case of–

(a) dead and imposed loads (excluding imposed roof loads) – BS6399: Part 1: 1984;

(b) imposed roof loads – BS6399: Part 3: 1988; and

(c) wind loads – CP 3: Chapter V: Part 2: 1972 (in no case shall S3 be taken as less than 1):

Provided that–

(i) the actual load is used, where the actual load to which a building is to be subjected is likely to exceed the load so calculated; and

(ii) loads used allow for possible dynamic, concentrated and peak load effects which may occur.

D3 Stability

The building shall be designed and constructed so that the combined dead, imposed and wind loads are sustained and transmitted to the ground, taking into account the nature of the ground–

(a) safely; and

(b) without impairing the safety of any part of another building.

D4 Deemed-to-satisfy provisions for stability

The requirements of regulation D3 shall be deemed to be satisfied if the design and construction of the work is carried out in accordance with the relevant recommendations of the following documents, that is to say, in the case of–

(a) Foundations–

(i) BS8004: 1986; or

(ii) DOE(NI) Technical Booklet D: 1990: Sections 1 and 5 (for houses and small buildings).

(b) Structural work of reinforced, prestressed or plain concrete–

BS8110: Part 1: 1985, BS8110: Part 2: 1985 and BS8110: Part 3: 1985.

(c) Structural work of steel–

(i) BS449: Part 2: 1969 and Addendum No. 1 (1975) to BS449: Part 2: 1969;

(ii) BS5950: Part 1: 1985, BS5950: Part 2: 1985 and BS5950: Part 5: 1987; or

(iii) BS5950: Part 4: 1982.

(d) Structural work of composite steel and concrete construction–

CP117: Part 1: 1965.

(e) Structural work of aluminium–

CP118: 1969 using one of the principal or supplementary aluminium alloys designated in Section 1.1 of that Code; and for the purpose of Section 5.3 of that Code, the structure shall be classified as a safe-life structure.

(f) Structural work of masonry–

(i) BS5628: Part 1: 1978 (1985) and BS5628: Part 3: 1985; or

(*ii*) *DOE (NI) Technical Booklet D: 1990: Sections 1, 3 and 4 (for residential buildings of not more than 3 storeys, small single storey non-residential buildings and small buildings forming annexes to residential buildings (including garages and outbuildings)).*

(*g*) *Structural work of timber–*

(*i*) *BS5268: Part 2: 1988 and BS5268: Part 3: 1985; or*

(*ii*) *DOE (NI) Technical Booklet D: 1990: Sections 1 and 2 (for single family houses of not more than 3 storeys).*

D5 Disproportionate collapse

Buildings of 5 or more storeys (each basement level being counted as one storey) shall be designed and constructed so that in the event of damage occurring to any part of the building, the extent of any resultant collapse will not be disproportionate to the cause of the damage.

D6 Deemed-to-satisfy provisions for disproportionate collapse

(*1*) *For the purposes of this regulation–*

KEY ELEMENTS or *PROTECTED MEMBERS are single structural elements on which large parts of the structure rely and the failure of which would result in failure of the structure beyond the extent described in sub-paragraph (2)(b). Their design, which shall take their importance into account, and the least loadings they have to withstand, are described in the British Standards listed in sub-paragraph (2)(a).*

(*2*) *The requirements of regulation D5 shall be deemed to be satisfied if–*

(*a*) *the design and construction of the work is in accordance with the relevant recommendations of the following documents (taking account of the recommendations on ties and on the effect of misuse or accident), that is to say, in the case of–*

(*i*) *Structural work of reinforced, prestressed or plain concrete–*

BS8110: Parts 1 and 2: 1985.

(*ii*) *Structural work of steel–*

BS5950: Part 1: 1985 (the accidental loading referred to in clause 2.4.5.5 shall be chosen having particular regard to the importance of the key elements and the consequences of failure, and the key element shall always be capable of withstanding a load of at least 34 kN/m^2 applied from any direction).

(*iii*) *Structural work of masonry–*

BS5628: Part 1: 1978 (1985); and

(*b*) *the structural failure of any member not designed as a key element or protected member, in any one storey, will not result in failure of the structure beyond the immediately adjacent storeys or beyond an area within those storeys of–*

(*i*) *70 m^2; or*

(*ii*) *15% of the area of the storey;*

whichever is less.

PART E

Structural fire precautions

E1 Interpretation

(1) In this Part and in Schedule 4–

BASEMENT STOREY means a storey which is below the ground storey; or, if there is no ground storey, means a storey the floor of which is situated at such a level or levels that some point on its perimeter is more than 1.2 m below the level of the finished surface of the ground adjoining the building in the vicinity of that point;

CAVITY and CAVITY BARRIER have the meanings assigned to them by regulation E14(1);

COMPARTMENT means any part of a building which is separated from all other parts by one or more compartment walls or compartment floors or by both such walls and floors; and, if any part of the top storey of a building is within a compartment, that compartment shall also include any roof space above such part of the top storey;

COMPARTMENT WALL and COMPARTMENT FLOOR means respectively a wall and a floor which complies with regulation E9 and which is provided as such for the purposes of regulation E4 or to divide a building into compartments for any purpose in connection with regulations E5, E6 or E7;

DOOR includes any shutter, cover or other form of protection to an opening in any wall or floor of a building or in the structure surrounding a protected shaft, whether the door is constructed of one or more leaves;

ELEMENT OF STRUCTURE means–

(a) any member forming part of the structural frame of a building or

any other beam or column (not being a member forming part of a roof structure only);

(b) a floor, including a compartment floor, other than the lowest floor of a building;

(c) an external wall;

(d) a separating wall;

(e) a compartment wall;

(f) structure enclosing a protected shaft;

(g) a loadbearing wall or loadbearing part of a wall; and

(h) a gallery;

EXTERNALLY NON-COMBUSTIBLE means externally consisting of or faced with non-combustible material;

FIRE STOP has the meaning assigned to it by regulation E14(1);

GLAZING means light-transmitting material whether glass or not;

GROUND STOREY means a storey the floor of which is situated at such a level or levels that any given point on its perimeter is at or about, or not more than 1.2 m below the level of the finished surface of the ground adjoining the building in the vicinity of that point; or, if there are two or more such storeys, means the higher or highest of these;

HEIGHT OF A BUILDING shall be construed in accordance with regulation E3;

OPEN CARPORT means a carport which has not more than one storey and is open on two or more of its sides; and, for the purpose of this definition, a side which includes or consists of a door shall not for that reason be regarded as an open side;

PERMITTED LIMIT OF UNPROTECTED AREAS means the maximum aggregate area of unprotected areas in any side or external wall of a building or compartment, calculated as prescribed in Part 1 of Schedule 4;

PROTECTED SHAFT means a stairway, lift, escalator, chute, duct or other shaft which enables persons, things or air to pass between different compartments and complies with the requirements of regulation E10;

RELEVANT BOUNDARY, in relation to a side or external wall of a building or compartment, means that part of the boundary of the premises (as defined in regulation A2(1)) or of the notional boundary (as prescribed in regulation E7(1)(c)) which is adjacent to that side or wall and either coincides with, is parallel to or is at an angle of not more than 80° with that side or wall;

SEPARATING WALL means a wall or a part of a wall which is common to adjoining buildings; and

UNPROTECTED AREA, in relation to an external wall or side of a building, means–

(a) a window, door or other opening;

(b) any part of the external wall which has fire resistance less than that specified by this Part for that wall; and

(c) any part of the external wall which has combustible material more than 1 mm thick attached or applied to its external face, whether for cladding or any other purpose.

(2) Any reference in this Part to a building shall, in any case where two or more houses adjoin, be construed as a reference to one of those houses.

(3) If any part of a building other than a single storey building–

(a) consists of a ground storey only;

(b) has a roof to which there is only such access as may be necessary for the purposes of maintenance or repair; and

(c) is completely separated from all other parts of the building by a compartment wall or compartment walls in the same continuous vertical plane,

that part may be treated, for the purposes of this Part, as a part of a single storey building.

(4) In relation to a building, or part of a building, of purpose group VII–

(a) the floor of a gallery (other than a loading gallery, fly gallery, stage grid, lighting bridge, or any gallery used for similar purposes or provided for the purpose of maintenance or repair) shall be regarded as the floor of a storey; and

(b) wherever in this Part a building is described by reference to a number of storeys, that number shall be construed as including any ground storey or upper storey formed by such a floor.

(5) Any requirement in this Part that an element of structure, door or other part of a building shall have fire resistance of a specified period shall be construed as meaning that it shall be so constructed that a specimen constructed to the same specification, if exposed to test by fire in accordance with, in the case of–

(a) loadbearing elements– BS 476: Parts 20 and 21: 1987;

(b) non-loadbearing elements– BS 476: Parts 20 and 22: 1987; or

(c) other parts of a building– BS 476: Parts 20 and 23: 1987,

would (subject to any relevant provision in Table 1 to this regulation) satisfy the requirements of that test as to loadbearing capacity, integrity and insulation for not less than the specified period:

Provided that an element of structure, door or other part of a building shall be deemed to have the requisite fire resistance if–

(*i*) *it is constructed to the same specification as that of a specimen which prior to 1st January 1989 was either exposed to test by fire in accordance with BS 476: Part 8: 1972 and (subject to any relevant provision in Table 1 to this regulation) satisfied the requirements of that test as to stability, integrity and insulation for not less than the specified period or was assessed by an appropriate authority as capable of satisfying those requirements; or*

(*ii*) *in the case of a wall, beam, column, stanchion or floor to which Building Research Establishment Report BR 128, Guidelines for the Construction of Fire Resisting Structural Elements (1988) Part II relates, it is constructed in accordance with one of the specifications set out in the relevant Table therein and the notional period of fire resistance given in that Table as being appropriate to that type of construction and other relevant factors is not less than the specified period.*

(6) Any reference in this Part to a roof or part of a roof of a specified designation shall be construed as a requirement that the roof or part shall be so constructed that a specimen constructed to the same specification, if exposed to test by fire in accordance with BS476: Part 3: 1958, would comply with the relevant test criteria specified in relation to that designation:

Provided that any roof or part of a roof shall be deemed to be of the specified designation if it conforms with one of the specifications set out against that designation in Schedule 5.

(7) Any reference in this Part to a plastics material of a designated type shall be construed as a reference to a material which falls within the description relevant to that type given in column (2) of Table 2 to this regulation and of which the appropriate number of specimens, if tested in accordance with BS 2782: 1970 by the method of test prescribed in column (3) of that Table, would comply with the test criteria prescribed in column (4) of that Table.

Table 1 to Regulation E1

Provisions as to method of test and minimum period of fire resistance

Part of building	Method of test	Minimum period as to–		
		BS 476: Parts 20 and 21, or 20 and 22, or 20 and 23: 1987		
		Loadbearing capacity[x]	Integrity	Insulation
		BS 476: Part 8: 1972		
		Stability	*Integrity*	*Insulation*
(1)	(2)	(3)	(4)	(5)
1. External wall situated 1 m or more from relevant boundary (excluding any part of such a wall which is described in item 2)	exposure of inside of wall to test by fire	*	*	15 min
2. Any part of an external wall (being a wall situated 1 m or more from relevant boundary) which is required to comply with regulation E7(5)(b)	exposure of each side of wall separately to test by fire–			
	(a) if inside of wall exposed to test by fire	*	*	15 min
	(b) if outside of wall exposed to test by fire	†	†	†
3. External wall situated less than 1 m from any point on relevant boundary 4. Separating wall 5. Compartment wall 6. Structure (other than an external wall) enclosing protected shaft 7. Structure referred to in regulations E13(2)(a) and E13(3)(b)	exposure of each side of structure separately to test by fire	*	*	*

Table 1 to Regulation E1 – continued

Part of building	Method of test	Minimum period as to–		
		BS 476: Parts 20 and 21, or 20 and 22, or 20 and 23: 1987		
		Loadbearing capacity[x]	Integrity	Insulation
		BS 476: Part 8: 1972		
		Stability	*Integrity*	*Insulation*
(1)	(2)	(3)	(4)	(5)
8. Wall referred to in regulation E18(6)(b)	exposure of garage side of wall to test by fire	*	*	*
9. Compartment floor	exposure of underside of floor to test by fire	*	*	*
10. Floor of upper storey in building of purpose group I which has two storeys	exposure of underside of floor to test by fire	30 min‡	15 min‡	15 min‡
11. Casing referred to in regulation E12(3)(c)	exposure of exterior to test by fire	30 min	30 min	30 min§
12. Ceiling referred to in regulation E14(6)(b)	exposure of underside to test by fire¶	30 min	30 min	30 min
13. Cavity barrier referred to in regulation E14(8)(a)	exposure of each side of barrier separately to test by fire	30 min	30 min	15 min
13A. Cavity barrier referred to in regulation E14(8)(b)	exposure of each side of barrier separately to test by fire	30 min	30 min	no requirement
14. Door other than a door described in item 15 or 16	exposure to test by fire when fitted in its frame	*	*	no requirement

Table 1 to Regulation E1 – continued

Part of building	Method of test	Minimum period as to–		
		BS 476: Parts 20 and 21, or 20 and 22, or 20 and 23: 1987		
		Loadbearing capacity[x]	Integrity	Insulation
		BS 476: Part 8: 1972		
		Stability	*Integrity*	*Insulation*
(1)	(2)	(3)	(4)	(5)
15. Door referred to in both regulation E11(5) and regulations E9(1)(a)(i), E13(2)(c), E13(3)(c), E14(9)(c)(vi) or E18(6)(c)(ii)	exposure to test by fire when fitted in its frame	30 min	20 min	no requirement
16. Door referred to in regulation E11(6) and regulation E10(7)(a) or E10(7)(b)	exposure to test by fire when fitted in any rebated frame	30 min	30 min	no requirement

Notes to Table 1 to Regulation E1

x applies only to tests in accordance with BS 476: Parts 20 and 21: 1987

* denotes 'period of fire resistance specified'.

† denotes 'period of fire resistance specified by regulation E5 or one hour whichever is the less'.

‡ These requirements are referred to in Table 14 of Building Research Establishment Report BR 128, Guidelines for the Construction of Fire Resisting Structural Elements (1988) as modified ½ hour.

§ No requirement if the distance between the casing and any pipe within the enclosure other than a pipe penetrating the casing exceeds 50 mm.

¶ A ceiling tested in accordance with BS 476: Part 8: 1972 shall have been tested as for a floor but with the following modifications–

(a) Construction – the specimen of the ceiling and its supporting structure to be tested shall be representative of that to be used in practice and shall include any insulating material to be laid directly on the ceiling.

(b) Loading and restraint – no loading shall be applied and any restraint shall comply with clause 1.3.2.

(c) Determination of fire resistance – the fire resistance of the ceiling shall be judged on the compliance of the specimen with the three criteria specified in clause 1.5 and its fire resistance shall be determined in accordance with the provisions of clause 1.6.

Table 2 to Regulation E1

Designation of plastics materials

Type	Description of material	Method of test in accordance with BS 2782: 1970	Criteria (to be satisfied by each specimen used for test purposes unless otherwise prescribed)
(1)	(2)	(3)	(4)
1.	Any plastics material	102C	The softening point of the material (expressed as the arithmetic mean of the softening points of the two specimens used) does not exceed 120°C
2.	Any plastics material which satisfies both tests	102C	The softening point of the material (expressed as the arithmetic mean of the softening points of the two specimens used) does not exceed 120°C
		508A	When tested in a thickness of 3 mm, the rate of burning does not exceed 50 mm/min
3.	Polyvinyl chloride	508A	(i) The flame does not reach the first mark; and (ii) the duration of flame or after-glow after the removal of the burner does not exceed 5 seconds
4.	Polyvinyl chloride	508C	The distance of travel of the flame does not exceed 75 mm
5.	Polyvinyl chloride	508D	(i) The specimen flames or glows for not more than 5 seconds; (ii) any material dropped from the specimen does not continue to burn after reaching the base of the test apparatus; (iii) charring or scorching does not extend over an area exceeding 20% of the area of the underside of the specimen; and (iv) the length of the charred or scorched edge of the underside of the specimen does not exceed 50 mm

E2 Designation of purpose groups

(1) Subject to regulation H1(2)(b), for the purposes of these regulations every building or compartment shall be regarded according to its use or intended use as falling within one of the purpose groups set out in the Table to this regulation and, where a building is divided into compartments used or intended to be used for different purposes, the purpose group of each compartment shall be determined separately.

Provided that where the whole or part of a building or compartment (as the case may be) is used or intended to be used for more than one purpose, only the main purpose of use of that building or compartment shall be taken into account in determining into which purpose group it falls.

(2) Notwithstanding paragraph (1), a detached building which consists only of a garage or an open carport or of both shall be regarded as falling within purpose group I if the garage, the carport or each of them (as the case may be) has a floor area not exceeding 40 m^2.

Table to Regulation E2

Designation of purpose groups

Purpose group (1)	Descriptive title (2)	Purposes for which building or compartment is intended to be used (3)
I	Small residential	Private dwelling-house (not including a flat or maisonette)
II	Institutional	Hospital, home, school or other similar establishment used as living accommodation for, or for treatment, care or maintenance of, persons suffering from disabilities due to illness or old age or other physical or mental disability or under the age of five years, where such persons sleep in the premises
III	Other residential	Accommodation for residential purposes other than any premises comprised in groups I and II
IV	Office	Office, or premises used for office purposes, meaning thereby the purposes of administration, clerical work (including writing, book-keeping, sorting papers, filing, typing, duplicating, machine-calculating, drawing and the editorial preparation of matter for publication), handling money and telephone and telegraph operating, or as premises occupied with an office for the purposes of the activities there carried on
V	Shop	Shop, or shop premises, meaning thereby premises not being a shop but used for the carrying on there of retail trade or business (including the sale to members of the public of food or drink for immediate consumption, retail sales by auction, the business of lending books or periodicals for the purpose of gain, and the business of a barber or hairdresser), and premises to which members of the public are invited to resort for the purpose of delivering their goods for repair or other treatment or of themselves carrying out repairs to, or other treatment of, goods
VI	Factory	Factory within the meaning ascribed to that word by section 175 of the Factories Act (N.I.) 1965 **(a)**
VII	Other place of assembly	Place, whether public or private, used for the attendance of persons for or in connection with their social, recreational, educational, business or other activities, and not comprised within groups I to VI
VIII	Storage and general	Place for storage, deposit or parking of goods and materials (including vehicles), and any other premises not comprised in groups I to VII

(a) 1965 c. 20 (N.I.)

E3 Rules for measurement

In this Part–

(a) the height of a building or (where relevant) of part of a building as described in regulation E5(1)(b) shall be measured from the mean level of the ground adjoining the outside of the external walls of the building or part (as the case may be) to the level of half the vertical height of the roof of the building or part, or to the top of the walls or of the parapet (if any), whichever is the higher;

(b) (i) the area of any storey of a building, part of a building or compartment shall be taken to be the total area of that storey bounded by the inner finished surfaces of the enclosing walls or, on any side where there is no enclosing wall, by the outermost edge of the floor on that side;

(ii) the area of any room or garage shall be taken to be the total area of its floor bounded by the inner finished surfaces of the walls forming the room or garage; and

(iii) the area of any part of a roof shall be taken to be the actual visible area of such part measured on a plane parallel to the pitch of the roof; and

(c) the cubic capacity of a building, part of a building or compartment shall be ascertained by measuring the volume of space contained within the following surfaces and shall include the space occupied by any structure, shafts or ducts within the space to be so measured–

(i) the inner finished surfaces of the enclosing walls or, on any side where there is no enclosing wall, a plane extending vertically above the outermost edge of the floor on that side;

(ii) the upper surface of its lowest floor; and

(iii) in the case of–

(A) a building, the under surface of the roof;

(B) a part of a building or a compartment which extends to the roof, the under surface of the roof; or

(C) any other part of a building or compartment, the under surface of the ceiling of the highest storey within that part or compartment.

E4 Provision of compartment walls and compartment floors

(1) Any building of a purpose group specified in column (1) of the Table to this regulation which has–

(a) any storey the floor area of which exceeds that specified as relevant

to a building of that purpose group and height in column (3) of the Table; or

(b) a cubic capacity which exceeds that specified as so relevant in column (4) of the Table,

shall be so divided into compartments by means of compartment walls or compartment floors or both that–

(i) no such compartment has any storey the floor area of which exceeds the area specified as relevant to the building in column (3) of the Table; and

(ii) no such compartment has a cubic capacity which exceeds that specified as so relevant in column (4) of the Table:

Provided that, if any building of purpose group V is fitted throughout with an automatic sprinkler system which complies with the relevant recommendations of BS 5306: Part 2: 1979, this paragraph shall have effect in relation to that building as if the limits of dimensions specified in columns (3) and (4) of the Table were doubled.

(2) In any building which exceeds 28 m in height, any floor which separates one storey from another storey, other than a floor which is–

(a) within a maisonette; or

(b) above the ground storey but at a height not exceeding 9 m above the adjoining ground,

shall be constructed as a compartment floor.

(3) The following walls and floors shall be constructed as compartment walls or compartment floors–

(a) any floor in a building of purpose group II;

(b) any wall or floor separating a flat or maisonette from any other part of the same building;

(c) any wall or floor separating part of a building from any other part of the same building which is used or intended to be used mainly for a purpose falling within a different purpose group in the Table to regulation E2; and

(d) any floor immediately over a basement storey if such storey–

(i) forms part of a building of purpose group I which has three or more storeys or a building or compartment of purpose group III or V; and

(ii) has an area exceeding 100 m^2.

Table to Regulation E4

Dimensions of buildings and compartments

Purpose group		Height of building (in m)	Limits of dimensions	
			Floor area of storey in building or compartment (in m^2)	Cubic capacity of building or compartment (in m^3)
(1)		(2)	(3)	(4)
Part 1: Buildings other than single storey buildings				
II	Institutional	No limit	2000	No limit
III	Other residential	Not exceeding 28 Exceeding 28	3000 2000	8500 5500
V	Shop	No limit	2000	7000
VI	Factory	Not exceeding 28 Exceeding 28	No limit 2000	28000 5500
VII	Assembly	No limit	No limit	7000
VIII	Storage and general	Not exceeding 28 Exceeding 28	No limit 1000	21000 No limit
Part 2: Single storey buildings				
II	Institutional	No limit	3000	No limit
III	Other residential	No limit	3000	No limit

E5 Fire resistance of elements of structure

(1) In this regulation and in the Table to this regulation–

(a) (subject to any express provision to the contrary) any reference to a building of which an element of structure forms part means the building or (if a building is divided into compartments) any compartment of the building of which the element forms part; and

(b) any reference to height means the height of a building, not of any compartment in the building, but if any part of the building is completely separated throughout its height both above and below ground from all other parts by a compartment wall or compartment walls in the same continuous vertical plane, any reference to height in relation to that part means the height solely of that part.

(2) Subject to the provisions of this regulation and of regulation E6, every element of structure shall have fire resistance of not less than the relevant period set out in the Table to this regulation:

Provided that–

(a) any separating wall shall not have fire resistance of less than one hour;

(b) any compartment wall or compartment floor which separates a part of a building falling within purpose group II or III from any other part of the building falling within a purpose group other than purpose group II or III shall not have fire resistance of less than one hour;

(c) any element of structure which forms part of more than one building or compartment shall be so constructed as to comply with the greater or greatest of the relevant requirements specified in the Table; and

(d) any element of structure shall not have fire resistance of less than the minimum period required by these regulations for any element which it carries.

(3) Any compartment wall separating a flat or maisonette from any other part of the same building shall not be required to have fire resistance exceeding one hour unless–

(a) the wall is a loadbearing wall or a wall forming part of a protected shaft; or

(b) the part of the building from which the wall separates the flat or maisonette is of a different purpose group and the minimum period of fire resistance required by the provisions of this regulation for any element of structure in that part is one and a half hours or more.

(4) Nothing in paragraph (2) shall apply to–

(a) any part of an external wall which is non-loadbearing and may, in accordance with regulation E7, be an unprotected area; or

(b) in the case of a single storey building or a building consisting of a ground storey and one or more basement storeys, any element of structure which forms part of the ground storey and consists of–

(i) part of an external wall which does not support a gallery and which may, in accordance with regulation E7, be an unprotected area;

(ii) a structural frame or a beam or column:
Provided that any beam or column (whether or not it forms

part of a structural frame) which is within or forms part of a wall, and any column which gives support to a wall or gallery, shall have fire resistance of not less than the minimum period, if any, required by these regulations for that wall or that gallery; or

(iii) an internal loadbearing wall or a loadbearing part of a wall unless that wall or part is, or forms part of, a compartment wall or a separating wall, or forms part of the structure enclosing a protected shaft or supports a gallery.

Table to Regulation E5

Minimum periods of fire resistance

In this Table–

CUBIC CAPACITY means the cubic capacity of the building or, if the building is divided into compartments, the compartment of which the element of structure forms part;

FLOOR AREA means the floor area of each storey in the building or, if the building is divided into compartments, of each storey in the compartment of which the element of structure forms part; and

PART in column (1), means a part which is separated as described in regulation E5(1)(b).

Part 1: Buildings other than single storey buildings

Purpose group		Maximum dimensions			Minimum period of fire resistance (in hours) for elements of structure* forming part of–		
		Height (in m)	Floor area (in m^2)	Cubic capacity (in m^3)	ground storey or upper storey	basement storey	
(1)		(2)	(3)	(4)	(5)	(6)	
I	Small residential-						
	House having not more than three storeys	No limit	No limit	No limit	$\frac{1}{2}$	1†	x
	House having four storeys	No limit	250	No limit	1‡	1	
	House having any number of storeys	No limit	No limit	No limit	1	$1\frac{1}{2}$	
II	Institutional	28	2000	No limit	1	$1\frac{1}{2}$	
		over 28	2000	No limit	$1\frac{1}{2}$	2	

Table to Regulation E5 Part 1 – continued

Purpose group		Maximum dimensions			Minimum period of fire resistance (in hours) for elements of structure* forming part of–		
		Height (in m)	Floor area (in m^2)	Cubic capacity (in m^3)	ground storey or upper storey	basement storey	
(1)		(2)	(3)	(4)	(5)	(6)	
III	Other residential-						
	Building or part having not more than two storeys	No limit	500	No limit	$\frac{1}{2}$	1	x
	Building or part having three storeys	No limit	250	No limit	1‡	1	
	Building having any number of storeys	28	3000	8500	1	$1\frac{1}{2}$	
	Building having any number of storeys	No limit	2000	5500	$1\frac{1}{2}$	2	
IV	Office	7.5	250	No limit	$\frac{1}{2}$	1†	x
		7.5	500	No limit	$\frac{1}{2}$	1	
		15	No limit	3500	1‡	1	
		28	5000	14000	1	$1\frac{1}{2}$	
		No limit	No limit	No limit	$1\frac{1}{2}$	2	
V	Shop	7.5	150	No limit	$\frac{1}{2}$	1†	x
		7.5	500	No limit	$\frac{1}{2}$	1	
		15	No limit	3500	1‡	1	
		28	1000	7000	1	2	
		No limit	2000	7000	2	4	y
VI	Factory	7.5	250	No limit	$\frac{1}{2}$	1†	x
		7.5	No limit	1700	$\frac{1}{2}$	1	
		15	No limit	4250	1‡	1	
		28	No limit	8500	1	2	
		28	No limit	28000	2	4	
		over 28	2000	5500	2	4	
VII	Assembly	7.5	250	No limit	$\frac{1}{2}$	1†	x
		7.5	500	No limit	$\frac{1}{2}$	1	
		15	No limit	3500	1‡	1	
		28	1000	7000	1	$1\frac{1}{2}$	
		No limit	No limit	7000	$1\frac{1}{2}$	2	

Table to Regulation E5 Part 1 – continued

Purpose group	Maximum dimensions			Minimum period of fire resistance (in hours) for elements of structure* forming part of–		
	Height (in m)	Floor area (in m^2)	Cubic capacity (in m^3)	ground storey or upper storey	basement storey	
(1)	(2)	(3)	(4)	(5)	(6)	
VIII Storage and general	7.5	150	No limit	$\frac{1}{2}$	1†	x
	7.5	300	No limit	$\frac{1}{2}$	1	
	15	No limit	1700	1‡	1	
	15	No limit	3500	1	2	
	28	No limit	7000	2	4	
	28	No limit	21000	4	4	
	over 28	1000	No limit	4	4	

Notes to Part 1

For the purpose of regulation E5(2), the period of fire resistance to be taken as being relevant to an element of structure is the period included in column (5) or (6), whichever is appropriate, in the line of entries which specifies dimensions with all of which there is conformity or, if there are two or more such lines, in the topmost of those lines.

* A floor which is immediately over a basement storey shall be deemed to be an element of structure forming part of a basement storey.

† The period is half an hour for elements forming part of a basement storey which has an area not exceeding 50 m^2.

‡ This period is reduced to half an hour in respect of a floor which is not a compartment floor, except as to the beams which support the floor or any part of the floor which contributes to the structural support of the building as a whole.

x The line of entries thus marked is applicable only to buildings, not to compartments, except in relation to purpose group III; see also regulations E7(3) proviso (i) and E8(7) proviso (a).

y If the building is fitted throughout with an automatic sprinkler system which complies with the relevant recommendations of BS 5306: Part 2: 1979, any maximum limits specified in columns (3) and (4) shall be doubled.

Table to Regulation E5 – continued

Part 2: Single storey buildings

Purpose group		Maximum floor area (in m^2)	Minimum period of fire resistance (in hours) for elements of structure	
(1)		(2)	(3)	
I	Small residential	No limit	$\frac{1}{2}$	z
II	Institutional	3000	$\frac{1}{2}$	z
III	Other residential	3000	$\frac{1}{2}$	z
IV	Office	3000	$\frac{1}{2}$	z
		No limit	1	
V	Shop	2000	$\frac{1}{2}$	z
		3000	1	
		No limit	2	
VI	Factory	2000	$\frac{1}{2}$	z
		3000	1	
		No limit	2	
VII	Assembly	3000	$\frac{1}{2}$	z
		No limit	1	
VIII	Storage and general	500	$\frac{1}{2}$	z
		1000	1	
		3000	2	
		No limit	4	

Notes to Part 2

For the purpose of regulation E5(2), the period of fire resistance to be taken as being relevant to an element of structure is the period included in column (3) in the line of entries which specifies the floor area with which there is conformity or, if there are two or more such lines, in the topmost of those lines.

z See regulations E7(3) proviso (i) and E8(7) proviso (b).

E6 Fire resistance of floors in conjunction with suspended ceilings

(1) In the Table to this regulation–

(a) HEIGHT has the meaning assigned to it by regulation E5(1)(b); and

(b) references to Class 0 and Class 1 shall be construed in accordance with sub-paragraphs (e) and (f) of regulation E15(1).

(2) In the application of regulation E5 to floors, no account shall be taken of any fire resistance attributable to any suspended ceiling other than a suspended ceiling constructed as described in the Table to this regulation.

Table to Regulation E6

Suspended ceilings

Height (in m)	Type of floor	Required fire resistance of floor (in hours)	Description of suspended ceiling
(1)	(2)	(3)	(4)
Less than 15	Non-compartment	1 or less	Surface of ceiling exposed within the cavity not lower than Class 1
	Compartment	Less than 1	
	Compartment	1	Surface of ceiling exposed within the cavity not lower than Class O; supports and fixings for the ceiling non-combustible
15 or more	Any	1 or less	Surface of ceiling exposed within the cavity not lower than Class O and jointless; supports and fixings for the ceiling non-combustible
No limit	Any	More than 1	Ceiling of non-combustible construction and jointless; supports and fixings for the ceiling non-combustible

E7 External walls

(1) For the purposes of this regulation–

(a) any reference to Schedule 4 shall be construed as referring to the provisions of Part I of that Schedule together with (at the option of

the person intending to erect the building) the provisions of Part II, Part III or (if applicable) Part IV;

(b) any part of a roof shall be deemed to be part of an external wall or side of a building if it is pitched at an angle of 70° or more to the horizontal and adjoins a space within the building to which persons have access not limited to the purposes of maintenance or repair; and

(c) if a building is to be erected on land which will be occupied in common with another building (whether it be the only other building or any one of a number of other buildings) and either the building to be so erected or that other building is a building of any purpose group (except a building described in regulation E2(2) which complies with regulation E18 or E19)–

(i) in the application of the provisions of this regulation to any side or external wall of the building to be so erected which faces a side or external wall of that other building, a notional boundary shall be assumed to pass between those buildings;

(ii) such notional boundary shall be so situated as to enable the adjacent sides and external walls of both buildings to comply with the requirements of this regulation; and

(iii) if that other building is an existing building, it shall be treated as if it were a new building of the same purpose group and having the same unprotected areas and fire resistance as the existing building.

(2) Any side of a building except as provided by regulation E18 or E19 shall comply with any relevant requirements relating to permitted limits of unprotected areas specified in Schedule 4.

(3) Any external wall which is situated within a distance of 1 m from any point on the relevant boundary and any external wall of a building which exceeds 15 m in height shall–

(a) be constructed wholly of non-combustible materials apart from any external cladding which complies with paragraph (4) or any internal lining which complies with regulation E15; and

(b) be so constructed that any fire resistance required by these regulations is attained by the non-combustible part alone:

Provided that the requirements of this paragraph shall not apply to–

(i) an external wall of a building which is within the limits of size indicated by the letter 'x' in Part 1 of the Table to regulation E5 or of a building which is not divided into compartments and is within the limits of size indicated by the letter 'z' in Part

2 of that Table if, in either case, that building does not exceed 15 m in height;

(ii) an external wall of a building, or part of a building, of purpose group III which consists of flats or maisonettes if that building has not more than three storeys or that part is separated as described in regulation E5(1)(b) and has not more than three storeys; or

(iii) an external wall of a part of a building if that wall is situated 1 m or more from the relevant boundary and that part is separated as described in regulation E5(1)(b) and does not exceed 15 m in height.

(4) Any external cladding which is situated within a distance of 1 m from any point on the relevant boundary and any external cladding on a building which exceeds 15 m in height shall have a surface complying with the requirements for Class O specified in regulation E15(1)(e):

Provided that, if an external wall of such a building is 1 m or more from the relevant boundary, any part of such cladding below a height of 15 m from the ground may (subject to paragraph (5)) consist of timber of not less than 9 mm finished thickness or of a material having a surface which, when tested in accordance with BS 476: Part 6: 1968 or 1981, has an index of performance (I) not exceeding 20.

(5) Any part of an external wall of a building of purpose group VII having more than one storey shall comply with the following provisions if it is situated not more than 7.5 m above the finished surface of any adjoining ground or of any adjoining roof or other part of the building to which persons have access–

(a) in any such part of an external wall there shall be no unprotected area other than–

(i) a door; or

(ii) an opening which (whether glazed or not) would permit danger from external fire to be appreciated from the interior of the building;

(b) any such part (in addition to having not less fire resistance than that prescribed by regulation E5) shall, if situated 1 m or more from the relevant boundary, be so constructed that, if the outside were to be exposed to fire, it would resist the action of fire for not less than the period prescribed by regulation E5 or one hour whichever is the less; and

(c) the external surface of any such part of an external wall, including any cladding and any glazed opening (other than a door) but not

the frame of the latter–

(i) if situated within a distance of 1 m from any point on the relevant boundary, shall be of Class O as defined in regulation E15(1)(e); or

(ii) if situated 1 m or more from the relevant boundary, shall (if tested in accordance with BS 476: Part 6: 1968 or 1981) have an index of performance (I) not exceeding 12 and a sub-index (i_1) not exceeding 6.

(6) Any beam or column forming part of, and any structure carrying, an external wall which is required to be constructed of non-combustible materials shall comply with the provisions of paragraph (3) as to non-combustibility.

E8 Separating walls

(1) Subject to the exceptions specified in paragraph (2), any separating wall shall be imperforate and shall form a complete vertical separation between any buildings separated (including any roof spaces therein).

(2) Nothing in paragraph (1) shall prohibit–

(a) the passage through a separating wall of a pipe, if the pipe complies with regulation E12; or

(b) an opening in a separating wall which is necessary as a means of escape from fire, if the opening is fitted with a door which–

(i) complies with the requirements of regulation E11; and

(ii) has fire resistance which is not less than the period required by regulation E5 for the separating wall.

(3) Subject to the exceptions specified in paragraph (4), any separating wall which forms a junction with a roof shall be carried above the upper surface of the covering of that roof to a distance of not less than 375 mm (measured at right angles to such upper surface).

(4) A separating wall shall not be required to comply with the provisions of paragraph (3)–

(a) if the buildings separated by the separating wall are so constructed that–

(i) any part of the roof which is within 1.5 m of the separating wall is designated AA, AB or AC;

(ii) the deck of such part of the roof is of solid or hollow slab construction of non-combustible material; and

(iii) the junction between the separating wall and such roof is fire-stopped; or

(b) if–

(i) each of the buildings separated by the separating wall is of purpose group I, III, IV or VII;

(ii) neither building exceeds 12.5 m in height;

(iii) any part of the roof which is within 1.5 m of the separating wall is covered with non-combustible material or asphalt; and

(iv) the junction between the separating wall and the roof covering is fire-stopped; or

(c) if–

(i) each of the buildings separated by the separating wall is a building of purpose group I having not more than three storeys;

(ii) any part of the roof which is within 1.5 m from the separating wall is designated AA, AB or AC; and

(iii) the junction between the separating wall and the roof is fire-stopped.

(5) If any external wall is carried across the end of a separating wall, such external wall and separating wall shall be bonded together or the junction of such walls shall be fire-stopped.

(6) Any combustible material which is built into or carried through, across the end of or over the top of a separating wall shall not be of such a type or used in such a way as will render ineffective the resistance of that wall to the effects or spread of fire:

Provided that–

(a) if a building is constructed in compliance with the requirements of paragraph (4)(b), nothing in this paragraph shall prohibit the continuation over the top of the separating wall of–

(i) any boarding, with or without sarking felt or sarking paper, if such boarding is used as a base for the roof covering and the boarding is solidly bedded on mortar or other not less suitable material where it rests on the separating wall;

(ii) any wood wool slabbing, with or without sarking felt or sarking paper, if the slabbing is solidly bedded on mortar or other not less suitable material where it rests on the separating wall; or

(iii) any tiling or slating battens (other than such battens used in

connection with head (ii)), if the battens are solidly bedded on mortar or other not less suitable material where they rest on the separating wall and the space between them is filled with mortar or other not less suitable material up to the underside of the roof covering; and

(b) if a building is constructed in compliance with the requirements of paragraph (4)(c), nothing in this paragraph shall prohibit the roof covering from passing over the top of the wall or any combustible material falling within the provisions of sub-paragraph (a)(i), (ii) or (iii) from forming part of a roof which is designated AA, AB or AC.

(7) Any separating wall shall be constructed wholly of non-combustible materials apart from any surface finish which complies with regulation E15 and the required fire resistance shall be attained independently of any such combustible surface finish:

Provided that the requirements of this paragraph shall not apply to–

(a) a wall separating buildings which are not divided into compartments and are within the limits of size indicated by the letter 'x' in Part 1 of the Table to regulation E5; or

(b) a wall separating single storey buildings which are not divided into compartments and are within the limits of size indicated by the letter 'z' in Part 2 of the Table to regulation E5.

(8) Any beam or column forming part of, and any structure carrying, a separating wall which is required to be constructed of non-combustible materials shall itself comply with the requirements of paragraph (7) as to non-combustibility.

E9 Compartment walls and compartment floors

(1) Any compartment wall or compartment floor shall be imperforate with the exception of any one or more of the following–

(a) (i) in the case of a compartment wall separating a flat or maisonette from any space in common use giving access to that flat or maisonette, an opening fitted with a door which complies with the requirements of regulation E11 and has fire resistance of not less than half an hour; or

(ii) in any other case, an opening fitted with a door which complies with the requirements of regulation E11 and has fire resistance of not less than the minimum period required by regulation E5 for the wall or floor;

(b) an opening for a protected shaft;

(c) an opening for a ventilation duct (other than a duct in, or consisting of, a protected shaft) if–

(i) any space surrounding the duct is fire-stopped;

(ii) the duct is fitted with an automatic fire-shutter where it passes through the wall or floor; and

(iii) where the duct forms part of a system provided for the purpose of recirculating air through a building, an optical smoke detector (for the purpose of detecting the scattering or absorption of light by smoke particles in a light beam) is fitted in the ductwork which is capable of initiating changes in the operation of the system so as to divert vitiated air containing any smoke to the outside of the building if the smoke reaches an optical density of 0.5 dB/m;

(d) an opening for a pipe which complies with the requirements of regulation E12;

(e) an opening for a chimney, appliance ventilation duct or duct encasing one or more flue pipes, in each case complying with the relevant requirements of paragraph (5) and of Part L; or

(f) an opening for a refuse chute which complies with the requirements of Part J.

(2) Where a compartment wall or compartment floor joins any compartment wall, external wall or separating wall or any structure enclosing a protected shaft, such structures shall be bonded together at the junction or the junction shall be fire-stopped.

(3) Where any compartment wall forms a junction with a roof, such wall shall be carried above the upper surface of the roof covering for a distance of not less than 375 mm, measured at right angles to the surface of the roof, unless either–

(a) the roof complies with the requirements of regulation E8(4)(a); or

(b) the compartment wall is in a building of purpose group III, IV or VII not exceeding 12.5 m in height and the roof complies with the requirements of regulation E8(4)(b)(iii) and (iv):

Provided that nothing in this paragraph shall prohibit the continuation over the top of the wall of any construction which complies with the requirements of regulation E8(6).

(4) Any combustible material which is built into or carried through or across the ends of any compartment wall or compartment floor or carried over the top of any compartment wall shall not be of such a

type or used in such a way as will render ineffective the resistance of that wall or floor to the effects or spread of fire.

(5) Any flue in a chimney, any passage in an appliance ventilation duct and any space within a duct encasing one or more flue pipes shall–

(a) if the chimney or duct passes through a compartment wall or compartment floor, be separated from that wall or floor and from each compartment adjoining that wall or floor by non-combustible construction having fire resistance of not less than half the minimum fire resistance required by regulation E5 for that wall or floor; or

(b) if the chimney or duct forms part of a compartment wall, be separated from any compartment adjoining that wall by non-combustible construction having, at any level, fire resistance of not less than half the minimum fire resistance required by regulation E5 for that wall at that level.

(6) Any compartment wall or compartment floor which is required by regulation E5 to have fire resistance of one hour or more (except where that requirement arises solely by virtue of proviso (*b*) to regulation E5(2)), shall be constructed wholly of non-combustible materials apart from–

(a) any floor finish;

(b) any surface finish to a wall or ceiling which complies with the requirements of regulation E15; or

(c) any ceiling which complies with a description specified in the Table to regulation E6;

and, apart from any such ceiling, the required fire resistance of the wall or floor shall be obtained without assistance from any combustible material permitted by this paragraph:

Provided that the requirements of this paragraph shall not apply to–

(i) the following walls and floors in a building, or a part, of purpose group III which consists of flats or maisonettes–

(A) if that building has three storeys or that part is separated as described in regulation E5(1)(b) and has three storeys, any wall or floor other than a wall within a basement storey or a floor immediately over a basement storey; or

(B) if that building has four storeys or that part is separated as described in regulation E5(1)(b) and has four storeys, any floor other than a floor immediately over a basement storey; or

(ii) any existing floor in a building, or a part, of purpose group IV, V, VII or VIII which is altered or extended if, after alteration or extension, that building does not exceed 15 m in height or that part is separated as described in regulation E5(1)(b) and does not exceed 15 m in height.

(7) Any beam or column forming part of, and any structure carrying, any compartment wall or compartment floor which is required to be constructed of non-combustible materials, shall itself comply with the provisions of paragraph (6) as to non-combustibility.

E10 Protected shafts

(1) In this regulation, PROTECTING STRUCTURE means any wall or floor or other structure which encloses a protected shaft other than–

(a) a wall which also forms part of an external wall, separating wall or compartment wall;

(b) a floor which is also a compartment floor or a floor laid directly on the ground; or

(c) a roof.

(2) No protected shaft shall be constructed for use for any purposes additional to those specified in regulation E1(1) other than for the passage of a pipe or duct or as sanitary accommodation or washrooms, or both.

(3) Subject to the provisions of this regulation, any protected shaft shall be completely enclosed.

(4) (a) Any protecting structure which is required by regulation E5 to have fire resistance of one hour or more shall be constructed wholly of non-combustible materials apart from any surface finish which complies with the requirements of regulation E15:

Provided that the requirements of this sub-paragraph shall not apply to protecting structure which is situated within the ground storey or an upper storey of a building, or a part, of purpose group III consisting of flats or maisonettes if that building has three storeys or that part is separated as described in regulation E5(1)(b) and has three storeys.

(b) Any beam or column forming part of, and any structure carrying, protecting structure which is required to be constructed of non-combustible materials shall itself comply with the provisions of sub-paragraph (a) as to non-combustibility.

(5) Any wall, floor or other structure enclosing a protected shaft but not being protecting structure may contain such openings as shall be in accordance with other provisions of these regulations.

(6) There shall be no opening in any protecting structure other than any one or more of the following–

(a) an opening for a pipe which complies with the requirements of regulation E12;

(b) an opening fitted with a door which has fire resistance complying with the provision of paragraph (7) and complies with the provisions of regulation E11;

(c) (if the protected shaft contains a lift) an opening which complies with the provisions of paragraph (8); or

(d) (if the protected shaft serves as, or contains, a ventilating duct) an inlet to or outlet from that duct or an opening for that duct.

(7) Any door fitted in an opening in protecting structure shall have fire resistance for the following minimum period–

(a) if the protected shaft is in a building of purpose group III, IV or VII and is wholly or partly above the level of the adjoining ground, not less than half an hour; or

(b) in any other case, either not less than half the period required by other provisions of this Part for the protecting structure surrounding the opening or not less than half an hour (whichever is the greater).

(8) Any protected shaft containing a lift or lifts–

(a) shall be ventilated to the external air by means of one or more permanent openings situated at the top of the shaft and having a total unobstructed area of not less than 0.1 m^2 for each lift in the shaft;

(b) shall not contain any pipe conveying gas or oil or any ventilating duct; and

(c) may have an opening in its protecting structure for the passage of the cables operating the lift into the room containing the lift motor:

Provided that, if the opening is at the bottom of the shaft, the opening shall be as small as practicable.

(9) (a) If a protected shaft serves as, or contains, a ventilating duct–

(i) the duct shall be fitted internally with automatic fire shutters so constructed, at such intervals and in such positions as may

be necessary to reduce so far as practicable the risk of fire spreading from a compartment to any other compartment, or such other provision shall be made as will reduce such risk so far as practicable;

(ii) the duct shall not be constructed of, or lined with, any material which substantially increases such risk; and

(b) In addition, in the case of a protected shaft containing a ventilating duct, the shaft shall be so constructed with such additional barriers to fire between the duct and the shaft as may be necessary to reduce so far as practicable the risk of fire spreading from a compartment to any other compartment.

(10) If a protected shaft consists of a stairway, it shall not contain any pipe conveying gas or oil or any ventilating duct.

(11) If a protected shaft contains a pipe conveying gas, the shaft shall be adequately ventilated direct to the external air.

E11 Fire-resisting doors

(1) This regulation shall apply to any door which is required by the provisions of this Part to have fire resistance.

(2) In this regulation–

AUTOMATIC SELF-CLOSING DEVICE does not include rising butt hinges except in relation to a door to which paragraph (5) applies; and

ELECTRO-MAGNETIC OR ELECTRO-MECHANICAL DEVICE SUSCEPTIBLE TO SMOKE refers only to any such device which will allow the door held open by it to close automatically upon the occurrence of each or any one of the following–

(a) detection of smoke by automatic apparatus suitable in nature, quality and location;

(b) manual operation of a switch fitted in a suitable position;

(c) failure of electricity supply to the device, apparatus or switch;

(d) if a fire alarm system is installed in the building, operation of that system.

(3) (a) Subject to paragraph (7) any door to which this regulation applies shall be fitted with an automatic self-closing device capable of returning the door to the fully closed position from any angle of swing.

(b) No means of holding any such door open shall be provided other than a fusible link or, if the door is so constructed and installed

that it can readily be opened manually, an electro-magnetic or electro-mechanical device susceptible to smoke.

(c) No part of a hinge on which any such door is hung shall be made either of combustible material or of non-combustible material having a melting point less than 800°C.

(4) Any door fitted in an opening which is provided as a means of escape in the event of fire or might be so used shall be so constructed and installed that it can readily be opened manually and shall not be held open by any means other than an electro-magnetic or electro-mechanical device susceptible to smoke:

Provided that there may also be installed so as to close the same opening a door which cannot readily be opened manually if–

(a) such door is fitted with an automatic self-closing device and is held open by a fusible link;

(b) the manually openable door has fire resistance of not less than half an hour; and

(c) the required fire resistance is achieved by the two doors together.

(5) Any door to which reference is made in regulation E9(1)(a)(i), E13(2)(c), E13(3)(c), E14(9)(c)(vi) or E18(6)(c)(ii) shall be either a single leaf door swinging in one direction only or a double leaf door each leaf of which swings in the opposite direction from the other leaf.

(6) Any door which is fitted in protecting structure (as defined in regulation E10(1)) and is not required by the provisions of regulation E10(7) to have fire resistance of more than half an hour may consist of any single or double leaf door (the leaf or each leaf of which swings in one or both directions), other than a double leaf door both leaves of which swing in one and the same direction and have rebated meeting stiles, if–

(a) the door opens into a hall, lobby or corridor enclosed by walls or partitions having fire resistance of not less than half an hour; and

(b) the clearance between the leaf or leaves of any such door and its frame and (if the door has two leaves) between the leaves is as small as is reasonably practicable.

(7) Notwithstanding paragraph 3(a), a door which is not fitted with a self-closing device may be installed in an opening in the structure which encloses a protected shaft containing exclusively a lift or lifts if either–

(a) the door has fire resistance for a period of not less than half an hour and there is also installed so as to close the same opening

another door which is fitted with an automatic self-closing device, is held open by a fusible link and has fire resistance for a period not less than that prescribed by the relevant provisions of this Part for the structure surrounding the opening; or

(b) (unless the opening is in a compartment wall and is one of two openings provided at the same level to allow access to a lift from different sides) the door has fire resistance for a period not less than that prescribed by relevant provisions of this Part for the structure surrounding the opening.

(8) Without prejudice to the requirements of paragraphs (4) to (7), two fire-resisting doors (each being either a single or a double leaf door) may be installed in an opening if each by itself is capable of closing the opening and the required fire resistance is achieved by the two doors together.

E12 Penetration of structure by pipes

(1) In this regulation, PIPE–

(a) excludes a flue pipe and any pipe used for ventilation purposes other than a ventilating pipe required by the provisions of Part N; and

(b) includes pipe fittings and accessories.

(2) (a) Subject to the provisions of paragraph (3), the nominal internal diameter of that part of a pipe which passes through–

(i) an opening in a separating wall or protecting structure;

(ii) an opening in a compartment wall or compartment floor other than any such opening which is wholly enclosed within a protected shaft; or

(iii) an opening in a cavity barrier,

shall not exceed the relevant dimension prescribed in the Table to this regulation:

Provided that if, on either side of the structure penetrated and within a distance of 1 m (measured along the pipe) from the point of penetration, the pipe which penetrates the structure, being of specification (a), is connected to a pipe of specification (b) or (c) or, being of specification (b), is connected to a pipe of specification (c), the maximum internal diameter of the pipe shall be determined as though it were of the same specification as the pipe to which it is connected.

(b) Any opening referred to in sub-paragraph (a), shall be as small as is reasonably practicable and shall be fire-stopped around the pipe.

(3) Notwithstanding the requirements of paragraph (2)(a), a pipe which forms part of an above ground drainage system comprising pipes which comply with specification (b) in the Table and have a nominal internal diameter not exceeding 150 mm in the case of a stack pipe or 100 mm in the case of a branch pipe may pass through an opening in a separating wall between houses or an opening in a compartment wall or compartment floor between flats or maisonettes if–

(a) the pipe, being a stack pipe, is contained in each storey within an enclosure or, being a branch pipe, discharges into a stack pipe contained within an enclosure formed in part by the wall penetrated by the branch pipe;

(b) any such enclosure–

(i) extends, in each storey, from the floor to the ceiling of that storey or, if the ceiling is suspended beneath a floor, to that floor;

(ii) has each side formed by a separating wall, compartment wall or external wall or by casing;

(iii) has an internal surface, excluding any supporting members, which complies with the requirements for Class O specified in regulation E15(1)(e);

(iv) has no access panel situated in a bedroom or circulation space; and

(v) is not used for any other purpose except to accommodate pipes conveying water;

(c) any such casing–

(i) is imperforate except for any opening made for the passage of a pipe or fitted with an access panel;

(ii) consists of any material other than sheet metal; and

(iii) (including any access panel) has fire resistance of not less than half an hour; and

(d) any opening made for the passage of a pipe through a side of an enclosure or through a floor at the base or top of an enclosure (including, in the case of a maisonette, any floor within the dwelling) is as small as is reasonably practicable and is fire-stopped around the pipe.

Table to Regulation E12

Maximum nominal internal diameter of pipes

Specification of pipe (1)	Maximum nominal internal diameter of pipe (in mm) (2)
(a) Pipe made of any non-combustible material which, if exposed to a temperature of 800°C, will not soften and will not fracture to such an extent as to permit flames or hot gases to pass through the wall of the pipe.	150
(b) Pipe made of lead or aluminium or alloy thereof, fibrous-cement pipe; or unplasticised polyvinyl chloride pipe complying with BS 4514: 1983	100 if it penetrates structure (other than a separating wall) enclosing a protected shaft not regularly used for the passage of people. 38 in all other cases
(c) Pipe made of any other material	38

E13 Stairways

(1) Every stairway (including any landing thereof) which forms part of a building shall, whether the stairway is internal or external, be constructed of non-combustible material except–

(a) an internal stairway which is situated–

(i) within a maisonette;

(ii) within any storey which comprises elements of structure for which the fire resistance required by this Part is less than one hour;

(iii) within the ground storey or an upper storey of a building or part of purpose group III which consists of flats or maisonettes if that building has not more than three storeys or that part is separated as described in regulation E5(1)(b) and has not more than three storeys; or

(iv) within a building or compartment of purpose group V but not within a protected shaft; or

(b) an external stairway which is situated between the ground and a floor or flat roof the level of which, at the head of the stairway, is not more than 6 m above the finished surface of the ground adjoining the foot of the stairway:

Provided that nothing in this paragraph shall prohibit the addition of any combustible material to the upper surface of any stairway or landing.

(2) Any building of purpose group I which has three or more storeys shall be so designed and constructed as to comply with the following provisions–

(a) any internal stairway, together with any hall or landing associated therewith and any part of a floor which affords passage between flights of the stairway, shall be separated from all other parts of the building by structure which has fire resistance of not less than the minimum period required by regulation E5 for elements of structure forming part of the storey in which it is situated;

(b) subject to paragraph (3), the space associated with the stairway and enclosed by the fire-resisting structure within the ground storey of the building shall extend to an external doorway which provides ready access to a place of safety outside the building (that is to say, a place in which persons would be in no danger from fire within the building); and

(c) any opening in the fire-resisting structure which gives access to a habitable room or kitchen shall be fitted with a door which has fire resistance of not less than half an hour and complies with the requirements of regulation E11.

(3) The requirements of paragraph 2(b) shall not apply if–

(a) the fire-resisting structure enclosing the stairway within the ground storey of the building contains two or more openings each of which affords a route to an external doorway which provides ready access to a place of safety outside the building;

(b) each such route is separated from any other such route by structure having not less fire resistance than the minimum period referred to in paragraph (2)(a); and

(c) any opening in such structure is fitted with a door which has fire resistance of not less than half an hour and complies with the requirements of regulation E11.

E14 Provision and construction of cavity barriers and fire stops

(1) For the purposes of this regulation–

(a) CAVITY means any space enclosed by the elements of a building (including a suspended ceiling) or contained within an element other than a room, cupboard, circulation space, protected shaft or the space within a flue, chute, duct, pipe, or conduit;

CAVITY BARRIER means any construction provided to close a cavity against penetration of smoke or flame or provided within a cavity

to restrict movement of smoke or flame within the cavity; and includes a construction provided for another purpose if such construction conforms with the criteria required of a cavity barrier; and

FIRE STOP means a seal of non-combustible material provided to close an imperfection of fit between elements, components or construction in a building so as to restrict penetration of smoke or flame through that imperfection; and

(b) any requirement that a cavity shall be closed or that movement or penetration of smoke or flame shall be restricted means, where not more precisely defined, that the construction provided for such purpose shall be capable of performing such functions in relation to both smoke and flame.

(2) Subject to the exception in paragraph (5)–

(a) every cavity contained within an element shall be closed by a cavity barrier around the perimeter of any opening through the element; and

(b) if any element containing a cavity meets another such element, the cavities shall be so closed that they do not communicate one with another.

(3) Subject to the exceptions in paragraphs (5) and (6), every cavity shall be subdivided by means of a cavity barrier in the same plane as any element which–

(a) abuts against the element containing, or an element enclosing, the cavity; and

(b) consists of–

(i) any wall, floor, ceiling, roof or other structure which is required to have fire resistance for the purposes of this Part, or would be so required if the building were being newly erected, other than a wall which is required to have fire resistance solely because it is loadbearing; or

(ii) any frame fitted with a door which likewise is or would be required to have fire resistance.

(4) Subject to the exceptions in paragraphs (5) and (7), every cavity shall be subdivided by means of cavity barriers in such positions that the distance between cavity barriers (measured along the members bounding the cavity) does not exceed the distance, if any, specified in the Table to this paragraph.

Table to Regulation E14(4)

Maximum distance between cavity barriers

Location of cavity	Purpose group of building or compartment	Class of surface exposed within the cavity, excluding the surface of any pipe, cable or conduit	Maximum distance
(1)	(2)	(3)	(4)
Between a roof and a ceiling	Purpose group I and flats or maisonettes within purpose group III	Any	No limit
	Purpose group II and III except flats and maisonettes	Any	15 m and in addition, area limited to 100 m^2
	Any other purpose group	Any	20 m
Other than between a roof and a ceiling	Any purpose group	Class 0	20 m
		Other than Class 0	8 m

(5) Notwithstanding the requirements of paragraphs (2), (3) and (4), any cavity within a wall which complies with the following provisions may be unlimited as to extent and may communicate with another such cavity–

(a) the wall consists of two leaves, each being not less than 75 mm thick and constructed of non-combustible materials;

(b) the cavity does not exceed 100 mm in width and is closed by a cavity barrier at the top of the wall and at the top of any opening in the wall; and

(c) there is no combustible material exposed or situated within the cavity other than–

(i) insulating material which, except in the case of a wall forming part of a building of purpose group I, completely fills the cavity;

(ii) timber lintels, window or door frames or the end faces of joists;

(iii) pipes, conduits or cables; or

(iv) closers, flashings, damp-proof courses or wall ties.

(6) The requirements of paragraph (3) shall not apply to–

(a) any cavity between a floor next to the ground or oversite concrete and the ground or oversite concrete;

(b) any cavity within a floor or within, or enclosed by, a roof if the cavity is enclosed on the lower side by a ceiling which–

(i) extends throughout the building or compartment;

(ii) is not so constructed as to be demountable;

(iii) has fire resistance of not less than half an hour;

(iv) is imperforate save for openings that would be permissible under paragraph (9)(c) if the ceiling were a cavity barrier;

(v) has an upper surface of Class 1 as defined in regulation E15(1)(f); and

(vi) has a lower surface which (if tested in accordance with BS 476: Part 6: 1968 or 1981) has an index of performance (I) not exceeding 12 and a sub-index (i_1) not exceeding 6;

(c) any cavity in a roof at its junction with an external wall where the provision of a cavity barrier would prevent direct ventilation between the roof space and the external air; or

(d) any cavity within, or enclosed by, the roof of a building of purpose group I other than any such cavity which is situated immediately over a stairway enclosure to which regulation E13(2) refers and is not separated from that enclosure by a ceiling as described in sub-paragraph (b).

(7) The requirements of paragraph (4) shall not apply to–

(a) any cavity between a floor next to the ground or oversite concrete and the ground or oversite concrete if there is no access provided for persons to that cavity or the height of that cavity does not exceed 1 m; or

(b) any cavity between non-combustible sheeting forming a roof covering if–

(i) the cavity is filled with insulating material having a surface of a class not lower than Class 1 as defined in regulation E15(1)(f); or

(ii) in any case where complete filling is not reasonably practicable because the sheets have different profiles in cross-section, a layer of such material separates the sheets and is in

contact with both in line with the bottom of each corrugation in the upper sheet.

(8) (a) A cavity barrier which is required by any regulation in this Part and is of such dimensions as to include within its surface a square having sides of 1 m in length shall have fire resistance of not less than half an hour; and

(b) a cavity barrier which is required by any regulation in this Part and is of such dimensions as not to include within its surface such a square shall be constructed in a manner wholly similar to a construction having fire resistance of not less than half an hour or shall be constructed of–

(i) fibrous building or insulating board (but not fibrous-cement sheet) not less than 9 mm thick;

(ii) plasterboard not less than 12.5 mm thick;

(iii) steel not less than 3 mm thick;

(iv) timber not less than 38 mm thick;

(v) wire-reinforced mineral wool blanket not less than 50 mm thick; or

(vi) cement mortar, plaster or other non-combustible material not less than 25 mm thick.

(9) A cavity barrier–

(a) shall be fixed in such a manner that its performance is unlikely to be rendered ineffective by movement of the building due to subsidence, shrinkage, or thermal change or by failure in a fire of its fixings or the material against which it abuts;

(b) shall be fitted tightly, to rigid construction or, if it abuts against slates, tiles, corrugated sheeting or other construction to which it cannot be so fitted, its junction with that construction shall be fire-stopped; and

(c) shall be imperforate with the exception of any one or more of the following–

(i) an opening for a pipe which complies with the requirements of regulation E12;

(ii) an opening for a cable or a conduit containing one or more cables;

(iii) an opening fitted with an automatic fire shutter;

(iv) an opening for a duct which is fitted with an automatic fire shutter where it passes through the barrier;

(v) an opening for a continuous duct which is constructed of mild steel not less than 0.7 mm thick; or

(vi) an opening fitted with a door which complies with the requirements of regulation E11 and has fire resistance of not less than half an hour.

(10) (a) Any opening provided through any part of an element of structure or a cavity barrier for the passage of a pipe, duct, conduit or cable shall be no larger than is necessary for that purpose and shall be fire-stopped.

(b) Fire-stopping around a pipe or duct shall be so arranged as not to restrict thermal movement.

(c) Non-rigid materials used for fire-stopping shall be reinforced with or supported by non-combustible materials to prevent displacement and in any case where the unsupported span would exceed 100 mm.

E15 Restriction of spread of flame over surfaces of walls and ceilings

(1) For the purposes of this regulation and the Table hereto–

(a) CEILING includes any soffit and any rooflight or other part of a building which encloses and is exposed overhead within a room, circulation space or protected shaft;

CIRCULATION SPACE means any space which is solely or predominantly used as a means of access between a room and a protected shaft or between either a room or a protected shaft and an exit from the building or compartment;

ROOFLIGHT includes any domelight, lantern light, skylight or other element intended to admit daylight;

SMALL ROOM means a room which is totally enclosed and has a floor area not exceeding that specified in column (2) of the Table to this regulation, according to the purpose group of the building or compartment; and

TRIM means any architrave, cover mould, picture rail, skirting or similar narrow member;

(b) any reference to the surface of a wall shall be construed as a reference to that surface including the surface of any glazing but excluding the surface of any unglazed portion of a door, any door frame, window frame, frame in which glazing is fitted, fireplace surround, mantleshelf, fitted furniture or trim;

(c) any reference to the surface of a ceiling shall be construed as a reference to that surface excluding the surface of the frame of any rooflight;

(d) any part of a ceiling which slopes at an angle of 70° or more to the horizontal and is not part of a rooflight shall be deemed to be a wall;

(e) any reference to a surface being of Class 0 shall be construed as a requirement that–

(i) the material of which the wall or ceiling is constructed shall be non-combustible throughout; or

(ii) the surface material (or, if it is bonded throughout to a substrate, the surface material in conjunction with the substrate) shall have a surface of Class 1 and, if tested in accordance with BS476: Part 6: 1968 or 1981, shall have an index of performance (I) not exceeding 12 and a sub-index (i_1) not exceeding 6:

Provided that the face of any plastics material Type 1 shall not be regarded as a surface of Class 0 unless–

(A) the material is bonded throughout to a substrate which is not a plastics material and the material in conjunction with the substrate satisfies the test criteria prescribed in head (ii); or

(B) the material satisfies the test criteria prescribed in head (ii) and is used as the lining of a wall so constructed that any surface which would be exposed if the lining were not present satisfies the said test criteria and is the face of any material other than a plastics material Type 1;

(f) any reference to a surface being of a class other than Class 0 shall be construed as a requirement that the wall or ceiling shall be so constructed that a specimen constructed to the same specification, if exposed to test by fire in accordance with BS476: Part 7: 1971 or 1987, would comply with the test criteria as to surface spread of flame specified in relation to that class; and

(g) in relation to a requirement that a surface shall be of a class not lower than a specified class, Class 0 shall be regarded as the highest class followed in descending order by Class 1, Class 2, Class 3 and Class 4.

(2) The surface of a wall or ceiling in a room, circulation space or protected shaft shall be of a class not lower than that specified as relevant in the Table to this regulation:

Provided that–

(a) a wall of a room may have a surface of any class not lower than Class 3 to the extent permitted by paragraph (3);

(b) an external wall of a room may have openings glazed in the manner permitted by regulation E16(2) and openings so glazed may be disregarded for the purposes of paragraph (3); and

(c) a ceiling may either have a surface of any class not lower than Class 3 to the extent permitted by paragraph (4) or may consist of plastics material to the extent permitted by regulation E16(3).

(3) Any part of the surface of a wall in a room may be of any class not lower than Class 3 if the area of that part (or, if there are two or more such parts in a room, the aggregate area of those parts) does not exceed the lesser of the following–

(a) half the floor area of the room; or

(b) (in the case of a building or compartment of purpose group I, II, or III) 20 m^2 or (in any other case) 60 m^2.

(4) Any part of the surface of a ceiling may be of any class not lower than Class 3 if that part of the surface is the face of a layer of material the other face of which is exposed to the external air and–

(a) (i) the ceiling is that of a room in a building or compartment of purpose group I, II, III, IV, V or VII or that of a circulation space in a building or compartment of any purpose group;

(ii) the area of that part does not exceed 5 m^2; and

(iii) the distance between that part and any other such part is not less than 2.8 m if each part is a rooflight which complies with the provisions of paragraph (5) or 3.5 m in any other case;

(b) (i) the ceiling is that of a room in a building or compartment of purpose group VI or VIII;

(ii) the area of that part does not exceed 5 m^2;

(iii) the distance between that part and any other such parts is not less than 1.8 m; and

(iv) that part and all other such parts are evenly distributed over the whole area of the ceiling and together have an area which does not exceed 20% of the floor area of the room;

(c) the ceiling is that of a balcony, verandah, open carport, covered way or loading bay which (irrespective of its floor area) has at least one of its longer sides wholly and permanently open; or

(d) the ceiling is that of a garage, conservatory or outbuilding which (irrespective of whether it forms part of a building or is a building

which is attached to another building or wholly detached) has a floor area not exceeding 40 m^2.

(5) The provisions referred to in paragraph (4)(a)(iii) are–

(a) that the rooflight is so designed and installed that every part of the internal surface of the light-transmitting material is above the general plane of the ceiling by no less than one quarter of the greatest dimension of that material measured internally on plan; and

(b) that any exposed internal surface (other than the frame of the rooflight) between the light-transmitting material and the general plane of the ceiling is of a class not lower than that required for the surface of the ceiling.

Table to Regulation E15

Surfaces of walls and ceilings

Purpose group of building or compartment		Maximum floor area of small room (in m^2)	Class of surface for both walls and ceilings (except where separately specified)		
			Small rooms (see col. (2))	Rooms other than small rooms	Circulation spaces and protected shafts
(1)		(2)	(3)	(4)	(5)
I	Small residential–				
	House having not more than two storeys	4	3	1 (Wall) 3 (Ceiling)	1 (Wall) 3 (Ceiling)
	Any other house	4	3	1	0
II	Institutional	4	1	0 (Wall) 1 (Ceiling)	0
III	Other residential	4	3	1	0
IV	Office	30	3	1	0
V	Shop	30	3	1	0
VI	Factory	30	3	1	0
VII	Assembly	30	3	1	0
VIII	Storage and general	30	3	1	0

E16 Exceptions permitting the use of certain plastics materials

(1) The provisions of regulation E15(1) shall apply for the interpretation of this regulation.

(2) Any glazing which is fitted in an opening situated in an external wall enclosing a room may consist of a single layer of rigid sheeting of plastics material Type 3.

(3) Any part of the ceiling of a room or circulation space may consist of–

(a) rigid sheeting of plastics material Type 3 if the face of the sheeting which is not the surface of the ceiling is exposed to the external air; or

(b) one or more panels of such plastics materials as are permitted by paragraph (4) if the upper and lower surfaces of any part of the ceiling which is not formed by a panel of plastics material and the surfaces of all other parts of the structure which enclose the space over the ceiling are of a class not lower than that prescribed in the Table to regulation E15 for the ceiling of such a room or circulation space.

(4) Panels to which paragraph (3)(b) refers may consist of one or more sheets or membranes of either–

(a) plastics material Type 2 if–

(i) the nominal thickness of the sheet or membrane (or, if a panel consists of two or more sheets or membranes, their nominal aggregate thickness) does not exceed 3 mm;

(ii) the aggregate area of the plastics material, if situated in a building or compartment of purpose group II, III or VII, does not exceed 30% of the floor area of the room or 15% of the floor area of the circulation space, as the case may be, or, if situated in a building or compartment of any other purpose group, does not exceed 50% of the floor area of the room or 15% of the floor area of the circulation space, as the case may be;

(iii) no panel has any side exceeding 5 m in length or an area exceeding 4 m^2 if situated in a room or 2 m^2 if situated in a circulation space; but if two or more panels are grouped so that each is less than 575 mm from another, the said maximum dimensions shall be applied to the smallest rectangle which would wholly enclose all such panels; and

(iv) every panel is loosely mounted in such a way that it will fall out of its mountings when softened by heat; or

(b) plastics material Type 4 or 5 if–

(i) the nominal thickness of the sheet or membrane (or, if a panel consists of two or more sheets or membranes, their nominal aggregate thickness) does not exceed 1 mm; and

(ii) no panel has an area exceeding 4 m^2.

E17 Roofs

(1) No part of the roof of a building which–

(a) has a cubic capacity exceeding 1500 m^3;

(b) is wholly or partly of purpose group VI or VIII; or

(c) is a house in a continuous terrace of more than two houses,

shall be so constructed as to be designated BD, CA, CB, CC, CD, DA, DB, DC or DD or be covered with thatch or wood shingles.

(2) Any part of a roof which is designated BA, BB, or BC shall be not less than 6 m from any point on a boundary.

(3) Any part of a roof which is designated AD, BD, CA, CB, CC or CD or is covered with thatch or wood shingles shall be not less than the following distance from any point on a boundary–

(a) 6 m if such part is–

(i) of an area not exceeding 3 m^2; and

(ii) separated from any other such part by an area of roof at least 1·5 m wide and covered by non-combustible material; or

(b) 12 m in any other case.

(4) Any part of a roof which is designated DA, DB, DC or DD shall be–

(a) not less than 22 m from any point on a boundary;

(b) of an area not exceeding 3 m^2; and

(c) separated from any other part of the same roof which is so designated by an area of roof at least 1·5 m wide and covered with non-combustible material.

(5) If any part of a roof cannot be designated under regulation E1(6) on account of the low softening temperature of its covering material, such part shall be not less than the following distance from any point on a boundary–

(a) 6 m if such part is–

(i) of an area not exceeding 3 m^2; and

(ii) separated from any other such part by an area of roof at least 1·5 m wide and covered by non-combustible material; or

(b) 12 m or twice the height of the building, whichever is the greater, in any other case.

(6) Nothing in this regulation shall prevent–

(a) any part of a roof being constructed of glass or rigid sheeting of plastics material Type 3 being in either case material which cannot be designated in accordance with regulation E1(6) if either–

(i) that part of the roof is not less than 6 m from any boundary; or

(ii) that part of the roof is less than 6 m from any boundary, and the roof is that of a garage, conservatory or outbuilding having a floor area not exceeding 40 m^2 (whether or not attached to or forming part of another building) or is the roof of, or a canopy over, a balcony, verandah, open carport, covered way or detached swimming pool; or

(b) any part of a roof being constructed of a layer of material described in column (1) of the Table to this regulation if–

(i) the inner surface of that layer constitutes part of a ceiling and complies with regulation E15(4);

(ii) the area of roof which separates that part from any other such part is covered by non-combustible material; and

(iii) that part is not less than the distance specified in that Table from any point on a boundary.

Table to Regulation E17

Minimum distance of certain parts of a roof from boundary

Description of material (1)	Minimum distance from boundary (in m) (2)
1. Material designated AD, BD, CA, CB, CC or CD or not capable of designation owing to low softening temperature	6
2. Material designated DA, DB, DC or DD	22

E18 Small garages

(1) The following provisions (subject to the provisions of regulation E19 regarding small open carports) shall apply to any garage which has a floor area not exceeding 40 m^2.

(2) If such garage is a separate building and–

(a) is not less than 2 m from any boundary and any house within the boundary;

(b) (being less than 2 m from any boundary) complies with the requirements of paragraph (3); or

(c) (being less than 2 m from any house within the boundary) complies with the requirements of paragraph (4),

it shall not be required to comply with any regulation in this Part except regulation E17 and any other provisions expressly referred to in this regulation.

(3) Any such garage which is less than 2 m from any boundary shall be so constructed that any part of an external wall which is less than 2 m from the boundary is externally non-combustible and the walls of the garage have an internal surface which fulfils the requirements for Class 0 specified in regulation E15(1)(e).

(4) Any such garage which is less than 2 m from any house within the same boundary shall be so constructed that any part of an external wall which is less than 2 m from such house is externally non-combustible and the walls of the garage have an internal surface which fulfils the requirements for Class 0 specified in regulation E15(1)(e); but these requirements shall not apply if every part of any external wall of such house is less than 2 m from the garage–

(a) is externally non-combustible;

(b) has resistance to external fire of not less than half an hour; and

(c) has no unprotected area which exceeds 0.1 m^2 or is less than 1.5 m from any other unprotected area in that part.

(5) In the application of paragraphs (3) and (4), any exposed surface of a frame member forming the structure of a wall shall not be deemed to be part of the internal surface of that wall.

(6) If a garage to which paragraph (1) applies is attached to or forms part of a house, it shall be so constructed that–

(a) any floor immediately over such garage has fire resistance of not less than half an hour;

(b) any wall between such garage and such house has fire resistance of not less than half an hour; and

(c) any opening in such wall is–

(i) at its lowest point, not less than 100 mm above the level of the garage floor; and

(ii) fitted with a door, shutter or cover which has fire resistance of not less than half an hour and complies with the requirements of regulation E11.

E19 Small open carports

(1) Any open carport which has a floor area not exceeding 40 m^2 and complies with any condition specified in paragraph (2) shall not be required to comply with any regulation in this Part except regulation E17.

(2) The conditions referred to in paragraph (1) are as follows–

(a) that such carport is a detached building;

(b) that such carport is part of a detached building which consists additionally only of a garage which also has a floor area not exceeding 40 m^2 and would, if it were a separate building, comply with the provisions of regulation E18; or

(c) that such carport is a single storey part of a building which consists additionally only either of a house alone or of a house and garage (the garage having a floor area not exceeding 40 m^2) and that, if the presence of the carport were disregarded–

(i) the house, where there is no garage, would comply with the requirements of regulation E7;

(ii) the house and garage, if they would then constitute one building, would comply with the requirements of regulation E7; or

(iii) the house and garage, if they would then constitute separate buildings, would comply with the requirements of regulations E7 and E18 respectively:

Provided that, where this regulation applies by virtue of the erection of an open carport as an extension to an existing house or garage or both, the conditions in sub-paragraphs (b) and (c) shall be applicable as though any reference therein to compliance with regulations E7 and E18, or either of them, were omitted.

PART EE

Means of escape in case of fire

EE1 Application

This Part shall apply to a building which is or contains–

(a) a house;

(b) a flat or maisonette on or above the third storey;

(c) a shop; or

(d) an office.

EE2 Provision of means of escape

(1) In any building, or part of a building, to which this Part applies, there shall be provided–

(a) such means of escape consisting of exits and escape routes of such number, size, layout, design and construction as may reasonably be required in the circumstances of the case to enable the occupants to reach a place of safety in the event of a fire; and

(b) such other works as may be necessary for ensuring that such means of escape can be safely and effectively used at all material times.

(2) Nothing in this regulation shall require the provision of means of escape from any part of a building other than that used for a purpose referred to in regulation EE1.

(3) In so far as this regulation necessitates structural fire precautions, its requirements shall be additional to those of Part E.

EE3 Deemed-to-satisfy provisions for the provision of means of escape

Without prejudice to the provisions of Part E, the requirements of regulation EE2 shall be deemed to be satisfied if, in the case of a building comprising or containing–

(*a*) *a house–*

BS 5588: Part 1: Section 1.1: 1984 – Clauses 2, 4, 5, 6 and 7.3;

(*b*) *a flat or maisonette–*

CP 3: Chapter IV: Part 1: 1971;

(*c*) *a shop–*

BS 5588: Part 2: 1985: Sections 1 (except Clauses 1 and 3), 2, 3, 4 and 5 (except Clauses 13.1, 14.1 to 14.4 and 23): or

(*d*) *an office–*

BS 5588: Part 3: 1983: Sections 1 (except Clauses 1 and 3), 2, 3, 4 and 5 (except Clauses 12.1, 13.1 to 13.4 and 22),

respectively have been complied with.

PART F

Thermal insulation of dwellings

F1 Application

(1) Subject to the provisions of paragraph (2), this Part shall apply to any building, or part of a building, which is intended to be used as a dwelling.

(2) This Part shall not apply to any external wall, floor or roof of any part of a dwelling which consists of a shed or store entered solely from outside or of a garage, boathouse, conservatory or porch.

F2 Interpretation

(1) In this Part and in Schedule 6–

OPENING means any window opening, rooflight opening and any opening for a door, ventilator or other purpose;

PARTIALLY VENTILATED SPACE means a space which–

(a) is either–

(i) a passage, stairway or other common space which is not part of, but adjoins, a dwelling; or

(ii) a part of a dwelling which consists of a shed or store entered solely from outside or of a boathouse, conservatory or porch; and

(b) is ventilated by means of permanent vents having an aggregate area not exceeding 30% of its wall boundary area;

PERIMETER WALLING means those walls which together enclose all parts of a dwelling other than a partially ventilated space or a ventilated space;

PERMANENT VENT means an opening or duct which communicates with the external air and is designed to allow the passage of air at all times;

ROOFLIGHT OPENING means any structural opening in a roof which is provided for a hinged, sliding or fixed light irrespective of its size or function;

SURFACE RESISTANCE means the reciprocal of the surface heat transfer coefficient and for the purposes of this definition SURFACE HEAT TRANSFER COEFFICIENT in relation to a surface, means the rate of heat transfer in watts between each square metre of the surface and the ambient air when there is a difference in temperature of 1°C between the surface and the ambient air;

U VALUE means the thermal transmittance coefficient, that is to say, the rate of heat transfer in watts through $1\,m^2$ of a structure when the combined radiant and air temperatures at each side of the structure differ by 1°C and is expressed in $W/m^{2o}C$;

VENTILATED SPACE means a space which–

(a) is either–

(i) a passage, stairway or other common space which is not part of, but adjoins, a dwelling; or

(ii) a part of a dwelling which consists of a shed or store entered solely from outside or of a boathouse, conservatory or porch; and

(b) is ventilated by means of permanent vents having an aggregate area exceeding 30% of its wall boundary area;

WALL includes any internal or external surface finishes;

WALL BOUNDARY AREA means the total superficial area of all walling, including any opening, bounding a partially ventilated space or a ventilated space; and

WINDOW OPENING means any structural opening which is provided for a window irrespective of its size and function or for a hinged or sliding door or panel having a glazed area of $2\,m^2$ or more.

(2) For the purposes of this Part–

(a) any reference to a dwelling is a reference solely to those parts of a dwelling which are enclosed by perimeter walling;

(b) any part of a roof which has a pitch of 70° or more shall be treated as an external wall;

(c) any floor which is so situated that its upper surface is exposed to the external air shall be treated as a roof in relation to that part of

the building beneath it;

(d) in calculating the U value of a roof, wall or floor–

(i) the sum of the surface resistances of–

(a) the external surface of the roof; and

(b) the internal surface of the roof, or the lower surface of the ceiling of the storey immediately below the roof,

shall be taken as 0.14 m^2°C/W;

(ii) the sum of the external and internal surface resistances of the wall shall be taken as 0.18 m^2°C/W; and

(iii) the sum of the upper and lower surface resistances of the floor shall be taken as 0.18 m^2°C/W; and

(e) in the case of an alteration or extension to a dwelling the area of perimeter walls and the area of roof shall be taken to be respectively–

(i) the area of all the walls enclosing; and

(ii) the area of the roof covering,

the alteration or extension.

F3 Maximum U values of walls, floors and roofs

(1) Subject to the provisions of paragraph (3), the U value of any part of a wall, floor or roof which encloses a dwelling and is described in column (1) of the Table to this regulation (including surface finishes thereof and excluding any openings therein) shall not exceed the appropriate value specified in column (2) of that Table.

(2) Any opening in a wall (other than a window opening) and any recess to accommodate a meter cupboard shall be assumed to have a U value equivalent to that of the wall in which it is situated.

(3) Notwithstanding the requirements of paragraph (1), the U value of any lintel, jamb or sill associated with an opening in a wall shall not exceed 1.2 W/m^2°C.

Table to Regulation F3	
Maximum U values of walls, floors and roofs	
Element of building	Maximum U value (in $W/m^2°C$)
(1)	(2)
1. External wall	0.6
2. Wall between a dwelling and a ventilated space	0.6
3. Wall between a dwelling and a garage or partially ventilated space	1.0
4. Wall between a dwelling and any part of an adjoining building to which Part F is not applicable	1.0
5. Wall or partition between a room and a roof space, including that space and the roof over that space	0.6
6. External wall adjacent to a roof space over a dwelling, including that space and any ceiling below that space	0.6
7. Floor between a dwelling and the external air	0.6
8. Floor between a dwelling and a ventilated space	0.6
9. Roof, including any ceiling to the roof or any roof space and any ceiling below that space	0.35

F4 Deemed-to-satisfy provisions regarding thermal insulation

The requirements of regulation F3(1) relating to the U value of any part of a wall, floor or roof shall be deemed to be satisfied if the wall, floor or roof, having regard to the provisions of Part 1 of Schedule 6, is constructed in accordance with a specification contained in Parts II, III or IV of that Schedule whichever is appropriate.

F5 Area of window openings

(1) The total area of window openings and the total area of rooflight openings in those walls and roofs of a dwelling for which a maximum U value is specified in regulation F3 shall not exceed 15% of the area of perimeter walling and 2% of the area of the roof respectively–

Provided that–

(a) where all the window openings and rooflight openings are single

glazed, the total permitted area of window openings or of rooflight openings respectively may be exceeded if the total area of those openings taken together does not exceed the sum of the areas calculated in accordance with the appropriate percentage values specified; and

(b) where not all the window openings and rooflight openings are single glazed, the total permitted area of both window openings and rooflight openings taken together may be exceeded if the calculated total rate of heat loss through all those openings is not in excess of that which would have been obtained had all those openings been single glazed and the total area thereof was equal to the sum of the areas calculated in accordance with the percentage values specified.

(2) For the purposes of this regulation–

(a) the area of perimeter walling shall be measured internally, between finished floor and ceiling levels and shall include all openings in the walling;

(b) the area of roof shall be measured internally, between flanking walls or partitions and shall include all openings in the roof; and

(c) single, double and treble glazed window openings or rooflight openings shall be assumed to have U values of 5.7, 2.8 and 2.0 $W/m^2{}^\circ C$ respectively, irrespective of whether the light transmitting material is glass or not.

PART FF

Conservation of fuel and power in buildings other than dwellings

FF1 Application

(1) Subject to paragraphs (2) and (3), this Part shall apply to any building, or part of a building, falling wholly within purpose group II, III, IV, V, VI, VII or VIII other than–

(a) any building, or part, of purpose group III to which Part F applies;

(b) any building, or part, which has a total floor area not exceeding 30 m^2;

(c) any building, or part, of purpose group II, III, IV, V or VII and any building, or part, of purpose group VIII which is not intended to be used for storage if, in each case, the proposed use is such that the design output rating of the space heating installation therein will not need to exceed 25 W per square metre of floor area in order to maintain temperature conditions normal for that use; and

(d) any building, or part, of purpose group VI and any building, or part, of purpose group VIII which is intended to be used for storage if, in each case, the proposed use is such that the design output rating of the space heating installation therein will not need to exceed 50 W per square metre of floor area in order to maintain temperature conditions normal for that use.

(2) In relation to a structural alteration of the enclosing structure of an existing building or part of a building–

(a) regulation FF3 shall not apply if the building or part was erected before the date of coming into operation of this Part or was erected after that date but was exempted by paragraph (1); and

(b) in any case in which regulation FF3 applies, it shall apply as provided under sub-paragraphs (a) and (b) of regulation A7(1).

(3) In relation to an extension of an existing building or part of a building–

(a) regulation FF3 shall not apply if the extended building or part, treated as if it were being newly erected in its proposed form, would be exempted by paragraph (1); and

(b) in any case in which regulation FF3 applies, it shall apply as provided under sub-paragraph (a) of regulation A7(1) irrespective of when that building or part was erected.

FF2 Interpretation

(1) In this Part and in Schedule 7–

OPENING means any window opening, rooflight opening and any opening for a door, ventilator or other purpose;

PARTIALLY HEATED SPACE means any space which–

(a) is enclosed by a structure which is exposed in part to the external air; and

(b) if regarded as a building, or part of a building, falling wholly within one purpose group, would not be subject to the requirements of this Part by virtue of sub-paragraph (c) or (d) of regulation FF1(1);

PERMANENT VENT means an opening or duct which communicates with the external air and is designed to allow the passage of air at all times;

ROOFLIGHT OPENING means any structural opening in a roof which is provided for a hinged, sliding or fixed light irrespective of its size or function;

SURFACE RESISTANCE means the reciprocal of the surface heat transfer coefficient and for the purpose of this definition SURFACE HEAT TRANSFER COEFFICIENT in relation to a surface, means the rate of heat transfer in watts between each square metre of the surface and the ambient air when there is a difference in temperature of 1°C between the surface and the ambient air;

U VALUE means the thermal transmittance coefficient, that is to say, the rate of heat transfer in watts through 1 m^2 of a structure when the combined radiant and air temperatures at each side of the structure differ by 1°C and is expressed in $W/m^{2\circ}C$;

VENTILATED SPACE means any space which–

(a) is enclosed by a structure which is exposed in part to the external

air; and

(b) is ventilated by means of permanent vents having an aggregate area exceeding 30% of the wall boundary area;

WALL includes any internal or external surface finishes;

WALL BOUNDARY AREA means the total superficial area of all walling, including any opening, bounding a ventilated space; and

WINDOW OPENING means any structural opening which is provided for a window irrespective of its size and function or for a hinged or sliding door or panel having a glazed area of 2 m^2 or more.

(2) In this Part and in Schedule 7–

(a) any reference to a building, or part of a building, of a specified purpose group shall be construed as a reference to a building, or part, of that purpose group determined in accordance with the provisions of regulation E2;

(b) any reference to a building, or part of a building, of purpose group VIII which is intended to be used for storage shall be construed as a reference to any such building, or part, which is a place for storage, deposit or parking of goods and materials (including vehicles); and

(c) any reference to a building, or part of a building, of purpose group VIII which is not intended to be used for storage shall be construed as a reference to any other premises not comprised in purpose groups I to VII.

(3) For the purposes of regulation FF4–

(a) any part of a roof which has a pitch of 70° or more shall be treated as an external wall;

(b) any floor which is so situated that its upper surface is exposed to the external air shall be treated as a roof in relation to that part of the building beneath it;

(c) any lintel, jamb or sill associated with an opening in a wall may be regarded (at the option of the person intending to erect the building) either as part of that wall or as part of that opening;

(d) in calculating the U value of a roof, wall or floor–

(i) the sum of the surface resistances of–

(a) the external surface of the roof; and

(b) the internal surface of the roof, or the lower surface of the ceiling of the storey immediately below the roof,

shall be taken as 0.14 $m^{2\circ}C/W$;

(ii) the sum of the external and internal surface resistances of the wall shall be taken as 0.18 $m^2°C/W$; and

(iii) the sum of the upper and lower surface resistances of the floor shall be taken as 0.18 $m^2°C/W$;

(e) the U value of any window opening or rooflight opening shall be assumed to be 5.7 $W/m^2°C$ if it is single-glazed, 2.8 $W/m^2°C$ if it is double-glazed or 2.0 $W/m^2°C$ if it is triple-glazed, irrespective of whether the light transmitting material is glass or not; and

(f) any other opening in a wall or roof shall be assumed to have a U value equivalent to the average U value of the element in which it is situated.

FF3 Conservation of fuel and power

A building, or part of a building, to which this Part applies shall be so designed and constructed that the enclosing structure provides adequate resistance to the passage of heat the loss of which, from the building or part, would entail the consumption of fuel or power to enable temperature conditions normal for the proposed use of the building or part to be maintained.

FF4 Deemed-to-satisfy provisions for the conservation of fuel and power

The requirements of regulation FF3 shall be deemed to be satisfied if–

(a) (i) the total area of window openings and the total area of rooflight openings situated in walls and roofs for which a maximum U value is specified in sub-paragraph (b)(i) do not exceed the appropriate percentage values specified in Table 1; or

(ii) the calculated total rate of heat loss (W/°C) through all such openings does not exceed that which would have obtained had each of those openings been single-glazed and the total areas thereof complied with head (i); and

(b) (i) the U value of every part of a wall, floor or roof which is described in Table 2 (excluding any openings therein) does not exceed the appropriate value specified in that Table;

(ii) the calculated total rate of heat loss (W/°C) through all such walls, floors and roofs does not exceed that which would have obtained had the U value of every part of each of those elements complied with head (i); or

(iii) each such wall, floor and roof is constructed in accordance with a specification contained in Parts II or III of Schedule 7 whichever is appropriate.

Table 1 to Regulation FF4

Maximum area of window openings and rooflight openings

Type of openings

Maximum area of window openings and rooflight openings having regard to the purpose group of the building or part of the building (expressed as a percentage of the total areas of the walls and roofs respectively for which a maximum U value is required by paragraph (b)(i)) where–

(a) the area of a window opening or rooflight opening is taken to be the area of the inner surface of the element fitted in that opening measured in the general plane or planes of that element;

(b) the area of a wall is taken to be the area of the inner face of that wall (including window openings and all openings for doors, roller shutters or other purposes) measured between finished floor and ceiling levels and between finished surfaces of flanking walls or partitions;

(c) the area of a roof is taken to be the area of the inner surface of that roof (including rooflight openings and all openings for other purposes) measured between flanking walls or partitions; and

(d) in the case of a building, or part of a building, of purpose group V—

(i) the area of any window opening situated in a wall enclosing the ground storey is not included in the total area of window openings; and

(ii) the area of walling enclosing the ground storey is not included in the total area of the walls.

(1)	*II or III* *(2)*	*IV, V or VII* *(3)*	*VI or VIII* *(4)*
Window openings	*25*	*35*	*15*
Rooflight openings	*20*	*20*	*20*

FF4

Table 2 to Regulation FF4

Maximum U values of walls, floors and roofs

Element of building	*Maximum U value of every part of the element (in W/m²°C) having regard to the purpose group of a building or part of a building*	
	II, III, IV, V or VII, or (if not for storage) VIII	*VI or (if for storage) VIII*
(1)	*(2)*	*(3)*
1. External wall (other than any such wall enclosing a ventilated space or a partially heated space)	*0.6*	*0.7*
2. Internal wall exposed to a ventilated space		
3. Floor having its under surface exposed to the external air or to a ventilated space		
4. Roof (other than a roof over a ventilated space or partially heated space) including– *(a) any ceiling to the roof; or* *(b) any roof space and any ceiling below that space*		

PART G

Sound insulation of dwellings

G1 Application and interpretation

(1) This Part–

(a) applies only to a dwelling; but

(b) does not apply to a wall separating a dwelling from an open access balcony.

(2) In this Part–

OPEN ACCESS BALCONY means a balcony which–

(a) gives access to dwellings or a common service area; and

(b) ignoring structural columns is open to the external air for more than one-third of its floor to ceiling height and throughout the length of the dwellings; and

SEPARATING WALL and SEPARATING FLOOR mean respectively a wall or floor separating–

(a) any adjoining dwellings;

(b) a dwelling and a building, or part of a building, in a different purpose group as defined in regulation E2; or

(c) a dwelling and an area in communal use or occupation.

G2 Separating walls and separating floors

(1) A separating wall in conjunction with its flanking construction shall provide adequate resistance to airborne sound transmission.

(2) Subject to paragraph (3) a separating floor in conjunction with its flanking construction shall provide adequate resistance to airborne sound transmission, and, where such a floor is above a dwelling, adequate resistance to impact sound transmission.

(3) A separating floor or part of a separating floor which forms an open access balcony shall provide adequate resistance to impact sound transmission only.

G3 Deemed-to-satisfy provisions for separating walls and separating floors

The requirements of regulation G2 shall be deemed to be satisfied if the separating wall or separating floor in conjunction with its flanking construction is constructed in accordance with–

(*a*) *the Acceptable Construction Method contained in Section 1 of DOE (NI) Technical Booklet G: 1990; or*

(*b*) *the Similar Construction Method contained in Section 2 of DOE (NI) Technical Booklet G: 1990.*

PART H

Stairways, ramps, balustrades and vehicle barriers

H1 Interpretation

(1) In this Part–

ASSOCIATED LANDING means that portion of any floor, balcony, platform or similar place, or of any paving or ground, which is situated at the top or bottom of a stairway, ramp or stepped ramp;

BALCONY includes a gallery;

BALUSTRADE includes a wall, screen or railing;

COMPARTMENT has the meaning assigned to it by regulation E1;

DEEMED LENGTH has the meaning assigned to it by paragraph (2)(a);

FLIGHT means that part of a stairway, ladder or stepped ramp which consists of a step or consecutive steps;

GOING–

(a) in relation to a tread, means the distance (measured on plan) between its nosing and the nosing of the tread, ramp or landing next above it; and

(b) in relation to a landing, means the distance (measured on plan) across the landing along the projection of the centre line of the flight, ramp or section thereof at the top or bottom of which the landing is situated;

LADDER means a flight with a pitch greater than 55°.

LANDING–

(a) means a platform situated between consecutive flights of a stairway, ramp or stepped ramp; and

(b) unless the context otherwise requires, includes an associated landing;

LENGTH, in relation to a tread, means the least distance (measured on plan) between the sides of the tread;

NOSING means the front edge of a tread and includes the edge of the top surface of any landing or ramp which is situated at the top of a flight;

PARALLEL TREAD means a tread having a uniform width throughout that part of its length which is within the width of the stairway;

PITCH means the angle between the pitch line and the horizontal;

PITCH LINE means a notional line which connects the nosings of all treads in a flight with the nosing of the landing or ramp at the top of the flight, extends down to the landing or ramp at the bottom of the flight and (subject to the provisions in relation to head J in the Table to regulation H3) forms the greatest possible angle to the horizontal;

RAMP means any part of a building which provides a route of travel for pedestrians or wheelchair users and has an inclined surface;

RISE means the vertical distance–

(a) between two consecutive treads;

(b) between a tread and the top surface of a landing or ramp immediately above or below that tread; or

(c) if a threshold forms or surmounts the nosing of a tread or landing, between the top of the threshold and the top surface of the tread or landing at the bottom of the step;

SMALL ROOM means any room having a floor area not exceeding 4 m^2 in the case of a building or compartment of purpose groups I, II or III or 30 m^2 in any other case;

STAIRWAY means any part of a building which provides a route of travel and is formed by a single flight or by a combination of two or more flights and one or more intervening landings and is not a ladder;

STEP does not include any threshold which–

(a) has a height not exceeding 40 mm in the case of an internal doorway or 75 mm in the case of an external doorway; or

(b) is provided for the purposes of regulation E18(6)(c);

STEPPED RAMP means any part of a building which provides a route of travel and is formed by a combination of one or more flights and one or more ramps;

TAPERED TREAD means a tread which has a greater width at one side than at the other and a going which changes at a constant rate throughout its length;

TREAD means the upper surface of a step;

VEHICLE PARK does not include a car showroom, a garage or carport of purpose group I or a single storey building comprising two or more garages each of which has an area not exceeding 40 m^2; and

WIDTH–

(a) in relation to a tread, means the least distance from the nosing of the tread to the face of the riser or, if there is no riser, to the back edge of the tread; and

(b) in relation to a stairway, ramp or stepped ramp or section thereof, means its unobstructed width, that is to say, clear of handrails and other projections; and, for this purpose, no account shall be taken of any string not exceeding 30 mm in thickness.

(2) For the purposes of this Part–

(a) if consecutive tapered treads are of different lengths, each such tread shall be deemed to have a length equal to the length of the shorter or shortest of those treads; and DEEMED LENGTH shall be construed accordingly;

(b) the purpose group of a building or compartment shall be determined in accordance with regulation E2 except that, if a building or compartment is used or intended to be used for more than one purpose, it shall be regarded as being of the purpose group appropriate to that one of the uses in relation to which this Part prescribes the most onerous standard; and

(c) any portion of a stairway, ramp or stepped ramp serving more than one compartment shall, if the compartments are of different purpose groups, be regarded as serving that one of the compartments in relation to which this Part prescribes the most onerous standard.

H2 General requirements for stairways, ramps and stepped ramps

(1) Within every house of more than one storey there shall be provided between such storeys access by means of a stairway complying with the

relevant provisions of this Part:

Provided that nothing in this regulation shall require the provision of a stairway to any storey within a house if that storey is used only as general storage accommodation.

(2) Any stairway, ramp or stepped ramp shall comply with the following requirements insofar as they are relevant–

(a) subject to paragraph (3)(a), there shall be a landing at the top and bottom of–

(i) any stairway;

(ii) any ramp which does not form part of a stepped ramp; and

(iii) any stepped ramp;

(b) subject to paragraph (3)(b), any such landing, and any landing situated between consecutive flights of a stairway, shall be level and free from obstruction;

(c) over the whole width of any stairway, ramp or stepped ramp (including its associated landings) there shall be clear headroom of not less than 2 m measured vertically from the pitch line or, where there is no pitch line, from the top surface of any ramp or landing;

(d) if any flight or ramp is subdivided into sections–

(i) the width of each section shall be not less than 1 m; and

(ii) a handrail shall be provided between adjacent sections;

(e) subject to paragraph (3)(c), no door, shutter or threshold shall be placed across any flight or ramp or between any landing and any flight or ramp provided that nothing in this sub-paragraph shall prohibit the placing of a wicket gate in a dwelling at the top or bottom of any flight or ramp between the flight or ramp and any associated landing;

(f) if any stairway, ramp or stepped ramp (other than one which is external and serves exclusively one dwelling) is intended to serve as a means of escape or might be so used–

(i) equipment for artificially lighting all parts thereof (including its associated landings) shall be installed; and

(ii) any such installation shall either incorporate means whereby the lighting may be controlled by any person using the stairway, ramp or stepped ramp or means whereby the lighting may be caused to operate whenever light is required by such a person; and

(g) if any tread, ramp or landing is permitted by regulation H3 or H4 to be formed of slats or perforated material and is so formed, no

opening in any part of the upper surface thereof within the width of the flight, ramp or landing shall exceed 20 mm in width.

(3) Notwithstanding the requirements of paragraphs (2)(a), (2)(b) and (2)(e) respectively–

(a) the provision of a landing between an external doorway of a building and a stairway shall not be required if–

(i) the door opens inwards or slides; and

(ii) the total rise of the stairway does not exceed 600 mm;

(b) a landing of even ground or paving at the top or bottom of an external flight or ramp may slope at a gradient not exceeding 1 in 12; and

(c) a door, shutter or threshold may be placed in line with–

(i) a step at the entrance to a building;

(ii) a single step between any enclosed porch, outhouse or conservatory and the remainder of a house;

(iii) a single step which provides access to a shop window or small room; or

(iv) a single step provided for the purposes of regulation E18(6)(c).

H3 Further requirements for stairways

(1) Subject to the provisions of paragraph (2), any stairway (including its associated landings) shall comply with the requirements set out in the Table to this regulation insofar as they are relevant.

(2) For the purposes of paragraph (1), any stairway serving a building or compartment of purpose groups II or VII in respect of which column (4) of the Table to this regulation is relevant to a part and column (5) is relevant to the remainder shall be considered as a stairway to which column (4) is relevant to the whole if the part to which column (4) is relevant is the part furthest from the nearest accessible way out of the building.

(3) Any stairway shall be so constructed that–

(a) there are not more than 36 rises in consecutive flights without a change in the direction of travel of 30° or more;

(b) the pitch of any flight is not greater than the pitch of any other flight which is further from the nearest accessible way out of the building; and

(c) if it is exposed to the weather, the total rise from the bottom to the top of the stairway does not exceed 6 m.

(4) Any flight shall be so constructed that–

(a) subject to the provisions of paragraph (5), each tread (irrespective of whether its nosing is straight or curved on plan) is either a parallel tread or a tapered tread;

(b) subject to the provisions of paragraph (6), the rise of any step is uniform throughout its length and is the same as the rise of every other step in the flight;

(c) each tread is level;

(d) the width of each tread, measured at any part, is not less than the going of the tread at that part;

(e) the length of each tread is not less than the width of the stairway;

(f) the nosing of any tread which has no riser below it overlaps on plan the back edge of the tread next below it by not less than 15 mm;

(g) all parallel treads have the same going;

(h) all consecutive tapered treads have–

(i) the same going measured at the centre of the length (or, if applicable, the deemed length) of each tapered tread;

(ii) the same rate of taper; and

(iii) their narrow ends at the same side of the flight; and

(j) if the flight forms part of a building of purpose group I, a building or compartment of purpose group II used by persons under the age of five years or a building or compartment of purpose group III, there is no open rise or opening in a riser of such size as would permit the passage through it of a sphere having a diameter of 100 mm.

(5) Notwithstanding the requirements of paragraph (4)(a), either side or both sides of the two treads at the bottom of a flight may be rounded or splayed if the tread otherwise complies with the requirements for a parallel or tapered tread.

(6) The requirements of paragraph (4)(b) shall not apply to a step which is at the top or bottom of a flight and adjoins ground or paving outside a building if that step has a rise measured at the centre of the flight which is the same as the rise of the other steps in the flight.

(7) The treads and landings of any stairway to which column (4) of the Table to this regulation relates shall not be constructed of slats or perforated material.

Table to Regulation H3

Specific requirements for stairways

Head	Building or compartment of purpose groups I or III		Building or compartment of purpose groups II or VII	Building or compartment of purpose groups II, III, IV, V, VI, VII or VIII
	any stairway within a dwelling or serving exclusively one dwelling	any stairway for common use in connection with two or more dwellings	any stairway– (a) within or serving a building or compartment of purpose group II other than a stairway for use solely by staff; or (b) serving a part of a building or compartment of purpose group VII more than 100 m^2 in area and used for assembly purposes	any stairway other than a stairway to which columns (2), (3) or (4) relate
(1)	(2)	(3)	(4)	(5)
A. Width of stairway (subject to the provisions of Part EE)	Not less than– (a) 600 mm in the case of a stairway providing access only to– (i) one room, not being a living room or kitchen; or (ii) a bathroom and a water closet; or (b) 800 mm in any other case	Not less than 900 mm	Not less than 1 m	Not less than– (a) 800 mm in the case of a stairway within or serving a part of a building or compartment which is not capable of being used or occupied by more than 50 persons; or (b) 1 m in any other case

Table to Regulation H3 – continued

Head	Building or compartment of purpose groups I or III		Building or compartment of purpose groups II or VII	Building or compartment of purpose groups II, III, IV, V, VI, VII or VIII
	any stairway within a dwelling or serving exclusively one dwelling	any stairway for common use in connection with two or more dwellings	any stairway– (a) within or serving a building or compartment of purpose group II other than a stairway for use solely by staff; or (b) serving a part of a building or compartment of purpose group VII more than 100 m^2 in area and used for assembly purposes	any stairway other than a stairway to which column (2), (3) or (4) relates
(1)	(2)	(3)	(4)	(5)
B. Additional requirements for stairways over 1.8 m in width	–	–	Each flight to be so subdivided into sections that each section is– (a) not less than 1 m nor more than 1.8 m in width; and (b) separated from any other such section by a handrail complying with the requirements set out against head K	Each flight to be so subdivided into sections that each section is– (a) not less than 1 m nor more than 1.8 m in width; and (b) separated from any other such section by a handrail complying with the requirements set out against head K
C. Pitch of flight	Not exceeding 42°	Not exceeding 38°	–	–

D. Number of rises per flight. This requirement shall not apply to any step permitted by regulation H2(3)(c)	Except at the bottom of a stairway, not fewer than 2 nor more than 16	Not fewer than 2 nor more than 16	Not fewer than 3 nor more than 16	Not fewer than 3 nor more than 16
E. Height of rise	Not less than 75 mm nor more than 220 mm	Not less than 75 mm nor more than 190 mm	Not less than 75 mm nor more than 180 mm	Not less than 75 mm nor more than 190 mm
F. Going of step (subject to the provisions of head J)	Not less than 220 mm	Not less than 240 mm	Not less than 280 mm	Not less than 250 mm
G. Aggregate of the going and twice the rise of a step (subject to the provisions of head J). This requirement shall not apply to a flight which has only one rise	Not less than 550 mm nor more than 700 mm	Not less than 550 mm nor more than 700 mm	Not less than 550 mm nor more than 700 mm	Not less than 550 mm nor more than 700 mm
H. Going of landings (subject to the provisions of Part EE)	Not less than the width of the stairway	Not less than the width of the stairway	Not less than the width of the stairway or (if the stairway is subdivided) the width of the wider or widest section	Not less than the width of the stairway or (if the stairway is subdivided) the width of the wider or widest section
J. Tapered treads	(a) The going of any part of a tread within the width of the stairway to be not less than 50 mm *(b) The going to be not less than 220 mm	(a) The going of any part of a tread within the width of the stairway to be not less than 50 mm *(b) The going to be not less than 240 mm	(a) The going of any part of a tread within the width of the stairway to be not less than 50 mm *(b) The going to be not less than 280 mm	(a) The going of any part of a tread within the width of the stairway to be not less than 50 mm *(b) The going to be not less than 250 mm

Table to Regulation H3 – continued

Head	Building or compartment of purpose groups I or III		Building or compartment of purpose groups II or VII	Building or compartment of purpose groups II, III, IV, V, VI, VII or VIII
	any stairway within a dwelling or serving exclusively one dwelling	any stairway for common use in connection with two or more dwellings	any stairway– (a) within or serving a building or compartment of purpose group II other than a stairway for use solely by staff; or (b) serving a part of a building or compartment of purpose group VII more than 100 m^2 in area and used for assembly purposes	any stairway other than a stairway to which column (2), (3) or (4) relates
(1)	(2)	(3)	(4)	(5)
J. Tapered treads – continued	*(c) The aggregate of the going and twice the rise to be not less than 550 mm nor more than 700 mm *(d) The pitch to be not more than 42° * For the purposes of (b), (c) and (d) above, the going, rise and pitch shall be measured at the	*(c) The aggregate of the going and twice the rise to be not less than 550 mm nor more than 700 mm *(d) The pitch to be not more than 38° * For the purposes of (b), (c) and (d) above, the going, rise and pitch shall be measured at the	*(c) The aggregate of the going and twice the rise to be not less than 550 mm nor more than 700 mm * For the purposes of (b) and (c) above, the going and rise shall be measured at points	*(c) The aggregate of the going and twice the rise to be not less than 550 mm nor more than 700 mm * For the purposes of (b) and (c) above, the going and rise shall be measured at the central

J. Tapered treads – continued	central points of the length (or, where applicable, the deemed length) of a tread if the stairway is less than 1 m in width, or at points 270 mm from each end of the length (or, where applicable, the deemed length) of a tread if the stairway is 1 m or more in width	central points of the length (or, where applicable, the deemed length) of a tread if the stairway is less than 1 m in width, or at points 270 mm from each end of the length (or, where applicable, the deemed length) of a tread if the stairway is 1 m or more in width	270 mm from each end of the length (or, where applicable, the deemed length) of a tread	points of the length (or, where applicable, the deemed length) of a tread if the stairway is less than 1 m in width, or at points 270 mm from each end of the length (or, where applicable, the deemed length) of a tread if the stairway is 1 m or more in width
K. Handrails These requirements shall not apply to any side of a flight formed by fixed seating	Irrespective of the purpose group of the building or compartment– (a) any flight with a total rise of more than 600 mm shall be provided with a handrail– (i) on each side of the flight if the width of the flight is 1 m or more; (ii) on the side where the tapered treads have the greater going if the flight is less than 1 m in width and contains tapered treads; and (iii) on at least one side in any other case; and (b) any such handrail shall– (i) be so designed as to afford adequate means of support to persons using the flight; (ii) be continuous for the length of the flight (except that any handrail need not extend beside the two steps at the foot of a stairway); (iii) be securely fixed at a height of not less than 840 mm nor more than 1 m (measured vertically above the pitch line); and (iv) be terminated by a scroll or other suitable means			

H4 Further requirements for ramps

(1) Subject to the provisions of paragraph (2), any ramp (including its associated landings) shall comply with the requirements set out in the Table to this regulation insofar as they are relevant.

(2) For the purposes of paragraph (1), any ramp serving a building or compartment of purpose groups II or VII in respect of which column (4) of the Table to this regulation is relevant to a part and column (5) is relevant to the remainder shall be regarded as a ramp to which column (4) is relevant to the whole if the part to which column (4) is relevant is the part furthest from the nearest accessible way out of the building.

(3) Any ramp to which column (4) of the Table to this regulation relates shall not be constructed of slats or perforated material.

Table to Regulation H4

Specific requirements for ramps

Head	Building or compartment of purpose groups I or III		Building or compartment of purpose groups II or VII	Building or compartment of purpose groups II, III, IV, V, VI, VII or VIII
	Any ramp within a dwelling or serving exclusively one dwelling	Any ramp for common use in connection with two or more dwellings	Any ramp– (a) within or serving a building or compartment of purpose group II other than a ramp for use solely by staff; or (b) serving a part of a building or compartment of purpose group VII more than 100 m^2 in area and used for assembly purposes	Any ramp other than a ramp to which column (2), (3) or (4) relates
(1)	(2)	(3)	(4)	(5)
A. Width of ramp (subject to the provisions of Part EE)	Not less than– (a) 600 mm in the case of a ramp providing access only to– (i) one room, not being a living room or kitchen; or (ii) a bathroom and a watercloset; or (b) 800 mm in any other case	Not less than 900 mm	Not less than 1 m	Not less than– (a) 800 mm in the case of a ramp within or serving a part of a building or compartment which is not capable of being used or occupied by more than 50 persons; or (b) 1 m in any other case
B. Slope of ramp	Not more than 1 in 12	Not more than 1 in 12	Not more than 1 in 12	Not more than 1 in 12

Table to Regulation H4 – continued

Head	Building or compartment of purpose groups I or III		Building or compartment of purpose groups II or VII	Building or compartment of purpose groups II, III, IV, V, VI, VII or VIII
	Any ramp within a dwelling or serving exclusively one dwelling	Any ramp for common use in connection with two or more dwellings	Any ramp– (a) within or serving a building or compartment of purpose group II other than a ramp for use solely by staff; or (b) serving a part of a building or compartment of purpose group VII more than 100 m^2 in area and used for assembly purposes	Any ramp other than a ramp to which column (2), (3) or (4) relates
(1)	(2)	(3)	(4)	(5)
C. Going of landings (subject to the provisions of Part EE)	Not less than the width of the ramp	Not less than the width of the ramp	Not less than the width of the ramp or (if the ramp is subdivided) the width of the wider or widest section	Not less than the width of the ramp or (if the ramp is subdivided) the width of the wider or widest section
D. Handrails These requirements shall not apply to any side of a ramp formed by fixed seating	Irrespective of the purpose group of the building or compartment– (a) any ramp with a total rise of more than 600 mm shall be provided with a handrail– (i) on each side if the width of the ramp is 1 m or more; and (ii) on at least one side in any other case; and (b) any such handrail shall– (i) be so designed as to afford adequate means of support to persons using the ramp; (ii) be continuous for the length of the ramp; (iii) be securely fixed at a height of not less than 840 mm nor more than 1 m (measured vertically above the top surface of the ramp); and (iv) be terminated by a scroll or other suitable means			

H5 Further requirements for stepped ramps

Any stepped ramp (including its associated landings) shall be so constructed that–

(a) any flight and any associated landing situated at the top or bottom of a flight complies with the relevant requirements of regulation H3;

(b) any ramp and any associated landing situated at the top or bottom of a ramp complies with the relevant requirements of regulation H4; and

(c) the length of any ramp is not less than 1 m nor more than 2 m measured along the centre line of the route of travel.

H6 Guarding of stairways, ramps, stepped ramps, landings, balconies and other places

(1) A balustrade shall be provided in each of the following positions–

(a) at each side of any flight or ramp except (if there is no opening or hole in the ground or floor near the bottom of the stairway)–

(i) beside the two steps at the bottom of a stairway; or

(ii) beside a stairway with a total rise of not more than 600 mm; and

(b) at the perimeter of each of the following wherever such provision is necessary to ensure reasonable safety for persons having access thereto–

(i) any landing or floor;

(ii) any part of a balcony, platform, roof, vehicle park or other place to which persons have access for purposes other than maintenance or repair;

(iii) any rooflight in such a part of a roof; and

(iv) the ground or paving adjacent to any area into which an external stairway or ramp descends to an extent exceeding 600 mm (measured vertically) below the level of that ground or paving.

(2) Any balustrade required by paragraph (1) shall be designed as a guard and so constructed as to comply with the following provisions–

(a) subject to paragraph (3), the height of the balustrade (measured vertically from the pitch line in the case of a balustrade guarding a flight or from the top surface of the place guarded in any other case) shall be not less than the height specified in column (2) of the Table to this regulation;

(b) the balustrade shall be capable of resisting the horizontal force specified in column (3) applied at the height specified in column (2) of the Table to this regulation;

(c) any glazed part of the balustrade shall be formed of glass blocks, toughened glass or laminated safety glass; and

(d) if the balustrade forms part of a building of purpose group I, a building or compartment of purpose group II used by persons under the age of five years or a building or compartment of purpose group III–

(i) there shall be no opening in the balustrade of such size as would permit the passage through it of a sphere having a diameter of 100 mm except (in the case of a balustrade guarding a flight) any triangular opening formed by a tread, a rise and the bottom edge of the balustrade if that bottom edge is not more than 50 mm above the pitch line; and

(ii) the balustrade shall be so constructed that a child cannot readily climb up it.

(3) Notwithstanding the requirements of paragraph (2)(a), the top of a portion of any balustrade guarding a landing at the top of a flight or ramp may be continuous with, and at the same angle as, the top of a balustrade guarding that flight or ramp.

Table to Regulation H6

Minimum height and strength of balustrade

Description of balustrade (1)	Minimum height of balustrade (in mm) (2)	Minimum horizontal force to be resisted (in kN/m) (3)
1. Balustrade guarding a flight or ramp within a dwelling	840	0.36
2. Balustrade guarding a landing or floor within a dwelling	900	0.36
3. Any balustrade in a dwelling not described in items 1 and 2	1100	0.74
4. Balustrade (including any superimposed padded rest) guarding a balcony in a building of purpose group VII and immediately in front of fixed seating	790	1.5
5. Any balustrade in a building of purpose group VII not described in item 4	1100	3.0
6. Balustrade guarding a flight not described in items 1 or 5	900	0.74
7. Balustrade guarding a landing, ramp, floor, balcony or roof not described in items 2 to 5	1100	0.74
8. Any balustrade not described in items 6 or 7	1100	3.0

H7 Vehicle barriers

Any floor or roof used as a vehicle park and any part of a building used as a vehicular route thereto shall be adequately guarded by a barrier (except across any entrance or exit) at every part of the perimeter of the area so used which is at or above the level of any adjacent floor, roof, vehicular route, street or ground.

H8 Deemed-to-satisfy provision for vehicle barriers

The requirements of regulation H7 shall be deemed to be satisfied if a vehicle barrier is designed and constructed in accordance with the relevant recommendations of BS 6180: 1982.

PART J

Refuse disposal

J1 Refuse storage container chambers constructed in buildings comprising more than one dwelling

(1) This regulation shall apply to any chamber which forms part of a building comprising more than one dwelling and which is constructed to accommodate refuse storage containers into which refuse may be delivered through a hopper or chute.

(2) Such chamber shall be so constructed that–

(a) the walls, floor and roof are made of suitable non-combustible material, and any part of a wall or floor which separates the chamber from the building of which it forms part is constructed as if it were a compartment wall or compartment floor within the meaning of Part E having fire resistance of one hour or such fire resistance as is required by regulation E5 (whichever is the greater);

(b) the inner surfaces of the chamber are impervious to moisture;

(c) the floor of the chamber is laid to a fall towards a trapped gulley situated inside or immediately outside the chamber;

(d) it has as its sole means of access–

(i) for the removal and replacement of the containers, a flush door which is situated in an external wall of the chamber and has fire resistance of not less than half an hour as defined in regulation E1(5); and

(ii) for the deposit of refuse in the containers, either a refuse chute which complies with the provision of regulation J2, or a hopper which complies with the provisions of regulation J4; and

(e) (where delivery is by way of hopper only) it is ventilated to the external air by means of–

(i) a fly-proof ventilator placed as high as practicable in an

external wall of the chamber and so positioned as not to transmit foul air in such a manner as to become prejudicial to health or a nuisance; or

(ii) a pipe or shaft which complies with regulation J3.

J2 Refuse chutes in buildings comprising more than one dwelling

(1) This regulation shall apply to any refuse chute constructed for use with a refuse storage container chamber to which regulation J1 applies.

(2) Such refuse chute shall be–

(a) constructed of suitable non-combustible materials of such thickness, and so put together and arranged, as to prevent the ignition of any part of the building in the event of any refuse within the chute, or in the chamber at the bottom of the chute, catching fire;

(b) so constructed that the inner surfaces of the chute are impervious to moisture;

(c) so constructed as to prevent the lodgement of any refuse within the chute;

(d) circular in cross-section with an internal diameter of not less than 375 mm;

(e) fitted with adequate means of access for inspection and cleansing;

(f) fitted, for the insertion of refuse, with one or more hoppers which comply with the provisions of regulation J4;

(g) ventilated to the external air by means of a pipe or shaft which complies with the provisions of regulation J3; and

(h) fitted at its lower extremity with a shutter capable of closing the outlet of the chute.

J3 Pipes or shafts ventilating refuse storage container chambers or refuse chutes

Any pipe or shaft ventilating either a refuse storage container chamber to which regulation J1 applies or a refuse chute to which regulation J2 applies shall–

(a) comply with the provisions of regulation J2(2)(a);

(b) be not less than 17 000 mm^2 in cross-sectional area;

(c) be so constructed that the outlet is protected against the entry of rain; and

(d) be carried upwards to such a height and so positioned as not

to transmit foul air in such a manner as to become prejudicial to health or a nuisance.

J4 Hoppers for refuse storage container chambers or refuse chutes

(1) This regulation shall apply to any hopper constructed for use with a refuse storage container chamber to which regulation J1 applies or with a refuse chute to which regulation J2 applies.

(2) Such hopper shall be–

(a) situated in a place which is either freely ventilated or has adequate means of mechanical ventilation;

(b) constructed of suitable non-combustible material;

(c) so constructed and installed as–

(i) efficiently to discharge any refuse placed in it into the refuse storage container or refuse chute;

(ii) to be incapable of remaining in any position other than the open or the closed position; and

(iii) to prevent, as far as possible, whether in an open or closed position, the emission of dust or foul air from the refuse storage container chamber or refuse chute; and

(d) in the case of a hopper for use in conjunction with a refuse chute, so constructed and installed as not to project into the chute.

(3) No such hopper shall be situated within a dwelling.

PART K

Ventilation

K1 Interpretation

In this part–

COMMON SPACE means a space intended for use by the occupants of more than one dwelling and not open to the external air;

HABITABLE ROOM has the meaning assigned to it by regulation A2 but does not include a room intended to be used for the lawful detention of any person other than a person of unsound mind;

MECHANICAL VENTILATION means a system of ventilation operated by a power driven mechanism;

SANITARY APPLIANCE and SANITARY ACCOMMODATION have the meanings assigned to them by regulation P1;

TOP OF THE WALL means–

(a) if the building has a flat roof, the underside of that roof;

(b) if the building has a pitched roof, the lowest part of the eaves of that roof; or

(c) if the roof (whether flat or pitched) has a parapet, the top of that parapet; and

VENTILATION OPENING means any part of a window or any hinged panel, adjustable louvre or other means of ventilation which opens directly to the external air, but does not include any opening associated with a means of mechanical ventilation.

K2 Means of ventilation

(1) Subject to the provisions of paragraph (3) any room referred to in column (1) of the Table to this regulation shall be provided with–

(a) one or more ventilation openings having a total area of not less

than that specified opposite thereto in column (3); or

(b) mechanical ventilation capable of achieving the number of air-changes per hour specified opposite thereto in column (4).

(2) For the purposes of paragraph (1) a door which opens directly to the external air shall be deemed to be a ventilation opening if–

(a) the door contains a ventilator with an area of not less than 10 000 mm^2 capable of being opened (without the door being opened); or

(b) the room contains one or more ventilation openings having a total area of not less than 10 000 mm^2, in addition to the door.

(3) A habitable room opening into an enclosed verandah, greenhouse, conservatory or similar place shall be deemed to comply with the provisions of this regulation if the room and the enclosed place together have one or more ventilation openings which, if they ventilated a room having a floor area equal to the combined floor area of the room and the enclosed place, would comply with the requirements of paragraph (1).

Table to Regulation K2

Ventilation of rooms and spaces*

Location of room or space (1)	Room or space (2)	Minimum area of ventilation opening† (3)	Number of air changes per hour (4)
In a dwelling	Habitable room	One-twentieth of the floor area of the room	1
	Kitchen Sanitary accommodation	One-twentieth of the floor area of the room	3
Other than in a dwelling	Common space	One-fiftieth of the floor area of the space	1
	Kitchen Sanitary accommodation	One-twentieth of the floor area of the room	3

Notes to Table

* Additional ventilation may be required to a room containing a heating appliance (see Part M).

† Some part of such area shall be not less than 1.75 m above the floor.

K3 Ventilation openings on to courts

(1) No ventilation opening constructed in compliance with the requirements of regulation K2 shall be so situated as to open on to a court enclosed on every side, unless the distance from the ventilation opening to the opposite wall of the court is either–

(a) 15 m or more; or

(b) not less than half the vertical distance between the top of such opening and the top of the wall containing the opening.

(2) No ventilation opening constructed in compliance with the requirements of regulation K2 shall be so situated as to open on to a court which has one side unobstructed by any building or other erection, and of which the long side, measured from such unobstructed side, exceeds twice the width, unless such ventilation opening–

(a) is in the side of the court opposite the unobstructed side;

(b) (if it is situated in either of the long sides) is within a distance from the unobstructed side not exceeding twice the width of the court; or

(c) (if it is situated in either of the long sides) is in such a position that the distance from the opening to the opposite wall of the court is either–

(i) 15 m or more; or

(ii) not less than half the vertical distance between the top of such opening and the top of the wall containing the opening.

PART L

Chimneys, flue pipes, hearths and fireplace recesses

L1 Application and interpretation

(1) In this Part–

APPLIANCE means–

(a) a heat-producing appliance (including a cooker) which is designed to burn–

(i) solid fuel (in this Part called a SOLID FUEL APPLIANCE);

(ii) oil (in this Part called an OIL-BURNING APPLIANCE); or

(iii) gaseous fuel (in this Part called a GAS APPLIANCE); and

(b) an incinerator employing any means, including electricity, of igniting refuse;

APPLIANCE VENTILATION DUCT means a duct forming a passage which in one part serves to convey combustion air to one or more gas appliances, in another part serves to convey the products of combustion from one or more gas appliances to the external air and intermediately serves both purposes;

CHIMNEY includes any part of the structure of a building forming any part of a flue other than a flue pipe;

CONSTRUCTIONAL HEARTH means a hearth forming part of the structure of a building;

CLASS I APPLIANCE means–

(a) a solid fuel appliance or oil-burning appliance having, in either case, an output rating not exceeding 45 kW;

(b) an appliance which so burns gas as to simulate a solid fuel fire and has an input rating not exceeding 60 kW but is not provided with an integral flueway for conveying the products of combustion from

the combustion space to any flue serving the appliance; or

(c) an incinerator having a refuse combustion chamber exceeding 0.03 m^3 but not exceeding 0.08 m^3 in capacity,

and CLASS I shall be construed accordingly;

CLASS II APPLIANCE means–

(a) any gas appliance having an input rating not exceeding 60 kW other than an appliance of the type described in paragraph (b) of the definition of Class I appliance; or

(b) an incinerator having a refuse combustion chamber not exceeding 0.03 m^3 in capacity

and CLASS II shall be construed accordingly;

DISCHARGE means the discharge of the products of combustion;

EXTERNAL WALL includes any external cladding or internal lining;

FLOOR includes any ceiling which is applied or fixed to the underside of the floor;

FLUE means a passage for conveying the discharge of an appliance to the external air and includes any part of the passage in an appliance ventilation duct which serves the purpose of a flue;

FLUE PIPE means a pipe forming a flue, but does not include a pipe built as a lining into either a chimney or an appliance ventilation duct;

GAS FIRE means an appliance with a flue for heating one room, mainly by the emission of radiant heat, and not comprising any water heating component;

HIGH-RATING APPLIANCE means–

(a) a solid fuel appliance or oil-burning appliance having, in either case, an output rating exceeding 45 kW;

(b) a gas appliance having an input rating exceeding 60 kW; or

(c) an incinerator having a refuse combustion chamber exceeding 0.08 m^3 in capacity,

and HIGH-RATING shall be construed accordingly;

INSULATED METAL CHIMNEY means a chimney comprising a flue lining, non-combustible thermal insulation and a metal outer casing;

MAIN FLUE means a flue serving more than one appliance;

ROOF includes any ceiling which is applied or fixed to the underside of a roof and is in a plane parallel to that of the roof covering;

ROOM-SEALED APPLIANCE means a gas appliance which draws its combustion air from a point immediately adjacent to the point where it discharges its products of combustion and is so designed that the inlet, outlet and combustion chamber of the appliance, when installed, are isolated from the room or internal space in which the appliance is situated except for a door for ignition purposes;

SUBSIDIARY FLUE means a flue conveying the discharge of one appliance into a main flue; and

SUPERIMPOSED HEARTH means a hearth not forming a part of the structure of a building.

(2) (a) The provisions of this regulation and of regulation L2(1)(a), (4)(a) and (6) shall apply to the construction of a chimney which is a separate building.

(b) The provisions of this regulation and of the regulations specified in regulation L22(1) shall apply to the construction of an insulated metal chimney which serves a Class I or Class II appliance.

(c) Except as specified in this paragraph, the provisions of this Part shall not apply to a chimney which is a separate building.

(3) Any provision in this Part which applies to a chimney, flue pipe, fireplace recess or constructional hearth serving a Class I appliance shall also apply where a solid fuel fire is intended to burn directly on a hearth without the installation of any appliance whatsoever.

(4) In relation to any Class I oil-burning appliance to which reference is made in regulation M5, regulations L3 to L7 and L10 shall not apply unless compliance therewith is required by the provisions of regulation M4.

L2 General structural requirements

(1) (a) Any chimney, flue pipe, constructional hearth or fireplace recess (whether serving a high-rating, Class I or Class II appliance) shall be–

(i) constructed of non-combustible materials of such a nature, quality and thickness as not to be unduly affected by heat, condensate or the products of combustion; and

(ii) so constructed and of such thickness, or, in the case of a flue pipe, so placed or shielded, as to prevent the ignition of any part of any building.

(b) Nothing in sub-paragraph (a)(i) shall prohibit–

(i) the placing in a chimney or fireplace recess serving a Class I or Class II appliance of a damp-proof course of combustible material if it is solidly bedded in mortar;

(ii) the placing in a chimney or fireplace recess serving a Class I appliance of any combustible material in a position not prohibited by regulation L10;

(iii) the use of flue blocks having suitable combustible material incorporated during manufacture between the inner wall and surrounding material of the flue block, or, if necessary to provide an expansion gap, the placing of such material between a flue lining and the surrounding material in a chimney; or

(iv) the laying of combustible material upon the surface of a hearth in a position not prohibited by regulation L4(2).

(2) Any chimney or flue pipe (whether serving a high-rating, Class I or Class II appliance) shall be so constructed as to prevent any products of combustion escaping internally into the building.

(3) Any flue pipe (whether serving a high-rating, Class I or Class II appliance) shall–

(a) be so placed or shielded as to ensure that, whether the pipe is inside or outside the building, there is neither undue risk of accidental damage to the flue pipe nor undue danger to persons in or about the building;

(b) be properly supported; and

(c) discharge either into a chimney or into the external air.

(4) (a) The outlet of any flue other than a flue described in sub-paragraph (b) shall be so situated as to prevent the discharge therefrom into the external air from entering any opening in a building in such concentration as to be prejudicial to health or a nuisance.

(b) The outlet of a flue which serves a Class I or Class II appliance and is not the flue of a chimney which is a separate building shall comply with regulation L13 or L21 as appropriate.

(5) If provision is made for a solid fuel fire to burn directly on a hearth, secure means of anchorage for an effective fireguard shall be provided in the adjoining structure.

(6) If a flue serves an appliance which burns solid fuel or oil or is an incinerator, an opening into the flue shall be constructed so as to enable the flue to be cleaned and shall be fitted with a closely fitting cover of non-combustible material:

Provided that the requirements of this paragraph shall not apply if, while the appliance is in position, the flue is accessible for cleaning through the appliance or (if the flue communicates with a fireplace recess) through the appliance or the fireplace recess.

L3 Fireplace recesses for Class I appliances

(1) Any fireplace recess serving a Class I appliance shall have a constructional hearth which complies with the requirements of regulation L4.

(2) Subject to paragraph (3), any fireplace recess serving a Class I appliance which is constructed of bricks or blocks of concrete or burnt clay or of concrete cast *in situ* shall be so constructed that–

(a) the jamb on each side of the recess is not less than 200 mm thick;

(b) the back of the recess is a solid wall not less than 200 mm thick or a cavity wall each leaf of which is not less than 100 mm thick; and

(c) any such thickness extends for the full height of the recess:

Provided that–

(i) if the recess is situated in an external wall and no combustible external cladding is carried across the back of the recess, the back of the recess may be a solid wall less than 200 mm thick but not less than 100 mm thick; and

(ii) if any part of a wall, other than a wall separating buildings or dwellings within a building, serves as the back of each of two recesses built on opposite sides of the wall, that part of the wall may be a solid wall less than 200 mm but not less than 100 mm thick.

(3) For the purposes of paragraph (2), no account shall be taken of the thiskness of any part of a fireback or other appliance or the thickness of any material between an appliance and the fireplace recess.

(4) No opening shall be made in the back of a fireplace recess other than an opening which–

(a) is made solely for the purpose of allowing the passage of convected air; and

(b) does not communicate with a flue.

L4 Constructional hearths for Class I appliances

(1) Any constructional hearth serving a Class I appliance shall–

(a) be not less than 125 mm thick;

(b) (if it adjoins a floor constructed wholly or partly of combustible material, or if combustible material is laid on the hearth as a continuation of the finish of the adjoining floor in accordance with the provisions of paragraph (2)) be so constructed that any part of the exposed surface of the hearth, which is not more than 150 mm, measured horizontally, from the said floor or combustible material, is not lower than the surface of the floor and not lower than the remainder of the exposed surface of the hearth; and either

(c) (if it is constructed in conjunction with a fireplace recess)–

(i) extend within the recess to the back and jambs of the recess;

(ii) project not less than 500 mm in front of the jambs; and

(iii) extend outside the recess to a distance of not less than 150 mm beyond each side of the opening between the jambs; or

(d) (if it is constructed otherwise than in conjunction with a fireplace recess) be of such dimensions as to contain a square having sides measuring not less than 840 mm.

(2) No combustible material shall be laid on a constructional hearth serving a Class I appliance, as a continuation of the finish of the adjoining floor, which–

(a) (if the appliance is installed directly upon or over the constructional hearth) would be nearer to the base of the appliance when installed than the distances specified in regulation M4(4); or

(b) (if the appliance is installed upon or over a superimposed hearth which complies with the requirements of regulation M4(3)(c)) would extend under the superimposed hearth to a distance of more than 25 mm or be nearer to the base of the appliance when installed than 150 mm, measured horizontally.

(3) No combustible material, other than timber fillets supporting the edges of a hearth where it adjoins a floor, shall be placed under a constructional hearth serving a Class I appliance within a distance of 250 mm, measured vertically, from the upper surface of the hearth, unless such material is separated from the underside of the hearth by an air space of not less than 50 mm.

(4) Nothing in this regulation shall prohibit–

(a) the construction of a pit to hold the ash container of an appliance if–

(i) the sides and bottom of the pit are constructed of non-combustible material not less than 50 mm thick;

(ii) there is no opening in the sides or bottom of the pit other than

the outlet of any duct constructed in compliance with sub-paragraph (b), or (if a side of the pit is formed by an external wall of the building) an opening situated so as to permit the removal of the container from outside the building and fitted with a closely fitting cover of non-combustible material;

(iii) no combustible material is built into a wall below or beside the pit within 225 mm of the inner surface of the pit; and

(iv) any combustible material placed elsewhere than in a wall below or beside the pit is separated from the outer surface of the pit by an airspace of not less than 50 mm; or

(b) the construction below the upper surface of a constructional hearth of a duct to be used solely for the admission of combustion air to an appliance either from outside the building, or (if the floor adjoining the hearth is a floor next to the ground and is constructed as a suspended floor) from the space beneath the floor, if the duct is smoke-tight and constructed of non-combustible material.

L5 Walls and partitions adjoining hearths for Class I appliances

Subject to the requirements of regulation M4(7), if any part of a wall or partition, other than a wall forming the back or a jamb of a fireplace recess which complies with the requirements of regulation L3, adjoins, or is within 150 mm of, a constructional hearth serving a Class I appliance, that part shall be constructed to a height of not less than 1.2 m above the upper surface of the hearth of solid non-combustible material not less than 75 mm thick.

L6 Chimneys for Class I appliances

(1) Any chimney serving a Class I appliance shall be either–

(a) lined with any one of the following–

(i) clay flue linings complying with BS 1181: 1971 (1977);

(ii) rebated or socketed flue linings made from kiln-burnt aggregate and high alumina cement; or

(iii) clay pipes and fittings which comply with BS 65: 1981 and are of British Standard type, socketed, imperforate and acid resistant; or

(b) constructed of concrete flue blocks made of, or having inside walls made of, kiln-burnt aggregate and high alumina cement and so made that no joints between blocks other than bedding joints adjoin any flue:

Provided that, notwithstanding the requirements of this paragraph, a chimney may be lined with a flexible flue liner if–

(i) the chimney is already lined or constructed in accordance with this paragraph; or

(ii) the chimney is not so lined or constructed but was erected under former control.

(2) Any linings or blocks described in paragraph (1) shall be jointed and pointed with cement mortar and any linings described in paragraph (1)(a) shall be so built into the chimney that the socket of each component is uppermost.

(3) If a chimney serving a Class I appliance is either–

(a) constructed of bricks or blocks of concrete or burnt clay or of concrete cast *in situ* and in any case lined with one of the materials specified in paragraph (1)(a); or

(b) constructed of flue blocks in compliance with paragraph (1)(b),

any flue in the chimney shall be surrounded and separated from any other flue in the chimney by solid material not less than 100 mm thick, excluding the thickness of any flue lining:

Provided that–

(i) if the chimney forms part of a wall separating buildings or dwellings within a building and is not back-to-back with another chimney, that part of the chimney which is below the roof and separates a flue from the adjoining building or dwelling shall comprise either a solid wall not less than 200 mm thick or a cavity wall, each leaf of which is not less than 100 mm thick; and for the purposes of this sub-paragraph, any such thickness shall not include the thickness of any flue lining; or

(ii) if the chimney forms part of an external wall and is constructed of blocks complying with paragraph (1)(b), and there is a distance of not less than 140 mm between the flue and any timber external cladding or other combustible material adjoining the outer surface of that part of the chimney which separates the flue from the external air, such part may be less than 100 mm thick but not less than 65 mm thick.

(4) If a flue in a chimney serving a Class I appliance communicates with a fireplace recess, the dimensions of every part of the flue, measured in cross-section, shall be such as will contain a circle having a diameter of not less than 175 mm:

Provided that nothing in this paragraph shall prohibit restriction of the flue to form a throat.

(5) If a flue in a chimney serving a Class I appliance does not communicate with a fireplace recess, the flue shall terminate at its lower end in a chamber which–

(a) has means of access for inspection and cleaning fitted with a non-combustible closely fitting cover; and

(b) is capable of containing a condensate collecting vessel.

(6) No part of a flue in a chimney serving a Class I appliance shall make an angle with the horizontal of less than 45°.

(7) Nothing in this regulation shall apply to any part of a flue in a chimney pot or other flue terminal.

(8) No chimney shall incorporate more than three bends.

L7 Flue pipes for Class I appliances

(1) For the purposes of this regulation, the expression ROOF SPACE shall not include any void between the roof covering and any ceiling which is applied or fixed to the underside of the roof and is in a plane parallel to that of the roof covering.

(2) Except as provided by paragraph (3) no flue pipe serving a Class I appliance (whether encased or not) shall pass through any roof space, floor, internal wall or partition.

(3) Any such pipe described in paragraph (2) may pass through–

(a) a floor supporting a chimney so as to discharge vertically into the bottom of a flue in that chimney; or

(b) a wall forming part of a chimney so as to discharge into the side of a flue in that chimney.

(4) The cross-sectional area of any flue pipe serving a Class I appliance shall not be less than the cross-sectional area of the outlet of that appliance.

(5) No part of a flue pipe serving a Class I appliance shall make an angle above the horizontal of less than 45° except where it is necessary to discharge a back-outlet appliance into a fireplace, vertical flue or flue in a chimney by means of a connection which is accessible for cleaning and does not exceed 300 mm in overall length.

(6) No flue pipe shall incorporate more than three bends.

L8 Deemed-to-satisfy provisions regarding materials for the construction of flue pipes for Class I appliances

A flue pipe serving a Class I appliance shall be deemed to satisfy such requirements of regulation L2(1)(a)(i) as relate to the nature, quality and thickness of its materials if–

*(a) it is constructed of cast iron complying with BS 41: 1973(*1981) *or of mild steel not less than 4.75 mm thick;*

(b) (being a pipe serving an appliance which is neither an open fire nor capable of being used as an open fire) any part of the pipe which is within 1.8 m of its junction with the appliance is constructed of materials specified in sub-paragraph (a) and any other part of the pipe is of heavy quality fibrous-cement complying with BS 835: 1973 (1984); or

(c) *(being a pipe serving a free-standing appliance which is an open fire and is not capable of being used as a closed stove) the pipe connects the outlet of the appliance to a chimney, is not more than 460 mm long and is made of sheet steel having a thickness of not less than 1.2 mm.*

L9 Deemed-to-satisfy provisions regarding placing and shielding of flue pipes for Class I appliances

(1) *A flue pipe serving a Class I appliance shall be deemed to satisfy such requirements of regulation L2(1)(a)(ii) as relate to its placing or shielding if it complies with the relevant provisions of this regulation.*

(2) *If the flue pipe passes through a roof or external wall otherwise than for the purpose of discharging in the manner described in regulation L10(2) or (3), the flue pipe shall be–*

(a) at a distance of not less than three times its external diameter from any combustible material forming part of the roof or wall;

(b) (i) (in the case of a pipe passing through a roof) separated from any combustible material forming part of the roof by solid non-combustible material not less than 200 mm thick; or

(ii) (in the case of a pipe passing through an external wall) separated from any combustible material forming part of the wall by solid non-combustible material not less than 200 mm thick (if the combustible material is below or beside the pipe), or not less than 300 mm thick (if the combustible material is above the pipe); or

(c) enclosed in a sleeve of metal or fibrous-cement which–

(*i*) *is carried through the roof or wall to project not less than 150 mm beyond any combustible material forming part of the roof or wall;*

(*ii*) *has between the sleeve and the pipe a space of not less than 25 mm packed with non-combustible thermal insulating material; and*

(*iii*) (*A*) (*if the roof or wall is of hollow construction with an air space between the outer surface of the sleeve and any combustible material in the roof or wall*) *is so fitted that such material is not less than 25 mm from the outer surface of the sleeve and not less than one and a half times the external diameter of the pipe from the outer surface of the pipe; or*

(*B*) (*if the roof or wall is of solid construction*) *is so fitted that any combustible material forming part of the roof or wall is not less than 190 mm from the outer surface of the pipe and is separated from the outer surface of the sleeve by solid non-combustible material not less than 115 mm thick.*

(3) *Where the flue pipe is adjacent to a wall or partition, it shall be at a distance of–*

(*a*) *not less than three times its external diameter from any combustible material forming part of the wall or partition; or*

(*b*) *not less than one and a half times its external diameter from any such combustible material, if such material is protected by a shield of non-combustible material which–*

(*i*) *is so placed that there is an air space of not less than 12.5 mm between the shield and the combustible material or between the shield and any non-combustible material which covers the combustible material; and*

(*ii*) *is of such width, and is fixed between the wall or partition and the pipe in such a position in relation to the pipe, that it projects on either side of it for a distance of not less than one and a half times the external diameter of the pipe.*

(4) *If the flue pipe passes under any floor, roof or ceiling, it shall be at a distance of–*

(*a*) *not less than four times its external diameter from any combustible material forming part of the floor, roof or ceiling; or*

(*b*) *not less than three times its external diameter from any such combustible material, if such material is protected by a shield of non-combustible material which–*

(*i*) *has an air space of not less than 12.5 mm between the shield and the combustible material or between the shield and any non-combustible material which covers the combustible material; and*

(*ii*) *is of such width, and is fixed between the floor, roof or ceiling and the pipe in such a position in relation to the pipe that it projects on either side of it for a distance of not less than two and a half times the external diameter of the pipe.*

L10 Proximity of combustible material – Class I appliances

(1) Subject to paragraphs (2) and (3), no combustible material shall be so placed in any chimney or fireplace recess serving a Class I appliance, or in any wall of which such a chimney or recess forms part, as to be nearer to a flue, to the inner surface of the recess, or to an opening into a flue or through the back or jambs of the recess, than 150 mm (in the case of a wooden plug) or 200 mm (in the case of any other material).

(2) Where a flue pipe serving a Class I appliance discharges into the side of a flue in a chimney, any combustible material placed in the chimney, or in any wall of which the chimney forms part, shall be separated from the flue pipe by solid non-combustible material not less than 200 mm thick (if such material is beside or below the pipe) or not less than 300 mm thick (if such material is above the pipe).

(3) Where a flue pipe serving a Class I appliance discharges into the bottom of a flue in a chimney supported by a slab, floor or roof, any combustible material forming part of or placed in the slab, floor or roof shall be separated from the flue pipe by solid non-combustible material not less than 200 mm thick.

(4) Where the thickness of solid non-combustible material surrounding a flue in a chimney serving a Class I appliance is less than 200 mm, no combustible material, other than a floorboard, skirting board, dado rail, picture rail, mantleshelf or architrave, shall be so placed as to be nearer than 38 mm to the outer surface of the chimney.

(5) No metal fastening which is in contact with combustible material shall be so placed in any chimney or fireplace recess serving a Class I appliance, or in any wall of which such a chimney or recess forms part, as to be nearer than 50 mm to a flue, to the inner surface of the recess, or to an opening into a flue or through the back or jambs of the recess.

L11 Openings into flues for Class I appliances

No opening shall be made into any flue in a chimney or flue pipe

serving a Class I appliance except–

(a) an opening made for inspection or cleaning and fitted with a closely fitting cover of non-combustible material;

(b) an air inlet which is in the same room or internal space as the appliance, is fitted with a cover of non-combustible material and is capable of being closed; or

(c) an opening which is in the same room or internal space as the appliance and is fitted with a draught stabiliser or explosion door of non-combustible material.

L12 Flues communicating with more than one room or internal space – Class I appliances

No flue in a chimney or flue pipe serving a Class I appliance shall communicate with more than one room or internal space in a building:

Provided that nothing in this regulation shall prohibit–

(a) the installation of a back-to-back grate;

(b) the installation of two or more gas-fired incinerators in accordance with the requirements of regulation M6(2); or

(c) the making of an opening which complies with the description contained in regulation L11(a) for the purpose of giving access to a flue from a room or internal space other than that in which the appliance is installed.

L13 Outlets of flues for Class I appliances

The outlet of any flue in a chimney or flue pipe serving a Class I appliance shall be so situated that the top of such chimney or flue pipe (exclusive of any chimney pot or other flue terminal) is not less than–

(a) 1 m above the highest point of contact between the chimney or flue pipe and the roof:

Provided that where a roof has a pitch on both sides of the ridge of not less than 10° with the horizontal, and the chimney or flue pipe passes through the roof at or within 600 mm of the ridge, the top of the chimney or flue pipe (exclusive of any chimney pot or other flue terminal) may be less than 1 m but not less than 600 mm above the ridge;

(b) 1 m above the top of any part of a window or skylight capable of being opened, or of any ventilator, air inlet to a ventilation system

or similar opening, which is situated in any roof or external wall of a building and is not more than 2.3 m, measured horizontally, from the top of the chimney or flue pipe; and

(c) 1 m above the top of any part of a building (other than a roof, parapet wall or another chimney or flue pipe) which is not more than 2.3 m, measured horizontally, from the top of the chimney or flue pipe.

L14 Chimneys for Class II appliances

(1) Subject to the provisions of paragraph (5), any chimney serving a Class II appliance not being an appliance ventilation duct, shall be either–

(a) lined with any one of the following–

(i) acid-resistant tiles embedded in, and pointed with, high alumina cement mortar;

(ii) pipes which comply with specification (a) of regulation L16; or

(iii) clay flue linings which comply with BS 1181: 1971 (1977) and are jointed and pointed with fire clay cement mortar; or

(b) constructed of dense concrete blocks made of, or having inside walls made of, high alumina cement, and in either case jointed and pointed with high alumina cement mortar:

Provided that nothing in sub-paragraph (b) shall prohibit the use of bricks or of dense concrete blocks made otherwise than with high alumina cement, in either case jointed and pointed with cement mortar, for the construction of a chimney without flue linings if–

(i) the flue serves one appliance only;

(ii) the appliance served by the flue is of a type described in column (2) of the Table to this regulation; and

(iii) the length of the flue is such as is permitted by the Table having regard to the particulars of the flue and the type of appliance specified therein.

(2) Any flue in a chimney serving a Class II appliance (including an appliance ventilation duct) shall be surrounded and separated from any other flue in the chimney by solid material not less than 25 mm thick:

Provided that where two or more flue pipes are encased in a duct, nothing in this regulation shall require such flue pipes to be so separated.

(3) No fastening, other than a non-combustible support to a flue liner, shall be built into, or placed in, any chimney serving a Class II appliance (including an appliance ventilation duct) within 25 mm of any flue.

(4) Nothing in this regulation shall apply to any part of a flue in a chimney pot or other flue terminal.

(5) Notwithstanding the requirements of paragraph (1), a chimney serving a Class II appliance (not being an appliance ventilation duct) may be lined with a flexible flue liner if–

(a) the chimney is already lined or constructed in accordance with that paragraph; or

(b) the chimney is not so lined or constructed but was erected under former control.

Table to Regulation L14

Maximum length of certain flues

Situation of flue	Type of appliance	Maximum length of flue (in m)	
		If flue is circular or square, or is rectangular and has the major dimension not exceeding three times the minor dimension	If flue is rectangular and has the major dimension exceeding three times the minor dimension
(1)	(2)	(3)	(4)
(a) Flue formed by a chimney or flue pipe which is internally situated (that is to say, otherwise than as (b) below)	Gas fire	21	12
	Heater installed in drying cabinet or airing cupboard or instantaneous water heater	12	Not permitted
	Air heater or continuously burning water heater	6	Not permitted
(b) Flue formed by a chimney having one or more external walls; or by a flue pipe which is situated externally or within a duct having one or more external walls	Gas fire	11	6
	Heater installed in drying cabinet or airing cupboard or instantaneous water heater	6	Not permitted

L15 Flue pipes for Class II appliances

Any flue pipe serving a Class II appliance shall, if it is constructed of pipes of the spigot and socket type, have the socket of each component uppermost.

L16 Deemed-to-satisfy provisions regarding materials for the construction of flue pipes for Class II appliances

A flue pipe serving a Class II appliance shall be deemed to satisfy such requirements of regulation L2(1)(a) as relate to the nature, quality and thickness of its materials if it complies with any of the following specifications:

(*a*) *clay pipes and fittings which comply with BS 65: 1981, are of British Standard type, socketed, imperforate and acid resistant and are jointed and pointed with high alumina cement mortar;*

(*b*) *cast iron spigot and socket flue pipes and fittings which comply with BS 41: 1973 (1981) and are coated on the inside with acid-resistant vitreous enamel and jointed with an acid-resistant compound;*

(*c*) *sheet metal flue pipes and fittings which comply with BS 715: 1970 excluding the reference to epoxy resin from Table 2 of that publication;*

(*d*) *stainless steel pipes and fittings; or*

(*e*) *fibrous-cement flue pipes and fittings which–*

(*i*) *comply with BS 835: 1973(1984) or (except where they form a flue serving an incinerator) BS 567: 1973 (1984); and*

(*ii*) *(unless the flue serves one appliance only, and that appliance is a type specified in column (2) of the Table to regulation L14, and the length of the flue is such as is permitted by that Table having regard to the particulars of the flue and the type of appliance specified therein), are coated on the inside with an acid-resistant compound which either is prepared from vinyl acetate polymer or has a rubber derivative base; and are jointed with an acid-resistant compound.*

L17 Deemed-to-satisfy provisions regarding placing and shielding of flue pipes for Class II appliances

(*1*) *A flue pipe serving a Class II appliance shall be deemed to satisfy such requirements of regulation L2(1)(a)(ii) as relate to its placing and shielding if–*

(a) no part of the flue pipe is less than 50 mm from any combustible material; and

(b) where it passes through a roof, floor, ceiling, wall or partition constructed of combustible materials, the flue pipe is enclosed in a sleeve of non-combustible material and is separated from the sleeve by an air space of not less than 25 mm.

(2) A flue pipe serving a Class II appliance (being a pipe which is situated neither in the room or internal space in which the appliance is installed nor in an enclosed space to which no person has access) shall be deemed to satisfy such requirements of regulation L2(3)(a) as relate to the placing and shielding of a pipe within a building if–

(a) it is enclosed, either separately or together with one or more other flue pipes serving Class II appliances, in a casing constructed of suitable, but not necessarily imperforate, non-combustible material;

(b) there is a distance of at least 25 mm between the inside of the casing and the outside of any flue pipe; and

(c) no combustible material is built into, or enclosed within, the casing.

L18 Sizes of flues for Class II appliances

(1) The measurements in cross-section of a flue serving a Class II appliance (except where any part of that flue is in a ridge terminal) shall be such that–

(a) no dimension is less than 63 mm; and

(b) (i) if the flue is rectangular in section and is not in an appliance ventilation duct, the major dimension is not more than–

(A) six times the minor dimension if the flue serves only one gas fire or five times the minor dimension if the flue serves only one appliance other than a gas fire; or

(B) one and a half times the minor dimension, if the flue is a main flue; or

(ii) if the flue is rectangular in section and is in an appliance ventilation duct, the major dimension is not more than twice the minor dimension.

(2) The cross-sectional area of a flue serving one Class II gas fire shall be not less than 12 000 mm^2 and the area of the aperture in any local restrictor unit in the flue shall be not less than 6000 mm^2.

(3) The cross-sectional area of a flue serving one Class II appliance other than a gas fire shall be not less than the area of the outlet of that appliance.

(4) The cross-sectional area of a main flue serving two Class II gas appliances (other than gas fires) installed in the same room or internal space shall be not less than the larger of the following, that is to say–

(a) the area of the larger of the outlets of the appliances; or

(b) the area specified in the Table to this regulation, according to the total input rating of the appliances.

(5) Subject to the requirements of regulation M10(d)(iv), the nominal cross-sectional area of a main flue serving two or more Class II appliances installed in different storeys of a building shall be not less than 40,000 mm^2.

(6) The cross-sectional area of a flue in an appliance ventilation duct shall be such as will ensure that the requirements of regulation M10(b)(iii) are satisfied.

Table to Regulation L18

Minimum cross-sectional area of a flue serving two Class II gas appliances (other than gas fires) installed in the same room or internal space

Total input ratings of appliances (in kW)		Minimum cross-sectional area of flue (in mm^2)
Exceeding (1)	Not exceeding (2)	(3)
—	13	3 750
13	18	5 750
18	30	7 000
30	35	9 000
35	45	11 500

L19 Openings into flues for Class II appliances

No opening shall be made into a flue serving a Class II appliance except–

(a) an opening made for inspection or cleaning, and fitted with a gas-tight cover of non-combustible material; or

(b) (if the flue serves an appliance other than a room-sealed appliance or incinerator) an opening which is in the same room or internal space as the appliance and serves as an air inlet or is fitted with a draught diverter or a draught stabiliser.

L20 Flues communicating with more than one room or internal space – Class II appliances

(1) No flue serving a Class II appliance shall communicate with more than one room or internal space in a building except–

(a) a flue constructed to serve two or more Class II gas appliances installed in accordance with regulation M10; or

(b) a flue constructed to serve two or more Class II incinerators installed in accordance with regulation M11:

Provided that nothing in this paragraph shall prohibit the making of an opening as described in regulation L19(a), for the purpose of giving access to a flue from any room or internal space other than that in which the appliance is installed.

(2) A main flue serving two or more Class II gas appliances installed in different storeys of a building (being neither a flue in an appliance ventilation duct nor a flue through which the passage of the products of combustion is assisted by a mechanically operated system of extraction) shall be so constructed that–

(a) it is not formed by a chimney comprising part of an external wall or by a flue pipe encased in a duct comprising part of an external wall or situated externally;

(b) it is without offsets;

(c) it is not inclined at an angle greater than 10° from the vertical; and

(d) each appliance discharges into it by way of a subsidiary flue complying with paragraph (3).

(3) A subsidiary flue serving a Class II gas appliance, being a flue which discharges into a main flue to which paragraph (2) relates, shall–

(a) discharge into such main flue at a point not less than 1.2 m above the outlet of the appliance which it serves; and

(b) make an angle of not less than 45° with the horizontal except where any other angle is necessary for the purpose of connecting the subsidiary flue to the appliance or to the main flue.

L21 Outlets of flues for Class II appliances

(1) The outlet of any flue serving a Class II appliance shall be–

(a) fitted with a flue terminal designed to allow free discharge, to minimise down-draught and to prevent the entry of any matter which might restrict the flue;

(b) so situated externally that a current of air may pass freely across it at all times; and

(c) so situated in relation to any opening (that is to say, any part of a window or skylight capable of being opened or any ventilator, air inlet to a ventilation system or similar opening in any roof or external wall of a building) that–

(i) (if the appliance is a gas appliance) no part of the outlet is less than 600 mm from any opening; or

(ii) (if the appliance is an incinerator) no part of the outlet is less than 1 m above the top of any opening if such opening is less than 2.3 m, measured horizontally, from the outlet.

(2) The outlet of a main flue serving two or more Class II gas appliances installed in different storeys of a building (being neither a flue in an appliance ventilation duct nor a flue through which the passage of the products of combustion is assisted by a mechanically operated system of extraction) and into which each appliance discharges by way of a subsidiary flue, shall be so situated that–

(a) the outlet is not less than 6 m above any appliance served by the flue; and

(b) (i) where the chimney or flue pipe passes through a pitched roof, the outlet is above the level of the ridge of the roof; or

(ii) where the chimney or flue pipe passes through a flat roof, the outlet is not below the highest of the following levels–

(A) 600 mm above the roof;

(B) 600 mm above any parapet which is within 1.5 m, measured horizontally, of the outlet;

(C) the level of the top of any other part of the structure which is within 1.5 m, measured horizontally, of the outlet; or

(D) a level corresponding to the height of any part of the structure which is at a distance exceeding 1.5 m, measured horizontally, from the outlet reduced by one third of the difference between such distance and 1.5 m.

L22 Insulated metal chimneys serving Class I or Class II appliances

(1) An insulated metal chimney serving a Class I or Class II appliance shall be so constructed as to comply with the relevant requirements of regulations L2(4) and (6), L6(4) and (7), L11, L12, L13, L18(1), (2), (3) and (4), L19, L20(1) and L21 and with the provisions of paragraph (2):

Provided that regulation L20(1)(a) shall have effect as though there were substituted for the reference to regulation M10 a reference to

regulation M10(a).

(2) The provisions to which reference is made in paragraph (1) are as follows–

(a) the chimney shall be constructed of components complying with–

(i) BS 4543: Part 2: 1976 for solid fuel appliances; or

(ii) BS 4543: Part 2 or Part 3: 1976 for oil burning appliances;

(b) joints between components shall not be situated within the thickness of any wall, floor, ceiling or roof;

(c) if the chimney serves a Class I appliance, no part of the flue shall make an angle with the horizontal of less than 45° except where necessary to connect the chimney to the appliance;

(d) no combustible material shall be placed so as to be nearer to the outer surface of the chimney than the distance (X) adopted for the purposes of the test procedures specified in BS 4543: Part 1: 1976;

(e) the chimney shall be readily accessible for inspection and replacement throughout its length;

(f) if any part of the chimney is situated within a cupboard or storage space–

(i) that part shall be enclosed by a removable casing constructed of suitable imperforate material;

(ii) the distance between the inside of the casing and the outside of the chimney shall be not less than the distance specified in sub-paragraph (d); and

(iii) no combustible material shall be enclosed within the casing; and

(g) no part of the chimney shall pass through or be attached to any building or part of a building other than a building or part in the same occupation as that within which the appliance served by the chimney is situated.

PART M

Heat-producing appliances and incinerators

M1 Interpretation

In this Part–

(a) the provisions of regulation L1(1) shall apply except that neither APPLIANCE nor INCINERATOR shall include an incinerator employing electricity as a means of igniting refuse;

(b) PERMANENT VENT means a purpose-made opening or duct which is designed to allow the passage of air at all times; and

VENTILATION OPENING has the meaning assigned to it by regulation K1.

M2 Prevention of emission of smoke – (Clean Air)

In any building (other than a building erected under former control) there shall not be installed for the purposes of heating or cooking in that or any other building any appliance which discharges the products of combustion into the atmosphere, unless that appliance is designed to burn as fuel gas, oil, coke or anthracite:

Provided that nothing in this regulation shall prohibit the installation of–

(i) a furnace which complies with Article 5 of the Clean Air (Northern Ireland) Order 1981**(a)** (which requires that new furnaces shall so far as practicable be smokeless);

(ii) an appliance of a class exempted conditionally or unconditionally from the provisions of Article 17 of that Order (which relates to smoke control areas) by any order for the time being in force under paragraph (7) of that Article; or

(a) S.I. 1981/158 (N.I. 4)

(iii) a solid fuel appliance with a bottom grate unsuitable for burning coke or anthracite but designed so as to be capable of use with an alternative bottom grate which is suitable for burning such fuel.

M3 High-rating appliances

No high-rating appliance shall be installed in a building unless–

(a) it discharges into a flue;

(b) the outlet of the flue is so situated as to comply with the requirements of regulation L2(4)(a);

(c) any chimney, flue pipe, fireplace recess or constructional hearth which serves it, complies with the relevant requirements of regulation L2(1), (2), (3) and (6);

(d) any other part of the building is so constructed, situated or protected as to ensure that it will not be ignited by heat from the appliance; and

(e) provision is made for the introduction of combustion air in sufficient quantity to ensure the efficient operation of the appliance and the proper discharge from the appliance through the flue which serves it.

M4 Class I appliances

(1) Subject to the special provisions relating to certain Class I oil-burning appliances set out in regulation M5, no Class I appliance shall be installed in a building unless the installation complies with the provisions of this regulation.

(2) Provision shall be made for the introduction of combustion air into the room or other internal space in which the appliance is installed in sufficient quantity to ensure the efficient operation of the appliance and (except in the case of an appliance to which regulation M5(4)(b) refers) the proper discharge from the appliance through the flue which serves it.

(3) The appliance shall be placed upon or over–

(a) a constructional hearth which complies with the relevant provisions of Part L;

(b) a constructional hearth built under former control and conforming with the provisions of Part L, other than regulation L4(1)(c)(ii) or L4(1)(d); or

(c) a superimposed hearth constructed of non-combustible materials, not less than 48 mm thick and placed wholly or partly upon a constructional hearth which complies with either sub-paragraph (a) or sub-paragraph (b).

(4) Where the appliance is installed upon or over a constructional hearth without an intervening superimposed hearth, the distance measured horizontally from the base of the appliance to the edges of the hearth, or (if combustible material is laid on the hearth as a continuation of the finish of the adjoining floor) from the base of the appliance to the combustible material, shall be not less than–

(a) at the front, 300 mm (if the appliance is an open fire or a stove which can, when opened, be operated as an open fire) or 225 mm (in any other case); and

(b) at the back and sides, 150 mm, or (if the hearth extends to a wall or partition) such smaller distance as will not contravene the requirements of paragraph (7).

(5) If the appliance is installed upon or over a superimposed hearth, the appliance shall be so placed that–

(a) it is wholly over the constructional hearth beneath that superimposed hearth;

(b) no part of the base of the appliance is within 150 mm, measured horizontally, of any combustible material beside or upon the constructional hearth; and

(c) the distance measured horizontally from the base of the appliance to the edges of the superimposed hearth is not less than the dimensions given in paragraph (4).

(6) If the appliance is not a free-standing appliance and is placed on or over a constructional hearth in a fireplace recess, the recess shall be so constructed as to comply with the relevant provisions of Part L.

(7) The appliance shall be so placed that no part of its back or sides is within 150 mm, measured horizontally, of a wall or partition (other than a wall forming part of a fireplace recess which complies with the relevant provisions of Part L) unless that part of the wall or partition which is situated between the floor and the level of 300 mm above the top of the appliance is–

(a) constructed of solid non-combustible material; and

(b) not less than 200 mm thick (if the wall or partition is less than 50 mm from the appliance) or 75 mm thick (in any other case).

(8) Any part of the building (other than a wall or partition to which the

provisions of paragraph (7) relate) which is in proximity to the appliance and above the level of the adjoining floor and is constructed of combustible materials, shall be so situated or protected as to ensure that it will not be ignited by heat from the appliance.

(9) The appliance shall discharge into a flue–

(a) in a chimney or in a flue pipe either of which complies with the relevant provisions of Part L; or

(b) in a chimney built under former control and conforming with the relevant provisions of Part L excluding regulation L6.

(10) Subject to the exception in respect of incinerators contained in regulation M6(2), the flue into which the appliance discharges shall serve no other appliance:

Provided that nothing in this paragraph shall prohibit the installation of two solid fuel appliances or two oil-burning appliances so as to discharge into the same flue if–

(a) both appliances are in the same room;

(b) each appliance is a closed slow-burning appliance;

(c) the aggregate rating of the appliances does not exceed 45 kW; and

(d) the cross-sectional area of the flue is not less than the area of the larger of the flue connections.

(11) An appliance which is an open fire and is not capable of being used as a closed stove shall not be installed unless secure means of anchorage for an effective fireguard are, if not provided in the appliance itself, provided in the adjoining structure.

M5 Special provisions for certain Class I oil-burning appliances

(1) In this regulation, any reference to hearth temperature, surface temperature or flue gas temperature is a reference to that temperature as determined respectively in accordance with Test Procedure No. 11, Measurement Method 8 or Measurement Method 3 prescribed in BS 4876: 1984.

(2) Paragraphs (3), (4) and (5) of regulation M4 shall not apply to the installation of a Class I oil-burning appliance if–

(a) the hearth temperature of the appliance does not exceed 100°C and is so limited by means other than the interposition of unprotected insulating material between the burner and the base of the appliance; and

(b) the appliance is placed on, or incorporates, an imperforate rigid seating which is constructed of non-absorbent, non-combustible

material and is of such dimensions that no part of the front, back or sides of the appliance extends (if projected on plan) beyond the edges of the seating.

(3) Paragraphs (6), (7) and (8) of regulation M4 shall not apply to the installation of a Class I oil-burning appliance if the surface temperature of the side panels of the appliance does not exceed 100°C.

(4) Paragraph (9) of regulation M4 shall not apply to the installation of a Class I oil-burning appliance if–

(a) the flue gas temperature of the appliance does not exceed 260°C and the appliance discharges into–

(i) a flue in a chimney (not being an appliance ventilation duct) which is lined or constructed as prescribed in regulation L14 (excluding the proviso to paragraph (1) thereof); or

(ii) a flue in a flue pipe which complies with regulation L15 and with any one of the specifications set out in regulation L16 (excluding the words in brackets in specification (e)(ii) therein) and is installed in accordance with regulation L17; or

(b) the appliance has an output rating not exceeding 3 kW and is designed to operate without being connected to a flue.

M6 Additional provisions and exceptions for Class I incinerators

(1) No Class I incinerator shall be installed in a building unless–

(a) an after-burner or other means of smoke elimination is fitted; and

(b) there are means of access for cleaning the flue which serves it.

(2) Notwithstanding anything contained in regulation M4(10), a gas-fired incinerator may be installed in each of two or more storeys of a building so as to discharge into the same flue if–

(a) the discharge through the flue is assisted by a mechanically operated system of extraction;

(b) there are means for automatically cutting off the gas supply in the event of failure of the system of extraction; and

(c) each incinerator is fitted with a flame-failure device.

M7 Deemed-to-satisfy provisions for the supply of combustion air to Class I appliances

(1) The provisions of this regulation shall not apply if the room or space in which the appliance is installed is served by a warm air heating system

or by a mechanical ventilation or air conditioning system.

(2) *The requirements of regulation M4(2) shall be deemed to be satisfied if the room or space in which the appliance is installed has–*

(*a*) *in the case of an open fire which is not capable of being used as a closed stove or of an appliance to which regulation M5(4)(b) refers, a ventilation opening; or*

(*b*) *in any other case, a permanent vent which–*

(*i*) *has an unobstructed cross-sectional area of not less than the minimum area specified in the Table to this regulation; and*

(*ii*) *communicates directly either with the external air or with a void space which is situated beneath the lowest floor of the building and has a permanent vent the unobstructed cross-sectional area of which is not less than the minimum area prescribed for the purposes of sub-paragraph (b)(i).*

Table to Regulation M7

Minimum unobstructed cross-sectional area of permanent vent	
Number of appliances installed in room or space *(1)*	*Minimum unobstructed cross-sectional area of permanent vent* *(2)*
1	*Area equivalent to–* *(i) cross-sectional area of flue connection;* *or* *(ii) 550 mm² for each kilowatt (or part thereof) of the maximum output per hour of the appliance,* *whichever is the greater*
2 or more	*Area equivalent to–* *(i) cross-sectional area of larger or largest flue connection;* *or* *(ii) 550 mm² for each kilowatt (or part thereof) of the aggregate maximum output per hour of the appliances,* *whichever is the greater*

M8 Class II appliances

(1) No Class II appliance shall be installed in a building unless the installation complies with this regulation.

(2) Unless the appliance is a room-sealed appliance or is a gas heater installed in a cabinet or cupboard as specified in regulation M9(5)(b), provision shall be made for the introduction of combustion air into the room or other internal space in which the appliance is installed in sufficient quantity to ensure the efficient operation of the appliance and, in the case of a flued appliance, the proper discharge from the appliance through the flue which serves it.

(3) Below the appliance there shall be a hearth of solid non-combustible material which–

(a) in the case of a back-boiler (whether installed alone or in association with any other appliance)–

(i) is not less than 25 mm thick and is placed on non-combustible supports of a height not less than 25 mm;

(ii) extends not less than 150 mm beyond the back and sides of the back-boiler or, if there is a wall within 150 mm from the appliances, up to that wall; and

(iii) extends to the front of the back-boiler; or

(b) in any other case–

(i) is not less than 12.5 mm thick;

(ii) extends not less than 150 mm beyond the back and sides of the appliance or, if there is a wall within 150 mm from the appliance, up to that wall; and

(iii) extends forward not less than 225 mm measured horizontally beyond any flame or incandescent material that may be present within the appliance:

Provided that this paragraph shall not apply if the appliance–

(i) is so installed that no part of any flame or incandescent material that may be present within the appliance is less than 225 mm above the floor; or

(ii) is constructed to the same specification as that of the type test specimen which satisfied the appropriate test requirements set out in–

BS 5258: Part 1: 1986;
BS 5258: Part 4: 1987;
BS 5258: Part 5: 1975;
BS 5258: Part 6: 1988;
BS 5258: Part 7: 1977;

BS 5258: Part 8: 1980;
BS 5258: Part 10: 1980 (1983);
BS 5258: Part 11: 1980 (1983);
BS 5258: Part 12: 1980; or
BS 5386: Part 3: 1980;
whichever is relevant.

(4) The back, top and sides of the appliance, including any draught-diverter associated with it, shall be separated from any combustible material forming part of the building (other than the floor or hearth beneath the appliance) by a shield of non-combustible material not less than 25 mm thick or by an air space of not less than 75 mm:

Provided that this paragraph shall not apply if the appliance is constructed to the same specification as that of the type test specimen which satisfied the appropriate test requirements set out in whichever is relevant of the publications referred to in proviso (ii) to paragraph (3).

(5) Subject to the provisions of paragraph (6) and to the exceptions in respect of gas appliances contained in regulation M9, the appliance shall discharge into either–

(a) a flue in a chimney, appliance ventilation duct or flue pipe which complies with the relevant provisions of Part L relating to Class II appliances;

(b) a flue in a chimney built under former control which complies with the relevant provisions of Part L relating to Class II appliances (excluding regulation L14); or

(c) in the case of a gas fire, a flue in a chimney which complies with the relevant provisions of Part L relating to Class I appliances (excluding, if the chimney was built under former control, regulation L6).

(6) No appliance shall be installed so as to discharge into a flue in a chimney which is not constructed in accordance with the requirements of regulation L6(1) or regulation L14(1) unless–

(a) the flue connects with a debris catchment space having means of access for the removal of debris which–

(i) in the case of a gas fire, has a capacity of not less than 0.012 m^3 and a depth of not less than 250 mm below the lowest point of entry of the gas fire flue spigot into the chimney; or

(ii) in any other case, has a depth of not less than 250 mm below the lowest point of entry of the appliance flue into the chimney; or

(b) a flue liner is inserted in the chimney.

(7) Subject to the exceptions contained in regulation M10 (in the case of a Class II gas appliance) or regulation M11 (in the case of a Class II incinerator), the flue into which the appliance discharges shall serve no other appliance.

(8) No Class II appliance other than a room sealed appliance shall be installed in a bath or shower room.

M9 Exceptions permitting discharge of certain Class II gas appliances otherwise than into a flue

(1) Notwithstanding anything contained in regulation M8(5), the following Class II gas appliances may discharge otherwise than into a flue–

(a) a room-sealed appliance only if it is installed in accordance with the provisions of paragraph (2); and

(b) an appliance described in paragraphs (3), (4), (5), (6), (7) or (8) only if it is installed in accordance with the provisions of those paragraphs, whichever is relevant.

(2) A room-sealed appliance may be installed in any room or internal space so as to discharge directly into the external air if–

(a) the inlet and outlet of the appliance are incorporated in a terminal which is designed to allow free intake of combustion air and free discharge of the products of combustion and to prevent the entry of any matter which might restrict the inlet or outlet;

(b) where the outlet is wholly or partly beneath any ventilation opening, permanent vent, inlet to a ventilation system or similar opening, no part of the outlet is within 300 mm measured vertically from the bottom of that opening; and

(c) where the outlet of the appliance is less than 2 m above the level of any adjacent ground, balcony, flat roof or place to which any person has access, the outlet is protected by a guard of durable and non-combustible material.

(3) Any oven, hotplate or grill, or any combination thereof comprising a gas cooker, may be installed so as to discharge into the room in which it is situated if the room has a volume not less than 6 m^3 and means of ventilation complying with the requirements of paragraph (9).

(4) A gas heater having an input rating which does not exceed 2 kW may be installed in a drying or airing cupboard situated in any room or

internal space other than a bath or shower room if–

(a) the room–

(i) being a bedroom or bed-sitting room, has a volume of not less than 21 m^3, or

(ii) in any other case, has a volume not less than 6 m^3; and

(b) the room or space has a means of ventilation which complies with the requirements of paragraph (9).

(5) A gas heater of any size may be installed in a drying or airing cupboard situated in any room or internal space, other than a bedroom, bed-sitting room, bath or shower room if–

(a) (i) the room or space has a ventilation opening; and

(ii) the cupboard has an outlet into a flue which has a cross-sectional area of not less than 12 000 mm^2 and complies with the provisions of Part L relating to flues serving Class II appliances; or

(b) (i) the cupboard has an inlet and an outlet connected to an appliance ventilation duct constructed in compliance with the provisions of Part L; and

(ii) the door of the cupboard, when opened, operates automatically to close the inlet and outlet.

(6) A water heating gas appliance may be installed in a bedroom or bed-sitting room if–

(a) the room has a ventilation opening and a volume not less than 21 m^3; and

(b) the appliance is provided to serve a hand basin or sink and is either–

(i) an instantaneous water heater having an input rating not exceeding 12 kW; or

(ii) a storage water heater having an input rating not exceeding 3 kW and a storage capacity not exceeding 9 litres.

(7) A water heating gas appliance may be installed in any room or internal space other than a bedroom, bed-sitting room, bath or shower room, if–

(a) the room or internal space has a volume not less than 6 m^3 and means of ventilation complying with the requirements of paragraph (9); and

(b) the appliance is not provided to heat water for a bath and comprises–

(i) an instantaneous water heater having an input rating not exceeding 12 kW;

(ii) a storage water heater having an input rating not exceeding 3 kW or, if the storage capacity does not exceed 45 litres, having an input rating not exceeding 4.5 kW;

(iii) a wash-boiler or washing machine having an input rating not exceeding 6 kW; or

(iv) a water heating appliance (other than an instantaneous water heater, storage water heater, wash-boiler or washing machine) having an input rating not exceeding 3 kW.

(8) One or more space heating gas appliances may be installed in any room or internal space other than a bedroom, bed-sitting room, bath or shower room, if–

(a) the room or internal space has a volume not less than 6 m^3 and means of ventilation complying with the requirements of paragraph (9); and

(b) the total input rating of the appliance or appliances does not exceed–

(i) if installed in a room, 50 W per m^3 of space in that room; or

(ii) if installed in an internal space other than a room, 100 W per m^3 of that space.

(9) The requirements as to means of ventilation to which reference is made in paragraphs (3), (4)(b), (7)(a) and (8)(a) are that the room or internal space shall have–

(a) a ventilation opening; and

(b) a permanent vent which–

(i) communicates directly with the external air; and

(ii) has an unobstructed cross-sectional area measured in square millimetres, which is not less than the minimum area specified in columns (2) to (5) of the Table to this regulation, according to the type of the appliance indicated in column (1) of that Table, where the volume of the room or internal space measured in cubic millimetres, in which the appliance is installed, accords with the specifications set out in columns (2) to (5).

Table to Regulation M9

Minimum unobstructed area of permanent vent

Type of flueless appliance	Volume of room or internal space (in m^3)			
	6 to <9	9 to <11	11 to <21	21 or more
	Minimum unobstructed cross-sectional area of permanent vent (in mm^2)			
(1)	(2)	(3)	(4)	(5)
1. Oven, hotplate or grill or any combination thereof comprising a gas cooker	6500*	3500*	—	—
2. Instantaneous water heater	3500	3500	—	—
3. Storage water heater	9500	9500	3500	—
4. Wash-boiler or washing machine	9500	9500	3500	—
5. Fixed space heater in a room	9500†	9500†	9500†	9500†
6. Fixed space heater not in a room	9500‡	9500‡	9500‡	9500‡
7. Gas heater in drying or airing cupboard	9500	9500	9500	9500

Notes:

If 2 or more flueless appliances are installed in the same room the total required vent area shall be the aggregate of the appropriate areas in columns (2) to (5).

< Means "less than".

* If the room containing the appliance has a door which opens directly to the external air no permanent vent is required.

† If the input rating exceeds 3 kW, an additional 3500 mm^2 per extra kW or part thereof is required.

‡ If the input rating exceeds 6 kW, an additional 3500 mm^2 per extra 2 kW or part thereof is required.

M10 Exceptions permitting discharge from two or more Class II gas appliances into the same flue

Notwithstanding anything contained in regulation M8(7)–

(a) two or more Class II gas appliances (other than gas fires) may be installed in the same room or internal space so as to discharge into the same flue if–

(i) the flue is a main flue which complies with the relevant provisions of Part L; and

(ii) each appliance is fitted with a draught-diverter;

(b) a Class II room-sealed gas appliance may be installed in a room or internal space in each of two or more storeys of a building so as to discharge into the same appliance ventilation duct if–

(i) the duct complies with the relevant provisions of Part L;

(ii) any appliance having an input rating exceeding 7.5 kW is equipped with a flame-failure device; and

(iii) under any conditions of normal operation of the appliances, the combustion air entering the uppermost appliance will not contain more than 2% in volume of carbon dioxide;

(c) a Class II gas appliance may be installed in a room or internal space in each of two or more storeys of a building so as to discharge into the same flue if–

(i) the flue is a main flue which complies with the relevant provisions of part L;

(ii) the discharge through the flue is assisted by a mechanically operated system of extraction;

(iii) there are means for automatically cutting off the gas supply in the event of failure of the system of extraction; and

(iv) each appliance is fitted with a flame-failure device;

(d) a Class II gas appliance may be installed in a room or internal space in each of two or more storeys of a building so as to discharge into the same flue if–

(i) in each such room or internal space the number of windows or parts of windows capable of being opened, and the number of such windows or parts of windows having a similar aspect, are the same as in each other such room or internal space;

(ii) the flue is a main flue which complies with the relevant provisions of Part L;

(iii) each appliance discharges into the main flue by way of a subsidiary flue which complies with the relevant provisions of Part L;

(iv) all appliances are of the same type, being any one of the types specified in the Table to this regulation, and the number and total input rating of such appliances do not exceed those specified in the Table according to the type of appliance and the cross-sectional area of the main flue; and

(v) each appliance is fitted with a flame-failure device.

Table to Regulation M10

Class II gas appliances discharging by way of subsidiary flues into a main flue

Type of appliance	Nominal cross-sectional area of main flue			
	Not less than 40 000 but less than 62 000 mm^2		62 000 mm^2 or more	
	Maximum number of appliances	Total rating (in kW)	Maximum number of appliances	Total rating (in kW)
(1)	(2)	(3)	(4)	(5)
Convector fire with controlled flue flow, having a maximum rate of flow of 70 m^3/hr	5	30	7	45
Instantaneous water heater	10	300	10	450
Storage water heater, central heating unit or air heater	10	120	10	180

M11 Additional provisions and exceptions for Class II incinerators

(1) No Class II incinerator shall be installed in any building unless there are means of access for cleaning the flue.

(2) Notwithstanding anything contained in regulation M8(7), a Class II incinerator may be installed in each of two or more storeys of a building so as to discharge into the same flue if—

(a) (i) the flue is a main flue which complies with the relevant provisions of Part L; and

(ii) each incinerator discharges into the main flue through a subsidiary flue complying with the relevant provisions of Part L; or

(b) (i) the flue is a main flue which complies with the relevant provisions of Part L;

(ii) the discharge through the flue is assisted by a mechanically operated system of extraction; and

(iii) there are means for automatically cutting off the gas supply in the event of failure of the system of extraction; and

(c) each incinerator is fitted with a flame-failure device.

M12 Deemed-to-satisfy provisions for the supply of combustion air to Class II appliances

(1) *The provisions of this regulation shall not apply if the room or space in which the appliance is installed is served by a warm air heating system or by a mechanical ventilation or air conditioning system.*

(2) *The requirements of regulation M8(2) shall be deemed to be satisfied if the room or space in which the appliance is installed has–*

(a) in the case of a gas fire, a ventilation opening;

(b) in the case of a flued appliance other than a gas fire, a permanent vent which complies with the requirements specified in regulation M7(2)(b); or

(c) in the case of a flueless appliance, such means of ventilation as are specified in the relevant paragraphs of regulation M9.

M13 Liquefied Petroleum Gas (LPG) fixed installations

(1) In this regulation and in regulations M14, M15 and M16–

FIXED APPLIANCE means a Class II appliance or any appliance the principal function of which is heating, lighting or cooking;

LIQUEFIED PETROLEUM GAS means commercial butane and commercial propane in accordance with BS 4250: Part 1: 1987;

LPG INSTALLATION means an LPG storage tank and pipework, fittings, supports and all other items required to enable liquefied petroleum gas to be conveyed from the storage tank to the fixed appliance; and

LPG STORAGE TANK means a fixed bulk storage tank or vessel which is used for the storage of liquefied petroleum gas and is designed to be refilled in position.

(2) This regulation shall apply to any LPG installation which supplies fuel to a fixed appliance in any building of purpose group I or III as determined by regulation E2, but not to any installation in which the LPG storage tank is less than 150 litres or greater than 337 500 litres water capacity.

(3) The design, construction and installation of any LPG installation to which this regulation applies shall be safe and adequate for its purpose.

M14 Deemed-to-satisfy provisions for LPG fixed installations

The requirements of regulation M13(3) shall be deemed to be satisfied if–

(a) the LPG storage tank is sited in accordance with paragraphs 15 to 36;

(b) the mechanical integrity of the LPG storage tank is in accordance with paragraphs 37, 38 and 40;

(c) in the case of an underground or mounded LPG storage tank the installation is in accordance with paragraphs 41 to 46; and

(d) the pipework, fittings and supports are in accordance with paragraphs 58 to 89;

of Health and Safety Guidance Booklet HS(G)34 published by the Health and Safety Executive: 1987.

M15 Separation distances from an existing LPG storage tank

A building shall be separated by a safe distance from any existing LPG storage tank (as defined in regulation M13(1)) within the same curtilage.

M16 Deemed-to-satisfy provisions for separation distances from an existing LPG storage tank

The requirements of regulation M15 shall be deemed to be satisfied if the separation distances are in accordance with Table 2 of Health and Safety Guidance Booklet HS(G)34 published by the Health and Safety Executive: 1987, and where a fire wall is provided, paragraphs 34 to 36 of the Booklet.

PART N

Drainage

N1 Interpretation and application

(1) In this Part–

FOUL WATER means waste from a sanitary appliance and water which has been used for cooking or washing purposes and not contaminated by trade effluent;

RAIN-WATER DRAINAGE includes gutters, pipes, drains and fittings which convey rain-water only;

SANITARY APPLIANCE has the meaning assigned to it by regulation P1;

SANITARY PIPEWORK means a pipe or system of pipes for conveying foul water from a fitting to an underground foul drain; and

UNDERGROUND FOUL DRAINAGE includes drains and private sewers used in connection with buildings but not a system which is solely for the conveyance of subsurface water.

(2) Regulation N7 shall not apply to a drainage system intended for use in connection with a roof or balcony of 6 m^2 or less in area, unless that roof or balcony receives a flow of rain-water from another part of a building.

N2 Drainage systems

Every building shall be provided with such sanitary pipework, underground foul drainage and rain-water drainage as may be necessary for the hygienic and adequate disposal of foul water and rain-water from that building.

N3 Sanitary pipework

Sanitary pipework shall–

(a) consist of pipes and fittings–

(i) of such size, layout, construction and watertightness; and

(ii) with sufficient ventilation,

to ensure the hygienic conveyance of foul water to an underground foul drainage system; and

(b) have such means of access as is necessary to facilitate the clearance of blockages.

N4 Deemed-to-satisfy provision for sanitary pipework

The requirements of regulation N3 shall be deemed to be satisfied if the sanitary pipework complies with DOE(NI) Technical Booklet N: 1990: Section 1.

N5 Underground foul drainage

Underground foul drainage shall–

(a) consist of pipes and fittings–

(i) of such size, layout, construction and watertightness; and

(ii) with sufficient ventilation,

to ensure the hygienic conveyance of foul water to a sewer, cesspool, septic tank or similar structure; and

(b) have such means of access as is necessary to facilitate the clearance of blockages.

N6 Deemed-to-satisfy provision for underground foul drainage

The requirements of regulation N5 shall be deemed to be satisfied if the underground foul drainage complies with DOE(NI) Technical Booklet N: 1990: Section 2.

N7 Rain-water drainage

Rain-water drainage shall–

(a) consist of pipes and fittings–

(i) of such size, layout, construction and watertightness; and

(ii) with such ventilation,

to ensure the hygienic conveyance of rain-water to a surface water or combined sewer, a soakaway or a watercourse; and

(b) have such means of access as is necessary to facilitate the clearance of blockages.

N8 Deemed-to-satisfy provision for rain-water drainage

The requirements of regulation N7 shall be deemed to be satisfied if the rainwater drainage complies with DOE(NI) Technical Booklet N: 1990: Section 3.

N9 Cesspools, septic tanks and similar structures

(1) Any cesspool, septic tank or similar structure shall be–

(a) so constructed as to be impervious to both liquid from the inside and subsoil water from the outside; and

(b) so sited–

(i) as not to render liable to pollution any spring, stream, well, adit, or other source of water which is used, or is likely to be used, for drinking, domestic or kitchen purposes;

(ii) that there is ready means of access for cleansing it and removing its contents without carrying them through any building in which any person resides or is employed in any manufacture, trade or business, or to which the public has access; and

(iii) as not to be in such proximity to any building in which any person resides or is employed in any manufacture, trade or business, or to which the public has access, as to be liable to become a source of nuisance or a danger to health.

(2) a cesspool shall be–

(a) of suitable depth to enable it to be emptied completely;

(b) properly covered so as to be impervious to surface water and rainwater;

(c) fitted with a suitable manhole cover for the purposes of inspection (including inspection of the inlet), emptying and cleansing;

(d) adequately ventilated;

(e) without any outlet for overflow or discharge other than the outlet provided for emptying or cleansing; and

(f) of a capacity, measured below the level of the inlet, of not less than 18 m^3.

(3) Any structure to which paragraph (1) applies other than a cesspool shall be–

(a) of suitable depth;

(b) of adequate size, having in no case a capacity of less than 2.7 m^3;

(c) covered or fenced in;

(d) if covered, adequately ventilated and constructed with means of access for the purposes of inspection (including inspection of the inlet and outlet), emptying and cleansing; and

(e) fitted with filter or other treatment facility for effluent (including subsurface irrigation) or both, sited to comply with the requirements of paragraph (1)(b)(i) and (iii).

PART P

Sanitary appliances and unvented hot water storage systems

P1 Interpretation

In this Part–

SANITARY ACCOMMODATION means a room or space which contains a water closet or urinal whether or not it also contains other sanitary appliances;

SANITARY APPLIANCES includes a water closet or urinal and a bath, shower, wash-hand basin, bidet or other fitting for ablutionary purposes;

SANITARY PIPEWORK and UNDERGROUND FOUL DRAINAGE have the meanings assigned to them by regulation N1; and

URINAL includes one or more slabs, stalls, troughs, bowls or other suitable receptacles.

P2 Provision of sanitary appliances

(1) A dwelling shall have at least one water closet, one wash-hand basin and one fixed bath or shower.

(2) A wash-hand basin shall be provided, in the case of–

(a) a dwelling – either in the same room as a water closet or in an adjacent room; or

(b) any other building – either in the same room as a water closet or in an adjoining room which provides the sole means of access to the room containing the water closet.

(3) A water closet fitted with a macerator shall not be provided in any building unless the building has another water closet, accessible to all occupants, which discharges directly to sanitary pipework or underground foul drainage.

P3 Sanitary appliances

(1) Every sanitary appliance shall have smooth and readily cleansed, non-absorbent surfaces and shall discharge through an effective trap of suitable dimensions.

(2) Every wash-hand basin, bath and shower shall have provision for the piped supply of hot and cold water and where a sequential single control mixer valve is provided it shall start from the cold supply.

(3) Every water closet and urinal shall have flushing apparatus capable of effectively cleansing the receptacle, no part of which shall be directly connected to any pipe other than a flush pipe or sanitary pipework.

(4) The outlet of a urinal shall have an effective grating.

(5) A sanitary appliance fitted with a macerator, pump and drainage pipe shall ensure the hygienic conveyance of foul water to an underground foul drainage system.

P4 Sanitary accommodation

(1) Sanitary accommodation shall not open directly into–

(a) a habitable room unless the room is used solely for sleeping or dressing purposes;

(b) a room used for kitchen purposes; or

(c) a room in which a person is habitually employed in any trade or business.

(2) Any sanitary accommodation which can be entered directly from a room used for sleeping purposes, shall be so constructed that it can also be entered without passing through any such room, but this paragraph shall not apply if in the case of–

(a) a dwelling – there is other such sanitary accommodation within the dwelling which can be entered without passing through any such room; or

(b) any other building – there is within the building other such sanitary accommodation which is available for common use.

(3) Sanitary accommodation shall be ventilated in compliance with regulation K2.

(4) Where sanitary accommodation contains a cubicle or cubicles so constructed as to allow free circulation of air throughout the room or space then paragraph (3) shall apply to the room or space as a whole and not to the cubicle or cubicles separately.

P5 Unvented hot water storage systems

(1) This regulation shall apply to any hot water storage system (other than a space heating system or a system which heats and stores water for any industrial purpose) which–

(a) has a capacity greater than 15 litres and not greater than 500 litres;

(b) has a heat input not greater than 45 kW; and

(c) does not incorporate a vent pipe to the atmosphere.

(2) A hot water storage system to which this regulation applies, whether heated directly or indirectly, shall incorporate such safety devices to ensure that–

(a) the temperature of the stored water does not exceed 100°C at any time; and

(b) the working pressure is controlled and excessive pressure is relieved.

(3) Any discharge from those safety devices shall be conveyed safely to where it can be seen readily and will cause no danger to persons.

P6 Deemed-to-satisfy provision for an unvented hot water storage system

The requirements of regulation P5(2) shall be deemed to be satisfied if the hot water storage system is manufactured and installed in compliance with a certificate issued by the British Board of Agrément under MOAT 38: 1986.

PART R

Facilities for disabled people

R1 Application and interpretation

(1) This Part applies to buildings which are–

(a) office premises or shop premises within the meaning of Section 1 of the Office and Shop Premises Act (Northern Ireland) 1966 **(a)**;

(b) factories within the meaning of Section 175 of the Factories Act (Northern Ireland) 1965 **(b)**;

(c) to be used for the purposes of–

(i) a university;

(ii) a school or college of education within the meaning of the Education and Libraries (Northern Ireland) Order 1986 **(c)**; or

(iii) any other institution providing facilities for further education under Article 27 of that Order; and

(d) other buildings to which the public are admitted.

(2) In this Part–

DISABLED PEOPLE means people affected by an impairment of sight or hearing or with a physical impairment which makes them dependent upon a wheelchair for mobility or otherwise limits their ability to walk;

RELEVANT STOREY means any storey the floor of which is at or about the level of the finished surface of the ground adjoining the building; and

WHEELCHAIR SPACE means a clear space of at least 900 mm width and 1400 mm depth accessible to a wheelchair.

(a) 1966 c. 26 (N.I.).
(b) 1965 c. 20 (N.I.).
(c) S.I. 1986/594 (N.I. 3).

R2 Provision of facilities for disabled people

(1) The means of access to a relevant storey in a building and access within such a storey shall include provision for access by disabled people.

(2) If sanitary appliances are provided for the public in a building a reasonable number (and at least one) shall be accessible to, and suitable for use by, disabled people.

(3) The minimum number of wheelchair spaces to be provided in a hall or auditorium or a building constituting, or forming part of a sports stadium where audience or spectator seating is fixed or arranged in tiers in such a way as to make it impracticable to provide access for disabled people to all seats, shall be 6 or 1/100th of the total number of seats available to the public, whichever is the greater.

R3 Deemed-to-satisfy provisions for the provision of facilities for disabled people

The requirements of regulations R2(1) and R2(2) shall be deemed to be satisfied by compliance with, in the case of–

(a) a building defined in regulation R1(1)(c) – Department of Education and Science Design Note 18 (1984), Access for Disabled People to Educational Buildings; or

(b) any other building defined in regulation R1(1) – BS 5810: 1979: Section 2, Clauses 6, 7 and 8.

PART S

Thermal insulation of pipes, ducts and storage vessels

S1 Application and interpretation

(1) This Part shall apply only in so far as it is necessary for the purpose of furthering the conservation of fuel and power.

(2) Subject to the provisions of paragraphs (1) and (3), this Part shall apply in relation to the installation or complete replacement of, or any extension to, any system comprising pipes, ducts or storage vessels or any combination of these where such pipes, ducts or storage vessels are intended to carry or store heated gases or fluids in the heating system of any building.

(3) This Part shall not apply to–

(a) any pipe or duct, the transmission of heat from which is designed to contribute to any space heating of an area of a building through which it passes;

(b) any pipe or duct in a building or part of a building comprising a house falling within purpose group I, or a flat or maisonette or any combination of these, where such pipe or duct is contained in any room, passage, stairway, cupboard, intermediate floor or internal wall of the building or part of the building;

(c) any items, including flexible connections, structural supports, valve handles and control equipment provided for the support or operation of a system or any extension thereto comprising pipes, ducts or storage vessels or any combination of these;

(d) any pipe, duct or storage vessel intended to carry or store fluids or gases, heated exclusively or otherwise, for industrial purposes; or

(e) any pipe provided for the purposes of supplying heated water to a tap or other outlet where the outside diameter of the pipe, in millimetres, and corresponding length in metres, conform with the

specifications set out in columns (1) and (2) respectively of the Table to this regulation.

Table to Regulation S1

Outside diameter of pipe (in mm) (1)	Maximum length of pipe (in m) (2)
1. Not more than 12	20
2. More than 12 but not more than 22	12
3. More than 22 but not more than 28	8
4. More than 28	3

S2 Conservation of fuel and power

Where this Part applies, any pipes, ducts or storage vessels shall be so thermally insulated as to provide adequate resistance to the transmission of heat, any loss of which therefrom would entail an increase in the consumption of fuel or power necessary to enable temperature conditions normal for any supply of heated gases or fluids carried or stored therein to be maintained.

S3 Deemed-to-satisfy provisions for the conservation of fuel and power

(1) In this regulation THERMAL CONDUCTIVITY *has the meaning assigned to it in BS 5422: 1977.*

(2) For the purposes of this regulation heat loss shall be calculated in accordance with BS 5422: 1977.

(3) The requirements of regulation S2, in so far as they relate to any pipe or duct, shall be deemed to be satisfied if–

(a) the thickness and type of insulation provided is in accordance with BS 5422: 1977;

(b) the heat loss (expressed in W/m^2) from each pipe is not greater–

(i) for a pipe whose diameter (measured in mm) is listed in column (1) of the Table to this regulation, than the value shown in column (2) of that Table for a pipe of that diameter;

(ii) *for a pipe whose diameter (measured in mm) is of an intermediate size not shown in that Table, than the value calculated from that Table by means of linear interpolation;*

(c) *each duct, irrespective of its size, is thermally insulated so that the heat loss is not greater than 30 W/m²; or*

(d) *preformed, loose wrap or mat mineral fibre (glass or rock), cellular plastic or any other material with a thermal conductivity of not more than 0.07 W/m°C is provided as insulation, having–*

(i) *for a pipe with an outside diameter of less than 50 mm, a thickness equal to the outside diameter of the pipe; or*

(ii) *for a pipe with an outside diameter equal to or greater than 50 mm and for a duct of any size, a thickness not less than 50 mm.*

(4) *The requirements of regulation S2, in so far as they relate to any storage vessel shall be deemed to be satisfied if–*

(a) *the thickness and type of insulation provided is in accordance with BS 5422: 1977;*

(b) *such vessel complies with the requirements of BS 3456: Section 2.7: 1970 or BS 5615: 1985; or*

(c) *such vessel, irrespective of its size, is thermally insulated so that the heat loss is not greater than 90 W/m².*

Table to Regulation S3(3)(b)

Maximum permitted rates of heat loss from pipes

Outside diameter of pipe (in mm) (1)	*Heat loss (in W/m²)* (2)
10	*675*
20	*400*
30	*280*
40	*220*
50 or greater	*175*

PART T

Control of space and water heating systems

T1 Application

(1) This Part shall apply only in so far as it is necessary for the purpose of furthering the conservation of fuel and power.

(2) Subject to the provisions of paragraphs (1) and (3), this Part shall apply to–

(a) the installation of any heating system (whether by way of new work or by way of replacement) provided to serve a floor area which exceeds 125 m^2 in a building; and

(b) an extension to an existing heating system where such an extension is provided to serve a further floor area which exceeds 125 m^2 in a building in addition to any area served by the existing system.

(3) This Part shall not apply to any heating system or extension thereto provided solely for the purpose of serving–

(a) a house falling within purpose group I; or

(b) a flat or maisonette,

or any combination of these, together with any associated common parts.

T2 Interpretation

In this Part HEATING SYSTEM means any integral system, provided in a building for the purpose of space or water heating, together with any hot water storage vessels, other than a system provided for the purpose of heating or storing water exclusively or otherwise for industrial purposes.

T3 Control of output from space heating systems

(1) Where the provisions of regulation T1(2)(a) apply, provision shall be made for the purpose of regulating the output from a space heating system by the fitting of a thermostat–

(a) inside the building, for each system or section of the system which is designed to be independently controlled; and

(b) outside the building, where the system is designed to provide hot water from a central source for use in radiators or non-mechanical convectors.

(2) Where the provisions of regulation T1(2)(b) apply and any controls of the existing heating system are inadequate for the purpose described in this paragraph or are not fitted, provision shall be made for the purpose of regulating the output from the extension to the system by the fitting of a thermostat–

(a) inside the building for the extension to the system or any section thereof which is designed to be independently controlled; and

(b) outside the building where the extension to the system is designed to provide hot water from a central source for use in radiators or non-mechanical convectors.

T4 Control of intermittent heating

(1) Subject to the provisions of paragraphs (3), (4) and (5), where the provisions of regulation T1(2)(a) apply and the intended use of the building or part of the building does not require continuous heating, the heating system shall be fitted with a form of automatic control which has the capability of ensuring that the temperature conditions normal for the intended use of the building or part are maintained only during periods when the building or part is occupied for that use.

(2) Subject to the provisions of paragraphs (3), (4) and (5), where the provisions of regulation T1(2)(b) apply and the intended use of the part or parts of the building for which the extension is provided does not require continuous heating and any controls of the existing heating system do not have the capability described in this paragraph or are not fitted, the extension shall be fitted with a form of automatic control which has the capability of ensuring that the temperature conditions normal for the intended use of such part or parts are maintained only during periods when the part is or parts are occupied for that use.

(3) Where this Part applies and the output rating of any heating system or of any extension to a heating system is 100 kW or less, it shall be sufficient for the purpose of this regulation to provide an automatic switch which is capable of both shutting down and starting up the system or extension at pre-set times.

(4) Nothing in this regulation shall apply to an individual room or space heater with an output rating of 10 kW or less.

(5) Nothing in this regulation shall prohibit the installation of controls to prevent damage to the structure, services, fittings, equipment or contents of any building by low temperature, excessive humidity or condensation.

T5 Control of the operational selection of boilers

(1) Where the provisions of regulation T1(2)(a) apply, any heating system which includes 2 or more interconnected gas or oil fired boilers of an aggregate output rating exceeding 100 kW shall be provided with automatic controls which have the capability of–

(a) shutting down and starting up the boilers so that only that number of boilers sufficient for maintaining the temperature conditions and hot water supply normal for the intended use of the building or any part of the building is in operation at any one time; and

(b) reducing the flow of water through any boiler which is shut down.

(2) Where the provisions of regulation T1(2)(b) apply and the extension to the heating system includes 2 or more interconnected gas or oil fired boilers of an aggregate output rating exceeding 100 kW, the extension shall be fitted with automatic controls which have the capability of–

(a) shutting down and starting up the boilers included in the extension so that only that number of such boilers sufficient for maintaining the temperature conditions and hot water supply normal for the intended use of the part or parts of the building for which the extension is provided is in operation at any one time; and

(b) reducing the flow of water through any boiler included in the extension which is shut down.

T6 Control of temperature of stored hot water

Where this Part applies, provision shall be made for the purpose of regulating the temperature of any contents of any hot water storage vessel by the provision of–

(a) a thermostat fitted to the storage vessel; and

(b) in the case of any hot water storage vessel having a capacity which exceeds 150 litres, an automatic switch which has the capability of stopping and starting a supply of heat to any contents of the vessel at preset times.

Sealed with the Official Seal of the Department of the Environment on 21st February 1990.

(L.S.)

J. McCormick
Assistant Secretary

SCHEDULES

SCHEDULE 1

Part A.– Classes of partially exempted buildings

Regulation A5(2)(*a*)

Class	Description of partially exempted building	Substantive requirements with which compliance is required		
		As to materials	As to buildings	As to services, fittings and equipment
(1)	(2)	(3)	(4)	(5)
1.	A single storey building (not being a building within Class 5 or a building used for any trade or business) which– (i) is used by day only for private occupation or used exclusively for recreational or storage purposes (such as a summer-house, poultryhouse, aviary, orchardhouse, boathouse, coalshed, garden tool shed, potting-shed or cycle shed); (ii) is wholly detached from any other building; and (iii) has a floor area not exceeding 30 m^2.	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Part E (unless the building is not less than 2 m from (a) any boundary; and (b) any building which is within the same boundaries and is either of purpose groups I (other than a building described in regulation E2(2)),II or III).	Part N (except in relation to rain-water drainage). Part P

2.	A building which is used only in connection with and during the construction, alteration, extension or repair of any building or other work by persons engaged on that work.	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Parts C and D (unless the building is a single storey building). Part L (unless the building is a single storey building and does not include any sleeping accommodation).	Part M (unless the building is a single storey building and does not include any sleeping accommodation). Part N (except in relation to rain-water drainage). Part P
3.	A building being– any monument for the time being subject to Parts I, II or III of the Historic Monuments Act (Northern Ireland) 1971 **(a)**.	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Part L	Part M Part N Part P
4.	A building which– (i) is used, for a limited period only, in connection with the sale or letting of buildings or building plots in the course of the development of an estate; (ii) is erected on or in close proximity to the estate; and (iii) is wholly detached from any other building.	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Parts C and D (unless the building is a single storey building). Part L (unless the building is a single storey building, does not include any sleeping accommodation and is not less than 2 m from any building to which these regulations apply).	Part M (unless the building is a single storey building, does not include any sleeping accommodation and is not less than 2 m from any building to which these regulations apply). Part N (except in relation to rain-water drainage). Part P

(a) 1971 c. 17 (N.I.)

Schedule 1 Part A – continued

Class	Description of partially exempted building	Substantive requirements with which compliance is required		
		As to materials	As to buildings	As to services, fittings and equipment
(1)	(2)	(3)	(4)	(5)
5.	A single storey building which– (i) is used as a garage or open carport; (ii) is wholly detached from any other building; and (iii) has a floor area not exceeding 30 m^2.	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Part E (subject, where applicable, to regulation E18 or E19) unless the building is either– (i) wholly constructed of non-combustible materials; or (ii) not less than 2 m from (*a*) any boundary; and (*b*) any building which is within the same boundaries and is either of purpose groups 1 (other than a building described in regulation E2(2)), II or III. Part L	Part M Part N (except in relation to rain-water drainage). Part P
6.	A single storey building (not being a building within Class 7 or a building used for the purposes of agriculture) which– (i) is used exclusively for the storage of materials or products, for the accommodation of plant or machinery; or	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Parts C and D (unless the building has a capacity not exceeding 100 m^3). Part E (except regulation E15). Part L	Part M Part N Part P

6. (continued)	(ii) is a building wherein the only persons habitually employed are engaged solely in the general care, supervision, regulation, maintenance, storage or removal of the materials, products, plant or machinery in the building; and (iii) is wholly detached from any other building.			
7.	A building which– (i) is used exclusively for the accommodation of plant or machinery designed for any of the processes specified against Activities 1401, 2511 to 2516, 2532, 2568 and 2570 of the Standard Industrial Classification (Revised 1980) issued by the Central Statistical Office (whether or not such plant or machinery forms part of the structure); (ii) forms part of and is within the curtilage of a works; (iii) is a building wherein the only persons habitually employed are engaged solely in the general care, supervision, regulation or maintenance of such plant or machinery; and (iv) is wholly detached from any other building.	Part B (in so far as it relates to work to which any regulation listed in column (4) or (5) applies).	Parts C and D (unless the building is a single storey building having a capacity not exceeding 100 m^3). Regulations E5 and E6 (unless the building is so situated that each side may, in accordance with regulation E7, consist entirely of an unprotected area). Regulations E7 and E17. Part L.	Part M Part N Part P

SCHEDULE 1 – continued

Part B – Classes of wholly exempted buildings

Regulation A5(3)(*a*)

CLASS (1)	Description of wholly exempted building (2)
1.	A building the construction of which is subject to the Explosives Acts (Northern Ireland) 1875 and 1924 **(a)**.
2.	A building (other than a building comprising one or more dwellings or a building used for office or canteen accommodation) erected on a site for which a licence has been granted under the Nuclear Installations Act 1965 **(b)**.
3.	A building (other than a building comprising one or more dwellings or a building used for office or showroom accommodation) erected in connection with any mine or quarry.
4.	A building used solely for housing radio or television transmitting equipment, provided that the building– (i) is normally unattended; (ii) does not exceed 4 m in height or 150 m^3 in capacity; (iii) is either constructed wholly of non-combustible material or situated not less than 2 m from any building to which these regulations apply; and (iv) is not erected over a public sewer.
5.	A single storey hut, shed, shelter, kiosk or similar building provided that the building– (i) does not accommodate a water-closet, chemical closet or earth-closet fitting; (ii) does not exceed 9 m^2 in area; (iii) is either constructed wholly of non-combustible material or situated not less than 2 m from any building to which these regulations apply; and (iv) is not erected over a public sewer.
6.	An air-supported structure which– (i) does not exceed 15 m in length or diameter; (ii) has alternative means of escape; (iii) is not less than 2 m from any building to which these regulations apply; and (iv) is used solely in connection with a house falling within purpose group I of regulation E2.
7.	An air-supported structure which– (i) after deflation is re-erected in accordance with plans previously approved and with any conditions imposed in connection with the approval of those plans; and (ii) is used for the same purpose as that for which it was previously erected.
8.	A building erected on a site or within another building for not more than twenty-eight consecutive days including an exhibition stand and a stand for viewing a public display.
9.	A tent or marquee.

(a) 1875 c. 17 and 1924 c. 5 (N.I.)
(b) 1965 c. 57

Schedule 1 Part B – continued

CLASS (1)	Description of wholly exempted building (2)
10.	A movable dwelling including a tent, caravan, shed or similar structure used for human habitation.
11.	Mobile accommodation used in a static condition, including houseboat, caravan or railway carriage.
12.	Any part of a dock, wharf, pier, lighthouse, dam, reservoir, railway line, airfield, pavement, canal (including locks and other structures associated therewith), oil rig, tunnel, bridge, road, path, ramp, stairway, walkway or other work of public utility which does not form part of, give support to or gain support from, a building to which these regulations apply; sewage disposal works other than buildings designed to house plant or provide covered accommodation for persons.
13.	A structure (other than a chimney) not incorporating any covered space with headroom exceeding 1.5 m, except where the structure is attached to or within a building to which these regulations apply; a tower mast not attached to a building to which these regulations apply.
14.	Unclad plant or machinery, including a vending or weighing machine.
15.	Amusement, playground or fairground equipment, including a swing, roundabout and scenic railway.
16.	Scaffolding, falsework, lifts and hoists used in association with engineering or construction work.
17.	Storage racking not incorporating a floor.
18.	Road barriers, street furniture or similar structures, including a traffic light or sign.
19.	A fence, wall or gate not forming part of a building to which these regulations apply.
20.	An external storage tank, not being a septic tank, settlement tank, cesspool, liquefied petroleum gas storage tank or tower silo.
21.	Gantries or galleries used solely for access to or the operation of plant or machinery.
22.	Accommodation designed and intended for use solely as a detached shelter to afford protection against the effects of an attack with nuclear, chemical or conventional weapons which– (i) is so situated that the distance of any part of the excavation for the shelter from any exposed part of another building or structure or from any surfaced area to which the public have access or from the boundary is at least 1 m greater than the depth of the lowest point of the excavation below the existing ground level of the building or structure or surfaced area; (ii) does not contain any sanitary appliances, as defined in regulation P1 which are or will be connected to a drain or sewer serving any other building; and (iii) is so situated that it does not impair the stability of any other building or structure or of any surfaced area to which the public have access, or cause damage to, interfere with or prevent access to any existing drain, sewer, or water, gas or electricity supply.
23.	A greenhouse or conservatory which is wholly detached from any other building and has a floor area not exceeding 30 m^2.

SCHEDULE 2

Giving of notices and deposit of plans

Regulation A10

Rule A: General

The following provisions shall be observed in relation to the giving of any notices and the deposit of any plans, sections, specifications and particulars referred to in the other rules of this schedule:

1. Notices and other particulars shall be in writing.
2. Drawings shall be executed or reproduced in a clear and intelligible manner with suitable and durable materials. Plans and sections shall be to a scale of not less than 1:100 or, if the building is so extensive as to render a smaller scale necessary, not less than 1:200; block plans shall be to a scale of not less than 1:1250; and key plans shall be to a scale of not less than 1:2500. The scale shall be indicated on all plans, sections and other drawings and the north point on all block plans and key plans.
3. Every notice, drawing or other document shall be signed by the person required to furnish it to the district council or by his duly authorised agent, and in all cases shall state the full name and address of the person on whose behalf it has been furnished.
4. Every such document, together with a duplicate thereof, shall be sent or delivered to the offices of the district council.

Rule B: Erection of buildings (other than partially exempted buildings)

The following are the notices to be given and the plans, specifications and particulars to be deposited by a person intending to erect a building which is neither wholly nor partially exempted within the meaning of regulation A5:

1. Notice of intention to erect a building not wholly or partially exempted from the operation of these regulations.
2. Particulars, so far as necessary to show whether the building complies with all such requirements of these regulations as apply to it, of–
   (a) the intended use of the building;
   (b) the materials of which the building will be constructed;
   (c) the mode of drainage; and
   (d) the means of water supply.
3. A block plan showing–
   (a) the size and position of the building and its relationship to adjoining buildings;
   (b) the width and position of every street adjoining the premises; and

(c) the boundaries of the premises and the size and position of every other building and of every garden, yard and other open space within such boundaries.

4. A key plan showing the position of the site when it is not sufficiently identifiable from the block plan.

5. A plan of every floor and roof of the building and a section of every storey of the building, upon which shall be shown (where not already shown on the particulars and plans required by items 2 to 4), so far as necessary to enable the local authority to determine whether the building complies with these regulations–

(a) the levels of the site of the building, of the lowest floor of the building and of any street adjoining the premises, in relation to one another and above some known datum;

(b) the position of the damp-proof courses and any other barriers to moisture;

(c) the position, form and dimensions of the foundations, walls, windows, floors, roofs, chimneys and several parts of the building;

(d) the intended use of every room in the building;

(e) the provision made in the structure for protection against fire;

(f) the provision made in the building or part of the building for means of escape in case of fire and for securing that such means can be safely and effectively used at all material times; and

(g) the provision made in the structure for insulation against the transmission of heat and sound.

Rule C: Erection of partially exempted buildings

The following are the notices to be given and the plans, sections, specifications and particulars to be deposited by a person intending to erect a partially exempted building within the meaning of regulation A5:

1. Notice of intention to erect a building partially exempted from the operation of these regulations.

2. Particulars, so far as necessary to show whether the building falls within the relevant class of exemptions in Part A of Schedule 1 and complies with all such requirements of these regulations as apply to it, of–

(a) the intended use of the building;

(b) the materials of which it will be constructed; and

(c) the mode of drainage.

3. A block plan showing the size and position of the building and its relationship to adjoining buildings and indicating its distance from the boundaries of the premises.

4. A key plan showing the position of the site when it is not sufficiently identifiable from the block plan.

5. Plans and sections of the building showing the particulars required by item 5(a) to (e) of Rule B, so far as may be necessary to enable a district council to determine whether the building complies with these regulations.

Schedule 2

Rule D: Alterations and extensions

The following are the notices to be given and the plans, sections, specifications and particulars to be deposited by a person intending to make any alteration of or extension to a building:

1. Notice of intention to alter or extend a building.
2. In the case of alterations not involving any extension of a building–
   (a) the plans and sections required by item 5 of either Rule B or Rule C (whichever is appropriate) of the alterations and of the building so far as affected by the alterations, so far as necessary to establish whether the proposals comply with these regulations; and
   (b) a key plan showing the position of the site when it is not sufficiently identifiable from such plans.
3. In the case of an extension of a building–
   (a) the plans, sections, specifications and particulars referred to in items 2, 3, 4 and 5 of either Rule B or Rule C (whichever is appropriate) in relation to the extension as if the extension was the building therein referred to; and
   (b) the plans and sections as required by item 5 of Rule B or Rule C (whichever is appropriate) of the building so far as affected by the extension,

   so far as necessary to enable the district council to determine whether the proposals comply with the requirements of these regulations.

Rule E: Additional requirements

Where an authorised officer of the district council considers it to be necessary for the purposes of examining any proposals submitted in accordance with Rule B, C, D or G, he may require the deposit of any of the following drawings and particulars in addition to plans, sections, specifications and particulars required by such rule:

1. A specification of any particular material or materials proposed to be used.
2. The proportions of the materials in any concrete or mortar or the specified minimum strength of the concrete or mortar.
3. Calculations of loading and strength:

   Provided that where the dimensions of a structural member accord with the provisions of DOE (NI) Technical Booklet D: 1990 calculations of strength to demonstrate the adequacy of those dimensions shall not be required.
4. Drawings showing details of particular construction.
5. Calculations relating to the permitted limit of unprotected areas (within the meaning of regulation E1(1)) in any side of the building or adjoining building in accordance with regulation E7.
6. In the case of a building, or part of a building, which falls (in accordance with regulation E2) within purpose groups III, IV or V, particulars affecting the number and width of exits and escape routes.
7. Calculations for the purposes of regulations F3, F6, FF3 or FF4 other than calculations to determine the U value of any part of a wall, floor or roof which is constructed in accordance with the provisions of regulations F4 or FF4(b)(iii).
8. Soil investigation report.

Rule F: Works and fittings

The following are the notices to be given and the plans, sections, specifications and written particulars to be deposited by a person intending to execute any works or install any fittings to which regulation A8 relates:

1. Notice of intention to execute works or install fittings in connection with a building.

2. Particulars of the works or fittings so far as is necessary to establish whether they comply with all such requirements of these regulations (other than those in Parts S and T) as apply to them.

3. Where it is proposed to execute works of drainage or to construct or install a water closet fitting, urinal fitting, cesspool, septic tank or similar structure (for the reception or disposal of foul matter from buildings), a block plan. Such plan shall, if the execution of works or installation of fittings is in connection with an operation to which Rule B, C or D relates, be the block plan required by such rule and the block plan shall in any case show, so far as necessary to establish whether the proposals comply with all such requirements of these regulations as apply to them–

   (a) the position of the works or fittings;

   (b) the lines of drainage; the size, depth and inclination of every drain and the means of access to be provided for the inspection and clearance of blockages;

   (c) the position and level of the outfall of the drains; and

   (d) where the drainage is intended to be connected to a sewer, the position of the sewer.

4. Where it is proposed to construct or install a water closet fitting, urinal fitting, cesspool, septic tank or similar structure (for the reception or disposal of foul matter from buildings), plans and sections of the works or fittings, so far as necessary to show that they comply with all such requirements of these regulations as apply to them.

5. A key plan showing the position of the site when it is not sufficiently identifiable from the block plan.

Rule G: Material changes of use

The following are the notices to be given and the plans, specifications and particulars to be deposited by a person intending to make any material change of use to which these regulations are applied by regulation A9, in addition to anything required by Rule D in a case to which that rule relates:

1. Notice of intention to make, and description of, any change in the purposes for which the building or part of the building is used.

2. A block plan showing the size and position of the building and its relationship to adjoining buildings.

3. A key plan showing the position of the site when it is not sufficiently identifiable from the block plan.

4. The provision made in the structure for protection against fire; and the provisions made in the building or part for means of escape in case of fire and for securing that such means can be safely and effectively used at all material times.

5. In the case of a material change of use involving an increase in imposed loadings, the plans and sections required by item 5(c) and (d) of Rule B.

SCHEDULE 3

Timber boarding

Table to Regulation B4

In this schedule standard names in accordance with BS 881 and 589: 1974 are used.

Table 1: Species of timber for use in natural state

Hardwoods (1)			Softwoods (2)
Afromosia	Idigbo	Makore	Cedar, Western Red
Afzelia	Iroko	Niangon	Fir, Douglas
Agba	Kapur	Oak, European	Larch, European
Dahoma	Kempas	Oak, American White	Larch, Japanese
Danta	Keruing	Opepe	
Gedu nohor	Mahogany, African	Sapele	
Guarea	Mahogany, S American/ Brazilian	Teak	
		Utile	

Note to Table 1
Irrespective of the species being used, if sapwood is present the timber must be treated as a Table 2 timber.

Table 2: Species of timber for use after being subjected to a preservative treatment as recommended in BS5589: 1978 Section 2 for performance category B

Hardwoods (1)	Softwoods (2)
Elm	Hemlock, Western
Lauan, Dark Red	Redwood, European
Lauan, Light Red	Scots Pine
Meranti, Dark Red	Spruce, Sitka
Meranti, Light Red	Whitewood or European Spruce

SCHEDULE 4

Rules for calculation of permitted limits of unprotected areas

Regulation E7(2)

Part I: General rules applicable to this Schedule

1. The permitted limit of unprotected areas in any side of a building or compartment shall be calculated by reference to the requirements of Parts II, III or IV (whichever is applicable under regulation E7).

2. For the purposes of this schedule, the expression UNPROTECTED AREA has the meaning assigned to it by regulation E1(1) but in calculating the size of unprotected areas or the permitted limit of unprotected areas, the following provisions shall apply–

   (a) where any part of an external wall is an unprotected area, only because it has combustible material attached to it as cladding, the area of that unprotected area shall be deemed to be half the area of such cladding; and

   (b) no account shall be taken of any of the following–

      (i) an unprotected area which does not exceed 0·1 m^2 and which is not less than 1·5 m from any other unprotected area in the same side of the building or compartment (unless that other falls within (iii) below);

      (ii) one or more unprotected areas having an area (or if more than one an aggregate area) not exceeding 1 m^2 and not less than 4 m from any other unprotected area in the same side of the building or compartment (except any such area as is specified in (i) above);

      (iii) an unprotected area in any part of an external wall which forms part of a protected shaft; or

      (iv) an unprotected area in the side of a building not divided into compartments, if the area is not less than 27 m above any ground adjoining that side of the building.

Part II: Rules for calculation by reference to an enclosing rectangle

3. The conditions of this Part shall be satisfied if a building or compartment is so situated that no point on the relevant boundary is either between the relevant plane of reference and the side of the building or compartment or at a distance from the relevant plane of reference which is less than the distance specified in the Tables to this Part, according to the purpose group of the building or compartment, the dimensions of the enclosing rectangle and the unprotected percentage.

4. For the purposes of this Part–

   PLANE OF REFERENCE means any vertical plane which touches the side or some part of the side of a building or compartment, but which (however far extended) does not pass within the structure of such building or compartment (and for this purpose, any balcony, coping or similar projection shall be deemed not to be part either of that side or of the structure); and the relevant plane of reference shall in each case be taken as that most favourable in that respect to the person erecting the building;

Schedule 4

ENCLOSING RECTANGLE means the smallest rectangle on the relevant plane of reference which would–

(a) enclose all the outer edges of any unprotected areas of the building or, if the building is divided into compartments, of the compartment (other than any part of an unprotected area which is at an angle of more than 80° to the plane of reference), the outer edges being for this purpose projected on the plane of reference by lines perpendicular to such plane;

(b) have two horizontal sides; and

(c) have height and width falling within those listed in the Tables to this Part of this schedule;

UNPROTECTED PERCENTAGE means the percentage of the area of the enclosing rectangle which is equal to the aggregate of the unprotected areas taken into account in calculating the enclosing rectangle and as projected on it.

Tables to Part II of Schedule 4

Table 1: Buildings or compartments of purpose groups I (Small Residential), II (Institutional), III (Other Residential), IV (Office) and VII (Assembly)

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 3 m high								
3	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0
6	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.5	3.0
9	1.0	1.0	1.5	2.0	2.5	2.5	3.0	3.0	3.5
12	1.0	1.5	2.0	2.0	2.5	3.0	3.0	3.5	3.5
15	1.0	1.5	2.0	2.5	2.5	3.0	3.5	3.5	4.0
18	1.0	1.5	2.0	2.5	2.5	3.0	3.5	4.0	4.0
21	1.0	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.5
24	1.0	1.5	2.0	2.5	3.0	3.5	3.5	4.0	4.5
27	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	4.5
30	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	4.5
40	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	5.0
No limit	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	5.0

Schedule 4: Part II – continued

Table 1 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 6 m high								
3	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.5	3.0
6	1.0	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.0
9	1.0	2.0	2.5	3.0	3.5	4.0	4.5	4.5	5.0
12	1.5	2.5	3.0	3.5	4.0	4.5	5.0	5.0	5.5
15	1.5	2.5	3.0	4.0	4.5	5.0	5.5	5.5	6.0
18	1.5	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.5
21	1.5	2.5	3.5	4.0	5.0	5.5	6.0	6.5	7.0
24	1.5	2.5	3.5	4.5	5.0	5.5	6.0	7.0	7.0
27	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	7.5
30	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	8.0
40	1.5	2.5	3.5	4.5	5.5	6.5	7.0	8.0	8.5
50	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.0	9.0
60	1.5	2.5	3.5	5.0	5.5	6.5	7.5	8.5	9.5
80	1.5	2.5	3.5	5.0	6.0	7.0	7.5	8.5	9.5
100	1.5	2.5	3.5	5.0	6.0	7.0	8.0	8.5	10.0
No limit	1.5	2.5	3.5	5.0	6.0	7.0	8.0	8.5	10.0
	Enclosing rectangle 9 m high								
3	1.0	1.0	1.5	2.0	2.5	2.5	3.0	3.0	3.5
6	1.0	2.0	2.5	3.0	3.5	4.0	4.5	4.5	5.0
9	1.5	2.5	3.5	4.0	4.5	5.0	5.5	5.5	6.0
12	1.5	3.0	3.5	4.5	5.0	5.5	6.0	6.5	7.0
15	2.0	3.0	4.0	5.0	5.5	6.0	6.5	7.0	7.5
18	2.0	3.5	4.5	5.0	6.0	6.5	7.0	8.0	8.5
21	2.0	3.5	4.5	5.5	6.5	7.0	7.5	8.5	9.0
24	2.0	3.5	5.0	5.5	6.5	7.5	8.0	9.0	9.5
27	2.0	3.5	5.0	6.0	7.0	7.5	8.5	9.5	10.0
30	2.0	3.5	5.0	6.0	7.0	8.0	9.0	9.5	10.5
40	2.0	3.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5
50	2.0	4.0	5.5	6.5	8.0	9.0	10.0	11.5	12.5
60	2.0	4.0	5.5	7.0	8.0	9.5	11.0	11.5	13.0
80	2.0	4.0	5.5	7.0	8.5	10.0	11.5	12.5	13.5
100	2.0	4.0	5.5	7.0	8.5	10.0	11.5	12.5	14.5
120	2.0	4.0	5.5	7.0	8.5	10.0	11.5	12.5	14.5
No limit	2.0	4.0	5.5	7.0	8.5	10.5	12.0	12.5	15.0

Schedule 4

Schedule 4: Part II – continued

Table 1 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 12 m high								
3	1.0	1.5	2.0	2.0	2.5	3.0	3.0	3.5	3.5
6	1.5	2.5	3.0	3.5	4.0	4.5	5.0	5.0	5.5
9	1.5	3.0	3.5	4.5	5.0	5.5	6.0	6.5	7.0
12	1.5	3.5	4.5	5.0	6.0	6.5	7.0	7.5	8.0
15	2.0	3.5	5.0	5.5	6.5	7.0	8.0	8.5	9.0
18	2.5	4.0	5.0	6.0	7.0	7.5	8.5	9.0	10.0
21	2.5	4.0	5.5	6.5	7.5	8.5	9.0	10.0	10.5
24	2.5	4.5	6.0	7.0	8.0	8.5	9.5	10.5	11.5
27	2.5	4.5	6.0	7.0	8.0	9.0	10.5	11.0	12.0
30	2.5	4.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5
40	2.5	5.0	6.5	8.0	9.5	10.5	12.0	13.0	14.0
50	2.5	5.0	7.0	8.5	10.0	11.0	13.0	14.0	15.0
60	2.5	5.0	7.0	9.0	10.5	12.0	13.5	14.5	16.0
80	2.5	5.0	7.0	9.0	11.0	13.0	14.5	16.0	17.0
100	2.5	5.0	7.5	9.5	11.5	13.5	15.0	16.5	18.0
120	2.5	5.0	7.5	9.5	11.5	13.5	15.0	17.0	18.5
No limit	2.5	5.0	7.5	9.5	12.0	14.0	15.5	17.0	19.0
	Enclosing rectangle 15 m high								
3	1.0	1.5	2.0	2.5	2.5	3.0	3.5	3.5	4.0
6	1.5	2.5	3.0	4.0	4.5	5.0	5.5	5.5	6.0
9	2.0	3.0	4.0	5.0	5.5	6.0	6.5	7.0	7.5
12	2.0	3.5	5.0	5.5	6.5	7.0	8.0	8.5	9.0
15	2.0	4.0	5.5	6.5	7.0	8.0	9.0	9.5	10.0
18	2.5	4.5	6.0	7.0	8.0	8.5	9.5	10.5	11.0
21	2.5	5.0	6.5	7.5	8.5	9.5	10.5	11.0	12.0
24	3.0	5.0	6.5	8.0	9.0	10.0	11.0	12.0	13.0
27	3.0	5.5	7.0	8.5	9.5	10.5	11.5	12.5	13.5
30	3.0	5.5	7.5	8.5	10.0	11.0	12.0	13.5	14.0
40	3.0	6.0	8.0	9.5	11.0	12.5	13.5	15.0	16.0
50	3.5	6.0	8.5	10.0	12.0	13.5	15.0	16.5	17.5
60	3.5	6.5	8.5	10.5	12.5	14.0	15.5	17.0	18.0
80	3.5	6.5	9.0	11.0	13.5	15.0	17.0	18.5	20.0
100	3.5	6.5	9.0	11.5	14.0	16.0	18.0	19.5	21.5
120	3.5	6.5	9.0	11.5	14.0	16.5	18.5	20.5	22.5
No limit	3.5	6.5	9.0	12.0	14.5	17.0	19.0	21.0	23.0

Schedule 4: Part II – continued

Table 1 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 18 m high								
3	1.0	1.5	2.0	2.5	2.5	3.0	3.5	4.0	4.0
6	1.5	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.5
9	2.0	3.5	4.5	5.0	6.0	6.5	7.0	8.0	8.5
12	2.5	4.0	5.0	6.0	7.0	7.5	8.5	9.0	10.0
15	2.5	4.5	6.0	7.0	8.0	8.5	9.5	10.5	11.0
18	2.5	5.0	6.5	7.5	8.5	9.5	11.0	11.5	13.0
21	3.0	5.5	7.0	8.0	9.5	10.5	11.5	12.5	13.0
24	3.0	5.5	7.5	8.5	10.0	11.0	12.0	13.0	14.0
27	3.5	6.0	8.0	9.0	10.5	11.5	12.5	13.5	14.5
30	3.5	6.5	8.0	9.5	11.0	12.0	13.5	14.5	15.5
40	4.0	7.0	9.0	11.0	12.0	13.5	15.0	16.5	17.5
50	4.0	7.0	9.5	11.5	13.0	15.0	16.5	18.0	19.0
60	4.0	7.5	10.0	12.0	14.0	16.0	17.5	19.5	20.5
80	4.0	7.5	10.0	13.0	15.0	17.0	19.0	21.0	22.5
100	4.0	7.5	10.0	13.5	16.0	18.0	20.5	22.5	24.0
120	4.0	7.5	10.0	14.0	16.5	19.0	21.0	23.5	25.5
No limit	4.0	8.0	10.0	14.0	17.0	19.5	22.0	24.0	26.5
	Enclosing rectangle 21 m high								
3	1.0	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.5
6	1.5	2.5	3.5	4.0	5.0	5.5	6.0	6.5	7.0
9	2.0	3.5	4.5	5.5	6.5	7.0	7.5	8.5	9.0
12	2.5	4.0	5.5	6.5	7.5	8.5	9.0	10.0	10.5
15	2.5	5.0	6.5	7.5	8.5	9.5	10.5	11.0	12.0
18	3.0	5.5	7.0	8.0	9.5	10.5	11.5	12.5	13.0
21	3.0	6.0	7.5	9.0	10.0	11.0	12.5	13.5	14.0
24	3.5	6.0	8.0	9.5	10.5	12.0	13.0	14.0	15.0
27	3.5	6.5	8.5	10.0	11.5	13.0	14.0	15.0	16.0
30	4.0	7.0	9.0	10.5	12.0	13.0	14.5	16.0	16.5
40	4.5	7.5	10.0	12.0	13.5	15.0	16.5	18.0	19.0
50	4.5	8.0	11.0	13.0	14.5	16.5	18.0	20.0	21.0
60	4.5	8.5	11.5	13.5	15.5	17.5	19.5	21.0	22.5
80	4.5	8.5	12.0	14.5	17.0	19.0	21.0	23.5	25.0
100	4.5	9.0	12.0	15.5	18.0	20.5	22.5	25.0	27.0
120	4.5	9.0	12.0	16.0	18.5	21.5	23.5	26.5	28.5
No limit	4.5	9.0	12.0	16.0	19.0	22.0	25.0	26.5	29.5

Schedule 4

Schedule 4: Part II – continued

Table 1 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 24 m high								
3	1.0	1.5	2.0	2.5	3.0	3.5	3.5	4.0	4.5
6	1.5	2.5	3.5	4.5	5.0	5.5	6.0	7.0	7.0
9	2.0	3.5	5.0	5.5	6.5	7.5	8.0	9.0	9.5
12	2.5	4.5	6.0	7.0	8.0	8.5	9.5	10.5	11.5
15	3.0	5.0	6.5	8.0	9.0	10.0	11.0	12.0	13.0
18	3.0	5.5	7.5	8.5	10.0	11.0	12.0	13.0	14.0
21	3.5	6.0	8.0	9.5	10.5	12.0	13.0	14.0	15.0
24	3.5	6.5	8.5	10.0	11.5	12.5	14.0	15.0	16.0
27	4.0	7.0	9.0	11.0	12.5	13.5	15.0	16.0	17.0
30	4.0	7.5	9.5	11.5	13.0	14.0	15.5	17.0	18.0
40	4.5	8.5	11.0	13.0	14.5	16.0	18.0	19.0	20.5
50	5.0	9.0	12.0	14.0	16.0	17.5	19.5	21.0	22.5
60	5.0	9.5	12.5	15.0	17.0	19.0	21.0	23.0	24.5
80	5.0	10.0	13.5	16.5	18.5	21.0	23.5	25.5	27.5
100	5.0	10.0	13.5	17.0	20.0	22.5	25.0	27.5	29.5
120	5.5	10.0	13.5	17.5	20.5	23.5	26.5	29.0	31.0
No limit	5.5	10.0	13.5	18.0	21.0	24.0	27.5	30.0	32.5
	Enclosing rectangle 27 m high								
3	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.0	4.5
6	1.5	2.5	3.5	4.5	5.0	6.0	6.5	7.0	7.5
9	2.0	3.5	5.0	6.0	7.0	7.5	8.5	9.5	10.0
12	2.5	4.5	6.0	7.0	8.0	9.0	10.5	11.0	12.0
15	3.0	5.5	7.0	8.5	9.5	10.5	11.5	12.5	13.5
18	3.5	6.0	8.0	9.0	10.5	11.5	12.5	13.5	14.5
21	3.5	6.5	8.5	10.0	11.5	13.0	14.0	15.0	16.0
24	3.5	7.0	9.0	11.0	12.5	13.5	15.0	16.0	17.0
27	4.0	7.5	10.0	11.5	13.0	14.0	16.0	17.0	18.0
30	4.0	8.0	10.0	12.0	13.5	15.0	17.0	18.0	19.0
40	5.0	9.0	11.5	14.0	15.5	17.5	19.0	20.5	22.0
50	5.5	9.5	12.5	15.0	17.0	19.0	21.0	22.5	24.0
60	5.5	10.5	13.5	16.0	18.5	20.5	22.5	24.5	26.5
80	6.0	11.0	14.5	17.5	20.5	22.5	25.0	27.5	29.5
100	6.0	11.0	15.5	19.0	21.5	24.5	27.0	30.0	32.0
120	6.0	11.5	15.5	19.5	22.5	26.0	28.5	32.0	34.0
No limit	6.0	11.5	15.5	20.0	23.5	27.0	29.5	33.0	35.0

Schedule 4: Part II – continued

Table 2: Buildings or compartments of purpose groups V (Shop), VI (Factory) and VIII (Storage and General)

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
Enclosing rectangle 3 m high									
3	1.0	1.5	2.0	2.0	2.5	2.5	2.5	3.0	3.0
6	1.5	2.0	2.5	3.0	3.0	3.5	3.5	4.0	4.0
9	1.5	2.5	3.0	3.5	4.0	4.0	4.5	5.0	5.0
12	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	5.5
15	2.0	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.0
18	2.0	2.5	3.5	4.0	5.0	5.0	6.0	6.5	6.5
21	2.0	3.0	3.5	4.5	5.0	5.5	6.0	6.5	7.0
24	2.0	3.0	3.5	4.5	5.0	5.5	6.0	7.0	7.5
27	2.0	3.0	4.0	4.5	5.5	6.0	6.5	7.0	7.5
30	2.0	3.0	4.0	4.5	5.5	6.0	6.5	7.5	8.0
40	2.0	3.0	4.0	5.0	5.5	6.5	7.0	8.0	8.5
50	2.0	3.0	4.0	5.0	6.0	6.5	7.5	8.0	9.0
60	2.0	3.0	4.0	5.0	6.0	7.0	7.5	8.5	9.5
80	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	9.5
No limit	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
Enclosing rectangle 6 m high									
3	1.5	2.0	2.5	3.0	3.0	3.5	3.5	4.0	4.0
6	2.0	3.0	3.5	4.0	4.5	5.0	5.5	5.5	6.0
9	2.5	3.5	4.5	5.0	5.5	6.0	6.5	7.0	7.0
12	3.0	4.0	5.0	5.5	6.5	7.0	7.5	8.0	8.5
15	3.0	4.5	5.5	6.0	7.0	7.5	8.0	9.0	9.0
18	3.5	4.5	5.5	6.5	7.5	8.0	9.0	9.5	10.0
21	3.5	5.0	6.0	7.0	8.0	9.0	9.5	10.0	10.5
24	3.5	5.0	6.0	7.0	8.5	9.5	10.0	10.5	11.0
27	3.5	5.0	6.5	7.5	8.5	9.5	10.5	11.0	12.0
30	3.5	5.0	6.5	8.0	9.0	10.0	11.0	12.0	12.5
40	3.5	5.5	7.0	8.5	10.0	11.0	12.0	13.0	14.0
50	3.5	5.5	7.5	9.0	10.5	11.5	13.0	14.0	15.0
60	3.5	5.5	7.5	9.5	11.0	12.0	13.5	15.0	16.0
80	3.5	6.0	7.5	9.5	11.5	13.0	14.5	16.0	17.5
100	3.5	6.0	8.0	10.0	12.0	13.5	15.0	16.5	18.0
120	3.5	6.0	8.0	10.0	12.0	14.0	15.5	17.0	19.0
No limit	3.5	6.0	8.0	10.0	12.0	14.0	16.0	18.0	19.0

Schedule 4

Schedule 4: Part II – continued

Table 2 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 9 m high								
3	1.5	2.5	3.0	3.5	4.0	4.0	4.5	5.0	5.0
6	2.5	3.5	4.5	5.0	5.5	6.0	6.5	7.0	7.0
9	3.5	4.5	5.5	6.0	6.5	7.5	8.0	8.5	9.0
12	3.5	5.0	6.0	7.0	7.5	8.5	9.0	9.5	10.5
15	4.0	5.5	6.5	7.5	8.5	9.5	10.0	11.0	11.5
18	4.5	6.0	7.0	8.5	9.5	10.0	11.0	12.0	12.5
21	4.5	6.5	7.5	9.0	10.0	11.0	12.0	13.0	13.5
24	5.0	6.5	8.0	9.5	11.0	12.0	13.0	13.5	14.5
27	5.0	7.0	8.5	10.0	11.5	12.5	13.5	14.5	15.0
30	5.0	7.0	9.0	10.5	12.0	13.0	14.0	15.0	16.0
40	5.5	7.5	9.5	11.5	13.0	14.5	15.5	17.0	17.5
50	5.5	8.0	10.0	12.5	14.0	15.5	17.0	18.5	19.5
60	5.5	8.0	11.0	13.0	15.0	16.5	18.0	19.5	21.0
80	5.5	8.5	11.5	13.5	16.0	17.5	19.5	21.5	23.0
100	5.5	8.5	11.5	14.5	16.5	18.5	21.0	22.5	24.5
120	5.5	8.5	11.5	14.5	17.0	19.5	21.5	23.5	26.0
No limit	5.5	8.5	11.5	15.0	17.5	20.0	22.5	24.5	27.0
	Enclosing rectangle 12 m high								
3	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	5.5
6	3.0	4.0	5.0	5.5	6.5	7.0	7.5	8.0	8.5
9	3.5	5.0	6.0	7.0	7.5	8.5	9.0	9.5	10.5
12	4.5	6.0	7.0	8.0	9.0	9.5	11.0	11.5	12.0
15	5.0	6.5	8.0	9.0	10.0	11.0	12.0	13.0	13.5
18	5.0	7.0	8.5	10.0	11.0	12.0	13.0	14.0	14.5
21	5.5	7.5	9.0	10.5	12.0	13.0	14.0	15.0	16.0
24	6.0	8.0	9.5	11.5	12.5	14.0	15.0	16.0	16.5
27	6.0	8.0	10.5	12.0	13.5	14.5	16.0	17.0	17.5
30	6.5	8.5	10.5	12.5	14.0	15.0	16.5	17.5	18.5
40	6.5	9.5	12.0	14.0	15.5	17.5	18.5	20.0	21.0
50	7.0	10.0	13.0	15.0	17.0	19.0	20.5	23.0	23.0
60	7.0	10.5	13.5	16.0	18.0	20.0	21.5	23.5	25.0
80	7.0	11.0	14.5	17.0	19.5	21.5	23.5	26.0	27.5
100	7.5	11.5	15.0	18.0	21.0	23.0	25.5	28.0	30.0
120	7.5	11.5	15.0	18.5	22.0	24.0	27.0	29.5	31.5
No limit	7.5	12.0	15.5	19.0	22.5	25.0	28.0	30.5	34.0

Schedule 4: Part II – continued

Table 2 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 15 m high								
3	2.0	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.0
6	3.0	4.5	5.5	6.0	7.0	7.5	8.0	9.0	9.0
9	4.0	5.5	6.5	7.5	8.5	9.5	10.0	11.0	11.5
12	5.0	6.5	8.0	9.0	10.0	11.0	12.0	13.0	13.5
15	5.5	7.0	9.0	10.0	11.5	12.5	13.5	14.5	15.0
18	6.0	8.0	9.5	11.0	12.5	13.5	14.5	15.5	16.5
21	6.5	8.5	10.5	12.0	13.5	14.5	16.0	16.5	17.5
24	6.5	9.0	11.0	13.0	14.5	15.5	17.0	18.0	19.0
27	7.0	9.5	11.5	13.5	15.0	16.5	18.0	19.0	20.0
30	7.5	10.0	12.0	14.0	16.0	17.0	18.5	20.0	21.0
40	8.0	11.0	13.5	16.0	18.0	19.5	21.0	22.5	23.5
50	8.5	12.0	15.0	17.5	19.5	21.5	23.0	25.0	26.0
60	8.5	12.5	15.5	18.0	21.0	23.5	25.0	27.0	28.0
80	9.0	13.5	17.0	20.0	23.0	25.5	28.0	30.0	31.5
100	9.0	14.0	18.0	21.5	24.5	27.5	30.0	32.5	34.5
120	9.0	14.0	18.5	22.5	25.5	28.5	31.5	34.5	37.0
No limit	9.0	14.5	19.0	23.0	27.0	30.0	34.0	36.0	39.0
	Enclosing rectangle 18 m high								
3	2.0	2.5	3.5	4.0	5.0	5.0	6.0	6.5	6.5
6	3.5	4.5	5.5	6.5	7.5	8.0	9.0	9.5	10.0
9	4.5	6.0	7.0	8.5	9.5	10.0	11.0	12.0	12.5
12	5.0	7.0	8.5	10.0	11.0	12.0	13.0	14.0	14.5
15	6.0	8.0	9.5	11.0	12.5	13.5	14.5	15.5	16.5
18	6.5	8.5	11.0	12.0	13.5	14.5	16.0	17.0	18.0
21	7.0	9.5	11.5	13.0	14.5	16.0	17.0	18.0	19.5
24	7.5	10.0	12.0	14.0	15.5	16.5	18.5	19.5	20.5
27	8.0	10.5	12.5	14.5	16.5	17.5	19.5	20.5	21.5
30	8.0	11.0	13.5	15.5	17.0	18.5	20.5	21.5	22.5
40	9.0	12.0	15.0	17.5	19.5	21.5	23.5	25.0	26.0
50	9.5	13.0	16.5	19.0	21.5	23.5	26.0	27.5	29.0
60	10.0	14.0	17.5	20.5	23.0	26.0	27.5	29.5	31.0
80	10.0	15.0	19.0	22.5	26.0	28.5	31.0	33.5	35.0
100	10.0	16.0	20.5	24.0	28.0	31.0	33.5	36.0	38.5
120	10.0	16.5	21.0	25.5	29.5	32.5	35.5	39.0	41.5
No limit	10.0	17.0	22.0	26.5	30.5	34.0	37.0	41.0	43.5

Schedule 4

Schedule 4: Part II – continued

Table 2 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 21 m high								
3	2.0	3.0	3.5	4.5	5.0	5.5	6.0	6.5	7.0
6	3.5	5.0	6.0	7.0	8.0	9.0	9.5	10.0	10.5
9	4.5	6.5	7.5	9.0	10.0	11.0	12.0	13.0	13.5
12	5.5	7.5	9.0	10.5	12.0	13.0	14.0	15.0	16.0
15	6.5	8.5	10.5	12.0	13.5	14.5	16.0	16.5	17.5
18	7.0	9.5	11.5	13.0	14.5	16.0	17.0	18.0	19.5
21	7.5	10.0	12.5	14.0	15.5	17.0	18.5	20.0	21.0
24	8.0	10.5	13.0	15.0	16.5	18.0	20.0	21.0	22.0
27	8.5	11.5	14.0	16.0	18.0	19.0	21.0	22.5	23.5
30	9.0	12.0	14.5	16.5	18.5	20.5	22.0	23.5	25.0
40	10.0	13.5	16.5	19.0	21.5	23.0	25.5	27.0	28.5
50	11.0	14.5	18.0	21.0	23.5	25.5	28.0	30.0	31.5
60	11.5	15.5	19.5	22.5	25.5	28.0	30.5	32.5	33.5
80	12.0	17.0	21.0	25.0	28.5	31.5	34.0	36.5	38.5
100	12.0	18.0	22.5	27.0	31.0	34.5	37.0	40.0	42.0
120	12.0	18.5	23.5	28.5	32.5	36.5	39.5	43.0	45.5
No limit	12.0	19.0	25.0	29.5	34.5	38.0	41.5	45.5	48.0
	Enclosing rectangle 24 m high								
3	2.0	3.0	3.5	4.5	5.0	5.5	6.0	7.0	7.5
6	3.5	5.0	6.0	7.0	8.5	9.5	10.0	10.5	11.0
9	5.0	6.5	8.0	9.5	11.0	12.0	13.0	13.5	14.5
12	6.0	8.0	9.5	11.5	12.5	14.0	15.0	16.0	16.5
15	6.5	9.0	11.0	13.0	14.5	15.5	17.0	18.0	19.0
18	7.5	10.0	12.0	14.0	15.5	16.5	18.5	19.5	20.5
21	8.0	10.5	13.0	15.0	16.5	18.0	20.0	21.0	22.0
24	8.5	11.5	14.0	16.0	18.0	19.5	21.0	22.5	24.0
27	9.0	12.5	15.0	17.0	19.0	20.5	22.5	24.0	25.5
30	9.5	13.0	15.5	18.0	20.0	21.5	23.5	25.0	26.5
40	11.0	14.5	18.0	20.5	23.0	25.0	27.5	29.0	30.5
50	12.0	16.0	19.5	22.5	25.5	27.5	30.0	32.0	33.5
60	12.5	17.0	21.0	24.5	27.5	30.0	32.5	35.0	36.5
80	13.5	18.5	23.5	27.5	31.0	34.5	37.0	39.5	41.5
100	13.5	20.0	25.0	29.5	33.5	37.0	40.0	43.0	45.5
120	13.5	20.5	26.5	31.0	36.0	39.5	43.0	46.5	49.0
No limit	13.5	21.0	27.5	32.5	37.5	42.0	45.5	49.5	52.0

Schedule 4: Part II – continued

Table 2 – continued

Width of enclosing rectangle (in metres)	Distance (in metres) from relevant boundary for unprotected percentage not exceeding								
	20	30	40	50	60	70	80	90	100
	Enclosing rectangle 27 m high								
3	2.0	3.0	4.0	4.5	5.5	6.0	6.5	7.0	7.5
6	3.5	5.0	6.5	7.5	8.5	9.5	10.5	11.0	12.0
9	5.0	7.0	8.5	10.0	11.5	12.5	13.5	14.5	15.0
12	6.0	8.0	10.5	12.0	13.5	14.5	16.0	17.0	17.5
15	7.0	9.5	11.5	13.5	15.0	16.5	18.0	19.0	20.0
18	8.0	10.5	12.5	14.5	16.5	17.5	19.5	20.5	21.5
21	8.5	11.5	14.0	16.0	18.0	19.0	21.0	22.5	23.5
24	9.0	12.5	15.0	17.0	19.0	20.5	22.5	24.0	25.5
27	10.0	13.0	16.0	18.0	20.0	22.0	24.0	25.5	27.0
30	10.0	13.5	17.0	19.0	21.0	23.0	25.0	26.5	28.0
40	11.5	15.5	19.0	22.0	24.5	26.5	29.0	30.5	32.5
50	12.5	17.0	21.0	24.0	27.0	29.5	32.0	34.5	36.0
60	13.5	18.5	22.5	26.5	29.5	32.0	35.0	37.0	39.0
80	14.5	20.5	25.0	29.5	33.0	36.5	39.5	42.0	44.0
100	15.5	21.5	27.0	32.0	36.5	40.5	43.0	46.5	48.5
120	15.5	22.5	28.5	34.0	39.0	43.0	46.5	50.5	53.0
No limit	15.5	23.5	29.5	35.0	40.5	44.5	48.5	52.0	55.5

Schedule 4

Schedule 4 – continued

Part III – Rules for calculation by reference to aggregate notional area

5. The conditions of this Part shall be satisfied if a building is so constructed that the aggregate notional area of the unprotected areas in the side of a building or compartment does not exceed–

   (a) 210 m^2 (if the building or compartment is of purpose groups I, II, III, IV or VII); or

   (b) 90 m^2 (if the building or compartment is of purpose groups V, VI or VIII),

   such calculation being made by reference to any one of a series of vertical data, measured at intervals of not more than 3 m from one another along the relevant boundary.

6. For the purposes of this Part–

   AGGREGATE NOTIONAL AREA means the aggregate of the areas of any unprotected areas in the side of a building or compartment, each such area being multiplied by the Factor specified in the Table to this Part according to the distance of such unprotected areas from the vertical datum;

   VERTICAL DATUM means a vertical line of unlimited height at any point on the relevant boundary; and

   THE DATUM LINE means the line joining a vertical datum to the nearest point of the side of the building or compartment.

7. For the purposes of this Part no account shall be taken of any unprotected area in the side of a building or compartment which is–

   (a) screened from the vertical datum by any part of an external wall which is not an unprotected area;

   (b) outside a horizontal arc having its centre at a point through which the vertical datum passes and having a radius measuring 50 m and extending 90° on either side of the datum line; or

   (c) facing away from the vertical datum, or making an angle not exceeding 10° with a line drawn from it to the vertical datum.

Table to Part III of Schedule 4

Distance of unprotected area from vertical datum (in metres)		Factor
Not less than	Less than	
1.0	1.2	80
1.2	1.8	40
1.8	2.7	20
2.7	4.3	10
4.3	6.0	4
6.0	8.5	2
8.5	12.0	1
12.0	18.5	0.5
18.5	27.5	0.25
27.5	50.0	0.1
50.0	No limit	0

Schedule 4 – continued

Part IV – Rules for calculation in respect of certain buildings of purpose Groups I or III

8. The provisions of this Part apply only to any building of purpose groups I or III, which has not more than three storeys and of which no side (measured on an elevation) exceeds 24 m in length.

9. The conditions of this Part shall be satisfied if the distance between any part of a side of a building and the relevant boundary is not less than the minimum distance specified in the Table to this Part according to the length of such side and the total area of any unprotected areas to be taken into account.

Table to Part IV of Schedule 4

Permitted unprotected areas in certain residential buildings

Minimum distance (in metres) between side of building and boundary (1)	Length of side (in metres) not exceeding (2)	Total area of unprotected areas (in square metres) not exceeding (3)
1.0	24.0	5.6
2.5	24.0	15.0
5.0	12.0	up to the whole area of the wall
6.0	24.0	up to the whole area of the wall

SCHEDULE 5

Notional designations of roof coverings

Regulation E1(6)

Part I: Pitched roofs covered with slates or tiles

Covering material (1)	Supporting structure (2)	Designation (3)
1. Natural slates 2. Fibrous-cement slates 3. Clay tiles 4. Concrete tiles	Timber rafters with or without underfelt, sarking, boarding, wood wool slabs, compressed straw slabs, plywood, wood or flax chipboard, or fibre insulating board	AA
5. Strip slates of bitumen felt Class 1 or 2	Timber rafters and boarding, plywood, wood wool slabs, compressed straw slabs, wood or flax chipboard, or fibre insulating board	CC
6. Bitumen felt strip slates Type 2E, with underlayer of bitumen felt Type 2B or 2C	Timber rafters and boarding, plywood, wood wool slabs, compressed straw slabs, wood or flax chipboard, or fibre insulating board	BB

Note: Any reference in this Part to bitumen felt of a specified class or type is a reference to bitumen felt as so designated in BS 747: 1977 (1986).

Schedule 5 – continued

Part II: Pitched roofs covered with preformed self-supporting sheets

Details of covering		Supporting structure	Designation
Material (1)	Construction (2)	(3)	(4)
Corrugated sheets of– (i) galvanised steel; (ii) aluminium; (iii) fibrous-cement; or (iv) PVC coated steel	1. Single skin without underlay or with underlay of– (i) plasterboard; (ii) fibre insulating board; (iii) compressed straw slab; or (iv) wood wool slab	Structure of timber, steel or concrete	AA
	2. Double skin without interlayer or with interlayer of– (i) resin-bonded glass fibre; (ii) bitumen-bonded glass fibre; (iii) mineral wool slab or blanket; (iv) polystyrene; or (v) polyurethane	Structure of timber, steel or concrete	AA

Part III: Pitched or flat roofs covered with fully supported material

Covering material (1)	Supporting structure (2)	Designation (3)
1. Aluminium sheet 2. Copper sheet 3. Zinc sheet 4. Lead sheet 5. Mastic asphalt 6. Vitrious enamelled steel sheet	1. Timber joists and– (i) tongued and grooved boarding; or (ii) plain edged boarding	AA*
	2. Steel or timber joists with deck of– (i) wood wool slab; (ii) compressed straw slab; (iii) wood or flax chipboard; (iv) fibre insulating board; or (v) 9.5 mm plywood	AA
	3. Concrete or clay pot slab (cast in situ or precast); or non-combustible deck of steel or aluminium (with or without insulation)	AA

*Note: Lead sheet supported by timber joists and plain edged boarding shall be deemed to be of designation BA.

Schedule 5 – continued

Part IV: Roofs covered with bitumen felt

Part IV(A): Flat roofs covered with bitumen felt

A flat roof comprising a covering of bitumen felt shall (irrespective of the felt specification) be deemed to be of designation AA if the felt is laid on a deck constructed of any of the materials prescribed in the Table in Part IV(B) and has a surface finish of (a) bitumen bedded mineral aggregate covering the whole surface to a depth of not less than 12.5 mm, (b) bitumen bedded tiles of non-combustible material, (c) sand and cement screed or (d) macadam.

Part IV(B): Pitched roofs covered with bitumen felt

Details of felt			Combustible deck			Non-combustible deck		
Number of layers	Type of upper layer	Type of underlayer(s)	Deck of one of the following (having minimum thickness stated)–plywood (6 mm); wood or flax chipboard (12.5 mm); T & G boarding (16 mm finished); or plain edge boarding (19 mm finished)	Deck of compressed straw slab	Deck of screeded wood wool slab	Fibrous-cement or steel single skin or cavity deck (without overlay or with overlay of fibre insulating board)	Aluminium single skin or cavity deck (without overlay or with overlay of fibre insulating board)	Concrete or clay pot slab (cast in situ or precast)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Two or three layers built up in accordance with CP 144: Part 3: 1970	1. Type 1E	Type 1B or 1D or type 1C (minimum mass 13 kg/10 m^2)	CC	AC	AC	AC	AC	AB

	2. Type 2E	Type 1B, 1D or 1C (minimum mass 13 kg/10 m^2)	BB	AB	AB	AB	AB	AB
	3. Type 2E	Type 2B or 2C	AB	AB	AB	AB	AB	AB
	4. Type 3E	Type 3B or 3G	BC	AC	AB	AB	AB	AB
2. Single layer	Type 1E		CC	AC	AC	AC	CC	AC

Note: Any reference in this Part to bitumen felt of a specified type is a reference to bitumen felt as so designated in BS 747: 1977 (1986).

SCHEDULE 6

Thermal insulation of dwellings

Regulation F4

Part I – Interpretation

1. In this Schedule, THERMAL CONDUCTIVITY–

   (a) means the quantity of heat which passes in unit time through unit area of a homogeneous flat slab of unit thickness when unit difference of temperature is established between its faces, expressed in W/m°C; and

   (b) in the case of any material containing cement, refers exclusively to the thermal conductivity of that material having a moisture content of 3% by volume.

2. In the Tables in Parts II, III and IV–

   (a) a minimum thickness specified under any capital letter at the head of column (5) is the required minimum thickness of the insulating material identified by that capital letter in the Table to this rule; and

   (b) the words INSULATING MATERIAL in column (1) refer only to materials in relation to which a minimum thickness is prescribed by a relevant entry in column (5).

   Provided that the letter D shall only be taken to refer to urea formaldehyde cavity foam fill in circumstances in which its use is not prohibited by regulation B5.

Table to Rule 2: Insulating materials

Type (1)	Description (2)
A	Wood wool slab (density not exceeding 500 kg/m^3)
B	Fibre building board; insulation board or bitumen impregnated insulating board Perlite granules
C	Cellular glass
D	Mineral fibre quilt or loose fill Urea formaldehyde foam cavity fill
E	Mineral fibre slab or rigid mat Expanded polystyrene insulating board or loose fill Phenol formaldehyde insulating board
F	Polyurethane core to laminated board
G	Exfoliated vermiculite loose fill
H	Corkboard
J	Autoclaved aerated concrete (density not exceeding 500 kg/m^3)

Schedule 6

3. If, in addition to the component parts described in column (1) of any Table in Part II, III or IV, the construction of a wall, floor or roof includes any one of the surface finishes described in column (1) of the Table to this rule, the minimum thickness of insulating material specified in column (5) of the relevant Table in Part II, III or IV (or if there are no entries in that column, the minimum thickness specified in Column (2) of that Table) shall be taken to be reduced by the percentage in column (2) of the Table to this rule.

Table to Rule 3: Reduction of minimum thickness

Description of internal surface finish (1)	Percentage reduction (2)
1. Dense plaster	2
2. Lightweight plaster	6
3. Plasterboard on dabs, strips or battens	20
4. Insulating plasterboard or battens	30

4. If the density or thermal conductivity of a material is required to conform to a limit specified in column (3) or (4) in any Table in Part II, III or IV and the value is intermediate between 2 adjacent values specified in the relevant column, the appropriate minimum thickness of insulating material for the purposes of column (5) of that Table (or, if there are no entries in that column, the minimum thickness specified in column (2) of that Table) may, at the option of the person intending to erect the building, be determined by linear interpolation.

5. If, in addition to the component parts described in column (1) of the Table to Part IV, a roof includes a layer of fibre insulating board at least 12 mm thick interposed between expanded polystyrene insulating board and the roof covering or screed, the relevant minimum thickness of expanded polystyrene insulating board specified in column (5), type E, of the said Table may be reduced by 8 mm.

Schedule 6 – continued

Part II: Specifications relating to walls

Table 1: Walls required to have a U value not exceeding 0.6 W/m² °C

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Any wall not precisely specified in this Table–									
(a) of solid or composite construction containing insulating material; or	—	—	—	—	—	—	59	52	37
(b) of composite construction containing insulating material and enclosing an airspace not less than 25 mm wide.	—	—	—	—	—	—	52	46	33
2. A cavity wall comprising an outer leaf of brickwork and an inner leaf either of brickwork or of solid concrete blocks or slabs, each leaf conforming to the limit in column (2); and									
(a) the cavity is completely filled by insulating material; and									
(i) the inner leaf is of brickwork; or	100	—	—	—	—	—	47	41	—
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	—	—	—	52	46	—
	100	1700	0.76	—	—	—	49	43	—
	100	1400	0.51	—	—	—	47	41	—
	100	1100	0.34	—	—	—	43	38	—
	100	750	0.22	—	—	—	36	32	—
	100	600	0.19	—	—	—	34	29	—
	100	400	0.15	—	—	—	28	24	—

Schedule 6

WALLS
0.6W/m²°C

(b) the cavity is partially filled by insulating material attached to either of its boundary faces so as to preserve a residual airspace at least 25 mm wide or the insulating material is attached to the room face of the inner leaf; and									
(i) the inner leaf is of brickwork; or	100	—	—	—	—	50	—	35	25
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	—	—	56	—	39	28
	100	1700	0.76	—	—	53	—	37	26
	100	1400	0.51	—	—	50	—	35	25
	100	1100	0.34	—	—	45	—	31	22
	100	750	0.22	—	—	37	—	27	18
	100	600	0.19	—	—	33	—	23	17
	100	400	0.15	—	—	26	—	18	13
(c) the insulating material is separated from the inner face of the inner leaf by an airspace not less than 25 mm wide; and									
(i) the inner leaf is of brickwork; or	100	—	—	—	—	41	32	28	20
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4).	100	2300	1.63	—	—	47	40	33	24
	100	1700	0.76	—	—	44	35	31	22
	100	1400	0.51	—	—	41	32	28	20
	100	1100	0.34	—	—	36	29	25	18
	100	750	0.22	—	—	28	22	19	14
	100	600	0.19	—	—	25	20	17	12
	100	400	0.15	—	—	17	14	12	9

Schedule 6 Part II – continued

Table 1: Walls required to have a U value not exceeding 0.6 W/m² °C – continued

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
3. A solid wall, rendered externally, consisting of solid cast concrete or solid concrete blocks or slabs and conforming to the limit in column (2) and to the limit in column (3) or (4); and									
(a) insulating material is attached directly to the inner face; or	200	2300	1.63	—	—	69	55	48	34
	200	1700	0.76	—	—	62	50	43	31
	200	1400	0.51	—	—	57	45	40	28
	200	1100	0.34	—	—	48	38	33	24
	200	750	0.22	—	—	33	26	23	16
	200	600	0.19	—	—	23	18	16	11
	200	400	0.15	—	—	9	7	6	4
(b) insulating material is separated from the inner face by an airspace not less than 25 mm wide.	200	2300	1.63	—	—	60	48	42	30
	200	1700	0.76	—	—	53	43	37	27
	200	1400	0.51	—	—	48	38	33	24
	200	1100	0.34	—	—	39	31	27	19
	200	750	0.22	—	—	24	19	17	12
	200	600	0.19	—	—	14	11	10	7
	200	400	0.15	No requirement					

Schedule 6

WALLS
0.6W/m²°C

4. A wall, rendered externally, of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (3) or (4)–									
(a) in a single leaf conforming to the limit in column (2); or	565	1100	0.34	No requirement					
	357	750	0.22	No requirement					
	316	600	0.19	No requirement					
	250	400	0.15	No requirement					
(b) in two leaves of similar thickness and composition, separated by a cavity not less than 25 mm wide, the two leaves together conforming to the limit in column (2).	470	1100	0.34	No requirement					
	301	750	0.22	No requirement					
	263	600	0.19	No requirement					
	208	400	0.15	No requirement					
5. A composite wall containing a cavity not less than 25 mm wide and comprising—									
(a) an external cladding of metal, glass or plastic sheet; and									
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	69	55	48	34
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4); or	444	1100	0.34	No requirement					
	288	750	0.22	No requirement					
	249	600	0.19	No requirement					
	196	400	0.15	No requirement					
(b) an external veneer of single-leaf brickwork or of tiles or weatherboarding secured on battens with a background of breather paper and counter-battens sufficient to preserve the required cavity; and									
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	—	50	44	31
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4).	414	1100	0.34	No requirement					
	268	750	0.22	No requirement					
	232	600	0.19	No requirement					
	183	400	0.15	No requirement					

Schedule 6 Part II – continued

Table 2: Walls required to have a U value not exceeding 1.0 W/m² °C

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Any wall not precisely specified in this Table–	—	—	—	—	—	—	33	29	21
(a) of solid or composite construction containing insulating material; or									
(b) of composite construction containing insulating material and enclosing an airspace not less than 25 mm wide.	—	—	—	—	—	—	26	22	16
2. A cavity wall comprising an outer leaf of brickwork and an inner leaf either of brickwork or of solid concrete blocks or slabs each leaf conforming to the limit in column (2); and									
(a) the cavity is completely filled by insulating material; and									
(i) the inner leaf is of brickwork; or	100	—	—	—	—	—	20	17	—
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	—	—	—	26	23	—
	100	1700	0.76	—	—	—	23	20	—
	100	1400	0.51	—	—	—	20	17	—
	100	1100	0.34	—	—	—	16	14	—
	100	750	0.22	—	—	—	10	9	—
	100	600	0.19	—	—	—	7	6	—
	100	400	0.15	No requirement					

Schedule 6

WALLS
1.0W/m²°C

(b) the cavity is partially filled by insulating material attached to either of its boundary faces so as to preserve a residual airspace at least 25 mm wide or the insulating material is attached to the room face of the inner leaf; and										
(i) the inner leaf is of brickwork; or	100	—	—	—	—	16	—	11	8	
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	—	—	21	—	15	11	
	100	1700	0.76	—	—	19	—	13	10	
	100	1400	0.51	—	—	16	—	11	8	
	100	1100	0.34	—	—	10	—	7	5	
	100	750	0.22	No requirement						
	100	600	0.19	No requirement						
	100	400	0.15	No requirement						
(c) the insulating material is separated from the inner face of the inner leaf by an airspace not less than 25 mm wide; and										
(i) the inner leaf is of brickwork; or	100	—	—	—	—	7	6	5	3	
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4).	100	2300	1.63	—	—	13	10	9	6	
	100	1700	0.76	—	—	10	8	7	5	
	100	1400	0.51	—	—	7	6	5	3	
	100	1100	0.34	No requirement						
	100	750	0.22	No requirement						
	100	600	0.19	No requirement						
	100	400	0.15	No requirement						

Schedule 6 Part II – continued

Table 2: Walls required to have a U value not exceeding 1.0 W/m² °C – continued

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
3. A solid wall, rendered externally, consisting of solid cast concrete or solid concrete blocks or slabs and conforming to the limit in column (2) and to the limit in column (3) or (4); and									
(a) insulating material is attached directly to the inner face; or	200	2300	1.63	—	—	34	27	24	17
	200	1700	0.76	—	—	28	23	20	14
	200	1400	0.51	—	—	22	19	16	11
	200	1100	0.34	—	—	14	12	10	7
	200	750	0.22	No requirement					
	200	600	0.19	No requirement					
	200	400	0.15	No requirement					
(b) insulating material is separated from the inner face by an airspace not less than 25 mm wide.	200	2300	1.63	—	—	25	20	18	13
	200	1700	0.76	—	—	19	16	13	10
	200	1400	0.51	—	—	13	11	9	7
	200	1100	0.34	No requirement					
	200	750	0.22	No requirement					
	200	600	0.19	No requirement					
	200	400	0.15	No requirement					

Schedule 6

WALLS
1.0W/m²°C

4. A wall, rendered externally, of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (3) or (4)–									
(a) in a single leaf conforming to the limit in column (2); or	460	1400	0.51	No requirement					
	307	1100	0.34	No requirement					
	196	750	0.22	No requirement					
	172	600	0.19	No requirement					
	136	400	0.15	No requirement					
(b) in 2 leaves of similar thickness and composition, separated by a cavity not less than 25 mm wide, the 2 leaves together conforming to the limit in column (2).	340	1400	0.51	No requirement					
	226	1100	0.34	No requirement					
	146	750	0.22	No requirement					
	127	600	0.19	No requirement					
	100	400	0.15	No requirement					
5. A composite wall containing a cavity not less than 25 mm wide and comprising–									
(a) an external cladding of metal, glass or plastic sheet; and									
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	32	26	22	16
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4); or	326	1400	0.51	No requirement					
	218	1100	0.34	No requirement					
	141	750	0.22	No requirement					
	122	600	0.19	No requirement					
	96	400	0.15	No requirement					
(b) an external veneer of single-leaf brickwork or of tiles or weatherboarding secured on battens with a background of breather paper and counter-battens sufficient to preserve the required cavity; and									
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	28	—	20	14
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4).	230	1400	0.51	No requirement					
	153	1100	0.34	No requirement					
	99	750	0.22	No requirement					
	86	600	0.19	No requirement					
	68	400	0.15	No requirement					

Schedule 6 – continued

Part III: Specifications relating to floors

FLOORS
0.6 W/m² °C

Table 3: Floors exposed to the external air required to have a U value not exceeding 0.6 W/m² °C

(1) Description of floor	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Floor of slabs or hollow beams of dense concrete conforming to the limit in column (2) with–									
(a) insulating material in direct contact with the upper or lower surface of the floor; or	100	—	—	116	—	68	54	47	34
(b) insulating material separated by an airspace not less than 20 mm wide from the upper or lower surface of the floor.	100	—	—	97	—	57	46	40	29
2. Floor of slabs or beams of autoclaved aerated concrete conforming to the limit in column (2) and to the limit in column (3) or (4) with–									
(a) no additional insulation; or	250	600	0.18	No requirement					
(b) insulating material in direct contact with the upper surface of the floor; or	200	600	0.18	27	19	16	13	11	8
	150	600	0.18	50	36	30	24	21	15
	100	600	0.18	74	52	44	35	31	22
(c) insulating material separated by an airspace not less than 20 mm wide from the upper or lower surface of the floor.	200	600	0.18	9	6	5	4	4	3
	150	600	0.18	32	23	19	15	13	10
	100	600	0.18	56	40	33	26	23	16

Schedule 6 – continued

Part IV: Specifications relating to roofs

Table 4: Roofs required to have a U value not exceeding 0.35 W/m² °C

(1) Description of roof	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type (dimensions in brackets indicate the minimum thickness required when one side of an enclosed space is faced with bright reflective foil)								
				A	B	C	D	E	F	G	H	J
1. Any roof not precisely specified in this Table which contains insulating material.	—	—	—	—	—	—	108	95	68	176	—	450
2. Pitched roof of slates or tiles on sarking felt or sarking paper (or a pitched or flat roof of any waterproof material on boarding not less than 16 mm thick) having a ventilated space between the underside of the roof and a separate ceiling to the room below with—												
(a) insulating material in direct contact with that ceiling; or	—	—	—	—	—	—	94	82	59	152	98	—
(b) insulating material separated from either surface of the ceiling by an enclosed air space.	— —	— —	— —	— —	— —	— —	— —	76 (70)	54 (50)	— —	91 (84)	— —
3. Pitched or flat roof of fibrous-cement or metal decking with fibre insulating board not less than 12.5 mm thick below the roof finish (or a weatherproof deck of wood wool slabs not less than 50 mm thick) with–												

Schedule 6 Part IV – continued

Table 4: Roofs required to have a U value not exceeding 0.35 W/m² °C – continued

(1) Description of roof	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type (dimensions in brackets indicate the minimum thickness required when one side of an enclosed space is faced with bright reflective foil)								
				A	B	C	D	E	F	G	H	J
3. – continued												
(a) insulating material in contact with the roof covering the top of the decking or the soffit of the decking; or	—	—	—	—	—	—	—	80	57	—	96	—
(b) insulating material separated from the soffit of the decking by an enclosed air space.	—	—	—	—	—	—	—	74	53	—	89	—
	—	—	—	—	—	—	—	—	—	—	(82)	—
4. Pitched or flat roof of dense concrete hollow or solid beams or slabs screeded to an average thickness of not less than 40 mm with–												
(a) insulating material in contact with the roof covering or the soffit of the concrete members; or	—	—	—	—	—	125	—	88	63	—	105	—
(b) insulating material separated from the soffit of the concrete members by an enclosed air space.	—	—	—	—	—	—	—	81	58	—	98	—
	—	—	—	—	—	—	—	(75)	(54)	—	(91)	—
5. Pitched or flat roof of autoclaved aerated concrete slabs conforming to the limits in columns (2) and (3) with insulating material in contact with the roof covering or with the top of the concrete slabs.	100	650	—	173	130	—	—	77	55	—	91	—

SCHEDULE 7

Conservation of fuel and power in buildings other than dwellings

Regulation FF4(b)(iii)

Part I: Interpretation

1. In this Schedule, THERMAL CONDUCTIVITY–

   (a) means the thermal transmission in unit time through unit area of a slab of a uniform homogeneous material of unit thickness when unit difference of temperature is established between its surfaces; and

   (b) in the case of any material containing cement, refers exclusively to the thermal conductivity of that material having a moisture content of 3% by volume.

2. In the Tables to Parts II and III–

   (a) a minimum thickness specified under any capital letter at the head of column (5) is the required minimum thickness of the insulating material identified by that capital letter in the Table below; and

   (b) the words INSULATING MATERIAL in column (1) refer only to materials in relation to which a minimum thickness is prescribed by a relevant entry in column (5).

   Provided that the letter D shall only be taken to refer to urea formaldehyde cavity foam fill in circumstances in which its use is not prohibited by regulation B5.

Table to Rule 2: Insulating materials

Type (1)	Description (2)
A	Wood wool slab (density not exceeding 500 kg/m^3)
B	Fibre building board: insulating board or bitumen impregnated insulating board Perlite granules
C	Cellular glass
D	Mineral fibre (glass or rock) quilt or loose fill Urea formaldehyde foam cavity fill
E	Mineral fibre (glass or rock) slab or rigid mat Expanded polystyrene insulating board Phenol formaldehyde insulating board
F	Polyurethane core to laminated board

Schedule 7

3. If, in addition to the component parts described in column (1) of any Table in Part II or III, the construction of a wall, floor or roof includes any one of the surface finishes described in column (1) of the Table, the minimum thickness of insulating material specified in column (5) of the relevant Table in Part II or III (or, if there are no entries in that column, the minimum thickness specified in column (2) of that Table) shall be taken to be reduced by the percentage in column (2) of the Table.

Table to Rule 3: Reduction of minimum thickness

Description of internal surface finish (1)	Percentage reduction (2)
1. Dense plaster	2
2. Lightweight plaster	6
3. Plasterboard on dabs, strips or battens	20
4. Insulating plasterboard on battens	30

4. If the density or thermal conductivity of a material is required to conform to a limit specified in column (3) or (4) in any Table in Part II or III and the value is intermediate between two adjacent values specified in the relevant column, the appropriate minimum thickness of insulating material for the purposes of column (5) of that Table (or, if there are no entries in that column, the minimum thickness specified in column (2) of that Table) may, at the option of the person intending to erect the building, be determined by linear interpolation.

5. If, in addition to the component parts detailed in column (1) of Tables 3 and 6 in Parts II and III respectively, a roof includes a layer of fibre insulating board at least 12 mm thick interposed between expanded polystyrene insulating board and the roof covering or screed, the relevant minimum thickness of expanded polystyrene insulating board given in column (5), Type E of Tables 3 and 6 may be reduced by 8 mm.

Schedule 7 – continued

Part II: Specifications relating to buildings, or parts, of purpose group II, III, IV, V or VII or (if not for storage) VIII

Table 1: Walls required to have a U value not exceeding 0.6 W/m²°C

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Any wall not precisely specified in this Table–									
(a) of solid or composite construction containing insulating material; or	—	—	—	126	89	74	59	52	37
(b) of composite construction containing insulating material and enclosing an airspace not less than 20 mm wide	—	—	—	111	79	65	52	46	33
2. A cavity wall comprising an outer leaf of brickwork and an inner leaf either of brickwork or of solid concrete blocks or slabs, each leaf conforming to the limit in column (2); and									
(a) the cavity is completely filled by insulating material; and									
(i) the inner leaf is of brickwork; or	100	—	—	99	70	58	47	41	29
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	111	79	65	52	46	33
	100	1700	0.76	105	74	62	49	43	31
	100	1400	0.51	99	70	58	47	41	29
	100	1100	0.34	91	64	54	43	38	27
	100	750	0.22	78	55	46	36	32	23

Schedule 7 Part II – continued

Table 1: Walls required to have a U value not exceeding 0.6 W/m²°C – continued

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
2. (b) the cavity is partly filled by insulating material attached to the cavity face of the inner leaf so as to preserve a residual air space at least 25 mm wide or the insulating material is attached to the room face of the inner leaf; and									
(i) the inner leaf is of brickwork; or	100	—	—	84	59	50	40	35	25
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	96	68	56	45	39	28
	100	1700	0.76	90	63	53	42	37	26
	100	1400	0.51	84	59	50	40	35	25
	100	1100	0.34	76	54	45	36	31	22
	100	750	0.22	62	44	37	29	27	18
(c) the insulating material is separated from the inner face of the inner leaf by an airspace not less than 20 mm wide; and									
(i) the inner leaf is of brickwork; or	100	—	—	69	49	41	32	28	20
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4)	100	2300	1.63	80	57	47	40	33	24
	100	1700	0.76	74	53	44	35	31	22
	100	1400	0.51	69	49	41	32	28	20
	100	1100	0.34	61	43	36	29	25	18
	100	750	0.22	47	33	28	22	19	14

3. A solid wall, rendered externally, consisting of solid cast concrete or solid concrete blocks or slabs and conforming to the limit in column (2) and to the limit in column (3) or (4); and									
(a) insulating material is attached directly to the inner face; or	200	2300	1.63	117	83	69	55	48	34
	200	1700	0.76	106	75	62	50	43	31
	200	1400	0.51	97	68	57	45	40	28
	200	1100	0.34	82	58	48	38	33	24
	200	750	0.22	56	39	33	26	23	16
(b) insulating material is separated from the inner face by an airspace not less than 20 mm wide	200	2300	1.63	102	72	60	48	42	30
	200	1700	0.76	91	64	53	43	37	27
	200	1400	0.51	81	57	48	38	33	24
	200	1100	0.34	66	47	39	31	27	19
	200	750	0.22	40	28	24	19	17	12
4. A wall, rendered externally, of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (3) or (4)–									
(a) in a single leaf conforming to the limit in column (2); or	848	1400	0.51	no requirement					
	565	1100	0.34	no requirement					
	357	750	0.22	no requirement					
(b) in two leaves of similar thickness and composition, separated by a cavity not less than 20 mm wide, the two leaves together conforming to the limit in column (2)	706	1400	0.51	no requirement					
	470	1100	0.34	no requirement					
	301	750	0.22	no requirement					

Schedule 7 Part II – continued

Table 1: Walls required to have a U value not exceeding 0.6 W/m²°C – continued

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
5. A composite wall containing a cavity not less than 20 mm wide and comprising–									
(a) an external cladding of metal, glass or plastic sheet; and									
(i) insulating material and internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	69	55	48	34
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4); or	667 444 288	1400 1100 750	0.51 0.34 0.22			no requirement no requirement no requirement			
(b) an external veneer of single-leaf brickwork or of tiles or weatherboarding secured on battens with a background of breather paper and counter-battens sufficient to preserve the required cavity; and									
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	63	50	44	31
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4)	621 414 268	1400 1100 750	0.51 0.34 0.22			no requirement no requirement no requirement			

Schedule 7 Part II – continued

Table 2: Floors exposed to the external air required to have a U value not exceeding 0.6 W/m²°C

(1) Description of floor	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Floor of slabs or hollow beams of dense concrete conforming to the limit in column (2) with–									
(a) insulating material in direct contact with the upper or lower surface of the floor; or	100	—	—	—	—	68	54	47	34
(b) insulating material separated by an airspace not less than 20 mm wide from the upper or lower surface of the floor	100	—	—	—	—	57	46	40	29
2. Floor of slabs or beams of autoclaved aerated concrete conforming to the limit in column (2) and to the limit in column (3) or (4) with–									
(a) no additional insulation; or	250	600	0.18	—	—	—	—	—	—
(b) insulating material in direct contact with the upper or lower surface of the floor; or	200	600	0.18	27	19	16	13	11	8
	150	600	0.18	50	36	30	24	21	15
	100	600	0.18	74	52	44	35	31	22
(c) insulating material separated by an airspace not less than 20 mm wide from the upper or lower surface of the floor	200	600	0.18	9	6	5	4	4	3
	150	600	0.18	32	23	19	15	13	10
	100	600	0.18	56	40	33	26	23	16

ROOFS
0.6W/m²°C

Schedule 7 Part II – continued

Table 3: Roofs required to have a U value not exceeding 0.6 W/m²°C

(1) Description of roof	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Any roof not precisely specified in this Table which contains insulating material, including sandwich construction of mineral fibre (glass or rock) with requisite spacers between fibrous-cement corrugated sheets	—	—	—	—	—	—	60	50	35
2. Pitched roof of slates or tiles on sarking felt or sarking paper (or a pitched or flat roof of any waterproof material on boarding not less than 16 mm thick) having a ventilated space between the underside of the roof and a separate ceiling to the room below, with–									
(a) insulating material in direct contact with that ceiling; or	—	—	—	—	—	—	46	38	28
(b) insulating material separated from either surface of the ceiling by an airspace not less than 20 mm wide	—	—	—	—	—	—	—	34	24
3. Pitched or flat roof with boarding conforming to the limits in columns (2) and (4) laid on fibrous-cement or metal decking with–									
(a) insulating material in contact with the roof covering or the soffit of the assembly; or	12.5	—	0.05	—	—	—	—	32	23
(b) insulating material separated from the soffit by an airspace not less than 20 mm wide	12.5	—	0.05	—	—	—	—	25	18

Schedule 7

ROOFS
0.6W/m² °C

4. Pitched or flat weatherproofed decking of wood wool slabs of density not exceeding 500 kg/m³ and conforming to the relevant limit in column (2) with–									
(a) insulating material in contact with the roof covering or the top or soffit of the decking; or	50	—	—	—	—	—	—	31	20
	76	—	—	—	—	—	—	25	16
(b) insulating material separated from either surface of the decking by an airspace not less than 20 mm wide	50	—	—	—	—	—	—	21	13
	76	—	—	—	—	—	—	15	10
5. Pitched or flat roof of dense concrete hollow or solid beams or slabs either unscreeded or screeded to an average thickness of not less than 40 mm with material conforming to the limit in column (3) or (4) with–									
(a) insulating material in contact with the roof covering or the upper face or soffit of the concrete members; or	Unscreeded	—	—	—	—	70	—	49	35
	Screeded	1400	0.51	—	—	66	—	46	33
	Screeded	1100	0.34	—	—	64	—	45	32
	Screeded	750	0.22	—	—	60	—	43	30
	Screeded	400	0.15	—	—	57	—	40	28
(b) insulating material separated from the soffit of the concrete members by an airspace not less than 20 mm wide	Unscreeded	—	—	—	—	—	—	44	31
	Screeded	1400	0.51	—	—	—	—	41	29
	Screeded	1100	0.34	—	—	—	—	39	28
	Screeded	750	0.22	—	—	—	—	37	27
	Screeded	400	0.15	—	—	—	—	34	25
6. Roof of slabs or beams of autoclaved aerated concrete conforming to the relevant limit in column (2) and to the limit in column (3) or (4) with insulating material in contact with concrete members	250	600	0.18	11	8	6	—	4	3
	200	600	0.18	35	24	20	—	14	10
	150	600	0.18	58	41	34	—	24	17
	100	600	0.18	—	—	48	—	34	24

Schedule 7 – continued

WALLS
0.7W/m²°C

Part III: Specifications relating to buildings, or parts, of purpose group VI or (if for storage) VIII

Table 4: Walls required to have a U value not exceeding 0.7 W/m²°C

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Any wall not precisely specified in this Table–									
(a) of solid or composite construction containing insulating material; or	—	—	—	106	75	62	50	44	31
(b) of composite construction containing insulating material and enclosing an airspace not less than 20 mm wide	—	—	—	91	64	53	43	37	27
2. A cavity wall comprising an outer leaf of brickwork and an inner leaf either of brickwork or of solid concrete blocks or slabs each leaf conforming to the limit in column (2); and									
(a) the cavity is completely filled by insulating material; and									
(i) the inner leaf is of brickwork; or	100	—	—	80	56	47	37	33	23
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	91	64	53	43	37	27
	100	1700	0.76	85	60	50	40	35	25
	100	1400	0.51	80	56	47	37	33	23
	100	1100	0.34	71	50	42	33	29	21
	100	750	0.22	57	40	34	27	24	17

Schedule 7

WALLS
0.7W/m²°C

(b) the cavity is partly filled by insulating material attached to the cavity face of the inner leaf so as to preserve a residual airspace at least 25 mm wide or the insulating material is attached to the room face of the inner leaf; and									
(i) the inner leaf is of brickwork; or	100	—	—	64	45	38	30	26	19
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4); or	100	2300	1.63	75	53	44	35	31	22
	100	1700	0.76	69	49	41	33	29	20
	100	1400	0.51	64	45	38	30	26	19
	100	1100	0.34	56	39	33	26	23	16
	100	750	0.22	42	30	25	20	17	12
(c) the insulating material is separated from the inner face of the inner leaf by an airspace not less than 20 mm wide; and									
(i) the inner leaf is of brickwork; or	100	—	—	49	34	29	23	20	14
(ii) the inner leaf is of concrete blocks or slabs conforming to the limit in column (3) or (4)	100	2300	1.63	60	42	35	28	25	18
	100	1700	0.76	54	38	32	25	22	16
	100	1400	0.51	49	34	29	23	20	14
	100	1100	0.34	40	28	24	19	17	12
	100	750	0.22	27	19	16	13	11	8
3. A solid wall, rendered externally, consisting of solid cast concrete or solid concrete blocks or slabs and conforming to the limit in column (2) and to the limit in column (3) or (4); and									
(a) insulating material is attached directly to the inner face; or	200	2300	1.63	97	68	56	45	40	28
	200	1700	0.76	85	61	51	40	35	25
	200	1400	0.51	76	54	45	36	31	22
	200	1100	0.34	61	43	36	29	25	18
	200	750	0.22	35	25	21	17	14	10

Schedule 7 Part III – continued

Table 4: Walls required to have a U value not exceeding 0.7 W/m²°C – continued

(1) Description of wall	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
(b) insulating material is separated from the inner face by an airspace not less than 20 mm wide	200	2300	1.63	81	57	48	38	33	24
	200	1700	0.76	71	50	42	33	29	21
	200	1400	0.51	61	43	36	29	25	18
	200	1100	0.34	46	33	27	22	19	14
	200	750	0.22	20	14	12	9	8	6
4. A wall, rendered externally, of solid cast concrete blocks or slabs conforming to the limit in column (3) or (4)–									
(a) in a single leaf conforming to the limit in column (2); or	712	1400	0.51	no requirement					
	475	1100	0.34	no requirement					
	300	750	0.22	no requirement					
(b) in two leaves of similar thickness and composition separated by a cavity not less than 20 mm wide, the two leaves together conforming to the limit in column (2)	577	1400	0.51	no requirement					
	385	1100	0.34	no requirement					
	250	750	0.22	no requirement					

Schedule 7

WALLS

0.7W/m²°C

5. A composite wall containing a cavity not less than 20 mm wide and comprising–										
(a) an external cladding of metal, glass or plastics sheet; and										
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	54	43	38	27	
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4); or	546 364 235	1400 1100 750	0.51 0.34 0.22			no requirement no requirement no requirement				
(b) an external veneer of single-leaf brickwork or of tiles or weatherboarding secured on battens with a background of breather paper and counter-battens sufficient to preserve the required cavity; and										
(i) insulating material and an internal lining of gypsum plasterboard secured to studding; or	—	—	—	—	—	48	38	34	24	
(ii) an inner leaf of solid cast concrete or solid concrete blocks or slabs conforming to the limit in column (2) and to the limit in column (3) or (4)	500 333 216	1400 1100 750	0.51 0.34 0.22			no requirement no requirement no requirement				

Schedule 7 Part III – continued

Table 5: Floors exposed to the external air required to have a U value not exceeding 0.7 W/m²°C

(1) Description of floor	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Floor of slabs or hollow beams of dense concrete conforming to the limit in column (2) with–									
(a) insulating material in direct contact with the upper or lower surface of the floor; or	100	—	—	—	—	56	45	39	28
(b) insulating material separated by an airspace not less than 20 mm wide from the upper or lower surface of the floor	100	—	—	—	—	46	36	32	23
2. Floor of slabs or beams of autoclaved aerated concrete conforming to the limit in column (2) and to the limit in columns (3) or (4) with–									
(a) no additional insulation; or	250	600	0.18	—	—	—	—	—	—
(b) insulating material in direct contact with the upper or lower surface of the floor; or	200	600	0.18	7	5	4	3	3	2
	150	600	0.18	30	21	18	14	12	9
	100	600	0.18	54	38	32	25	22	16
(c) insulating material separated by an airspace not less than 20 mm wide from the upper or lower surface of the floor	150	600	0.18	12	9	7	6	5	4
	100	600	0.18	36	25	21	17	15	11

Schedule 7 Part III – continued

Table 6: Roofs required to have a U value not exceeding 0.7 W/m²°C

(1) Description of roof	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
1. Any roof not precisely specified in this Table which contains insulating material, including sandwich construction of mineral fibre (glass or rock) with requisite spacers between fibrous-cement corrugated sheets	—	—	—	—	—	—	50	42	29
2. Pitched roof of slates or tiles on sarking felt or sarking paper (or a pitched or flat roof of any waterproof material on boarding not less than 16 mm thick) having a ventilated space between the underside of the roof and a separate ceiling to the room below, with–									
(a) insulating material in direct contact with that ceiling; or	—	—	—	—	—	—	36	30	22
(b) insulating material separated from either surface of the ceiling by an airspace not less than 20 mm wide	—	—	—	—	—	—	—	26	19
3. Pitched or flat roof with boarding conforming to the limits in columns (2) and (4) laid on fibrous-cement or metal decking with–									
(a) insulating material in contact with the roof covering or the soffit of the assembly; or	12.5	—	0.05	—	—	—	—	24	17
(b) insulating material separated from the soffit by an airspace not less than 20 mm wide	12.5	—	0.05	—	—	—	—	17	9

Schedule 7 Part III – continued

Table 6: Roofs required to have a U value not exceeding 0.7 W/m²°C – continued

(1) Description of roof	(2) Minimum thickness (in mm)	(3) Maximum density (in kg/m³)	(4) Maximum thermal conductivity (in W/m°C)	(5) Minimum thickness (in mm) of insulating material referred to in column (1) according to type					
				A	B	C	D	E	F
4. Pitched or flat weatherproofed decking of wood wool slabs of density not exceeding 500 kg/m³ and conforming to the relevant limit in column (2) with–									
(a) insulating material in contact with the roof covering or the top or soffit of the decking; or	50	—	—	—	—	—	—	22	15
	76	—	—	—	—	—	—	16	10
(b) insulating material separated from either surface of the decking by an airspace not less than 20 mm wide	50	—	—	—	—	—	—	13	8
	76	—	—	—	—	—	—	6	4
5. Pitched or flat roof of dense concrete hollow or solid beams or slabs either unscreeded or screeded to an average thickness of not less than 40 mm with material conforming to the limit in column (3) or (4) with–									
(a) insulating material in contact with the roof covering or the upper face or soffit of the concrete members; or	Unscreeded	—	—	—	—	58	—	41	29
	Screeded	1400	0.51	—	—	54	—	38	27
	Screeded	1100	0.34	—	—	52	—	37	26
	Screeded	750	0.22	—	—	49	—	35	25
	Screeded	400	0.15	—	—	45	—	31	22
(b) insulating material separated from the soffit of the concrete members by an airspace not less than 20 mm wide	Unscreeded	—	—	—	—	—	—	35	25
	Screeded	1400	0.51	—	—	—	—	33	23
	Screeded	1100	0.34	—	—	—	—	31	22
	Screeded	750	0.22	71	—	—	—	29	21
	Screeded	400	0.15	63	—	—	—	26	19

Schedule 7

ROOFS
0.7W/m² °C

6. Roof of slabs or beams of autoclaved aerated concrete conforming to the relevant limit in column (2) and to the limit in column (3) or (4) with–										
(a) no additional insulation; or	250	600	0.18	—	—	—	—	—	—
(b) insulating material in contact with the concrete members	200	600	0.18	14	10	8	—	6	4
	150	600	0.18	38	27	22	—	16	11
	100	600	0.18	62	43	36	—	25	18

SCHEDULE 8

Publications to which specific reference is made in the Building Regulations (Northern Ireland) 1990.

Regulation A2(7)(b)

Table A. British Standards

Publication (1)	Amendment Slip: Serial Number (2)	Amendment Slip: Reference Number (3)	Context (4)
BS 41: 1973 (1981)	—	—	L8(*a*) L16(*b*)
BS 65: 1981	1 2 3	AMD 1202 AMD 4328 AMD 4394	L6(1)(*a*)(iii) L16(*a*)
BS 449: Part 2: 1969	1 2 3 4 5 6	AMD 416 AMD 523 AMD 661 AMD 1135 AMD 1787 AMD 4576	D4(*c*)
Addendum No. 1 (1975) to BS 449: Part 2: 1969	1 2	AMD 1765 AMD 1929	
BS 476: Part 3: 1958	1	PD 3276	E1(6)
BS 476: Part 4: 1970 (1984)	1 2	AMD 2483 AMD 4390	A2(1)
BS 476: Part 6: 1968	1 2	AMD 549 AMD 3192	E7(4), proviso E7(5)(*c*)(ii)
BS 476: Part 6: 1981		AMD 4329	E7(5)(*c*)(ii) E14(6)(*b*)(vi) E15(1)(*e*)(ii)
BS 476: Part 7: 1971 or 1987	—	—	E15(1)(*f*)
BS 476: Part 8: 1972	1 2 3	AMD 1873 AMD 3816 AMD 4822	E1(5) Table 1 to E1, subheading
BS 476: Part 20: 1987	—	—	E1(5) Table 1 to E1, subheading

Table A. British Standards – continued

Publication	Amendment Slip		Context
	Serial Number	Reference Number	
(1)	(2)	(3)	(4)
BS 476: Part 21: 1987	—	—	E1(5) Table 1 to E1, subheading
BS 476: Part 22: 1987	—	—	E1(5) Table 1 to E1, subheading
BS 476: Part 23: 1987	—	—	E1(5) Table 1 to E1, subheading
BS 567: 1973 (1984)	—	—	L16(*e*)(i)
BS 690: Part 2: 1981	—	—	Table to B4 item 7
BS 690: Part 3: 1973	1 2	AMD 1619 AMD 3830	Table to B4 item 7
BS 690: Part 4: 1974	1	AMD 3220	Table to B4 item 7
BS 715: 1970	1 2	AMD 3284 AMD 3517	L16(*c*)
BS 747: 1977 (1986)	1 2 3	AMD 3775 AMD 4609 AMD 5101	Schedule 5, footnotes
BS 835: 1973 (1984)	—	—	L8(*b*) L16(*e*)(i)
BS 881 & 589: 1974	—	—	Schedule 3
BS 1142: Part 2: 1971	—	—	Table to B4 item 3
BS 1181: 1971 (1977)	—	—	L6(1)(*a*)(i), L14(1)(*a*)(iii)
BS 1230: Part 1: 1985	—	—	A2(1)
BS 2782: 1970	1 2 3 4 5 6 7	AMD 936 AMD 999 AMD 1524 AMD 2222 AMD 3177 AMD 3899 AMD 4997	E1(7) Table 2 to E1, subheading
BS 2989: 1982	—	—	Table to B4, item 6
BS 3083: 1980	1	AMD 3620	Table to B4, item 6

Schedule 8

Table A. British Standards – continued

Publication (1)	Amendment Slip		Context (4)
	Serial Number (2)	Reference Number (3)	
BS 3456: Section 2.7: 1970	1 2 3	AMD 882 AMD 3743 AMD 5006	S3(4)(*b*)
BS 4250: Part 1: 1987	—	—	M13(1)
BS 4471: 1987	—	—	A2(9)(*b*)(ii)
BS 4514: 1983	1 2	AMD 4517 AMD 5584	Table to E12, specification (*b*)
BS 4543: Part 1: 1976	—	—	L22(2)(*d*)
BS 4543: Part 2: 1976	1 2 3	AMD 2794 AMD 3475 AMD 3878	L22(2)(*a*)
BS 4543: Part 3: 1976	1 2	AMD 2981 AMD 3476	L22(2)(*a*)
BS 4876: 1984	—	—	M5(1)
BS 5250: 1989	—	—	C7
BS 5258: Part 1: 1986	1 2	AMD 3348 AMD 4228	M8(3), proviso (ii)
BS 5258: Part 4: 1987	—	—	M8(3), proviso (ii)
BS 5258: Part 5: 1975	1 2	AMD 4076 AMD 4745	M8(3), proviso (ii)
BS 5258: Part 6: 1988	—	—	M8(3), proviso (ii)
BS 5258: Part 7: 1977	—	—	M8(3), proviso (ii)
BS 5258: Part 8: 1980	—	—	M8(3), proviso (ii)
BS 5258: Part 10: 1980 (1983)	1	AMD 4411	M8(3), proviso (ii)

Table A. British Standards – continued

Publication (1)	Amendment Slip: Serial Number (2)	Amendment Slip: Reference Number (3)	Context (4)
BS 5258: Part 11: 1980 (1983)	1	AMD 4412	M8(3), proviso (ii)
BS 5258: Part 12: 1980	1	AMD 5434	M8(3), proviso (ii)
BS 5262: 1976	1	AMD 2103	Table to B4, item 5
BS 5268: Part 2: 1988	—	—	D4(*g*)
BS 5268: Part 3: 1985	1	AMD 5931	D4(*g*)
BS 5306: Part 2: 1979	1 2 3 4	AMD 3568 AMD 4219 AMD 5105 AMD 5696	E4(1), proviso Table to E5, Part 1, footnote *y*
BS 5386: Part 3: 1980	1 2 3 4	AMD 4162 AMD 4405 AMD 4878 AMD 5220	M8(3), proviso (ii)
BS 5422: 1977	1 2	AMD 2599 AMD 5742	S3(1) S3(2) S3(3)(*a*) S3(4)(*a*)
BS 5588: Part 1: Section 1.1: 1984	1	AMD 5714	EE3
BS 5588: Part 2: 1985	1	AMD 5555	EE3
BS 5588: Part 3: 1983	1 2	AMD 5556 AMD 5825	EE3
BS 5589: 1978	1	AMD 3916	Schedule 3 Table 2
BS 5615: 1985	—	—	S3(4)(*b*)
BS 5617: 1985	—	—	B5(2)
BS 5618: 1985	—	—	B5(2)
BS 5628: Part 1: 1978 (1985)	1 2 3 4	AMD 2747 AMD 3445 AMD 4800 AMD 5736	D4(*f*) D6(2)(*a*)(iii)
BS 5628: Part 3: 1985	1	AMD 4974	D4(*f*)

Schedule 8

Table A. British Standards – Continued

Publication (1)	Amendment Slip		Context (4)
	Serial Number (2)	Reference Number (3)	
BS 5810: 1979	—	—	R3(*b*)
BS 5950: Part 1: 1985	—	—	D4(*c*) D6(2)(*a*)(ii)
BS 5950: Part 2: 1985	—	—	D4(*c*)
BS 5950: Part 4: 1982	—	—	D4(*c*)
BS 5950: Part 5: 1987	—	—	D4(*c*)
BS 6180: 1982	1	AMD 4858	H8
BS 6399: Part 1: 1984	1 2	AMD 4949 AMD 5881	D2(*a*)
BS 6399: Part 3: 1988	1	AMD 6033	D2(*b*)
BS 8004: 1986	—	—	D4(*a*)
BS 8110: Part 1: 1985	—	—	D4(*b*) D6(2)(*a*)(i)
BS 8110: Part 2: 1985	—	—	D4(*b*) D6(2)(*a*)(i)
BS 8110: Part 3: 1985	—	—	D4(*b*)

Table B. British Standard Codes of Practice

Publication (1)	Amendment Slip: Serial Number (2)	Amendment Slip: Reference Number (3)	Context (4)
CP3: Chapter IV: Part 1: 1971	1 2 3 4	AMD 851 AMD 1077 AMD 1889 AMD 2708	EE3
CP3: Chapter V: Part 2: 1972	1 2 3 4	AMD 4952 AMD 5152 AMD 5343 AMD 6028	D2(*c*)
CP 117: Part 1: 1965	—	—	D4(*d*)
CP 118: 1969	1	AMD 1129	D4(*e*)
CP 144: Part 3: 1970	1 2	AMD 2527 AMD 5229	Table to B4 Item 1 Schedule 5 Part IV(B) Item 1

Table C. Other Publications

Publication (1)	Amendment (2)	Context (3)
Standard Industrial Classification (Revised 1980) issued by the Central Statistical Office	—	Schedule 1, Part A, Class 7
Health and Safety Guidance Booklet HS(G) 34 published by the Health and Safety Executive: 1987	—	M14 M16
DOE (NI) Technical Booklet C: 1990	—	C5
DOE (NI) Technical Booklet D: 1990	—	D4 Schedule 2 Rule E (3)
DOE (NI) Technical Booklet G: 1990	—	G3
DOE (NI) Technical Booklet N: 1990	—	N4 N6 N8
Building Research Establishment Report BR 128 'Guidelines for the Construction of Fire Resisting Structural Elements' (1988)	—	E1(5) Note to Table 1 to E1
British Board of Agrément MOAT 38: 1986	—	P6
Department of Education and Science Design Note 18 (1984) 'Access for Disabled People to Educational Buildings'	—	R3(*a*)

EXPLANATORY NOTE

(*This note is not part of the Regulations*)

These Regulations revoke and replace with amendments the Building Regulations (Northern Ireland) 1977 ("the 1977 Regulations"), and all subsequent amending Regulations. They apply, in whole or in part, and subject to exceptions, to—

(i) the construction of any building and to certain works and fittings in conjunction with any building;

(ii) the structural alteration or extension of any building; and

(iii) any building undergoing a material change of use.

They come into operation on 1st June 1990, but do not apply in relation to work which has been completed, or for which plans have been deposited with a district council, before that date.

As in the previous Building Regulations, each Part of these Regulations is identified by a capital letter and the Regulations within each Part are identified by the appropriate letter and by numbers which run from "1" within each Part.

Four Parts (C, D, G and N) differ in form from the 1977 Regulations by being more generalised statements of requirements supported by Technical Booklets prepared by the Department of the Environment for Northern Ireland (DOE(NI) Technical Booklets). These Booklets contain tables formerly contained in the 1977 Regulations and provide for certain methods and standards of building which if followed will be deemed to satisfy the requirements of the Regulations.

Parts Q (Ashpits, wells, tanks and cisterns) and U (Toxic substances) of the 1977 Regulations have been omitted.

The Regulations provide for the giving of notices to and the deposit of plans and particulars with the appropriate district council. They also make provision (regulation A14) about the exercise of powers of dispensation or relaxation. The functions of a district council with respect to the passing or rejection of plans, and their powers in relation to work which does not conform with building regulations, are set out in the Building Regulations (Northern Ireland) Order 1979 ("the Order").

Some of the mandatory requirements of the Regulations are complemented by provisions which describe methods or materials which are deemed to satisfy the relevant functional or performance requirements. These provisions (called "deemed-to-satisfy provisions" and printed in italics) make extensive use of British Standards, British Standard Codes of Practice and, where relevant, DOE(NI) Technical Booklets. In addition for the first time any national technical specification of a Member State of the European Community which

gives an equivalent standard of protection or performance to any British Standard or British Standard Code of Practice will also be deemed to satisfy the relevant functional or performance requirements. These provisions are not exclusive—that is to say, they do not preclude use of other methods or materials which will satisfy the functional requirements (regulation A3).

Apart from the changes to Parts C, D, G and N referred to above, the principal changes from the 1977 Regulations are—

(1) In Part A (Interpretation and general):—

(*a*) the exemption dimensions for agricultural buildings are replaced by a single dimension of $1\frac{1}{2}$ times the height of the building;

(*b*) certain porches, greenhouses and conservatories are exempted from control;

(*c*) the requirements of Part EE (Means of escape in case of fire) are applied to an alteration or extension of a building where such requirements applied to the existing building;

(*d*) the requirements of Part D (Structure) are applied to material change of use; and

(*e*) district councils are required to notify unsuccessful applicants for building control approval of their rights of appeal under Articles 16 and 17 of the Order.

(2) Part B (retitled Materials and workmanship) is extended:—

(*a*) to cover workmanship which is required to be of sufficient standard to ensure there is no danger to health or safety and to conserve fuel and power;

(*b*) to impose a prohibition on the use of any materials (as defined) which continue to emit harmful substances for a longer period of time than is reasonable in all the circumstances;

(*c*) to introduce a new requirement for access to materials which depend on periodic maintenance, replacement or renewal for their suitability; and

(*d*) to include provisions controlling the use of urea formaldehyde foam (previously controlled by Part U of the 1977 Regulations which is now replaced by these provisions).

(3) In Part C (Preparation of site and resistance to moisture)

(*a*) the requirements for preparation of sites are extended to minimise the effects of dangerous or harmful substances;

(*b*) a new requirement is introduced to minimise the harmful effects of interstitial condensation; and

(*c*) an alternative method of ground surface cover is permitted for use with suspended timber floors as a deemed-to-satisfy provision for resistance to ground moisture.

(4) In Part D (retitled Structure) the requirements that the foundations and superstructure of a building shall safely sustain and transmit loads without impairing its stability or causing damage to it or an adjoining building are replaced by a simple requirement that a building shall sustain and transmit loads safely and without impairing the safety of another building.

(5) In Part EE (Means of escape in case of fire), there is the addition of a requirement for means of escape from a house.

(6) In Part G (retitled Sound insulation of dwellings), the requirements are extended to include all separating walls in dwellings other than those separating dwellings from open access balconies.

(7) In Part H (Stairways, ramps, balustrades and vehicle barriers), there is the addition of a requirement that certain balustrades must be constructed so that a child cannot readily climb up them.

(8) In Part K (retitled Ventilation), the Regulations no longer require (i) zones of open space outside windows of habitable rooms, (ii) ventilation of larders and (iii) a minimum ceiling height for habitable rooms. However, the requirements of that Part are extended to include minimum rates of air change where mechanical ventilation is used.

(9) In Part L (Chimneys, flue pipes, hearths and fire-place recesses), there is a requirement that no chimney or flue pipe shall incorporate more than 3 bends and a reduction of the minimum flue angle of a chimney to 45° with the horizontal.

(10) In Part M (Heat-producing appliances and incinerators), regulation M2 is amended to remove the restriction on the burning of coke (other than hard coke) and to allow the installation of a solid fuel burning appliance which is not suitable for burning coke or anthracite on condition that it can be converted, by means of an alternative bottom grate, to burn such fuel. There is also the introduction of a new provision requiring a safe distance between a building and any existing LPG storage tank within the same curtilage.

(11) In Part P (retitled Sanitary appliances and unvented hot water storage systems):—

(*a*) new requirements are introduced for the provision of sanitary appliances in dwellings;

(*b*) controls are introduced over the provision of macerators; and

(*c*) there are new requirements controlling the use of unvented hot water storage systems.

(12) In Part R (retitled Facilities for disabled people) the requirements for provision of sanitary appliances and wheelchair spaces in public buildings have been revised (regulation R2) so that:

(*a*) sanitary appliances are only required for the disabled where such appliances are made available to the public generally; and

(*b*) where it is impracticable to provide access for disabled people to all seats in an auditorium the maximum number of wheelchair spaces to be provided is six or 1/100th of the total number of seats available to the public, whichever is the greater.

(13) In Schedule 1 Part B (Classes of wholly exempted buildings), liquefied petroleum gas storage tanks are included as storage tanks not exempt from the provisions of the Regulations and there is an extension of exemption to wholly detached greenhouses and conservatories with a floor area not exceeding 30 m^2.

(14) In Schedule 2 (Giving of notices and deposit of plans), there is:—

(*a*) an extension of Rule A to require anyone depositing plans or other documents to give the full name and address of the person for whom he is acting;

(*b*) an extension of Rule E to require the deposit of a soil investigation report where considered necessary by the district council; and

(*c*) an extension of Rule G to require the deposit of details showing the provision made for structural fire protection and for means of escape in case of fire and, where applicable, plans, sections and other details relating to imposed loading.

Some minor and consequential amendments have been made to other Parts, including the necessary changes to take account of revised editions of and amendments to British Standards, British Standard Codes of Practice and other publications. The Regulations also include certain presentational adjustments including a revised typography and layout and relocation of schedules.

The publications referred to in these Regulations may be purchased from the following sources:—

(*a*) British Standards and British Standard Codes of Practice from the Sales Department, British Standards Institution, Linford Wood, Milton Keynes MK14 6LE;

(*b*) Health and Safety Guidance Booklet HS(G)34 from branches of Her Majesty's Stationery Office;

(*c*) Building Research Establishment Report BR128 from Publications Sales, Building Research Establishment, Garston, Watford WD2 7JR; and

(*d*) DOE(NI) Technical Booklets from branches of Her Majesty's Stationery Office.

If any works to which these Regulations apply contravene these Regulations, the district council in whose area those works are being or have been done may by notice served on the owner under Article 18(1) of the Order require him to pull down or remove those works

or, if he so elects and the council so agrees, to effect such alterations or additions therein as are necessary to make the works comply with the requirements of these Regulations.

Any person who contravenes any provisions contained in these Regulations or a notice under Article 18(1) of the Order is guilty of an offence under the Order and is liable on summary conviction to a fine not exceeding level 5 on the standard scale of fines and penalties (presently £2,000) and to a further fine not exceeding £50 for each day during which the offence continues after conviction therefor.

INDEX OF SUBJECTS

This Index is not part of the Regulations

INDEX

INDEX

INDEX

INDEX

INDEX

INDEX

INDEX

INDEX

1990 No. 60

Road Races (Cairncastle Hill Climb) Order (Northern Ireland) 1990

This Order, being of a temporary character, is not printed at length in this volume.