STATUTORY INSTRUMENTS

1982 No. 1878 (S. 203)

BUILDING AND BUILDINGS

The Building Standards (Scotland) Amendment Regulations 1982

Made - - - -	*20th December* 1982
Laid before Parliament	*11th January* 1983
Coming into Operation	*28th March* 1983

In exercise of the powers conferred on me by section 3(1) of, as read with the Fourth Schedule to, the Building (Scotland) Act 1959(**a**) and of all other powers enabling me in that behalf, and having consulted the Building Standards Advisory Committee and such other bodies as appear to me to be representative of the interests concerned, I hereby make the following regulations:—

Citation and commencement

1.—(1) These regulations may be cited as the Building Standards (Scotland) Amendment Regulations 1982, and the Building Standards (Scotland) Regulations 1981(**b**) and these regulations may be cited together as the Building Standards (Scotland) Regulations 1981 and 1982.

(2) These regulations shall come into operation on 28th March 1983.

Interpretation

2. In these regulations, unless the context otherwise requires—

(a) "the building standards regulations" means the Building Standards (Scotland) Regulations 1981 and other words and expressions have the same meanings as in the said regulations;

(b) any reference to a Part, regulation, Table or Schedule shall be construed as a reference to a Part or regulation of, or Table or Schedule to, the building standards regulations.

Transitional provisions

3. In relation to the granting of a warrant for the construction or change of use of a building where application therefor was made before the date of the coming into operation of these regulations, and in relation to any subsequent extension of the period of validity of such a warrant or amendment of its terms,

(**a**) 1959 c. 24.
(**b**) S.I. 1981/1596.

these regulations shall not be treated as having amended the building standards regulations for the purpose of construing the words "building standards regulations" in section 6(2), (3), (3A), (7) and (8) and sections 6A and 10 of the Building (Scotland) Act 1959(**c**).

Amendment of the building standards regulations

4. The building standards regulations shall be amended in accordance with these regulations.

5. In regulation A5(1)—

(i) in the definition of "DISPLAY WINDOW" for the words "Section II" there shall be substituted "Section I";

(ii) in the definition of "DOOR" for the words "Section II" there shall be substituted "Section I";

(iii) the definition of "EXTERNAL WALL" shall be deleted;

(iv) the definition of "OPENING" for the purposes of regulation J4 shall be deleted;

(v) in the definition of "OPENING" for the purposes of Section II of Part J for the words "Section II" there shall be substituted "Section I";

(vi) for the definition of "PERIMETER WALLS" there shall be substituted the following definition—

"PERIMETER WALLS in Part J means—

(a) in relation to a building of occupancy sub-group A1 or A2, all the walls which together enclose all parts of each house (including any associated accommodation referred to in column (3) of Schedule 1) which comprises, or forms part of, the building, excluding—

(i) any part of the building referred to in paragraph (d) of regulation J1; and

(ii) any wall between a ventilated space and the external air; and

(b) in relation to a chalet in occupancy sub-group A3, all the walls which together enclose all parts of the chalet, excluding—

(i) any part of the chalet referred to in paragraph (d) of regulation J1; and

(ii) any wall between a ventilated space and the external air;"

(**c**) Section 6(2) and (3) were amended by Schedule 1 paragraph 1 to the Building (Scotland) Act 1970 (c. 38); section 6(3A) was inserted by Schedule 7 paragraph 4(*a*) to the Health and Safety at Work etc Act 1974 (c. 37); section 6(8)(*a*) was repealed by Schedule 29 to the Local Government (Scotland) Act 1973 (c. 65); section 6(8)(*b*) and (*c*) were substituted for section 6(8)(*b*) by section 3 of the Building (Scotland) Act 1970; section 6A was inserted by section 4 of the Building (Scotland) Act 1970; section 10(1), (2) and (4) were amended by Schedule 1 paragraph 3 and Schedule 2 to the Building (Scotland) Act 1970, and section 10(2) by Schedule 29 to the Local Government (Scotland) Act 1973; section 10(1A) and (1B) were inserted by Schedule 1 paragraph 3(*b*) to the Building (Scotland) Act 1970; references to "local authority" were substituted for references to "buildings authority" by Schedule 15 paragraph 1 to the Local Government (Scotland) Act 1973.

(vii) the definition of "PERMANENT VENT" shall be deleted;

(viii) in the definition of "PLACE OF SPECIAL FIRE RISK" for the words "in regulation D4" there shall be substituted "in regulations D4 and E9";

(ix) before the definition of "RELEVANT AREA" the word "THE" shall be deleted;

(x) the definition of "ROOF" shall be deleted;

(xi) in the definition of "ROOF LIGHT OPENING" for the words "Section II" there shall be substituted "Section I";

(xii) in the definition of "SURFACE HEAT TRANSFER COEFFICIENT" before the words "Part J" there shall be inserted "Section I of";

(xiii) in the definition of "SURFACE RESISTANCE" before the words "Part J" there shall be inserted "Section I of";

(xiv) after the definition of "TEMPORARY BUILDING" there shall be inserted the following definition—

"THERMAL CONDUCTIVITY in regulation J7 has the meaning assigned to that expression by regulation J7(1)";

(xv) in the definition of "THERMAL TRANSMITTANCE COEFFICIENT" before the words "Part J" there shall be inserted "Section I of";

(xvi) in the definition of "U VALUE" for the words "Section II" there shall be substituted "Section I";

(xvii) in the definition of "VENTILATED SPACE" for the words "Section II of Part J" there shall be substituted "Section I of Part J and in Part G";

(xviii) the definition of "WALL" for the purposes of regulation J4 shall be deleted;

(xix) in the definition of "WALL" for the purposes of Section II of Part J for the words "Section II of Part J" there shall be substituted "Section I of Part J and in Part G";

(xx) in the definition of "WALL BOUNDARY AREA" for the words "Section II of Part J" there shall be substituted "Section I of Part J and in Part G";

(xxi) in the definition of "WINDOW OPENING" for the words "Section II" there shall be substituted "Section I".

6. In regulation A9 for the reference "D19(5)" there shall be substituted "D19(3)".

7. In Table 2 to regulation D6, Periods of fire resistance, Part II in the column headed "Specified period of fire resistance" for "Hours (4)" and "Hours (5)" there shall be substituted respectively "Hours (5)" and "Hours (6)".

8. In regulation D14(4)(c) for the words "a stairway enclosure to which regulation E10 applies" there shall be substituted "an enclosure to a stairway to which regulation E26 applies".

9. In the heading to regulation D16 for the word "Timber" there shall be substituted "Cladding".

10. In the Table to regulation E1, Application to certain buildings, in the column headed "Regulations applying"—

(i) with respect to item 2, there shall be substituted—

"E2, E3, E4, E5(4), E6, E8, E10 (except paragraph (6)), E17, E18, E19 and E20";

(ii) with respect to item 3, there shall be substituted—

"E2, E3, E5(4), E6, E17, E18, E19 and E20".

11. In the proviso to regulation E5(5)—

(i) after the words "one direction of escape" there shall be inserted "which exceeds 4.5 metres in length";

(ii) after the words "self-closing door" there shall be inserted "or doors".

12. In proviso (ii)(A) to regulation E7(3) after the words "stairway enclosure" there shall be inserted "which complies with regulation E10(2)(a) and (b)".

13. In regulation E11—

(i) in paragraph (2) for the words "regulation D6 for the floor or floors penetrated by the stairway or escalator" there shall be substituted "Table 1 to regulation E2";

(ii) in paragraph (5)(c) for the words "escape routes so situated on the perimeter of the storey that they" there shall be substituted "exits so situated on the perimeter of the storey that an exit".

14. In regulation E15—

(i) in paragraph (3)(b) after the words "stairway enclosure" there shall be inserted "and any associated protected lobby";

(ii) in paragraph (4) between the words "maintained" and "lighting" there shall be inserted "emergency".

15. In regulation E22 for paragraph (7) there shall be substituted the following paragraph—

"If there is fitted in the building a fire lift which complies with regulation E24, on each storey where there is an entrance to the fire lift there shall be at least one outlet not more than 4.5 metres distant from that entrance."

16. (i) In Table 1 to regulation E25, Flats, in the column headed "Internal layout"—

(a) with respect to item 1, after the words "private entrance hall" there shall be added "provided that there may be included in this heading a kitchen entered from a living room";

(b) with respect to item 4, for the words "conditions 1 and 2" there shall be substituted "condition 1";

(ii) In Table 2 to regulation E25, Maisonettes, in the column headed "Number of escape routes and alternative escape routes" with respect to items 3 and 4, the asterisk after the words "escape route" in both cases shall be deleted.

17. In regulation G2 for paragraph (1) there shall be substituted the following paragraph—

"(1) In this Part the following expressions have the meanings respectively assigned to them by regulation A5(1)—

BUILDING
DRAIN
FOUNDATION
REASONABLY PRACTICABLE
ROOF SPACE
ROOM
SITE
SUB-SOIL WATER
VENTILATED SPACE
WALL"

18. After regulation G9 there shall be inserted the following regulation—

"**G10 *Control of interstitial condensation**

(1) In every building of occupancy sub-group A1 or A2 or a chalet in occupancy sub-group A3, other than a chalet which is a temporary building, any—

(a) external wall;

(b) internal wall exposed to a ventilated space;

(c) wall or partition between a room and a roof space and the roof over that space;

(d) floor having its under surface exposed to the external air or to a ventilated space;

(e) roof (other than a roof over a ventilated space),

shall be so designed and composed of such materials as to prevent, so far as is reasonably practicable, damage to any part of the building as a result of the passage of moisture in the form of vapour from the interior of the building into its structure.

(2) In this regulation any reference to an external wall shall be construed in accordance with regulation J2(2)(f), and any reference to an internal wall exposed to a ventilated space shall be construed in accordance with regulation J2(2)(g)."

19. In regulation H4(1) for the reference "H2" there shall be substituted "H3".

20. In Part J: SECTION I—HOUSES AND CHALETS, comprising regulations J1 to J6 inclusive, and SECTION II—BUILDINGS OTHER THAN HOUSES AND CHALETS, comprising regulations J7 to J9 inclusive and Tables 1 and 2 to regulation J9 shall be deleted and there shall be substituted the Sections set out in Schedule 1 to these regulations.

21. In regulation S3(1) for the words "a clear headroom of 2050 millimetres" there shall be substituted "a clear headroom of not less than 2.05 metres".

22. In regulation S5(7) for the words "2,050 millimetres" there shall be substituted "2.05 metres".

23. In Table 1 to Schedule 2 there shall be inserted the following entries under columns (1), (2), (3) and (4) respectively—

(i)	After BS3410:1967 there shall be added—			
	BS3456:Section 2.7:1970	1	AMD 882	J7(3)(b)(iii)
(ii)	After BS5247:Part 14:1975 there shall be added—			
	BS5250:1975	1	AMD3025	Schedule 13, G10
(iii)	After BS5410:Part 2:1978 there shall be added—			
	BS5422:1977	1	AMD2599	J7(1)(a) and (b), J7(2), J7(3)(b)(i)
(iv)	After BS5589:1978 there shall be added—			
	BS5615:1978	—	—	J7(3)(b)(ii)
	BS5617:1978	1	AMD2979	Schedule 13, Table 2, J3(1), footnote D
	BS5618:1978	1	AMD2980	Schedule 13, Table 2, J3(1), footnote D
		2	AMD3489	
		3	AMD4130	

24. In Schedule 4 in column (3), with respect to Class 11(v)(C) for the words "external wall is less than" there shall be substituted "external wall is not less than".

25. In Schedule 7—

(i) in the heading delete the words "separating floors and compartment";

(ii) in the Table—

(a) in the heading delete the words "separating floors and compartment";

(b) in the column headed "Type of floor"—

(i) for the word "Non-compartment" there shall be substituted "Other than compartment and separating"; and

(ii) after the word "Compartment" there shall be inserted "and separating".

26. In Part II of Schedule 13—

(i) in Part G: Preparation of sites and resistance to the passage of moisture, after the entry for regulation G9 there shall be inserted the following entry under columns (1), (2) and (4) respectively—

"G10—as to control of interstitial condensation	External wall, internal wall exposed to a ventilated space, wall or partition between a room and a roof space and the roof over that space, floor having its under surface exposed to the external air or to a ventilated space, or roof (other than a roof over a ventilated space)	The design and construction are in accordance with the provisions of clause 22 of BS 5250:1975"

(ii) for Part J: Resistance to the transmission of heat and means to conserve energy, there shall be substituted the entries set out in Schedule 2 to these regulations.

27. Schedule 15 shall be deleted.

28. The Arrangement of Regulations prefacing the building standards regulations shall be amended in accordance with the provisions of Schedule 3 to these regulations.

29. The Indexes to the building standards regulations shall be amended in accordance with the provisions of Schedule 4 to these regulations.

George Younger,
One of Her Majesty's Principal
Secretaries of State

New St Andrew's House,
Edinburgh.
20th December 1982.

Regulation 20 SCHEDULE 1

SECTION I—RESISTANCE TO THE TRANSMISSION OF HEAT FROM BUILDINGS

J1 Application of Section I

(1) This Section shall apply to any building other than—

(a) a building which is not designed to be heated;

(b) a temporary building of occupancy sub-group A3 or A4 or occupancy group B, C, D or E;

(c) a greenhouse which has not less than three-quarters of its total external area comprised of glass (including glazing bars) or other translucent material;

(d) in a building of occupancy sub-group A1 or A2 or a chalet in occupancy sub-group A3—

(i) the roof, external wall or floor of any ancillary accommodation (including a garage, store, wash-house or watercloset) which is entered from outside the building whether or not it is also entered from inside the building;

(ii) the roof, external wall or floor of a sun porch;

(e) in a building of occupancy sub-group A1 or A2 the roof, external wall or floor of a common passage, stairway, landing or other common space;

(f) a building of occupancy sub-group A3 (other than a chalet) or A4 or occupancy group B, C, D or E the total area of all storeys of which does not exceed 30 square metres;

(g) a building of occupancy group D or E where the design output rating of the space heating installation therein does not exceed 50 watts per square metre of the floor area of the spaces served by such a space heating installation;

(h) a building of occupancy sub-group A3 (other than a chalet) or A4 or occupancy group B or C where the design output rating of the space heating installation therein does not exceed 25 watts per square metre of the floor area of the spaces served by such a space heating installation;

(j) an air-supported structure:

Provided that where a building as a whole would not fall within sub-paragraph (g) or (h) above, but only part thereof would do so, then this Section shall not apply to that part of the building.

(2) The provisions of regulation J3 shall not be subject to specification in a notice served under section 11 of the Act (which enables local authorities to require existing buildings to conform to these regulations) in so far as they relate to walls and floors:

Provided that nothing shall prevent account being taken of the standard of insulation of the walls or floors of a building, as provided in the provisos to regulation J3(1) and (2), in determining whether a roof of a building complies with the requirements of regulation J3.

J2 Interpretation of Section I

(1) In this Section the following expressions have the meanings respectively assigned to them by regulation A5(1)—

THE ACT
BUILDING
CHALET
CONSTRUCT and CONSTRUCTION
DISPLAY WINDOW
DOOR
HOUSE
OPENING
PASSAGE
PERIMETER WALLS
ROOF LIGHT OPENING
ROOF SPACE
ROOM
SHOP
STAIRWAY
STOREY
SUN PORCH
SURFACE HEAT TRANSFER COEFFICIENT
SURFACE RESISTANCE
TEMPORARY BUILDING
THERMAL TRANSMITTANCE COEFFICIENT
U VALUE
VENTILATED SPACE
WALL
WATERCLOSET
WINDOW OPENING

(2) For the purposes of this Section—

(a) any part of a roof which has a pitch of 70 degrees 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) in determining the U value of a roof, wall or floor—

(i) the sum of the surface resistances of—

(A) the external surface of a 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;

J2

(ii) the sum of the external and internal surface resistances of a wall shall be taken as 0.18; and

(iii) the sum of the upper and lower surface resistances of a floor shall be taken as 0.23;

(d) the U value of any window opening or roof light opening shall be assumed to be 5.7 if it is single-glazed, 2.8 if it is double-glazed and 2.0 if it is triple-glazed irrespective of whether the light-transmitting material is glass or not;

(e) any reference to a part of a wall, floor or roof shall mean a part comprising a section of the complete structure of the wall, floor or roof including any internal or external surface finishes thereon;

(f) any reference to an external wall shall exclude any such wall enclosing a ventilated space;

(g) any reference to an external wall or an internal wall exposed to a ventilated space shall exclude any part of such a wall extending—

(i) above the level of that part of the roof structure which has a U value not exceeding the appropriate U value for roofs specified in Table 1 to regulation J3; or

(ii) below the level of the lowest floor of the building; and

(h) in calculating the U values required, the effects of timber joists or framing, wall ties, thin cavity closures, mortar bedding, damp-proofing membranes, metal spacers and other thin discrete components may be ignored.

(3) For the purposes of calculating the proportion of window and roof light openings in a wall or roof—

(a) the area of a window opening or roof light opening shall be 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:

Provided that in the case of a shop no account shall be taken of any display window opening situated at access level;

(b) the area of a wall shall be taken to be the area of the inner face of that wall (including any opening therein) measured between finished floor and ceiling levels and between finished surfaces of flanking walls or partitions:

Provided that in the case of a shop no account shall be taken of the area of that part of the wall of the storey in which a display window at access level is situated; and

(c) the area of a roof shall be taken to be the area of the inner surface of that roof (including any opening therein) measured between flanking walls or partitions.

(4) In the case of an alteration or extension to a building the area of perimeter walls and the area of roof shall be taken to be respectively—

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

(b) the area of roof covering,

the alteration or extension.

J3* Walls, floors and roofs

(1) Every part of a wall, floor or roof (excluding any opening therein) which forms part of a building to which this Section applies and which is described in Table 1 to this regulation shall have a U value not exceeding the appropriate value specified in that Table:

Provided that the U value of any such wall, floor or roof may exceed the value in Table 1 if those elements are so constructed that the calculated total rate of heat loss in watts per degree Celsius through all of them is not in excess of that which would have obtained had the U value of every part of each of those elements complied with the appropriate value specified in Table 1, but in no case shall any such part have a U value in excess of 1.2.

(2) The total area of window openings and the total area of roof light openings in those walls and roofs of a building for which a maximum U value is specified in paragraph (1) above shall not exceed the appropriate percentage specified in Table 2 to this regulation of the total areas of those walls and roofs respectively which are described in the said Table 2:

Provided that—

(i) where all the window openings and roof light openings are single-glazed, the total permitted area of window openings or of roof light 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 in Table 2;

(ii) where not all the window openings and roof light openings are single-glazed, the total permitted area of both window openings and roof light openings taken together may be exceeded if the calculated total rate of heat loss in watts per degree Celsius through all those openings is not in excess of that which would have 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 appropriate percentage values specified in Table 2.

J3

Table 1 to Regulation J3

Maximum U values of walls, floors and roofs

Element of building	Maximum U value of every part of element having regard to the occupancy group or sub-group of a building			
	Occupancy sub-groups A1 and A2	Chalets in occupancy sub-group A3	Occupancy sub-groups A3 and A4 and occupancy groups B and C	Occupancy groups D and E
(1)	(2)	(3)	(4)	(5)
External wall	0.6	1.0	0.6	0.7
Internal wall exposed to a ventilated space	0.6	1.0	0.6	0.7
Wall or partition between a room and a roof space and the roof over that space	0.6	0.6	0.6	0.7
Wall or partition between a house and a building or part thereof to which this Section does not apply	1.0	—	—	—
Wall or partition between a house and an enclosed common passage, stairway, landing or other enclosed common space	1.0	—	—	—
Floor having its under surface exposed to the external air or to a ventilated space	0.6	0.6	0.6	0.7
Roof (other than a roof over a ventilated space) including any ceiling to the roof or any roof space and any ceiling below that space	0.35	0.35	0.6	0.7

Table 2 to Regulation J3

Maximum area of window openings and roof light openings in walls and roofs for which a maximum U value is specified in regulation J3(1), having regard to the occupancy group or sub-group of the building, expressed—

(a) in the case of a building of occupancy sub-group A1 or A2 or a chalet in occupancy sub-group A3, as a percentage of the total areas of—

(i) the perimeter walls; and

(ii) the roofs for which a maximum U value is specified in regulation J3(1); and

(b) in the case of any other building, as a percentage of the total areas of the external walls and internal walls exposed to a ventilated space, and roofs, respectively, for which a maximum U value is specified in regulation J3(1)

Type of opening	Occupancy sub-groups A1 and A2 and chalets in occupancy sub-group A3	Occupancy sub-groups A3 (other than chalets) and A4	Occupancy groups B and C	Occupancy groups D and E
(1)	(2)	(3)	(4)	(5)
Window openings	15	25	35	15
Roof light openings	2	20	20	20

J4 Floors in houses and chalets

In any building of occupancy sub-group A1 or A2 or a chalet in occupancy sub-group A3 every floor or part of a floor next to the ground and not having its under surface exposed to the external air or to a ventilated space shall be constructed—

(a) as a suspended floor with tongued and grooved boarding or other draught-resisting decking, carried on joists or as a suspended concrete floor, having in either case a space beneath the level of the floor enclosed by walls on all sides (apart from any necessary ventilation openings); or

(b) as a floor laid upon the ground or upon hardcore filling.

SECTION II—THERMAL INSULATION OF PIPES, DUCTS AND STORAGE VESSELS

J5 Application of Section II

This Section shall apply to every building other than a temporary building.

J6 Interpretation of Section II

(1) In this Section the following expressions have the meanings respectively assigned to them by regulation A5(1)—

BUILDING

J6-J7

CHALET
DUCT
HOUSE
PERIMETER WALLS
TEMPORARY BUILDING

(2) In the regulation specified the following expression has the meaning assigned to it in the said regulation—

THERMAL CONDUCTIVITY, J7

J7 Provision of insulation

(1) For the purpose of this regulation—

(a) THERMAL CONDUCTIVITY has the meaning assigned to it in BS5422: 1977;

(b) heat loss shall be calculated in accordance with BS5422: 1977.

(2) Subject to paragraph (4) of this regulation, any pipe or duct—

(a) containing heated fluids or gases for heating spaces within a building or for heating water for ablutionary or cleaning purposes; or

(b) containing hot water for ablutionary or cleaning purposes,

shall be provided with a type of insulation conforming to BS5422: 1977, the thickness of insulation being determined in accordance with Clause 24.3.1 and 2 thereof:

Provided that nothing in this paragraph shall apply—

(i) to any pipe which is so insulated that the heat loss (expressed in watts per square metre) is not greater—

(A) for a pipe whose diameter (measured in millimetres) is listed in column (1) of the Table to this regulation, than the value shown in column (2) of the Table for a pipe of that diameter;

(B) for a pipe whose diameter (measured in millimetres) is of an intermediate size not shown in that Table, than the value calculated from that Table by means of linear interpolation; or

(ii) to any duct irrespective of its size, which is so insulated that the heat loss is not greater than 30 watts per square metre; or

(iii) in the case of a pipe with an outside diameter of less than 50 millimetres, where the pipe is provided with an insulant having a thermal conductivity of not more than 0.07 watts per metre per degree Celsius and a thickness of not less than the outside diameter of the pipe; or

(iv) in the case of a pipe having an outside diameter of not less than 50 millimetres or a duct of any size, where the pipe or duct is provided with an insulant having a thermal conductivity of not more than 0.07 watts per metre per degree Celsius and a thickness of not less than 50 millimetres.

(3) Subject to paragraph (4) of this regulation any storage vessel containing—

(a) heated fluids for heating spaces within a building; or

(b) hot water for ablutionary or cleaning purposes shall be either—

(i) provided with a type of insulation conforming to BS5422: 1977, the thickness of insulation being determined in accordance with Clause 24.3.1. thereof; or

(ii) contained within an insulating jacket conforming to BS5615: 1978; or

(iii) a vessel conforming to BS3456: Section 2.7: 1970; or

(iv) irrespective of its size, so insulated that the heat loss is not greater than 90 watts per square metre.

(4) Nothing in this regulation shall apply to—

(a) any pipe or duct having a heat loss designed to make a useful contribution to the heating of the space through which it passes;

(b) any pipe or duct in a house in occupancy sub-group A1 or A2 or a chalet in occupancy sub-group A3 which is within the space bounded up by the upper surface of the lowest floor of the house or chalet, the internal surfaces of the perimeter walls thereof and the under surface of the ceiling or soffit of the highest storey of each such house or chalet;

(c) any pipe which does not exceed 25 millimetres in outside diameter and 3 metres in length and which supplies hot water to a tap or outlet;

(d) any necessary appendage for the support or operation of a system of pipes, ducts and storage vessels, including structural supports, valve handles and control equipment;

(e) any pipe, duct or storage vessel used for the purpose of any trade or manufacturing process.

Table to Regulation J7

Maximum permitted rates of heat loss from pipes

Outside diameter of pipe (in mm) (1)	Heat loss (in W/m^2) (2)
10	675
20	400
30	280
40	220
50 or greater	175

SCHEDULE 2 Regulation 26(ii)

Part J: Resistance to the transmission of heat and means to conserve energy

Table 1: Walls—solid walls required to have a U value not exceeding either 0.6, 0.7 or 1.0 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)													
			Type of walling material	Minimum thickness (in mm)	Maximum density (in kg/m³)	*Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of— 0.6 W/m²°C				0.7 W/m²°C				1.0 W/m²°C			
(1)	(2)	(3)				B	D	E	F	B	D	E	F	B	D	E	F
J3(1)—as to thermal insulation	External wall	Solid wall of masonry construction, wall rendered or unrendered externally and having insulation applied as a lining to the internal surface of the wall with a vapour check and an internal surface finish of plasterboard	(1) Natural stone	500	2000	56	38	33	24	43	29	25	18	17	11	10	7
			(2) Autoclaved aerated concrete blocks or slabs with an external finish of rendering or paint harl	200	750	30	20	17	13	15	10	9	7	0	0	0	0
				200	600	19	13	12	8	5	4	3	2	0	0	0	0
			(3) No fines concrete of whinstone or gravel aggregate with an external rendering	250	2000	67	45	39	28	53	35	31	22	27	18	16	12

* The references to the specifications for insulating materials to be construed as follows:—
B Fibre building board
D Mineral fibre batt or mat (glass or rock)
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board; Phenol formaldehyde insulating board
F Polyurethane insulating board
0 No insulating material required

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 2: Walls—cavity walls required to have a U value not exceeding either 0.6, 0.7 or 1.0 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)													
			Type of walling material	Maximum density of outer leaf (in kg/m³)	Maximum density of inner leaf (in kg/m³)	*Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of— 0.6 W/m²°C				0.7 W/m²°C				1.0 W/m²°C			
(1)	(2)	(3)				B	D	E	F	B	D	E	F	B	D	E	F
J3(1)—as to thermal insulation	External wall	Cavity wall of masonry construction with the two leaves separated by an unventilated cavity at least 50 millimetres wide; wall rendered or unrendered externally and having insulation applied as a lining to the internal surface of the wall with a vapour check and an internal surface finish of plasterboard	(4) Either leaf of bricks or blocks of clay, sand-lime, concrete with each leaf at least 100 millimetres thick	1900	2300	60	40	35	25	45	30	27	19	20	13	12	8
					1900	57	38	33	24	43	29	25	18	17	12	10	7
					1400	52	35	30	22	37	25	22	16	12	8	7	5
				1400	2300	54	36	32	23	40	27	24	17	14	10	9	6
					1900	52	35	31	22	38	25	22	16	12	8	7	5
					1400	47	31	28	20	33	22	19	14	7	5	4	3
				1900	750	36	24	21	15	22	15	13	9	0	0	0	0
				1400	750	31	21	18	13	17	11	10	7	0	0	0	0
				750	750	16	11	10	7	2	2	1	1	0	0	0	0
		Cavity wall as above and having insulation applied as a cavity fill with an internal surface finish of plaster	(5) (a) As in (4) above, but with cavity filled	1900	2300		51	44			41	36			24	21	
					1900		49	43			40	35			22	20	
					1400		45	40			36	31			19	16	
				1400	2300		47	41			38	33			21	18	
					1900		46	40			36	32			19	17	
					1400		42	37			32	28			15	13	
				1900	750		35	31			25	22			8	7	
				1400	750		32	28			22	19			5	4	
				750	750		22	19			12	11			0	0	

* The references to the specifications for insulating materials to be construed as follows:—
B Fibre building board
D Mineral fibre batt, mat or loose fill (glass or rock); Urea formaldehyde foam cavity fill installed in accordance with BS5617:1978 and BS5618:1978
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board or loose fill; Phenol formaldehyde insulating board
F Polyurethane insulating board
0 No insulating material required

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 2: Walls—cavity walls required to have a U value not exceeding either 0.6, 0.7 or 1.0 W/m²°C—continued

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)								
			Type of walling material	Maximum density of outer leaf (in kg/m³)	Maximum density of inner leaf (in kg/m³)	* Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of— 0.6 W/m²°C		0.7W/m²°C		1.0 W/m²°C	
(1)	(2)	(3)				E	F	E	F	E	F
J3(1)—as to thermal insulation—continued	External wall—continued	Cavity wall as above and having insulation applied as a partial cavity fill so as to preserve a residual space at least 25 millimetres wide (or 50 millimetres when the wall is liable under normal conditions to severe conditions of exposure as specified in Building Research Station Digest No 127 "An Index of exposure to driving rain"), with an internal surface finish of plaster	(5)(b) As in (4) above, but with cavity partially filled	1900	2300	38	27	30	21	15	11
					1900	37	26	28	20	13	10
					1400	33	24	25	18	10	7
				1400	2300	35	25	27	19	12	9
					1900	34	24	25	18	10	8
					1400	30	22	22	16	7	5
				1900	750	24	18	16	12	1	1
				1400	750	21	15	13	9	0	0
				750	750	13	9	5	3	0	0

* The references to the specifications for insulating materials to be construed as follows:—
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board; Phenol formaldehyde insulating board
F Polyurethane insulating board
0 No insulating material required

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 3: Walls—framed walls required to have a U value not exceeding either 0.6, 0.7 or 1.0 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)												
			Type of external cladding material	Minimum thickness of cladding (in mm)	Maximum density (in kg/m³)	* Minimum thickness (in mm) of insulation material referred to below according to type required to give a U value of—											
						0.6 W/m²°C				0.7 W/m²°C				1.0 W/m²°C			
(1)	(2)	(3)				B	D	E	F	B	D	E	F	B	D	E	F
J3(1)—as to thermal insulation	External wall	Framed wall of metal or timber standards and rails, having a cavity not greater than 100 mm wide with a weatherproof external cladding and a breather membrane or ventilation as necessary behind the cladding; the wall having insulation applied as a lining to the inner surface of the wall (or in the case of E below either as such a lining or as an infill to the framing) with a vapour check and an internal surface finish of plasterboard	(6) Masonry cladding material of either—	100	2300	72	48	42	30	58	39	34	24	32	22	19	14
			(a) clay brick or block; or		1900	70	47	41	29	56	37	33	24	30	20	18	13
			(b) concrete or sand-lime brick or block; or		1400	65	43	38	27	51	34	30	21	25	17	15	11
			(c) dense in situ concrete; or		750	50	34	30	21	36	24	21	15	10	7	6	5
			(d) lightweight concrete; or														
			(e) aerated autoclaved concrete block														

*The references to the specifications for insulating materials to be construed as follows:—

B Fibre building board

D Mineral fibre batt or mat (glass or rock)

E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board; Phenol formaldehyde insulating board

F Polyurethane insulating board

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 3: Walls—framed walls required to have a U value not exceeding either 0.6, 0.7 or 1.0 W/m²°C—continued

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)													
			Type of external cladding material	Minimum thickness of cladding (in mm)	Maximum density (in kg/m³)	* Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of— 0.6 W/m²°C				0.7 W/m²°C				1.0 W/m²°C			
(1)	(2)	(3)				B	D	E	F	B	D	E	F	B	D	E	F
J3(1)—as to thermal insulation—continued	External wall—continued	Framed wall of metal or timber standards and rails, having a cavity not greater than 100 mm wide with a weatherproof external cladding and a breather membrane or ventilation as necessary behind the cladding; the wall having insulation applied as a lining to the inner surface of the wall (or in the case of E below either as such a lining or as an infill to the framing) with a vapour check and an internal surface finish of plasterboard—continued	(7) Cladding material on battens and counter battens of either— (a) timber weather boarding; or (b) tile or slate			65	43	38	27	50	34	30	21	25	17	13	11
			(8) Sheet cladding material of either— (a) asbestos cement sheeting; or (b) plastic sheeting; or (c) metal sheeting			75	50	44	32	61	41	36	26	35	24	21	15

* The references to the specifications for insulating materials to be construed as follows:—
B Fibre building board
D Mineral fibre batt or mat (glass or rock)
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board; Phenol formaldehyde insulating board
F Polyurethane insulating board

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 4: Floors—solid floors required to have a U value not exceeding either 0.6 or 0.7 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)				* Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of— 0.6 W/m²°C						0.7 W/m²°C					
			Type of flooring material	Minimum thickness (in mm)	Maximum density (in kg/m³)	Type of floor finish	A	B	C	D	E	F	A	B	C	D	E	F
(1)	(2)	(3)																
J3(1)—as to thermal insulation	Floor	Floor of concrete construction with insulation fixed to the soffit of the floor	In situ or precast dense concrete slabs or beams	100	2300	Sand/cement screed not less than 50 mm thick with any type of sheet or tile finish	108	77	64	51	45	32	88	62	52	42	37	26
				100	2300	Boarding laid on battens	88	62	52	42	36	26	68	48	40	32	28	20
			Precast autoclaved aerated concrete slabs	100	600	Sand/cement screed not less than 50 mm thick with any type of sheet or tile finish	70	50	42	33	29	21	50	36	30	24	21	15
				100	600	Boarding laid on battens	50	36	30	24	21	15	30	21	18	14	13	9

* The references to the specifications for insulating materials to be construed as follows:—
A Wood wool slab (density not exceeding 500 kg/m³)
B Fibre building board
C Cellular glass
D Mineral fibre batt or mat (glass or rock)
E Mineral fibre slab (glass or rock) Expanded polystyrene insulating board; Phenol formaldehyde insulating board
F Polyurethane insulating board

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 5: Floors—joisted floors required to have a U value not exceeding either 0.6 or 0.7 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)											
			* Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of— 0.6 W/m²°C						0.7 W/m²°C					
(1)	(2)	(3)	A	B	C	D	E	F	A	B	C	D	E	F
J3(1)—as to thermal insulation	Floor	Floor of timber or metal joists, with any type of board surface, and with a ceiling; the insulation laid over the ceiling or used in conjunction with a ceiling	88	62	52	42	36	26	68	48	40	32	28	20

* The references to the specifications for insulating materials to be construed as follows:—
A Wood wool slab (density not exceeding 500 kg/m³)
B Fibre building board
C Cellular glass
D Mineral fibre batt, mat or loose fill (glass or rock)
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board; Phenol formaldehyde insulating board
F Polyurethane insulating board

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 6: Roofs—flat roofs required to have a U value not exceeding either 0.35, 0.6 or 0.7 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)																
			Type of roof structure	Maximum density (in kg/m³)	†Type of ceiling structure	* Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of—													
						0.35 W/m²°C					0.6 W/m²°C					0.7 W/m²°C				
(1)	(2)	(3)				A	B	C	E	F	A	B	C	E	F	A	B	C	E	F
J3(1)—as to thermal insulation	Roof	Flat roof of concrete construction with or without a screed (providing a minimum thickness of 150 mm) and a weatherproof covering, with insulation laid on a vapour barrier between the roof structure and the weatherproof covering, with or without a ceiling or soffit	(1) In situ or pre-cast dense concrete	2300	(a)	206	145	121	85	61	103	73	61	43	31	82	58	49	34	25
					(d)	226	160	133	93	67	123	87	73	51	37	103	73	61	43	31
			(2) Precast auto-claved aerated concrete	750	(a)	160	113	94	66	47	57	40	34	24	17	36	26	22	15	11
					(d)	180	127	106	74	53	77	55	46	32	23	56	40	33	24	17
				600	(a)	149	105	88	62	44	46	33	27	19	14	26	18	15	11	8
					(d)	170	120	100	70	50	66	47	39	28	20	46	32	27	19	14
		Flat roof of timber or metal framed construction and a weatherproof covering, with insulation laid on a vapour barrier between the roof structure and the weatherproof covering, with or without a ceiling or soffit	(3) Insulation on top of— bituminous felt fixed to boarding not less than 19 mm thick		(c)	202	143	119	83	60	99	70	59	41	30	79	56	46	33	23
					(d)	222	157	131	92	66	119	84	70	50	35	99	70	58	41	29
			(4) Insulation on top of— bituminous felt on troughed metal decking		(b)	205	145	121	85	61	102	73	60	42	30	82	58	48	34	24
					(c)	213	150	125	88	63	110	78	65	46	33	89	63	53	37	27
					(d)	225	159	133	93	67	122	87	72	51	36	102	72	60	42	30

† The references to types of ceiling structure to be construed as follows:—
(a) With any type of board lining fixed to branders not less than 19 mm thick secured to the underside of the roof structure
(b) With a roof space, sealed from any external wall cavity, and a ceiling of sheeting 9.5 mm thick
(c) With a soffit of sheeting 9.5 mm thick
(d) Without a ceiling

* The references to the specifications for insulating materials to be construed as follows:—
A Wood wool slabs (density not exceeding 500 kg/m³)
B Fibre building board
C Cellular glass
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board; Phenol formaldehyde insulating board
F Polyurethane insulating board

Part J: Resistance to the transmission of heat and means to conserve energy—continued

Table 7: Roofs—pitched roofs required to have a U value not exceeding either 0.35, 0.6 or 0.7 W/m²°C

Provision of regulation deemed to be satisfied	Element of structure or fitting	Case dealt with or relevant conditions	Specification (4)																			
			Type of roof structure	†Type of ceiling structure	* Minimum thickness (in mm) of insulating material referred to below according to type required to give a U value of—																	
					0.35 W/m²°C						0.6 W/m²°C						0.7 W/m²°C					
(1)	(2)	(3)			A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F
J3(1)—as to thermal insulation	Roof	Pitched roof of timber or metal framed construction with a weatherproof covering and with— a level ceiling	(1) Slates or tiles on underslating felt on boarding not less than 12.5 mm thick, with tiling battens, counter battens and double layer felt as required to meet exposure conditions, with insulation laid on the ceiling and a ventilated space between the insulation and the boarding	(b)	196	139	116	93	81	58	95	67	56	45	39	28	75	53	44	36	31	22
			(2) Metal or asbestos cement sheeting laid on purlins with insulation laid on the ceiling and a ventilated air space between the insulation and the sheeting	(b)	210	149	124	99	87	62	109	77	64	52	45	32	89	63	53	42	37	27
		Pitched roof as above with— a sloping ceiling	(3) As (1) above, with a 50 mm minimum ventilated air space above the insulation	(c)	244	172	144	115	101	72	120	85	71	57	50	36	96	68	57	45	40	29
			(4) As (2) above, with a 50 mm minimum ventilated air space above the insulation	(c)	261	185	154	123	108	77	138	97	81	65	57	41	113	80	67	53	47	34
			(5) Metal or asbestos cement sheeting sandwich construction with insulation as a sandwich between the sheeting and the soffit, laid on purlins	(c)	261	185	154	123	108	77	138	97	81	65	57	41	113	80	67	53	47	34
		Pitched roof as above with— no ceiling	(6) As (5) above	(d)	281	199	166	133	116	83	158	112	93	75	65	47	133	94	79	63	54	40

† The references to types of ceiling structure to be construed as follows:—
(b) With a roof space, sealed from any external wall cavity, and a ceiling of sheeting 9.5 mm thick
(c) With a soffit of sheeting 9.5 mm thick
(d) Without a ceiling

* The references to the specifications for insulating materials to be construed as follows:—
A Wood wool slab (density not exceeding 500 kg/m³)
B Fibre building board
C Cellular glass
D Mineral fibre batt, mat or loose fill (glass or rock)
E Mineral fibre slab (glass or rock); Expanded polystyrene insulating board
F Polyurethane insulating board

SCHEDULE 3 Regulation 28

AMENDMENTS TO THE ARRANGEMENT OF REGULATIONS PREFACING THE BUILDING STANDARDS REGULATIONS

1. In the entry for regulation D16 for the word "Timber" there shall be substituted "Cladding".

2. After the entry for regulation G9 there shall be inserted the following entry—

"G10 *Control of interstitial condensation".

3. For the entries under Part J entitled "SECTION I—HOUSES AND CHALETS", and comprising regulations J1 to J6 inclusive, and "SECTION II—BUILDINGS OTHER THAN HOUSES AND CHALETS" and comprising regulations J7 to J9 inclusive, with relevant page references, there shall be substituted the following—

"SECTION I—RESISTANCE TO THE TRANSMISSION OF HEAT FROM BUILDINGS

J1 Application of Section I
J2 Interpretation of Section I
J3 *Wall, floors and roofs
Table 1 to regulation J3
Table 2 to regulation J3
J4 Floors in houses and chalets

SECTION II—THERMAL INSULATION OF PIPES, DUCTS AND STORAGE VESSELS

J5 Application of Section II
J6 Interpretation of Section II
J7 Provision of insulation
Table to regulation J7".

4. In the entry for Schedule 7 the words "separating floors and compartment" shall be deleted.

5. The entry for Schedule 15 shall be deleted.

SCHEDULE 4 Regulation 29

AMENDMENTS TO THE INDEXES TO THE BUILDING STANDARDS REGULATIONS

In Index 1—

(i) the word "- continued" shall be deleted from the heading to that Index;

(ii) with respect to the item "Hairdresser", the reference "B3" in column (2) shall be deleted and "B2" substituted.

In Index 2—

(i) in Part G, in the column headed "Regulation" after the item with respect to G9 there shall be added "G10 Control of interstitial condensation" and opposite in the column headed "Occupancy group and sub-group" there shall be inserted the symbol "0" in the columns for occupancy group A, sub-groups 1, 2 and 3 only;

(ii) for the entry for Part J, Resistance to the transmission of heat and means to conserve energy, there shall be substituted the following—

"Part J: Resistance to the transmission of heat and means to conserve energy

Regulation (1)		Occupancy group and sub-group (2)				
		A 1 2 3 4	B 1 2	C 1 2 3	D 1 2 3	E 1 2
SECTION I—RESISTANCE TO THE TRANSMISSION OF HEAT FROM BUILDINGS						
J1	Application of Section I	0 0 0 0	0 0	0 0 0	0 0 0	0 0
J2	Interpretation of Section I	0 0 0 0	0 0	0 0 0	0 0 0	0 0
J3	Walls, floors and roofs	0 0 0 0	0 0	0 0 0	0 0 0	0 0
J4	Floors in houses and chalets	0 0 0				
SECTION II—THERMAL INSULATION OF PIPES, DUCTS AND STORAGE VESSELS						
J5	Application of Section II	0 0 0 0	0 0	0 0 0	0 0 0	0 0
J6	Interpretation of Section II	0 0 0 0	0 0	0 0 0	0 0 0	0 0
J7	Provision of insulation	0 0 0 0	0 0	0 0 0	0 0 0	0 0
SECTION III—HEATING CONTROLS IN BUILDINGS OTHER THAN HOUSES						
J10	Application of Section III	0 0	0 0	0 0 0	0 0 0	0 0
J11	Interpretation of Section III	0 0	0 0	0 0 0	0 0 0	0 0
J12	Provision of heating controls	0 0	0 0	0 0 0	0 0 0	0 0
J13	Control of internal space temperature	0 0	0 0	0 0 0	0 0 0	0 0
J14	Control of intermittent heating	0 0	0 0	0 0 0	0 0 0	0 0
J15	Control of the operational selection of boilers	0 0	0 0	0 0 0	0 0 0	0 0
J16	Control of hot water storage temperature	0 0	0 0	0 0 0	0 0 0	0 0
J17	Accessibility and identification of controls	0 0	0 0	0 0 0	0 0 0	0 0"

In Index 3—

I In the entry—

(i) "**Building**, temporary", the reference "J7" shall be deleted;

(ii) "**Chalet**, thermal insulation" after the reference "J1" there shall be added "J3";

(iii) "**Condensation**, control of interstitial" for the reference "J6" there shall be substituted "G10";

(iv) "**Display window**, in relation to thermal insulation" for the reference "J9" there shall be substituted "J2";

(v) "**Ducts**" after the words "protection of service and ventilation" and the reference "D12" there shall be inserted "thermal insulation" and "J7";

(vi) "**Existing buildings**, exclusion from notice under section 11 of the Act", the reference "J7" shall be deleted;

(vii) "**Floor**" after the words "imposed load on" and the reference "P8" there shall be inserted "interstitial condensation" and "G10";

(viii) "**Floor**, thermal insulation" for the references "J3", "J5" and "J9" there shall be substituted "J2", "J3" and "J4";

(ix) "**Ground floor**, insulation of" for the reference "J5" there shall be substituted "J4";

(x) "**Heat loss**" for the reference "J9" there shall be substituted "J3" and "J7";

(xi) "**Perimeter walls**, definition" for the reference "J4" there shall be substituted "A5";

(xii) "**Perimeter walls**, in relation to thermal insulation" for the reference "J4" there shall be substituted "J3";

(xiii) "**Pipes**" after the word "tests" and the references "M14" and "Sch 12" there shall be inserted "thermal insulation" and "J7";

(xiv) "**Roofs**" after the words "height of chimneys above" and the references "F5" and "F25" there shall be inserted "interstitial condensation" and "G10";

(xv) "**Roofs**, thermal insulation" for the references "J1", "J3", "J8" and "J9" there shall be substituted "J1", "J2" and "J3";

(xvi) "**Roof lights**, thermal insulation in relation to" for the references "J3", "J8" and "J9" there shall be substituted "J2" and "J3";

(xvii) "**Section 11 of Building (Scotland) Act (exclusion from notice under)**", the reference "J7" shall be deleted;

(xviii) "**Shop premises**, display windows" for the reference "J9" there shall be substituted "J2";

(xix) "**Temporary Buildings**, thermal insulation", the reference "J7" shall be deleted;

(xx) "**Thermal transmittance coefficient (U Value)**, interpretation" for the references "J3", "J4", "J5", "J8" and "J9" there shall be substituted "J2" and "J3";

(xxi) "**Ventilated space**" after the word "definition" and the reference "A5" there shall be inserted—

"interstitial condensation" and "G10"

"provision" and "J3";

(xxii) "**Walls**"—

(a) after the words "internal linings" and the reference "E17" there shall be inserted "interstitial condensation" and "G10";

(b) after the words "timber on external face" and the reference "D16" there shall be inserted, "wall-definition" and "A5";

(xxiii) "**Walls**, external" for the references "J4" and "J9" there shall be substituted "J2" and "J3";

(xxiv) "**Walls**, openings" for the references "J4" and "J9" there shall be substituted "J2" and "J3";

(xxv) "**Walls**, thermal insulation" for the references "J4" and "J9" there shall be substituted "J2" and "J3";

(xxvi) "**Windows**, opening" for the references "J4", "J8" and "J9" there shall be substituted "J2" and "J3";

II For the entry—

(i) "**Opening (In relation to thermal insulation)**" there shall be substituted the following entry—

"**Opening**
(In relation to thermal insulation)

definition	A5
definitions—window, roof light	A5
in relation to glazed areas	J3";

(ii) "**Thermal insulation**" there shall be substituted the following entry—

"**Thermal insulation**

application	J1 J5
ducts	J7
floors	J2 J3 J4
larders	Q9
pipes	J7
roofs	J2 J3
storage vessels	J7
walls	J2 J4 ";

III Before the entry—

(i) "**Specifications**" there shall be inserted the following entry—

"**Space heating installation** J1";

(ii) "**Storey**" there shall be inserted the following entry—

"**Storage vessels**

thermal insulation J7";

(iii) "**Thermal insulation**" there shall be inserted the following entry—

"**Thermal conductivity** J7";

IV The entry and reference for "**Heat emitters**" shall be deleted;

V The entries and references for "**Permanent vents**" shall be deleted.

EXPLANATORY NOTE

(This Note is not part of the Regulations.)

These regulations amend the Building Standards (Scotland) Regulations 1981. They come into operation on 28th March 1983 but do not apply to any construction or change of use of a building where application for the warrant was made before that date.

The principal amendments are:—

a. that regulation 18 transfers the controls on interstitial condensation to Part G of the building standards regulations (Preparation of sites and resistance to the passage of moisture);

b. that regulation 20 substitutes new Sections I and II of Part J of the building standards regulations and these are set out in Schedule 1. Section I now embraces both domestic and industrial and commercial buildings and introduces higher thermal insulation standards for the walls, floors and roofs of houses and chalets. Section II contains provisions for the thermal insulation of pipes, ducts and storage vessels intended to carry or store heated gases or fluids in the heating system of buildings so as to conserve fuel and power. In so far as it applies to non-industrial buildings this gives effect to the first paragraph of Article 2 of Council Directive 78/170 EEC (OJ No. L52, 23.2.1978, pp 32–33) which provides:

> "Member States shall take all necessary measures to ensure that economically justifiable insulation of the distribution and storage system is made compulsory in new non-industrial buildings, both as regards heating fluid and domestic hot water";

c. that in the light of the changes introduced by regulations 18 and 20 the deemed-to-satisfy specifications in Schedule 13 to the buildings standards regulations are amended by regulation 26 and Schedule 2.

A number of amendments are also made to the building standards regulations by way of clarification, as well as amendment consequential upon the principal amendments mentioned above.

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