

WALLS

General Requirements

PART A: Structure
(2004 Edition, incorporating 2004, 2010 and 2013 Amendments)

The building shall be constructed so that:

- The combined dead, imposed and wind loads are sustained and transmitted by it to the ground, safely and without causing any building deflection/deformation or ground movement that will affect the stability of any part of the building.

PART B: Fire Safety Volume 1 Dwellings
(2019 Edition, incorporating 2020 amendments)

Requirement B2
Internal fire spread (linings)
To inhibit the spread of fire within the building, the internal linings shall:

- adequately resist the spread of flame over their surfaces
- have, if ignited, either a rate of heat release or a rate of fire growth, which is reasonable in the circumstances.

Internal linings can be defined as materials or products used in lining any partition, wall, ceiling or other internal structure.

Wall and ceiling linings should meet the classifications in Table 4.1 of Approved Document Part B Volume 1.

Requirement B3
Internal fire spread (structure)
The building shall be designed and constructed so that, in the event of fire, its stability will be maintained for a reasonable period

A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings.

Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following:

- Subdivision of the building with fire-resisting construction
- Installation of suitable automatic fire suppression systems

The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

Load bearing walls (internal and external) must have a fire resistance as given in Appendix B, Table B3 of Approved Document Part B, Volume 1.

Every wall separating dwellinghouses should be constructed as a compartment wall.
A garage is also classed as a compartment wall. If a garage is attached to or forms an integral part of a dwelling house the garage must be separated by fire resisting construction.

Compartment walls
All compartment walls must achieve a complete barrier to fire between the compartments they separate and have appropriate fire resistance as given in Appendix B, Table B3 and Table B4 of Approved Document Part B Volume 1. Refer to the regulations for full requirements.

Cavities
To reduce the potential for fire spread cavity barriers must be provided to divide cavities and to close the edges of cavities.
Cavity barriers should be provided:

- at the edges of cavities, around openings such as windows, doors etc,
- at the junction between external cavity wall and every compartment floor and wall
- at the junction between an internal cavity wall and every compartment floor, compartment wall or other wall or door assembly forming a fire resisting barrier

Refer to the regulations for full requirements.

Masonry cavity walls are excluded from provisions for cavity barriers if they meet the following:

- Must include two leaves of brick or concrete each at least 75mm thick.
- Have a closed cavity at the top of the wall (unless the cavity is totally filled with insulation).
- Have a close cavity around the openings.

Note that materials used to close the cavity in this arrangement do not need to achieve a specific performance in relation to fire resistance. Materials achieving class B-s3, d2 or worse may be placed within the cavity in these instances.

Requirement B4
External Fire Spread

The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.

Walls must be constructed so that the risk of ignition by an external source to the outside surface of the building and spread of fire over the outside surface is restricted.
Materials used to construct the walls do not contribute to the rate of fire spread up the outside of the building. The extent to which this is necessary depends on the height and use of the building.

Within a single family dwelling of less than 18m height, for any external wall less than 1m from the boundary, the external surface should be Class B-s3, d2(2) or better fire performance.

For further information refer to Approved Document Part B Volume 1 Table 10.1 for the reaction to fire performance of external surface of walls.

The above notes do not contain guidance for flats, for full requirements refer to the regulations.

PART C: Site Preparation and Resistance to Contaminants and Moisture
(2004 Edition, incorporating 2004, 2010 and 2013 Amendments)

Moisture
The walls of the building shall adequately protect the building and people who use the building from harmful effects caused by:

- ground moisture
- precipitation and wind-driven spray
- interstitial and surface condensation
- spillage of water from or associated with sanitary fittings or fixed appliances

Internal and External Walls - Moisture from the ground
An internal or external wall will meet the requirement if it is built with a damp proof course of any material that will prevent the passage of moisture. The damp proof course must be continuous with any other damp proof membrane in the floors, and be 150mm above the level of adjoining ground. If the wall is a cavity wall, the cavity should be taken down at least 225mm below the level of the lowest damp proof course, or a damp proof tray should be provided with weep holes every 900mm.
See Approved Document Part C for detail drawings of acceptable solutions.

External Walls - Moisture from the outside
Protection from precipitation can be given by a solid wall of sufficient thickness, a cavity wall or by an impervious or weather resisting cladding.

For more detailed requirements for solid walls, cavity walls and insulation, with diagram examples refer to Approved Document Part C.

Joints between doors and windows
The joint between walls and door and window frames should resist the penetration of precipitation to the inside of the building and not be damaged by precipitation and not permit precipitation to reach any part of the building which would be damaged by it.
Damp proof courses should be provided to direct moisture to the outside as appropriate.

PART D: Toxic Substances
(1992 Edition, incorporating 2002, 2010 and 2013 amendments)

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

PART E: Resistance to sound
(2003 Edition, incorporating 2004, 2010, 2013 and 2015 amendments)

E1
Protection against sound from other parts of the building and adjoining buildings
Dwelling-houses, flats and rooms for residential purposes shall be designed and constructed in a way that they provide reasonable resistance to sound from other parts of the same building and from adjoining buildings.

E2
Protection against sound within a dwelling-house etc
Dwelling-houses, flats and rooms for residential purposes shall be designed and constructed so that internal walls between a bedroom or a room containing a WVC, and other rooms provide a reasonable resistance to sound.

Refer to Approved Document Part E, Table 0.1a & Table 0.1b for performance standards for separating walls.

Refer to Approved Document Part E for example wall types, junctions and finishes that can achieve required performance standards.

The above notes do not contain guidance for flats, for full requirements refer to the regulations.

PART L: Conservation of fuel and power, Volume 1: Dwellings
(2021 Edition)

Reasonable provision shall be made for the conservation of fuel and power in buildings by:

- Limiting heat gains and losses through thermal elements and other parts of the building fabric; and
- From pipes, ducts and vessels used for space heating, space cooling and hot water services

New external wall must achieve a U-value of 0.18 W/m²K or better
(Under the notional dwelling specification for new dwelling otherwise external wall to meet U-value of 0.26 W/m²K)

Party walls must achieve a minimum U-value of 0 W/m²K
(Under the notional dwelling specification for new dwelling otherwise party wall to meet U-value of 0.2 W/m²K or better)

New external wall within an existing dwelling must achieve a U-value of 0.18 W/m²K or better
(Such as a wall to a new extension)

Upgrading existing external wall must achieve a U-value of 0.55W/m²K or better (for cavity insulation)

Upgrading existing external wall must achieve a U-value of 0.30W/m²K or better (for internal or external insulation)
(If the existing external wall does not meet the U-value 0.70 W/m²K threshold)

Refer to Approved Document Part L for full requirements for new elements in existing dwellings, extensions, renovating elements in existing dwellings and necessary U-values. Tables 1.1, 4.1, 4.2 and 4.3 provide further details on requirements and exceptions.

Insulation
To reduce heat loss and thermal bypass all insulation must be continuous.
Insulation must be fitted tight to the structure, cavity closers, lintels and cavity trays.

Thermal Bridging
To limit thermal bridging, junctions must be detailed to achieve continuity of insulation. External or cavity wall insulation should extend below the damp proof course and be at least one full block height (215mm) below the underside of the floor structure/slab and beyond the depth of the floor insulation.

For a timber frame where the intermediate floor structure breaches the external wall insulation, further insulation of the same thickness as the insulation used in the external wall should be included within the depth of the intermediate floor structure.

Insulation must be continuous across wall-to-eaves and wall-to-gable junctions.
Roofs insulated at ceiling level, loft insulation at the eaves should extend beyond the wall insulation without any reduction in thickness. Roofs insulated at rafter level, at the eaves insulation should extend to the top of the external wall. Voids between insulation at the top of the external wall and the cavity wall/timber frame insulation should be fully filled with insulation.

Airtightness
Care should be taken to reduce unwanted heat loss through air filtration. Refer to approved document Part L: Volume 1 Table 4.1 for minimum standards of air permeability.
A cavity wall should include plaster, parge coat or liquid membranes to reduce air permeability where dense aggregate blocks have been used.
Timber frame walls should include a vapour control layer with overlaps at seams and junctions and be taped to form the airtightness barrier.

These notes do not cover renovation or replacement of thermal elements, extensions or conversions. The above notes are limited to new build dwellings only

ROOFS

PART A: Structure
(2004 Edition, incorporating 2004, 2010 and 2013 Amendments)

The building shall be constructed so that the combined dead, imposed and wind loads are sustained and transmitted by it to the ground.

PART B: Fire Safety Volume 1 Dwellings
(2019 Edition, incorporating 2020 amendments)

Requirement B1 - Means of Escape
Where a flat roof forms a means of escape it should comply with the following:

- It should be part of the same building from which the escape is being made
- The route across the roof should lead to a storey exit or external escape route
- The part of the roof forming the escape route and any opening within 3m of the escape route, should be of fire resisting construction (minimum REI 30).

A flat roof intended to form part of an escape route should be provided with guarding in accordance with Approved Document K.

Requirement B2
Internal Fire Spread (Linings)

To inhibit the spread of fire within the building the internal linings shall adequately resist the spread of flame over their surfaces and if ignited, have either a rate of heat release or rate of fire growth which is reasonable in the circumstances.
(Internal lining applies to any partition, wall, ceiling or other internal structure).

Wall and ceiling linings should meet the classifications in Table 4.1 of Approved Document Part B Volume 1.

Wallcoverings such as exposed joists and architraves which conform to BS EN 15102, achieving at least class C-s3, d2 and bonded to a class A2-s3, d2 substrate, will also be acceptable.

For rooflight requirements refer to Approved Document Part B Volume 1.

Requirement B3
Internal Fire Spread (Structure)

The building shall be designed and constructed so that , in the event of fire its stability will be maintained for a reasonable period.

Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following:

- Subdivision of the building with fire-resisting construction
- Installation of suitable automatic fire suppression systems

The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

Floors in Loft Conversions
Where adding an additional storey to a two storey single family dwellinghouse, new floors should have a minimum REI 30 fire resistance. Any floor forming part of the enclosure to the circulation space between the loft conversion and the final exit should achieve a minimum rating of REI 30.

For more information on junctions of compartment walls with roofs, refer to Approved Document Part B Volume 1.

Cavities
To reduce the potential for fire spread cavity barriers must be provided to divide cavities and to close the edges of cavities.
Cavity barriers should be provided:

- at the edges of cavities, around openings such as windows, doors etc,
- at the junction between external cavity wall and every compartment floor and wall
- at the junction between an internal cavity wall and every compartment floor, compartment wall or other wall or door assembly forming a fire resisting barrier

Refer to the regulations for full requirements.

Masonry cavity walls are excluded from provisions for cavity barriers if they meet the following:

- Must include two leaves of brick or concrete each at least 75mm thick.
- Have a closed cavity at the top of the wall (unless the cavity is totally filled with insulation).
- Have a close cavity around the openings.

Note that materials used to close the cavity in this arrangement do not need to achieve a specific performance in relation to fire resistance. Materials achieving class B-s3, d2 or worse may be placed within the cavity in these instances.

Requirement B4
External Fire Spread

The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

Resisting fire spread over roof coverings
The risk of a fire spreading from the building to a building beyond the boundary should be limited.

Refer to Approved Document Part B, Volume 1, Section B4 for limitations on roof coverings in relation to boundaries. Table 12.1, 12.2, 12.3.

The above notes do not contain guidance for flats, for full requirements refer to the regulations.

PART C: Site Preparation and Resistance to Contaminants and Moisture
(2004 Edition, incorporating 2004, 2010 and 2013 Amendments)

Resistance to moisture
The roof of the building shall adequately protect the building and people who use the building from harmful effects caused by; precipitation including wind driven spray, interstitial and surface condensation.

Resistance to moisture from the outside
Any roof will meet the requirement if; it is jointless or has sealed joints and is impervious to moisture or, it has overlapping dry joints, is impervious or weather resisting and is backed by a material which will direct precipitation which enters the roof towards the outer face.

Resistance to damage from interstitial condensation
A roof will meet the requirement if it is designed and constructed in accordance with Clause 8.4 of BS5250:2002 and BS EN ISO 13788:2002.
To avoid excessive moisture transfer to roof voids, gaps and penetrations for pipes and electrical wiring should be filled and sealed (especially in areas of high humidity such as kitchens and bathrooms). An effective draught seal should be provided to loft hatches to reduce inflow of warm air and moisture.

PART F: Ventilation
(2021 Edition)

There shall be adequate means of ventilation provided for people in the building.

PART H: Drainage and Waste Disposal
(2015 Edition)

Rainwater drainage
Adequate provision shall be made for rainwater to be carried from the roof of the building.

The flow into a gutter depends on the area of surface being drained and whether the surface is flat or pitched. Refer to Approved Document Part H for calculation tables of drained areas and gutter/outlet sizes.

Refer to Approved Document Part H Diagram 1 for rainfall intensities for design of gutter and rainfall pipes.

Gutters should be laid with any fall towards the nearest outlet. Gutters should also be laid so that any overflow in excess of the design capacity, caused by conditions such as above normal rainfall, will be discharged clear of the building, reducing the risk of overspilling of rainwater into the building or structural overload.

Rainwater pipes should be disposed of on site where possible, to a soakaway, watercourse or rainwater collection system. If these are not possible solutions, rainwater should discharge into a drain or gully.

PART K: Protection from falling, collision and impact
(2013 Edition)

K2 Protection from falling
Pedestrian guarding should be provided to any roof that people have access to such as a roof terrace.

Guarding on a roof is not required where access is for maintenance only.

PART L: Conservation of fuel and power, Volume 1: Dwellings
(2021 Edition)

Reasonable provision shall be made for the conservation of fuel and power in buildings by:

- limiting heat gains and losses through thermal elements and other parts of the building fabric,
- from pipes, ducts and vessels used for space heating, space cooling and hot water services.

New roofs must achieve a U-value of 0.11W/m²K or better
(Under the notional dwelling specification for new dwelling otherwise roof to meet U-value of 0.16 W/m²K or better)

New roofs within an existing dwelling must achieve a U-value of 0.15W/m²K or better
(Such as a roof to a new extension)

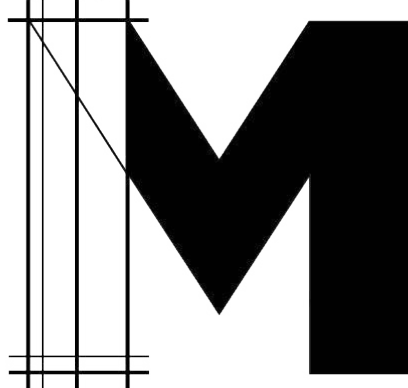
Upgrading existing roofs must achieve a U-value of 0.16 W/m²K or better
(If the existing roof does not meet the U-value 0.35W/m²K threshold.)

Refer to Approved Document Part L for full requirements for new elements in existing dwellings, extensions, renovating elements in existing dwellings and necessary U-values. Tables 1.1, 4.1, 4.2 and 4.3 provide further details on requirements and exceptions.

Insulation
Insulation should be installed tight to the structure, without air gaps, and should extend to the wall insulation. For roofs insulated at ceiling level, the long term protection of the insulation layer should be considered: boarded areas should be provided above the insulation to give access for maintenance.

Thermal Bridging
Continue insulation across the wall-to-eaves and wall-to-gable junctions.
Wall insulation should be installed to the top of the wall plate, in some cases this may be above the cavity closure or barrier.
Roofs insulated at ceiling level; loft insulation at the eaves should extend beyond the wall insulation without any reduction in thickness due to the pitch of the roof. At gables and party walls, insulation should extend to the wall; if the space between the wall and joist is less than 100mm, perimeter insulation may be required.

Airtightness
Loft hatches: where the roof is insulated at ceiling level, hatches should be suitably designed and installed to ensure optimum airtightness.



MOOSECONSULTING

ISSUE STATUS
CLIENT REVIEW

CLIENT

MR & MRS GREEN

PROJECT

FAIRHAVEN

REV	DESCRIPTION	DATE
A	CLIENT REVIEW	24.03.25

Notes

1. Structural calculations, guidance or notes of any is for guidance only, not for construction. You must engage a structural engineer.

2. All documentation provided does not limit your liability in respect to the engagement and full compliance of Planning and/or Building Control.

3. The nominated Building Control officer has the right to superceed any and all of the information contained within this document. You are required by Law to comply with the explicit directions given by your Building Control officer.

PROJECT ID	DATE of ISSUE
2503101	24.03.25
SCALE (@ A1)	REV
1 : 50	A

TITLE

BC GENERAL NOTES P2

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