

The following information is a partial list of requirements from the **Building Regulations Approved Documents** - for full and detailed explanations and requirements please consult the full publications.

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.
- ground movement caused by swelling, shrinkage or freezing of the sub-soil, land slip or subsidence will not affect the stability of any part of the building.

Site preparation and resistance to contaminants and water

- The ground to be covered by the building shall be reasonably free from any material that might damage the building or affect its stability, including vegetable matter, topsoil and pre-existing foundations.
- Reasonable precautions shall be taken to avoid danger to health and safety caused by contaminants on or in the ground covered, or to be covered, by the building and any land associated with the building.
- Adequate subsoil drainage shall be provided if it is needed to avoid: passage of ground moisture to the interior of the building; damage to the building, including damage through the transport of water-borne contaminants to the foundations of the building

Rainwater drainage systems shall ensure that rainwater soaking into the ground is distributed sufficiently so that it does not damage foundations of the proposed building or any adjacent structure.
(Approved Doc H3)

Foundations - plain concrete

There should not be:

- non engineered fill or a wide variation in ground conditions within the loaded area
- weaker or more compressible ground at such a depth below the foundation as could impair the stability of the structure.

Foundations stepped on elevation should overlap by twice the height of the step, by the thickness of the foundation, or 300mm, whichever is greater.

Residential Buildings

The maximum height of the building measured from the lowest finished ground level to the highest point of any wall or roof should be less than 15m.

The height of the building should not exceed twice the least width of the building.

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

- safely
- without causing such deflection or deformation of any part of the building as will impair the stability of any part of another building.

(Approved Doc A1)

The building shall be constructed so that ground movement caused by:

- swelling, shrinkage or freezing of the subsoil
- landslip or subsidence

will not impair the stability of any part of the building
(Approved Doc A2)

As a fire precaution, the spread of flame over the internal linings of a building and the amount of heat released from internal linings shall be restricted;

- all load bearing elements of structure of the building shall be capable of withstanding the effects of fire for an appropriate period without loss of stability;
- Ideally the building should be subdivided by elements of fire resisting construction into compartments;
- all openings in fire-separating elements shall be suitably protected in order to maintain the integrity of the continuity of the fire separation;
- any hidden voids in the construction shall be sealed and subdivided to inhibit the unseen spread of fire and products of combustion, in order to reduce the risk of structural failure, and the spread of fire.

(Approved Doc B3)

The floor son the building shall adequately protect the building and people who use the building from harmful effects caused by:

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

All floors next to the ground, walls and roof shall not be damaged by moisture from the ground, rain or snow and shall not carry that moisture to any part of the building that it would damage.

Dwellings shall be designed so that the noise from domestic activity in an adjoining dwelling (or other parts of the building) is kept to a level that:

- does not affect the health of the occupants of the dwelling
- will allow them to sleep, rest and engage in their normal activities in satisfactory conditions

(Approved Doc E1)

Domestic buildings shall be designed and constructed so as to restrict the transmission of echoes.
(Approved Doc E3)

There shall be adequate means of ventilation provided for people in the building
(Approved Doc F)

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.
- providing fixed building services which are energy efficient and have effective controls and are commissioned by testing and adjusting as necessary to ensure they use no more fuel and power than is reasonable in the circumstances.

(Approved Doc L)

Suspended timber floors must:

- Ensure the ground is covered so as to resist moisture and prevent plant growth.
- Have a ventilated air space between the ground covering and the timber.
- Have a damp proof course between the timber and any material which can carry moisture from the ground

Floors that separate a dwelling from another dwelling shall resist the transmission of airborne sounds. Floors above a dwelling that separate it from another dwell shall resist:

- the transmission of impact sound (such as falling objects, loudspeakers and other impact sources such as footsteps or furniture moving)
- the flow of sound energy through walls and floors
- the level of airborne sound

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

(Approved Doc C2)

Fumes given off by insulating materials such as by urea formaldehyde foams should not be allowed to penetrate occupied parts of the building to an extent where it could become a health risks to persons in the building by becoming an irritant concentration.

(Approved Doc D)

Materials and/or products used for the internal linings of walls shall restrict:

- the spread of flame;
- the amount of heat released.

A wall fire spread (structure)

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

The building should be sub-divided by elements of fire resisting construction into compartments.

Any hidden voids in the construction shall be sealed and sub-divided to inhibit the unseen spread of fire and products of combustion, in order to reduce the risk of structural failure, and the spread of fire.

(Approved Doc B3)

External walls shall be constructed so as to have a low rate of heat release and thereby be capable of reducing the risk of ignition from an external source and the spread of fire over their surfaces.

The amount of unprotected area in the sides of the building shall be restricted so as to limit the amount of thermal radiation that can pass through the wall.

(Approved Doc B4)

Dwellings shall be designed so that the noise from domestic activity in an adjoining dwelling (or other parts of the building) is kept to a level that:

- does not affect the health of the occupants of the dwelling
- will allow them to sleep, rest and engage in their normal activities in satisfactory conditions.

(Approved Doc E1)

Dwellings shall be designed so that any domestic noise that is generated internally does not interfere with the occupants ability to sleep, rest and engage in their normal activities in satisfactory conditions.
(Approved Doc E2)

Domestic buildings shall be designed and constructed so as to restrict the transmission of echoes.
(Approved Doc E3)

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,
- providing fixed building services which are energy efficient and have effective controls and are commissioned by testing and adjusting as necessary to ensure they use no more fuel and power than is reasonable in the circumstances.

(Approved Doc L)

Walls should comply with the relevant requirements of BS EN 1996-2:2006

For residential buildings, the maximum height of the building measured from the lowest finished ground level adjoining the building to the highest point of any wall or roof should not be greater than 15m.

Wall cladding shall be capable of safely sustaining and transmitting all dead, imposed and wind loads. Provision shall be made where necessary, to accommodate differential movement of the cladding and the supporting structure of the building. The cladding shall be securely fixed to and supported by the structure of the building using both vertical support and horizontal restraint. The cladding and its fixings shall be of durable materials. See approved documents for masonry unit and mortar requirements.

Extension straps should be used to strap walls to floors above ground level, at intervals not exceeding 2m. Gable walls should be strapped to roofs. The ends of every wall should be bonded or otherwise securely tied throughout their full height to a buttressing wall, pier or chimney.

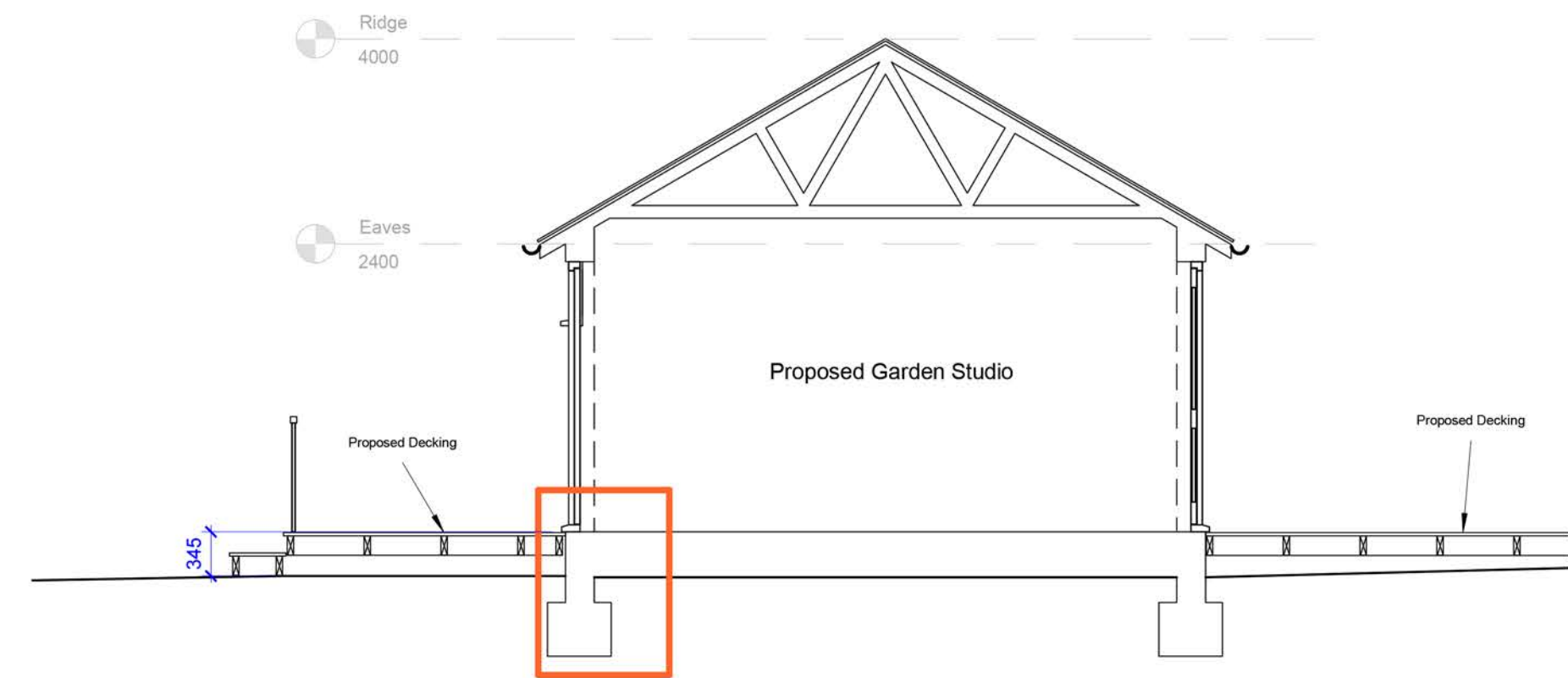
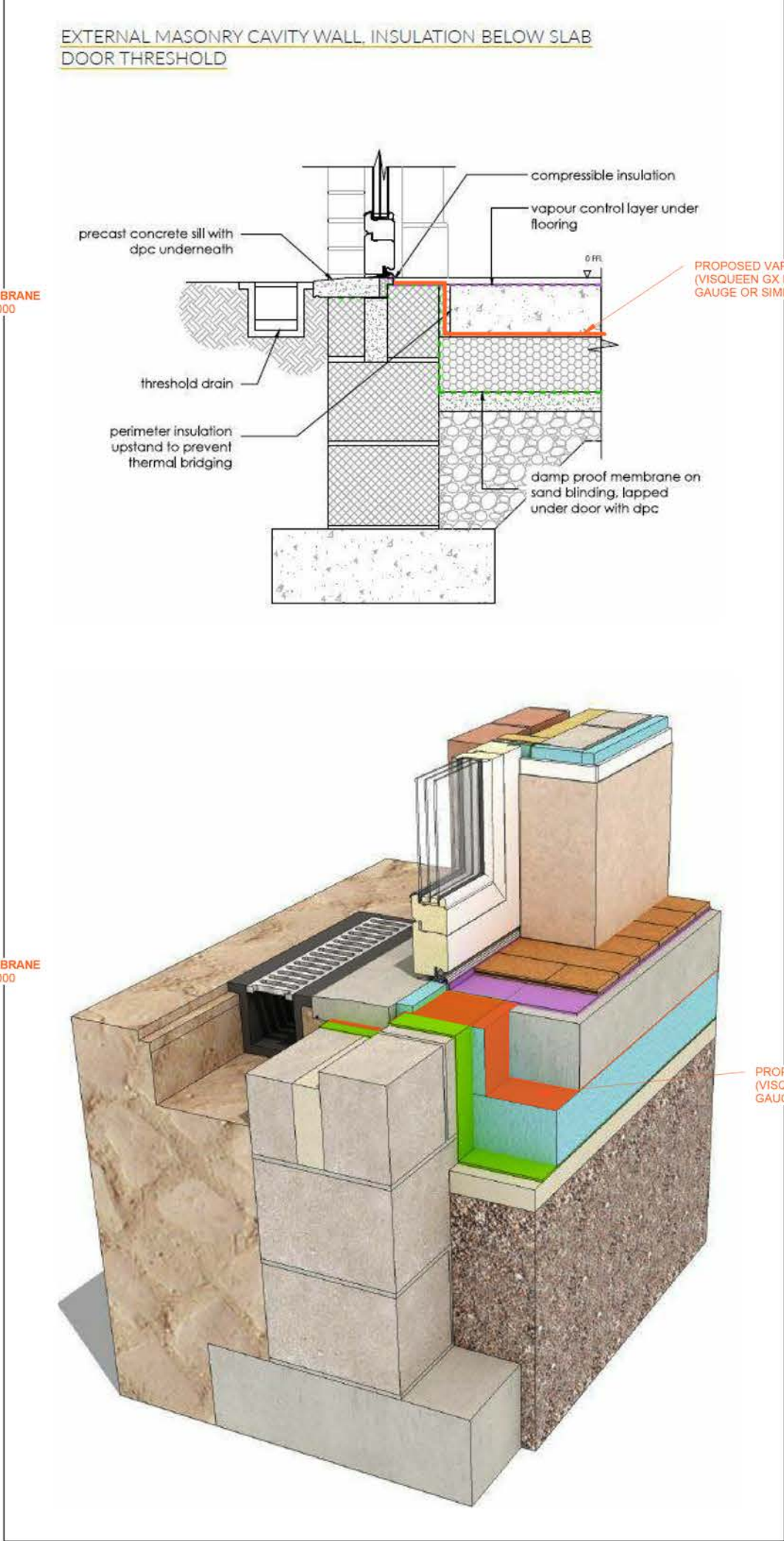
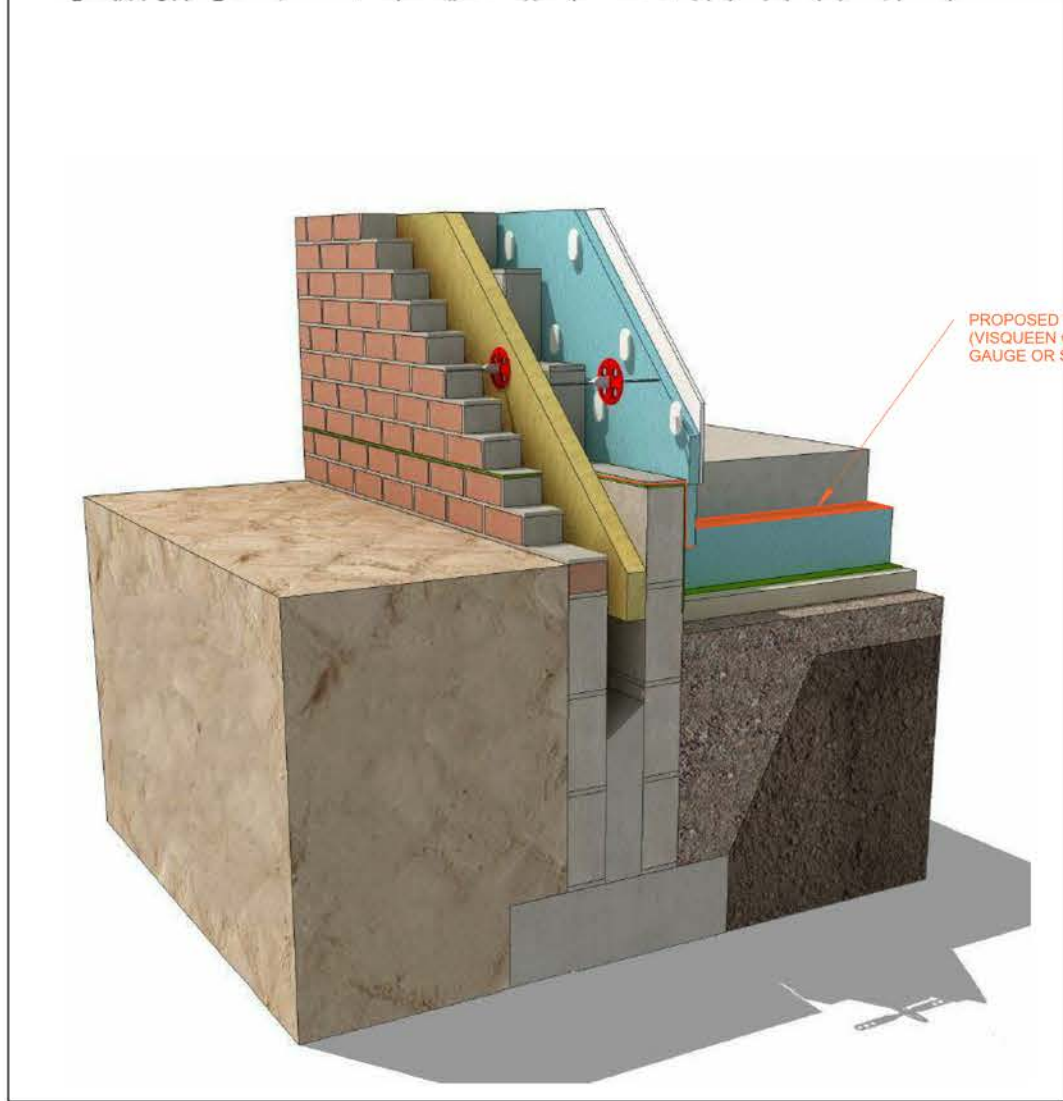
Structure should be designed so that the unseen spread of fire and smoke within concealed spaces is prevented.

- Cavity barriers should be provided:
 - at the edge of cavities
 - around window and door openings
 - at the junction between an external cavity wall and a compartment wall
 - at the junction between an external cavity wall and a compartment floor
 - at the top of an external cavity wall
 - at the junction between an internal cavity wall and any assembly which forms a fire resisting barrier
 - above the enclosures to a protected stairway in a dwelling with a floor more than 4.5m above ground level.

- All cavity walls should have
 - leaves at least 90mm thick and cavities at least 50mm wide
 - wall ties with a horizontal spacing of 900mm and a vertical spacing of 450mm
 - wall ties spaced not more than 300mm apart vertically within a distance of 225mm from the vertical edges of all openings, movement joints and roof verges.

Internal and external walls that are subject to moisture from the ground should have a dampproof course to prevent the passage of moisture. The damp proof course should be continuous with any damp proof membrane in the floor. If the wall is an external wall, the damp proof course should be at least 150mm above the level of the adjoining ground.

- If the wall is an external cavity wall either:
 - the cavity should be taken down at least 225mm below the level of the lowest dampproof course or
 - a damp proof tray should be provided so as to prevent precipitation passing into the inner leaf, with weep holes every 900mm to assist in the transfer of moisture through the external leaf.



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CODE	SUITABILITY DESCRIPTION
STATUS	STAGE - PURPOSE OF ISSUE

PROJECT

31 Gildersdale Drive, Manchester, M9 0SN.
Garden Studio /Sauna

TITLE

Standard Detail