

PLANNING NOTE
Under new regulations that came into force on 1 October 2008 an extension or addition to a house is considered to be permitted development and not requiring an application for planning permission, subject to the following limits and conditions:
-No more than half the area of land around the 'original house' would be covered by additions to buildings.
-No extension forward of the principal elevation or side elevation fronting a highway.
-No extension higher than the highest part of the roof.
-Maximum depth of a single storey rear extension to be 3 metres for an attached house and 4 metres for a detached house.
-Maximum height of a single storey rear extension to be four metres.
-Maximum ridge and eaves height no higher than existing house.
-Roof pitch of extensions higher than one storey to match existing house.
-Materials to be similar in appearance to the existing house.
-Upper-floor, side-facing windows to be obscure glazed: any opening to be 1.7m above the floor.

CDM REGULATIONS 2015
The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor. If more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

THERMAL BRIDGING
Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

MATERIALS AND WORKMANSHIP
All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

SITE PREPARATION
Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

EXISTING STRUCTURE
Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

BEAMS
Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nulifire 5 or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

LINTELS
-For uniformly distributed loads and standard 2 storey domestic loadings only.
-Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS EN 1992-1-1, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1.
-Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes to terminate at new 65mm x 25mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

SOLID FLOOR INSULATION UNDER SLAB
Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide a 1200 gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 75mm thick Celotex.
25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed. Provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish over the slab with a floating layer of min 20mm tongue and groove softwood boards or moisture resistant particle/chipboard grade type C4 to BS EN 312 as required. Lay with staggered joints.
Where drain runs pass under new floor, provide A12 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.
Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes to terminate at new 65mm x 25mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

WALLS BELOW GROUND
All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (50mm below damp course) laid to fall to weepholes.

FULL FILL CAVITY WALL
To achieve minimum U Value of 0.28W/m²K
New cavity wall to comprise of 105mm facing brick to match existing. Full fill cavity with 100mm Rockwool Cavity insulation as manufacturer's details. Inner leaf to be 100mm block k value 1.13, e.g. (Armstrong dense, Masterblock Monacrete 1005). Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1.6 cement mortar.

TIMBER FRAME WALL
To achieve minimum U Value of 0.28W/m²K
Tiles hung vertically on 25 x 38mm preservative-treated battens (provide counter battens to ensure vented and drained cavity if required) fixed to breathable membrane (having a vapour resistance of not more than 0.6 MN/s) and 12mm thick WBP external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using 100mm x 50mm head & sole plates and vertical studs (with noggins) at 400mm ctrs or to s/engineer's details & calculations. Insulation to be 100mm Kingspan Thermawall TW55 between studs plus 22mm Gyproc Thermaline Basic with VCL over. Finish with a 3mm skim coat of finishing plaster. All joints to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally.

NEW WALL CONSTRUCTION
TO BE TIED INTO THE EXISTING USING APPROVED STAINLESS STEEL PROFILES.

NEW STRUCTURAL STEELWORK
TO BE INSTALLED TO THE STRUCTURAL ENGINEER'S DETAILS AND CALCULATIONS.

NEW BI-FOLDING DOORSET TO BE INSTALLED
MANUFACTURER AND SPECIFICATION TO BE CONFIRMED.

NEW INTERNAL PARTITION WALLS
CONSTRUCTED USING 75 x 50mm SOFTWOOD STUDS AT 400MM CENTRES, FILLED WITH ISOVER INSULATION, OR SIMILAR APPROVED, FACED BOTH SIDES WITH 12.5MM PLASTERBOARD, FINISHED WITH A 3mm PLASTER SKIM.

NEW CAVITY WALL TO BE CONSTRUCTED
WITH A LINTEL, INSTALLED OVER THE EXISTING UNDERGROUND DRAINAGE.

DEPTH AND ROUTE OF DRAINAGE TO BE CONFIRMED
ON SITE.

NEW MARLEY INSPECTION CHAMBER,
OR SIMILAR APPROVED, TO BE INSTALLED ON THE LINE OF THE EXISTING DRAINAGE.

NEW GARAGE CONSTRUCTED
USING SINGLE SKIN FACING BRICKS.

BRICK PIER TO BE CONSTRUCTED
AT MIDPOINT OF SIDE WALL.

NEW STAIRCASE TO BE CONSTRUCTED, MAXIMUM TREAD RISE TO BE 220MM, MINIMUM GOING TO BE 220MM.
MAXIMUM PITCH TO BE 42°

NEW FD30 DOORSET TO BE INSTALLED TO CREATE COMPARTMENTATION OF THE NEW 2ND FLOOR BEDROOM FROM THE MAIN STAIRCASE.

STRAPPING FOR PITCHED ROOF
Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to roof rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BS EN 845-1 built into masonry walls at max 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid noggins between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 100mm galvanised metal straps or other approved to BSEN 845-1 at maximum 2m centres.

FLAT ROOF RESTRAINT
100m x 50mm C6 grade timber wall plates to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps at maximum 2.0m centres fixed to internal wall faces.

OPENINGS AND RETURNS
An opening or recess greater than 0.1m² shall be at least 150mm from the supported wall (measured internally).

STRIP FOUNDATION
Provide 225mm x 600mm concrete foundation, concrete mix to conform to BS EN 206-1 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2010 Building Regulations A1/2 and BS 8004:2015 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

TIMBER SUSPENDED FLOOR
Ground preparation -Remove top soil and vegetation, apply total weed killer and 150mm min thick sand blinding hardcore, then either -
(i) Provide concrete ground cover of at least 100mm thick or
(ii) Prepare the ground to an even surface and lay a ground cover of concrete at least 50mm thick, on a damp-proof membrane of at least 1200 gauge polyethylene, laid on a bed of fine blinding material.

DPC
Provide horizontal strip polymer (nyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPCs and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES
All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 845

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DOMESTIC CLIENTS
The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.
Or,
(b) Exceeds 500 person days.

PARTY WALL ACT
The owner, should they need to do so under the requirements of the Party Wall Act 1999, has a duty to serve a Party Structure Notice on any adjoining owner. If building work on, or to near an existing Party Wall involves any of the following:
• Support of beam
• Insertion of DPC through wall
• Raising a wall or cutting off projections
• Demolition and rebuilding
• Underpinning
• Infringement of lead flashings
• Excavations within 3 metres of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 metres of an existing structure where the new foundations are within a 45 degree line of the adjoining foundations.
A Party Wall Agreement is to be in place prior to start of works on site.

Floor construction – min 20mm tongue and groove softwood boards or moisture resistant particle/chipboard grade type C4 to BS EN 312 as required. Lay with staggered joints on 47mm x 220mm C24 grade soft wood joists at maximum 400mm centres max span 4.8m. Joists to be supported off proprietary galvanised joist hangers built into new masonry walls or fixed to treated timber wall plates resin bolted to walls at 600mm centres. If required, floor joists also to be supported on 100mm x 50mm treated wall plates and DPC fixed to masonry honeycombed sleeper walls built on thickened overste concrete. Joists to be inflated with 100mm Celotex XR4000 fixed with Celotex clips.

The top surface of the ground cover under the building shall be above the finished level of the adjoining ground. The underside of the floor joists are not to be less than 150mm above the top of the ground cover. The underside of any wall plate is to be not less than 75mm above the top of the ground cover.

Ventilation of Floor
Provide cross-ventilation under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm² per metre run of perimeter wall or 500mm² per square metre of floor area whichever gives the greater opening area. All sleeper walls or similar under floor obstructions shall be of honeycombed construction or have similar provision for distribution of ventilation. The under floor space shall be free from debris. Ducts to be sealed using gas proof tap if they pass through the radon barrier.

THIS IS A GENERAL GUIDE BASED ON NORMAL LOADING CONDITIONS FOUND IN DOMESTIC CONSTRUCTION. IT IS YOUR RESPONSIBILITY TO ASSESS YOUR DESIGN TO ASCERTAIN WHETHER ENGINEER'S DETAILS/CALCULATIONS ARE REQUIRED. PLEASE REFER TO THE TRADA DOCUMENT – SPAN TABLES FOR SOLID TIMBER MEMBERS IN FLOORS, CEILINGS AND ROOFS FOR DWELLINGS' OR ASK YOUR BUILDING CONTROL OFFICER FOR ADVICE.

CAVITIES
Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

EXISTING TO NEW WALL
Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abut the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

UPGRADE OF PITCHED ROOF
(imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)
Ventled roof – pitch 22-45°
To achieve U-value 0.18 W/m²K
Existing roof structure to be assessed by a structural engineer and any alterations to be carried out in strict accordance with structural engineer's details and calculations which must be approved by building control before works commence on site. The existing roof condition must be checked and be free from defects as required by the Building Control Officer any defective coverings or felt to be replaced in accordance with manufacturer's details.
Roof construction – 47 x 125mm Grade C24 rafters at max 400mm centres max span 2.7m. Insulation to be 25mm foiled rigid insulation such as Kingspan or Celotex between rafters and one layer Thinsulux (or similar approved multi-foil) under rafters with plasterboard attached to 25mm deep counter battens to create air space.
Maintain a 50mm air gap above insulation to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide to promote ventilation or provide equivalent high and low level tile vents in accordance with manufactures details. Fix 12.5mm foil backed plasterboard (joints staggered) and 5mm skim coat of finishing plaster to the underside of all ceilings using galvanised plasterboard nails.
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UNVENTED PITCHED ROOF
Pitch 22-45°
To achieve U-value 0.18 W/m²K
Timber roof structures to be designed by an Engineer in accordance with NHBC Technical Requirement R5 Structural Design. Calculations to be based on BS EN 1995-1-1, flooring tiles to match existing on 25 x 38mm tanalised sw treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 47 x 125mm grade C24 rafters at max 400mm centres span to engineer's details. Rafters supported on 100 x 50mm treated sw wall plates. Allow min 20mm air space to allow for drupe of breathable felt. Insulation to be 165mm Celotex XR4000 fixed between rafters. Fix 12.5mm foil backed plasterboard (joints staggered) and 5mm skim coat of finishing plaster to the underside of all ceilings using galvanised plasterboard nails. (An additional 15mm pur insulation to be provided under rafters to prevent thermal bridging if required)
Restraint strapping – Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanised straps or other approved to BSEN 845-1 at 2m centres.
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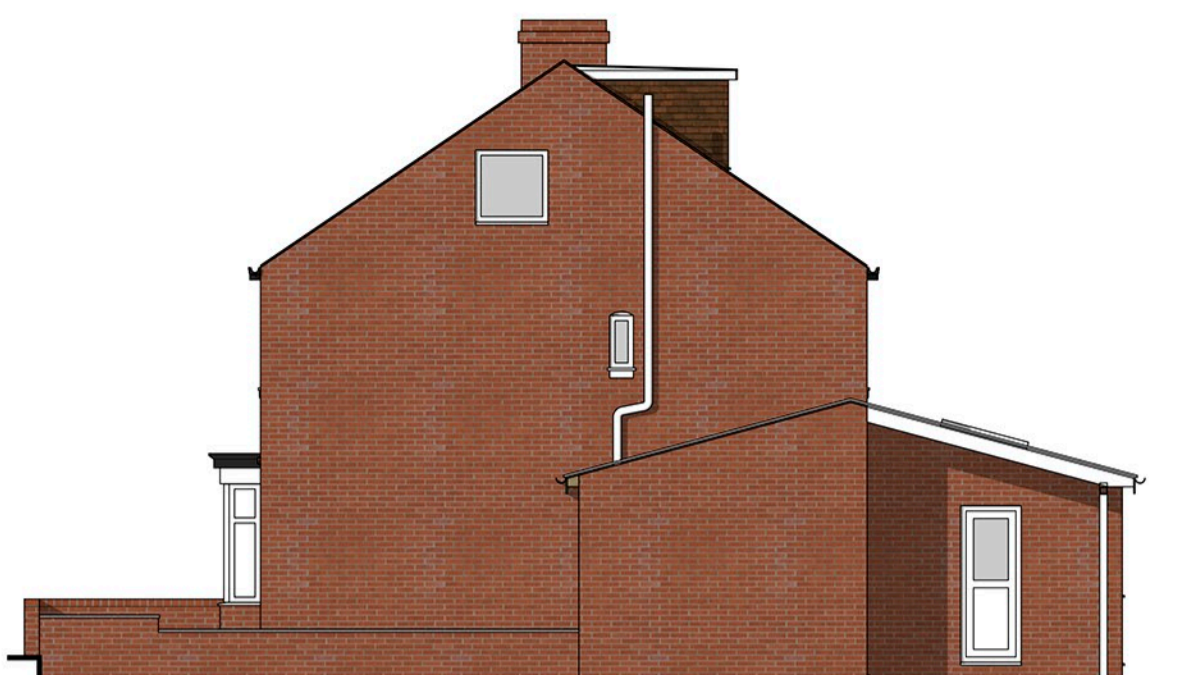
LEAD WORK AND FLASHINGS
All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jamb and below window openings with welded upstands. Joints to be lapped 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.



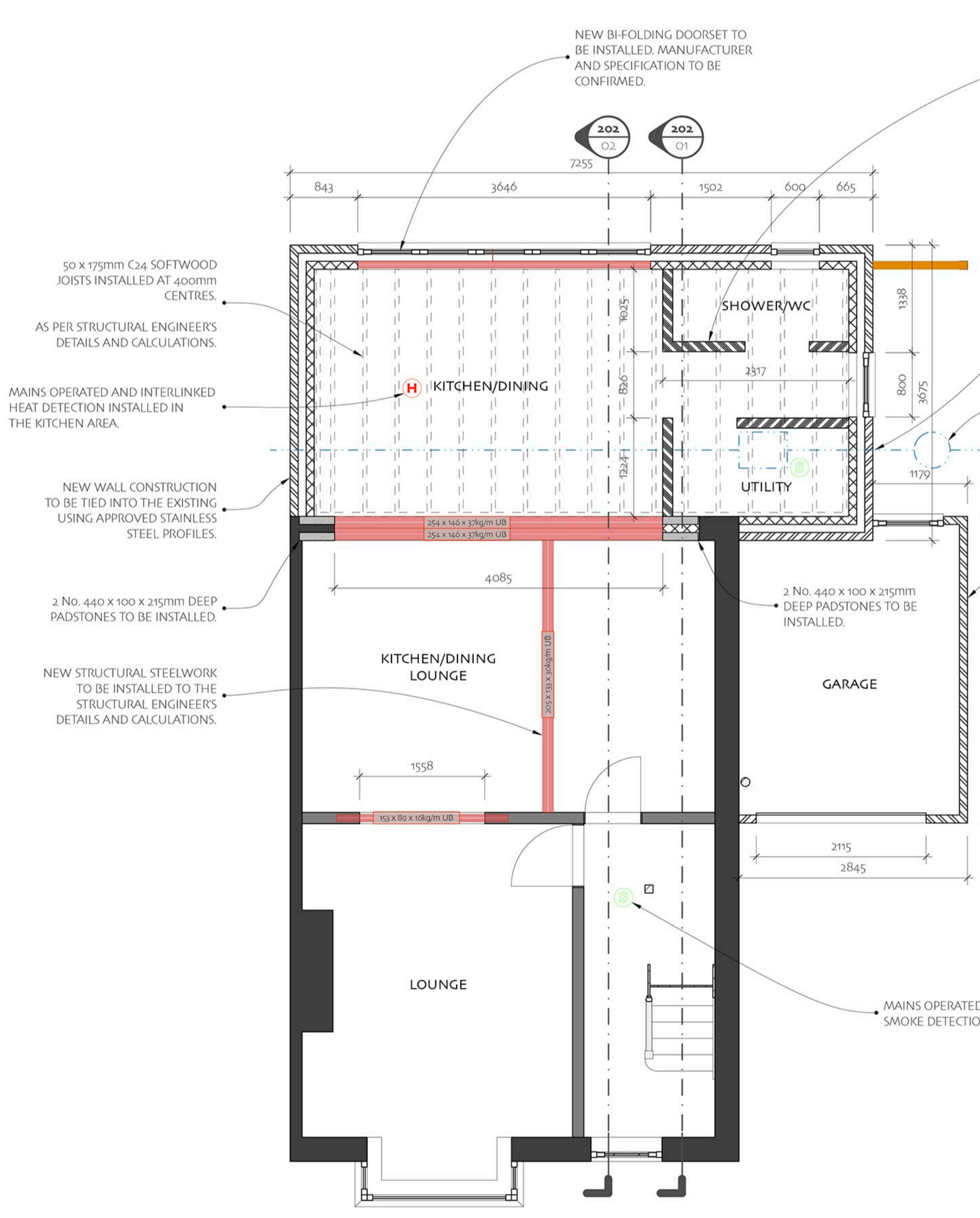
200/01: FRONT ELEVATION
Scale: 1:100



200/02: REAR ELEVATION
Scale: 1:100



200/03: LEFT ELEVATION
Scale: 1:100



rev	alteration	date	by
		06/09/20	MDS

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PROJECT:
CARRVILLE ROAD WEST

DRAWING TITLE:
BUILDING REGS:
ELEVATIONS AND LAYOUT

DATE: 06/09/20	SCALE: AS NOTED @ A1
DRG. No.: 0620-05-200	
REVISION: Initial	DRAWN BY: MDS

All dimensions to be verified on site