BUILDING REGULATIONS NOTES

UPGRADING EXISITING CONCRETE FLOOR
To achieve U-value of 0.25 W/m²K
The existing solid floor slab must be checked for stability and be free from defects as required by Building Control. The floor will need upgrading to ensure adequate damp protection and to prevent heat loss. Fix 20mm softwood tongue and groove softwood boards or moisture resistant particle/chipboard grade type C4 to BS EN 312 onto tantalised treated timber battens plugged and screwed into a concrete slab beneath. Lay boarding with staggered joints. Place 100mm Celotex GA4000 insulation between the battens (fully filling the void).
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 a 1200 gauge DPM linked to dpc in the walls over existing slab (if required).
A lesser provision of insulation may be appropriate where meeting such a standard would create significant problems in relation to adjoining floor level.

EXTERNAL WALL UPGRADE
To achieve minimum U Value of 0.30 W/m²K
Existing garage floor to be exposed and checked for suitability to carry the load from the new stud wall prior to commencement of work and as required by the Building Control Officer. Construct an inner leaf of timber studwork using 100mm x 50mm treated timbers with head and sole plates and noggins at 400mm ctrs, ensuring a 50mm clear cavity between existing wall and new stud. Provide a breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) on cavity side of studwork. Insulation between and over studs to be 90mm Celotex GA4000 between and 37.5mm Celotex PL4000 insulated plaster board with VCL over studs. Finish with 3mm skim coat of finishing plaster.
All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Provide a cavity tray at the base with weep holes at 600 ctrs. Provide horizontal strip polymer (hyload) damp proof course to new leaf minimum 150mm above external ground level. An injected DPC may also be required if one is not already present and working in existing wall. New DPC to be made continuous with floor DPM.
A lesser provision of insulation may be appropriate where meeting such a standard would result in a reduction of more than 5% in the internal floor area of the room.

UPGRADE OF PITCHED ROOF
(imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)
Vented roof – pitch 22-45°
To achieve U-value 0.16 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.
Insulation to be 50mm Celotex GA4000 infilled between rafters and 90mm under rafters. Fix 12.5mm plasterboard (joints staggered) over VCL. Finish with 3mm skim coat of finishing plaster to the underside of all ceilings.
(Cavity of 25mm provided by fixing battens between plasterboard and under rafter insulation - recommended where insulation under rafters exceeds 50mm).
Maintain a 50mm air gap above insulation to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation or provide equivalent high and low level tile vents in accordance with manufacturer's details.

STAIRS
Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Cupboard doors may open across the top landing where the swing is a minimum of 400mm from the tread. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

MEANS OF ESCAPE (converting a bungalow)
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms.
The window should have an unobstructed clear openable area that is at least 0.33m² and have no
clear dimension less than 450mm high or 450mm wide.
The bottom of the openable area should be not more than 1100mm above the floor.
The window should enable the person to reach a place free from danger from fire.

MEANS OF ESCAPE (converting a bungalow)
Form a protected escape stairway by providing half hour fire resistance to all partitions. Ceiling to be upgraded to provide half hour fire resistance or modified half hour fire resistance as appropriate. Stairway to be protected at all levels - from the loft room/rooms then leading directly to an external door at ground level (no inner rooms allowed). All doors on to the stairway must be FD20 rated fire doors to BS 476 or the European equivalent BS EN 1634 (fitted with intumescent strips rebated around sides & top of door or frame if required by BCO). Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance to at least 1.1m above the floor level or stair pitch line.
Any inner rooms to have escape windows with an unobstructed openable area that complies with:
The window should have an unobstructed clear openable area that is at least 0.33m² and have no
clear dimension less than 450mm high or 450mm wide.
The bottom of the openable area should be not more than 1100mm above the floor.
The window should enable the person to reach a place free from danger from fire.

SMOKE DETECTION
Provide a linked smoke alarm detection system to BS EN 14604 and BS 5839-6:2019 to at least a Grade D2 category LD3 standard (Grade A for large house, Grade A, LD2 for large house with 3 stories or more). System to be mains powered with battery back up. At least one smoke detector to be provided in each hallway and landing. In hallways exceeding 7.5m in length, no point within the hallway should exceed 7.5m from the nearest detector and no bedroom door should be further than 3m from the nearest smoke alarm. If ceiling mounted they should be 300mm from the walls and light fittings.
Mains-wired, interlinked heat detector to be provided to the kitchen and smoke detectors to principal living rooms, if required by Building Control.

PITCHED ROOF VENTILATION
Maintain a 50mm air gap above insulation in the roof pitch to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation.

ABOVE GROUND DRAINAGE
All new above ground drainage and plumbing to comply with BS EN 12056-2 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti-vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti-vac traps to be used).
Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe.
Bath/shower - 3m for 40mm pipe 4m for 50mm pipe.
WC - 6m for 100mm pipe for single WC.
All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.
Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.
Waste pipes not to connect on to SVP within 200mm of the WC connection.
Supply hot and cold water to all fittings as appropriate.
Supply hot and cold water to all fittings as appropriate.

STUD ASHLAR/DWARF WALL
To achieve minimum U Value of 0.18 W/m²K
Construct stud wall using 100mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to Structural Engineer's details and calculations. Insulation to be 90mm Celotex GA4000 between studs with 50mm Celotex GA4000 over. Provide vcl and 12.5mm plasterboard over internal face of insulation. Finish with 3mm skim coat of finishing plaster
All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally.

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

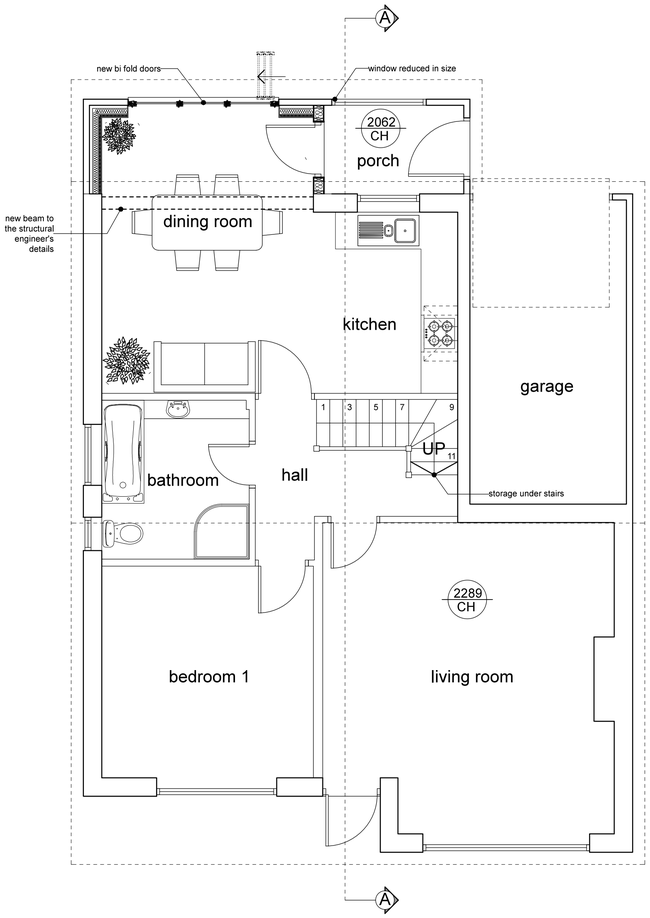
UPGRADE OF EXISTING FLOORS
Ensure first floor achieves modified half-hour fire resistance.
New second floor –Joists to be 50mm minimum from chimney breasts. (joist size to Structural Engineer's details and calculations).
Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312.
Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation, lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extend to eaves. Chicken wire to be fixed to the joists with nails or staples, these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208. Joists spans over 2.5m to be strutted at mid span, use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1200mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1, at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid noggins between joists at strap positions.
All work to be in accordance with BRE-Digest 208, first floor ceiling to be checked for suitability in accordance with guide, if found to be unsuitable, first floor ceiling to be over boarded with 12.5mm Fire-line board.

ELECTRICAL
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a Competent Person registered under a Competent Person Self Certification Scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd .An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

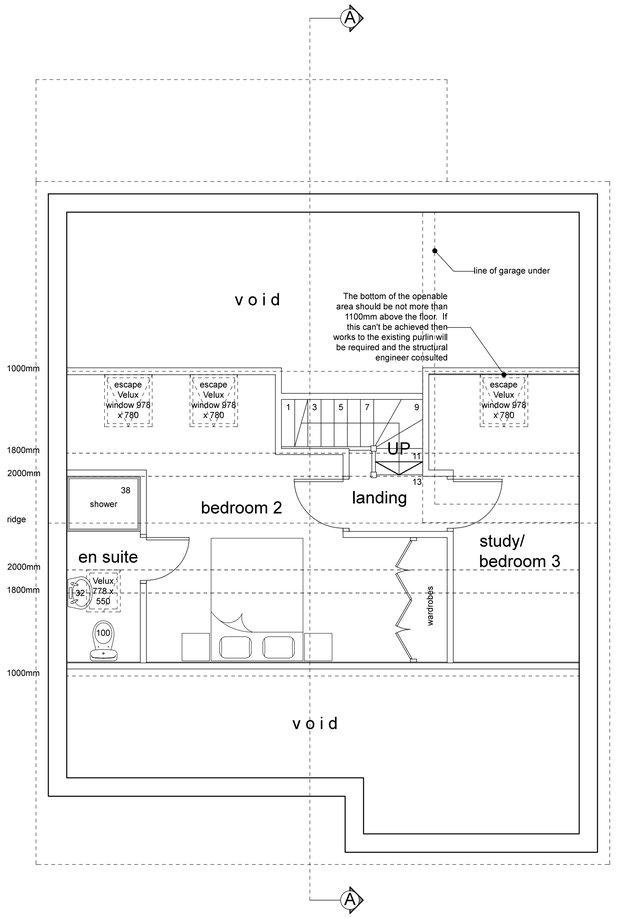
INTERNAL STUD PARTITIONS
100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm c/cs. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (e.g.100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions to be built off doubled up joists where partitions run parallel or provide noggins where at right angles. Walls faced throughout with 12.5mm plasterboard with skim plaster finish. Plasterboard to be taped and jointed complete with beads and stops.

ROOF LIGHTS
Min U-value of 2.2 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions, with rafters doubled up to sides and suitable flashings provided.

NOTICE OF COMPLETION
A Notice of Completion to be given to Building Control not more than 5 days after the work has been completed. The notice to contain the following information:
- The name, address, telephone number and (if available) email address of the client, principal contractor, and principal designer.
- A statement from the applicant to say that the works have been completed and complies with all the applicable regulations to the best of their knowledge.
- A statement from both the principal contractor and principal designer to confirm they have fulfilled their duties under Part 2A (duty holders and competence).

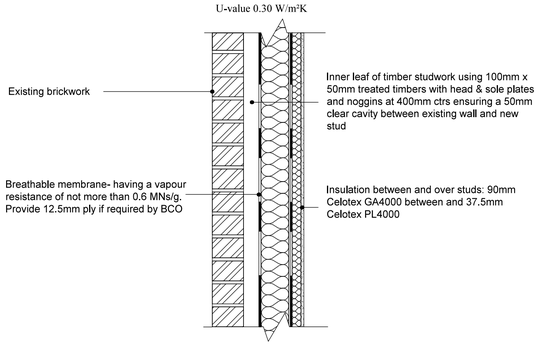


PROPOSED GROUND FLOOR PLAN 1:50

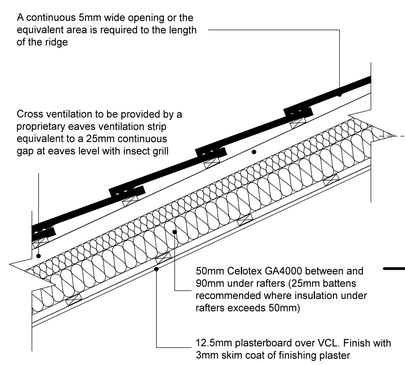


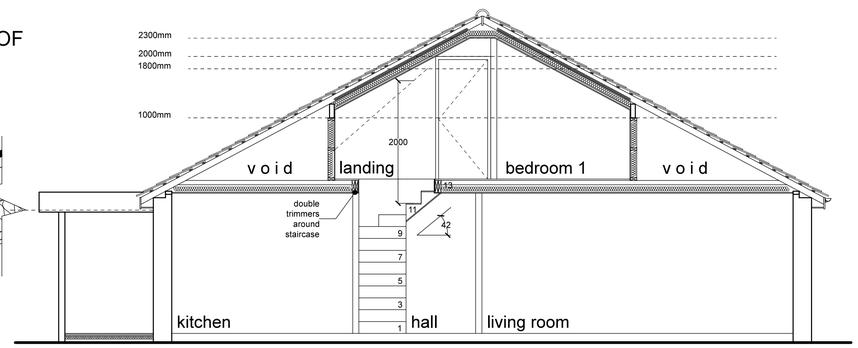
PROPOSED LOFT FLOOR PLAN 1:50

UPGRADE OF SINGLE BRICK WALL
U-value 0.30 W/m²K



UPGRADE OF EXISTING PITCHED ROOF
U-value 0.16 W/m²K





SECTION AA 1:50

RICE DESIGN

Architectural Services
Graphic Design
Space Planning

9 Kings Brook Close
Leicestershire
LE12 6RR

Mobile 07712 135544
E-mail: ricea@aol.com

Do not scale from drawing. All dimensions to be checked on site. All queries to be referred to Rice Design Ltd.

Note:

Prior to the commencement of work, the contractor and client are to check on-site all exterior dimensions, setting out positions, boundary positions and details to verify and agree upon. Any errors, omissions or design changes should be reported immediately to enable amended plans to be prepared and submitted for approval.

The requirements of the "Party Wall Act 1996" will apply to certain schemes. The "Building Owner" will in writing inform and agree with the "Adjoining owner(s)" if the proposed work affects the Party Wall or is within 3 meters and deeper than the foundations of the nearby building. If an agreement cannot be made then professional advice should be sought prior to commencement of work on site, by a Party Wall Surveyor. Rice Design Ltd take no responsibility for this.

The contractor will be responsible for locating all hidden services that may be affected by the proposal and stopping off or diverting as necessary. Drainage runs shown are assumed and must be checked on site before work commences. Any proposed building works within 3 meters of a public sewer will require a 'building over/close to" application to be submitted and approved by the water authority prior to work commencing.

All work to comply with CDM 2015. The principal contractor, for projects with more than one contractor, must take on the legal duties of the client in addition to their own as principal contractor. If the domestic client has not appointed a principal contractor, the client duties must be carried out by the contractor in control of the construction work

This drawing is to be read in conjunction with the Structural Engineers drawings and details.

Rev		Date	By
A	MINOR AMENDMENTS	15/03/24	SR
B	BUILDING REGS SPEC NOTES ADDED	20/03/24	SR

Client

MR & MRS SIMPSON

Project

4 OLDACRES
NOTTINGHAM
NG14 6ES

Drawing title

PROPOSED PLANS

Scale	Date	Drawn by
1:50 @ A1	MAR '24	SR

Drawing number	Revision
979-02	B

Dimensions on site and all equipment sizes to be verified prior to work commencing.