

Main Roof - Pitch 14° to be checked on site

Vaulted all areas

Min 'U' Value 0.15W/m².K

Roof structure to comprise of :-

- C16 - 50mm x 175mm softwood rafters @ 400mm ctrs.
- Timber design is in accordance with BS 5268-2:2002 Structural use of timber - Part 2: Code of practice for permissible stress design, materials and workmanship.
- Timber to be covered, this calculation is not for timber which is fully exposed to the elements.
- The depth to width ratio of the timber does not exceed 6 and as per the requirements of BS 5268-2 Table 19 there is no risk of buckling under design load provided; The ends are held in position and compression edge held in line, as by direct connection of sheathing, deck or joists.
- Notches are not to exceed 0.125 of the depth of the joist and are to be located between 0.07 and 0.25 of the span from the support.
- Holes drilled at the neutral axis (centre line) are not to exceed 0.25 of the depth of a joist and are not to be less than three diameters (centre to centre) apart and are to be located between 0.25 and 0.4 of the span from the support.
- Strutting or blocking between joists is required as follows;
 - - Joist spans up to 2.5m - no strutting required
 - - Joist spans 2.5m to 4.5m - provide strutting at mid-span
 - - Joist spans over 4.5m - provide 2 rows of strutting at third span positions
- Solid timber strutting to be at least 38mm thick and be a minimum of three quarters of the joist depth.
- Proprietary strutting to be used in accordance with manufacturers recommendations.
- The joists are to have a minimum end bearing of 40mm.
- Wane as allowed in BS 4978:2007 + A2:2017 is permitted.
- Rafters to be doubled up around roof windows.

All rafter feet birds-mouthed over and nailed or fixed via expament truss clips onto 100mm x 75mm softwood wall plates provided at eaves.

Head of common rafters to be fixed to a

- C16 - 50mm x 200mm SW pitch plate via Expamet Framing Anchors type MFAC in turn fixed via M12 frame anchors 150mm long into external face brick.

High level bracing if required to be

- C16 - 50mm x 175mm softwood joists @ 400mm ctrs, fixed to common rafters via
- M10 nut and bolt set with 50mm plate washers.

Wall plates where located onto steel beams, to be fixed using Hilti SWD screws at 150mm C/C Alternative Stagger.

Wall plate strapped to blockwork with galvanised straps at maximum 2m centres.

Lateral restraint to rafters parallel to gable wall by 30 x 5mm galvanised MS straps to first three timbers parallel to wall, screw fixed @ maximum 2000mm centres fixed to inner leaf of cavity wall.

Hip Timber/Steel/Fitch Beam to Structural Engineers Detail.

Timbers where located onto/into steel beams, to be fixed using Hilti SWD screws at 150mm C/C Alternative Stagger

Sloping section of ceilings to incorporate :-

- 2 layers of 60mm Rectiel Eurothane GP rigid phenolic insulation between rafters, positioned level with base, underlined with
- 60mm Rectiel Eurothane GP board to underside of rafters, fixed via,
- 25 x 50mm S/W timber battens screw fixed at 300mm C/C providing service void, to achieve maximum "U" value of 0.15W/m²K, all fixed in accordance with manufactures instructions.

Ceilings formed by fixing :-

- 12.5mm plasterboard to underside of each joist complete with 3-5mm skim finish.

Final roof pitch to be checked on site by contractor - indicated at 14°

Roof to be finally covered with :-

- Marley Mendip 12.5 Roof Tiles - 100mm headlap up to 6m rafter lenght fixed in accordance with manufacturers recommendation, Contractor to discuss with Marley to establish fixing requirement.
- Fixed over - DuPont™ Tyvek® Supro/Supro Plus - Maintain 150mm horizontal laps between each sheet and seal with the integral adhesive tape. Any vertical laps should be minimum 300mm and positioned over rafters. For airtightness, these may be sealed with Tyvek® Acrylic Tape (2060B). All fixed in accordance with manufacturers recommendations.
- Laid to gauge and laid on 50mm x 25mm tanalised softwood battens, fixed using 65mm minimum lenght galvanised nails

Head of abutment :-

Code 4 flashing

Marley or equivalent Top Abutment Ventilation System providing continuous 5mm ventilation along abutment

Eaves Detail :-

Marley or equivalent Universal Eaves Vent System

25mm continuous ventilation at eaves

Heating

Supply pressed steel radiators; all with thermostatic valve controls in accordance with Part L1B of Building Regulations (2013 edition with 2016 amendments).

Pipe work to be insulated in accordance with Part L1B of Building Regulations (2013 edition with 2016 amendments)

Heating and Hot & Cold water system to be issued with a commissioning certificate in accordance with Part L1 part 1.50 & 1.51 Building Regulations 2013 with 2016 amendments.

FINAL LAYOUT TO BE AGREED ON SITE WITH CONTRACTOR AND CLIENT - CERTIFICATION TO BE COMPLETED AND PROVIDED TO BUILDING CONTROL UPON COMPLETION.

Electrical Fittings

All sockets to be positioned above 450mm from floor level, and all switches to be positioned below 1200mm from finished floor level to comply with Part M of the Building Regulations.

Minimum 2No light fittings to incorporate only fitting with compact fluorescent lamps - luminous efficiency greater than 40 lumens/circuit-watt, in accordance with Part L1B paragraphs 43-46 Building Regulations (2013 Edition with 2016 amendments)

Electrical installation to be designed and installed and tested on completion by an NICEIC registered contractor in accordance with BS 7671:2001 to comply with Part P of the Building Regulations, certification completed and forwarded to building control

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Smoke Detectors

Install independent Smoke detectors in positions shown, units to be mains powered and interconnected when triggered.

- Units to be mounted at ceiling level, 300mm from any wall and light fitting.

Smoke alarm installation to BS 5839-6:2019 - Part 6: Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises;

Grade D2: A system of one or more mains-powered detectors each with an integral

standby supply consisting of a user replaceable battery or batteries.

Category LD3: a system incorporating detectors in all circulation areas that form part of the escape routes from the premises

In a Category LD3 system, at least one smoke detector should be sited in each hallway or corridor and on each main landing of every staircase.

- In hallways or corridors exceeding 7.5m in length, no point within the hallway or corridor should exceed 7.5m from the nearest detector.
- Where smoke alarms are installed, no bedroom door should be further than 3m from the nearest smoke alarm.

Smoke alarms to BS EN 14604

Heat alarms to BS 5446 - 2

Ventilation Generally

Provide mechanical ventilation, extract ventilation rates:-

intermittent extract

- Kitchen - 30Ltr/s at the hob within 650mm to 750mm above the hob surface or

- 60Ltr/s elsewhere

- Utility room - 30Ltr/s with 15 minute minimum over run

- Bathroom - 15Ltr/s with 15 minute minimum over run

- En-suite - 15Ltr/s with 15 minute minimum over run

- All vents to external atmosphere, via wall or roof vent.

- 30 dB (A) in noise-sensitive rooms such as living rooms and bedrooms, and 45 dB in less sensitive rooms.

New windows to habitable rooms to provide a minimum of 8000mm² equivalent background ventilation

New windows to bathrooms & utilities to provide a minimum of 5000mm² equivalent background ventilation

rooms with no operable windows, i.e. and internal room, all fans to have a 15 minute minimum over run.

- Purge ventilation to be a minimum of 1/20th or 5% of the floor area of the room.

- Doors to be undercut by 10mm from finished floor level



Scale in Meters @ A1



EXISTING BLOCK PLAN

Scale: 1:200 @ A1

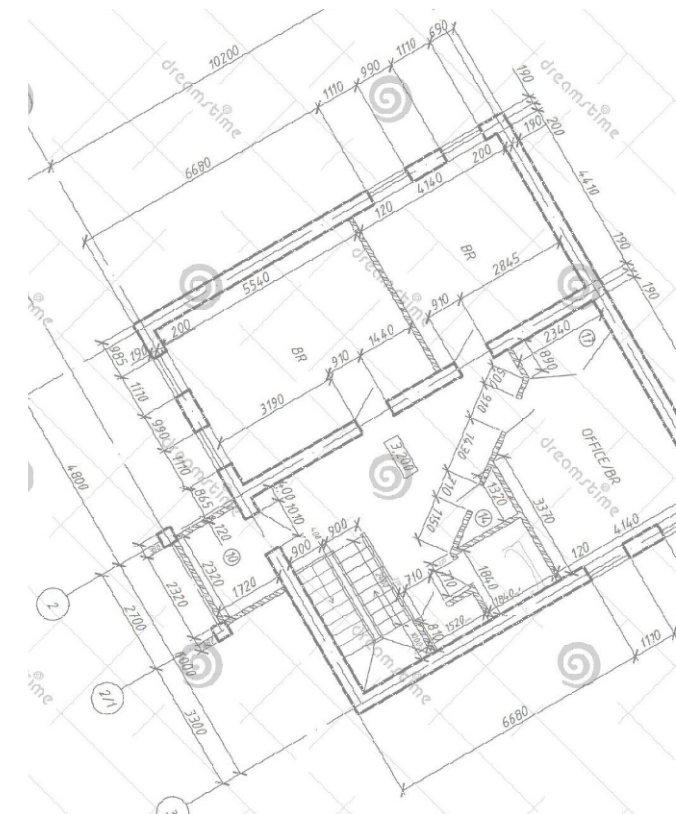


Proposed works shaded Red to Avoid confusion

PROPOSED BLOCK PLAN

Scale: 1:200 @ A1

1. TO BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS / SPECIALISTS DRAWINGS. REPORT ANY DISCREPANCIES BEFORE AFFECTED WORK COMMENCES
2. ALL SETTING OUT DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR BEFORE WORK COMMENCES
3. CONTRACTORS ATTENTION IS DRAWN TO THEIR RESPONSIBILITY UNDER THE 2015 CDM REGULATIONS
4. BEFORE YOU PROCEED WITH YOUR LOFT CONVERSION PROJECT, YOU MAY NEED TO DRAW UP A PARTY WALL AGREEMENT. HENCE THE NEED FOR A PARTY WALL AGREEMENT LOFT CONVERSION AGREEMENT. THIS IS A LEGAL AGREEMENT WHICH HELPS MINIMISE THE IMPACT THAT THE WORK MAY HAVE ON YOUR NEIGHBOURS AND HELP PROTECT THE INTERESTS OF ALL PARTIES INVOLVED.
5. BUILDING SAFETY ACT OCTOBER 2023
CLIENT - ENSURE THEY CAN PLAN MANAGE AND MONITOR THEIR PROJECT.
ENSURE DESIGN WORK IS IN ACCORDANCE WITH REGULATIONS
BUILDING WORK IS CARRIED OUT IN COMPLIANCE WITH REGULATIONS
DESIGNER & CONTRACTOR COOPERATE TO ENSURE COMPLIANCE WITH THE REGULATIONS.
CLIENT TO APPOINT DESIGNERS
CONTRACTORS AND PRINCIPLE DESIGNERS
PRINCIPLE CONTRACTORS



RJ DESIGN (NW) LTD
07734911515

robjones@rjdesignsnw.co.uk

client	Tony Haynes 07909-222-897 tonyhaynes@hotmail.co.uk
project	47 Butleigh Road Huyton Liverpool L36-3SN Proposed Rear Single Storey Extension - Class A Permitted Development. BUILDING REGULATION NOTES EXISTING BLOCK PLAN PROPOSED BLOCK PLAN
drawing title	
drawing number	0001-05
revision	*
drawing status	Planning - Building Control
scale	1:200 - @ A1
date	Dec 2023
drawn by	RJ
checked by	RJ