

SPECIFICATION OF BUILDING WORKS IN REFERENCE TO PLAN 2372 ABC

MR JOSH SEPHTON, 10 YEW TREE ROAD, LIVERPOOL L25 9QT

HIP & GABLE DORMER LOFT CONVERSION

FEBRUARY 2025

All work to be carried out to the satisfaction of the Building Control Officer and in accordance with the latest amendments to the building regulations.

A building control certificate shall be issued upon completion.

The original house is a semi-detached property, built with outer brick face, 50mm cavity and brick inner leaf, 'K' render finish.

The roof is a traditionally timber framed hip roof with 100mm x 38mm roof rafters, the ceiling / floor joists have been installed when the house was recently refurbished comprising 6" x 3" C24 timber joists @ 600mm ctrs. The ring beam timber purlins are 9" x 3" and are fixed at two levels supported by 9" x 2" timber hip blades. There is a breathable felt membrane with tandalised roof batten, finished with a concrete tiled roof.

RAINWATER :-

Run rainwater from new dormer down through new gutter and downspout into existing roof gutters.

VELUX ROOF LIGHTS :-

Velux roof lights to be reinstalled to the front elevation, just above the lower front purlin.

Rafters and trimmers to be doubled up around the opening using M/S joist hangers.

U value of 1.40 W/m².

STEELWORK :-

All steelwork to have calculations provided for by the structural engineer.

All steelwork to have concrete pad stones under.

See engineers notes.

WINDOWS :-

New matching white UPVC windows fitted and are to achieve a U value of 1.40 W/m²K. Soft low - E glass 16mm argon filled.

Obscure glazing fitted to En-Suite window, no opener on this side window.

Ensure for trickle vent in head.

Toughened or laminate safety glass to BS 6206 & part K section 5 (glazing in critical locations) of the current building regulations, within 1500mm above floor level to doors & side panels, within 300mm of door openings & within 800mm above floor level to windows.

VENTILATION :-

Background ventilation – controllable background ventilation via trickle vents to BS EN 13141- 3 within the widow frame at a rate of min 5000mm². Openings to be in excess of 1/20th of floor area.

DORMER :-

Existing loft floor joists are 150mm x 75mm C24 timber @ 600mm ctrs and are to be evaluated by the structural engineer on upgrading spacing and length support.

Fix chicken wire between floor joists so as to lay 100mm Rockwool insulation required for fire regulations.

Moisture resistant chipboard T & G flooring @ 22m for floor covering.

Dormer roof to be 195mm x 47mm C16 @ 400 ctrs and to sit in steel ridge beam using M/S joist hangers fixed to 195mm x 47mm timber bolted through web of steel.

One end resting towards the chimney stack. See the engineers notes for beam supports.

Dormer walls to be 125mm x 47mm timber frame, doubled up at corners, window reveals, top and bottom sole plates.

Fix 18mm external ply (fire resistant board to neighbouring cheek) to outer frame.

Fix 'TYVEK' breathable membrane.

Fix 36mm x 18mm tanalised batten.

Fix concrete 268mm x 165mm hanging tile.

Fix Kingspan Thermopitch TP10 90mm, between studs leaving a minimum 25mm air gap.

Fix 37.5mm Kooltherm K118 to all internal walls.

Dwarf walls under purlin to loft area to be fitted out as all Dormer walls.

Fix timber firrings with falls of 1:60 to tops of roof rafters.

Fix 18mm external plyboard.

Finish roof with GRP Fibreglass system using manufacturers upstands, drip bars and flashings.

UPVC Vented Soffit, Barge and Facia.

Internal studding in Dormer and newly formed walls, landing to bedroom 3, to be 100mm x 47mm timber @ 450mm ctrs, pack between studs with Rockwool slabs for soundproofing. All stairwell walls to be 30 minutes fire resistant plasterboard.

Form side Dormer as per plan, existing hip blade should be cut at side dormer intersection and supported under.

MAIN ROOF :-

There would be a minimum of 600mm to eaves from the Dormer cheeks to eaves, keep existing rafters & fix a timber top wall plate to the new Dormer so as to support down to the existing wall plate.

Fix 198mm x 47mm C16 roof rafters from ridge, fixed aside existing 100mm x 38mm front elevation rafters and down to lower purlin so as to take out the top purlin, this will also give room to fix insulation system of 125mm Kingspan Thermopitch TP10 between rafters with 50mm under, finish with 12.5mm plasterboard

LOFT INSULATION :-

Lay 300mm Rockwool roll in remaining loft area, @ 150mm two crossed layers between and over ceiling joists. U value achieved 0.15 Wm/2.

LEAD FLASHINGS :-

All Lead work to be code 4 with a minimum lap covering of 150mm.

FIRE DOORS :-

FD30 fire doors and frames to be fitted to all habitable rooms on through escape route.

All door frames to have an intumescent strip.

STAIRCASE:-

There is an existing top kite winding staircase fitted @ 42 degree pitch.

Fix a handrail to one side @ 900mm height from tread. Stairwell area to have 'Fireline' or similar plasterboard fixed to studs.

DORMER EN/SUITE :-

Dormer En/Suite waste to be run into the extended PVCU soil stack using recommended fittings.

Anti-vacuum traps to be used.

INTERNAL PLASTERING :-

Internal walls and ceilings to be screw fixed, scrim and neat skim.

ELECTRICS :-

All electrical work carried out to meet the requirements of part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under 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 with a copy each given to the council & householder. Low energy lighting to be installed.

SMOKE DETECTORS :-

Mains operated smoke / heat detectors with battery back up & linked to hall, landings and dormer loft conversion areas, to be installed to BS 5446-1:200 & BS5839 6:2004 to at least a grade D category with battery backup.

Smoke alarms should be sited so there is an alarm in the circulation space on all levels / storeys & within 7.5m of the doorway to every habitable room. If ceiling mounted they should be 300mm from walls & light fittings.

HEATING :-

Extend the heating system to incorporate the new dormer loft areas using double panel convector radiators with TVR's.

ESCAPE WINDOWS :-

Provide emergency egress opening windows to any newly created habitable first and second floor rooms, to have an unobstructed openable area of min width 450mm & 750mm height to ensure 0.33sq of clear opening. The bottom of the openable area should not be more than 1100mm above the floor.

DRAINS :-

Drains to be inspected upon commencement.

Underground drainage to be 100mm diameter UPVC proprietary pipework & to give a fall of 1:40. Surround pipes in pea shingle. All underground drainage to conform with BS7158 & BS801.

EXTRACTOR FANS :-

En/Suite to have mechanical ventilation to outside air with an extract rating of a minimum 15/Ltrs/second and an overrun of 15 minutes.

LIMITING U VALUES FOR NEW FABRIC ELEMENTS IN EXISTING DWELLINGS

FLOOR – 0.18 W m/2

WALL – 0.18 W m/2

PICCHED ROOF – 0.15 W/m2

FLAT ROOF - 0.15 W m/2

WINDOWS – 1.40 W m/2

DOORS – 0.25 W m/2

ROOF VOLUME

NOTE *

Side garage including roof is an existing part of the original house

NEW DORMER :-

Rear block –

$$5.5 \times 2.6 \times 4.1 = 58.6 - 50\% = 29.3$$

Remaining side Dormer –

$$2.7 \times 2.6 \times 1.6 = 11.2 - 50\% = 5.6 - 50\% = 2.8$$

REAR EXTENSION LOWER ROOF :-

Wrap around from rear to side on the full 8.5

$$8.5 \times 1.0 \times 3.4 = 28.9 - 50\% = 14.4$$

Remaining side (roof side reduced to 2.3) There is a further 1.0 in width from the projection of the rear extension to also take into account for reduction on the hip.

$$1.0 \times 1.0 \times 2.3 = 2.3 - 50\% = 1.1$$

TOTAL NEW DORMER VOLUME IS 32.1 cubic meters

EXISTING EXTENSION ROOF IS 15.5 cubic meters

TOTAL OF 47.6 added roof space including proposed Dormer & existing extensions.