SPECIFICATION

GENERAL: Rear dormer loft conversion at 68 Attlee Road UB4 9JE. Works to comply with Building Regulations and the Party Wall Act 1996 where applicable. All dimensions to be checked on site and not scaled.

1. PROPOSED ROOF STRUCTURE

Existing rafters: 50×150 mm C24 @ 400 mm c/c, retained and doubled up around new Velux roof windows.
New dormer flat roof: 50×200 mm C24 GRADE @ 400 mm c/c between doubled-up perimeter headers and the new roof beam.

Roof beam: UC 152×152×37 (S355) on 300×100×25 mm mild steel spreader plates/padstones, supporting front dormer edge and cut rafters.

Ridge board: 50×225 mm C24 timber board (non-structural), fixed between rafters both sides @ ≤ 2.0 m c/c to prevent rafter spread.

Roof build-up:

18 mm OSB3 structural deck

Vapour control layer

Hybrid warm roof insulation (70 mm PIR between + 50 mm PIR over joists)

GRP finish achieving BROOF(t4) classification

All roof timbers to BS 5268-2 and fixed with galvanized straps/joist hangers.

2. NEW FLOOR STRUCTURE

Structural floor supported on 3 No. UC 203×203×46 S355 beams (LB1, LB2, LB3) on 500×100×25 mm thick mild steel spreader plates/padstones.

Floor joists:

47×195 mm C24 @ 400 mm c/c, joists to sit flush with top of steel beams via hangers.

Strongbacks: 38×195 mm at mid-bay.

Decking: 22 mm P5 T&G glued and screwed.

Acoustic insulation: 100 mm mineral wool quilt between joists.

Joists restrained to beam webs with cleats/straps for lateral restraint.

Beams: Fully encased to provide 30 min fire protection with 2×12.5 mm fire-resistant plasterboard + skim.

3. DORMER WALLS AND CHEEKS

Studwork: 50×100 mm C24 @ 400 mm c/c with 12 mm plywood sheathing.

Insulation: 100 mm Celotex GA4000 between studs + 37.5 mm insulated plasterboard internally.

External finish: tile-hung to match existing roof or approved zinc/composite cladding.

Exposed gable wall to be raised in matching brickwork to dormer roof level.

4. STAIRS

New staircase: 13 risers @ 202 mm, 13 goings @ 230 mm, total run 2990 mm.

Pitch ≈ 41.3° (≤42°).

Clear width 850 mm (min 800 mm).

Headroom ≥1.9 m over stair centreline.

Handrail at 900 mm; balustrade to prevent 100 mm sphere passage.

FD30 fire door at loft entrance.

5. FIRE PROTECTION

All steels encased to 30 min fire resistance.

Existing ceiling upgraded with 12.5 mm fireline board.

Smoke/heat detectors: mains-powered, interlinked to GF, FF and loft, to BS 5839-6.

Escape window (if applicable): min clear opening 0.33 m², 450 mm high × 450 mm wide, cill <1100 mm above FFL.

Decking: 22 mm T&G flooring grade chipboard.

Acoustic insulation: 100 mm mineral wool quilt between joists.

Beams to bear on padstones and encased with 2×12.5 mm plasterboard + skim to achieve 30 min fire protection.
Ridge supported by 203×133×25 UB on 400×100×25 mm thick mild steel plate spreaders.

6. INSULATION & ENERGY

Roof slopes: 120 mm Celotex GA4000 between rafters + 50 mm insulated plasterboard under.

Dormer flat roof: hybrid warm roof with PIR above/between joists, GRP finish.

Dormer walls: 100 mm PIR + insulated plasterboard internally.

Floors: 100 mm mineral wool quilt between joists.

Target U-values: roof ≤0.15 W/m²K, walls ≤0.18 W/m²K, floor ≤0.22 W/m²K, windows ≤1.4 W/m²K.

7. WINDOWS AND DOORS

Dormer windows: double-glazed low-E, U-value ≤1.4 W/m²K, safety glazing to BS EN 12150 where <800 mm from FFL.

Velux roof windows: double-glazed, U ≤1.4 W/m²K.

FD30 fire door at loft entrance.

8. DRAINAGE & SERVICES

Existing single-stack drainage retained; extended where necessary.

Boiler/heating installation by Gas Safe engineer.

Extract ventilation:

Bathroom: 15 l/s with overrun.

Habitable rooms: background ventilation via trickle vents.

9. ELECTRICAL INSTALLATION

All works to comply with Part P.

Low-energy lighting ≥75%.

Smoke/heat alarms: mains-powered, interlinked, with battery backup.

10. VOLUME CALCULATION

Proposed dormer volume = 28 m³.

Permitted Development allowance = 40 m³.

☑ Within PD limits.

Project:	Loft Conversion
Address:	68 Attlee road UB4 9JE
Scale:	1:50 @ A3
Dwg. no:	A08
Drawn by:	FR
Date Drawn:	22/09/2025

For Drawings Tel: 07379110825

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