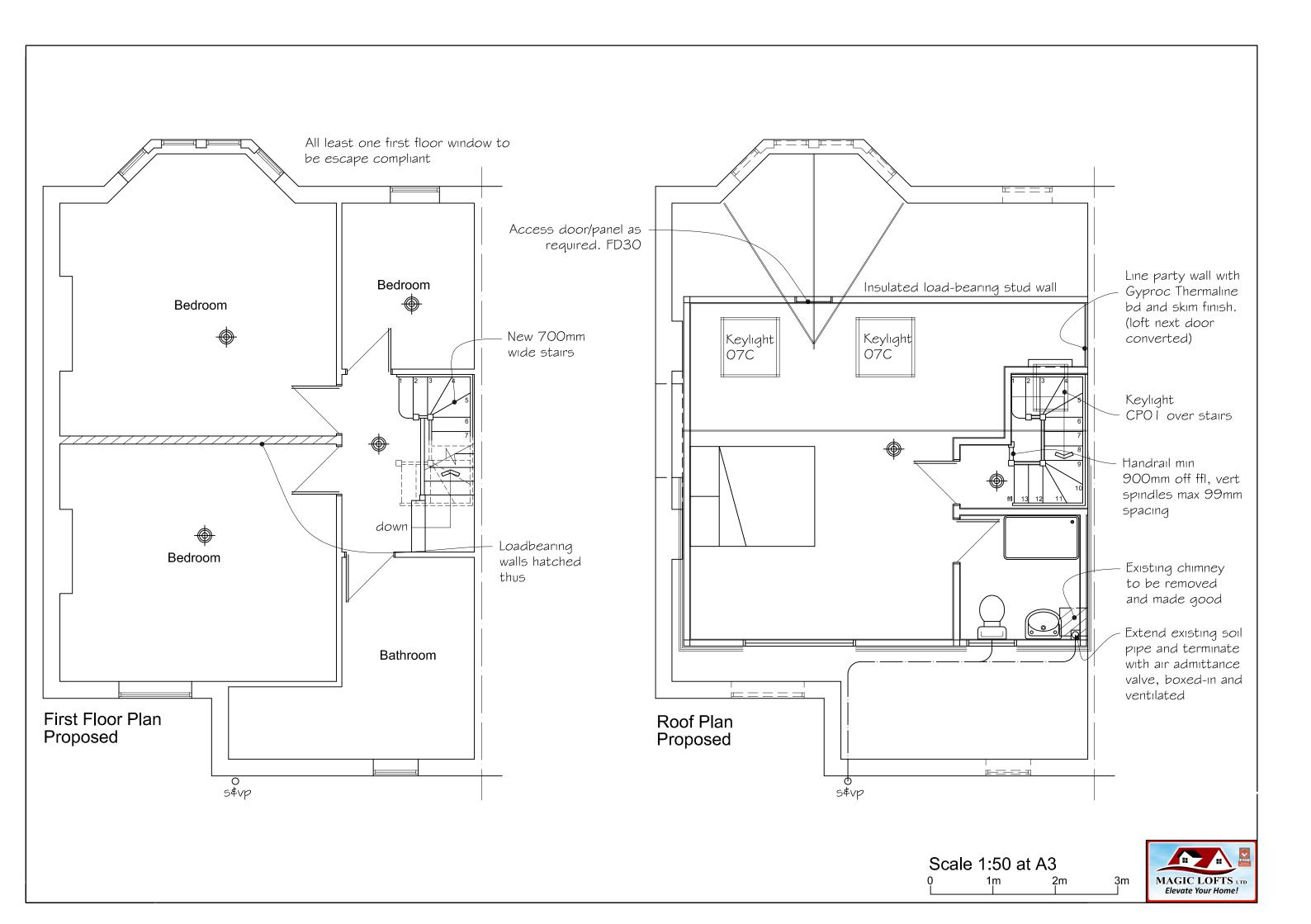


Proposed Loft Conversion	
DRAWN BY	PR
SCALE	1:50 & 1:100
DATE	
DWG No.	
CLIENT	





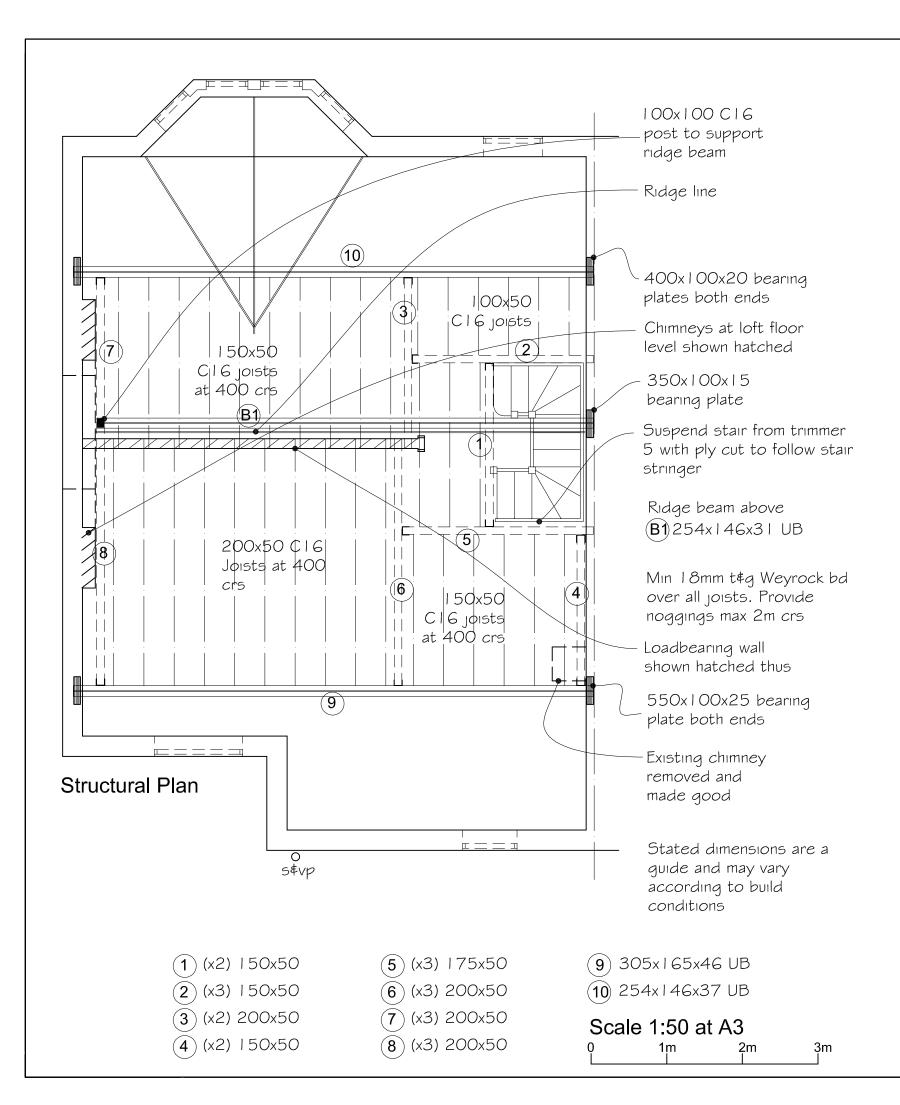
3m

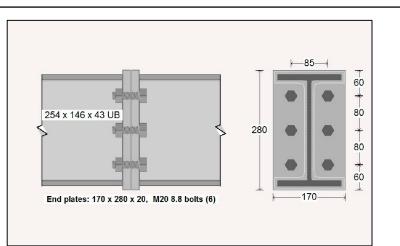
New roof not to project above existing ridge Minimum 2 high level tile vents Lay new 125x50 rafters alongside existing at 400 crs \$ onto load 150x75 C24 at 400 crs, max bearing stud wall, 50mm Cellotex insulation between rafters with span 3.81m 50mm residual air gap to cold side \$ multi-foil insulation/vapor barrier to underside of rafters (U = 0.18). Plaster skim finish over Provide eaves vents with insect 12mm pbd. proof mesh equal to 25mm air gap Insulation to vert stud walls, 90mm continuous. cellotex between vertical studs, 12mm pbd with skim finish internally. Provide 8000 sq mm permanent ventilation to new rooms with "trickle vents" in new window frames (4,000 Minimum 2 low level sq mm to bathroom). tile vents 100mm between \$150mm mineral wool insulation over and across joists to void areas. Insulation 18mm t&g Weyrock board over new secured with galv wire mesh. floor joists Galv joist hangers Existing 1 p ceilings New stair - see spec

Cross Section

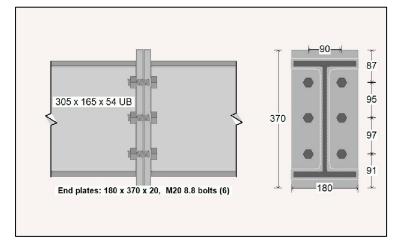




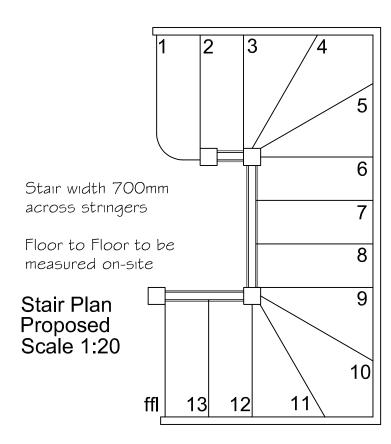








Splice Details Not to Scale



STRUCTURAL

Minimum 75mm timber beam bearing. Max thickness of timbers 75mm. Thicker beams to be made up and bolted at 600mm crs with 12mm bolts and 64mm dia toothed connectors. Flitch beams bolted at 300mm crs staggered crs with 16 dia bolts - double up at bearings and either side of point loads. Any protruding beams to be weathered with code 4 lead sheet on exterior ply formers. No structural roof supports to be removed before new permanent or temporary supports are in place. Any cut ties to be made good. Ensure min 19mm clearance between ceiling and floor members. All boundary work to have adjoining owners permission. Existing walls, lintels and foundations carrying additional load to be checked on site for suitability. Builder to check all dimensions before commencement. If in doubt - ask. Floor joists - strut at 1/2 points or 2m max. 18mm t&q bd over (22mm if joists at 600 crs). Cover joists with wire mesh & dress into and across void (for lath and plaster ceilings), fill 100mm Rockwool between ceiling joists.

FIRE PROTECTION

Coat with intumescent paint to manufacturers instructions to give 1/2 hr fire protection. Timber beams have 30mins fire resistance to BS5268 part 4 section 41 1078 (sacrificial design method). Doors marked * to be 30min fire resistant (fd30)

DRAINAGE

To comply with Part H of the Building Regulations. All waste to existing SVP. WC.100mm diameter, shower & whb 75mm diameter, 75mm deep seal traps to all fittings & cleaning eye to all bends

DORMER ROOF CONSTRUCTION (U=0.18W/m K)

Fibre glass resin bonded roof over 18mm plywood on 50x50 s.w. battens across firrings (1 in 40) over joists as specified at 400 crs. 100mm Cellotex rigid foam insulation between joists with multi-foil insulation across underside of joists. Min 50mm ventilated air gap to cold side of roof. 12mm Duplex plasterboard with 5mm skim finish below.

DORMER CHEEK CONSTRUCTION (U=0.28W/m K)

(30 mins fire resistance from both sides). Vertical tile/slate hanging to match existing on s.w. battens on building paper on 12.5mm plywood bracing (9mm masterboard within 1m of boundary) on 100x50 studs at 400 crs. 80mm rigid foam insulation (Cellotex or similar) between vert studs with a further 12mm Cellotex foil-backed insulation/vapour barrier across inside of studs. 12mm pbd and 5mm plaster skim finish internally. Lead soakers externally.

STAIRCASE 700mm wide

Rise 220mm max, going 220mm min, pitch 42 degrees max. 2m clear headroom above pitch line to new and existing stairs. Handrail 900mm above pitch line and continuous on the side where tapered treads have the greater going. Any tapered treads to have min 50mm going, the same angle of taper and 225mm going at centre of width. No gaps anywhere to allow the passage of 100mm dia sphere. Artificial light with 2 way switch top and bottom. 12.5mm plasterboard to underside of stairs.

INTERNAL PARTITIONS (To staircase enclosure)

12.5mm plasterboard with plaster skim to each side of 75mm x 50mm timber studding. 30 mins fire resistance.

SMOKE DETECTION

Mains powered with battery back-up, interlinked smoke detectors indicated thus



to be provided at every escape route and landing.

WINDOWS / ESCAPE WINDOWS

Escape windows, min opening area 0.33m² and at least 750 x 450mm wide/high and max 1.1m above floor level. All new windows and rooflights to be double glazed with min 16mm gap, low E glass εn=0.15 for windows εn=0.05 for rooflights. New windows to habitable rooms to be fitted with trickle ventilators min 8000mm².

VENTILATION

New bath / shower rooms to have mechanical extractor vents min rate 15L per second with 15min overrun.

ELECTRICAL SAFETY

All electrical work reg'd to comply with part P "Competent person scheme" to BS7671. Certification to be provided on completion.

LIGHTING & HEATING

Minimum 1 in 3 lights to be energy efficient type. Extend existing heating system to new rooms. New radiators to have thermostatic valves fitted.