



SPECIFICATIONS

GENERAL
 Ventilation: Provide equivalent to 5mm continuous ventilation strip at ridge. Ensure provide 25 ventilation strip (or equivalent) to existing eaves. Provide trickle ventilator to give 8000mm² background ventilation to loft rooms. Provide 25 ventilation strip above Velux roof windows to ensure continuous flow over sloping ceiling areas.
 Structural: Double rafters to trim all round Velux window apertures. NOTE: existing structure bearing additional load to be exposed and checked for adequacy.
 Conservation of fuel and power: Glazing to have U value 1.8 W/m² K. Install 3 energy-efficient light fittings. New radiator(s) to be fitted with TRVs.
 Electrical Work: All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Council must be satisfied that an appropriate electrical installation certificate has been issued for the work, and it has been signed by a person competent to do so.

STAIRCASE
 Rise = 207 Going = 230 No. equal risers = 13
 Overall width = 800 (100 Box) Maximum pitch 42°
 Floor/pitch line to top of handrail 900. Spindles at 100 centres. Tapered treads to have min 50 going and same going as straight treads at mid-point.

CEILINGS & SKELLINGS
 New ceiling joists (collars) with 120 Celotex insulation. Existing/new rafters to achieve 50 ventilation gap behind 50 Celotex insulation between rafters; 50 Celotex insulation across rafters with 12 foil-backed plasterboard + 5 plaster skim, or 50 Celotex insulation between rafters plus Tri-iso Super 10 stapled to rafters with 75mm overlaps + aluminium tape to seal, 25 x 50 cross battens at 400%, then 9.5 plasterboard (non foil backed) + plaster skim.

WALLS
 100 X 50 studwork at 400 centres infilled with 90 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skim each side (internal walls) or one side (perimeter walls). Internal walls to have sound insulation (25 Rockwool).

DORMER ROOF - FLAT
 Bitumen bedded limestone chippings on three layers bitumen roofing felt to BS 747, on 18 exterior plywood decking on 50 x 50 cross battens at 400 centres, on firing pieces (at 1:40 on x 50 flat roof joists) at 400 centres, infilled with 140 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skim internally. Provide 25 ventilation gap around perimeter of flat roof. 112 half-round gutter to perimeter of roof, discharge onto existing roof via 68 ø downpipe.

DORMER ROOF - PITCHED
 Concrete roof tiles on treated battens on felt on 100 x 50 rafters at 400 centres, notched over 100 x 50 sole plate. Ceiling ties 100 x 50 at 400 centres. Internal specification as per 'Ceilings'. Provide 25 ventilation around perimeter of pitched roof and equivalent to 5 continuous ventilation strip at ridge. 112 half-round gutter to perimeter of roof, discharge onto existing roof via 68 ø downpipe.

DORMER WALLS
 Vertical tiling on treated battens on breather paper on 12 ply bracing on 100 x 50 framing at 400 centres, infilled with 90 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skim internally. 100 x 100 corner and reveal posts. Checks within 1000 of boundary to have 9 Sapsins over ply to achieve half-hour fire resistance from both sides. Checks built off existing masonry to have GMS straps at 900 centres. Dormer fully weathered in Code 4 lead flashing.

NEW FLOOR
 Main beams on load bearing walls supporting new and existing structure. Supporting wall under rafters to have sole plate bolted to top flange of RSJ via M6 bolts at 600 centres. Timber packing bolted through RSJ web via M12 bolts at 600 centres, carrying GMS joisthangers with nails taken over stud wall sole plate. New joists to be 50 minimum from chimney breasts. Existing ceiling joists strapped up to new floor beams where binders/truss members removed. Steelwork to have 50 x 50 framing at 600 centres and encased in 12 fireline board for half-hour fire protection. New flooring to be 19 tongued and grooved flooring grade chipboard.

ALTERNATIVE INSULATION SPECIFICATION
 Tri-iso Super 10 (25mm thick uncompressed) applied to all areas, stapled to inside of rafters/joists/studs, 75mm overlaps with aluminium tape to seal. 25 x 50 cross battens over insulation at 400 c/c, then 9.5 plasterboard (non foil backed/Duplex) & plaster skim finish. (Effective U value 0.2 W/m² K or better, to all applications).

FIRE RESISTANCE
 Existing ceilings 12.5 P¹⁵⁰
 New loft floor to be full half-hour fire resistant. Lay 100 Rockwool over chickenwire over-existing ceiling-joists prior to laying new floor joists. Ensure first floor achieves modified half-hour fire resistance. Doors marked \odot to be fire doors (FD20). Any glazing to be replaced with fire resisting glass.
 Mains powered interlinked smoke alarms to BS 5446.

SOIL/DRAINAGE
 400 UPVC waste to bath/shower + basin, 1000 UPVC waste to WC, all connecting into existing SVP with vent pipe extended to terminate 900 above new windows. 75 deep seal traps (anti-vac if necessary). Ridding eyes at bends. Fit extractor fan with 15 litres per second flow rate, + 15 min overrun.

REF.	DESCRIPTION	BEAM SIZES	LENGTH BEARING
	VELUX TOP TRIMMER	2/100x50	
	VELUX SIDE TRIMMER	2/150x50	
F1	FLOOR BEAM	2/175x50 + 10 FLITCH PLATE	
F2/3	"	2/200x50	
F4	"	152x152 UC 30	4600
F5	"	152x89 UB 16 or 2/225x50 + 6 FLITCH PLATE	2700
F6	"	178x102 UB 19	3200
F7	"	152x152 UC 37	4230
F8	"	2/125x50	
F9	"	305x165 UB 46	6270
F10/11	"	2/200x50 + 6 FLITCH PLATE	
F12	"	2/150x50	
F13	"	152x152 UC 30	4350
J1	JOIST S	225x50 C24 AT 300%	
J2	"	225x50 C24 AT 300%	
	EXTG. RAFTERS	ADD 150x50 TO RAFTERS	

DIMENSIONS IN MILLIMETRES			
JULIAN ADAMS BSc (HONS)			
Loft Conversion Design			
01234 314143			
CONTRACTOR/AGENT			
IDEAL LOFTS			
PROJECT			
SCALE	1/50	DATE	9.3.9
DRG. No.	HA/01	REVISIONS	