

UPGRADE OF PITCHED ROOF:(imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)
Vented roof - pitch 22-45° (breathable felt only) To achieve U-value 0.16 W/m²K
Existing roof structure to be assessed by a Structural Engineer and any alterations to be carried out in strict accordance with Structural Engineer's details and calculations, which must be approved by building control before works commence on site. The existing roof condition must be checked and be free from defects, as required by the Building Control Officer, any defective coverings or felt to be replaced in accordance with manufacturer's details. Roof construction - 47 x 170mm Grade C24 rafters at max 400mm centres, span to Engineer's details. Insulation to be 140mm Actis Hybris between rafters and Hcontrol Hybrid under rafters. 38mm x 38mm battens to be fitted over Hcontrol Hybrid insulation. Fix 12.5mm plasterboard (joints staggered) (over VCL if required by BCO). Finish with 3mm skim coat of finishing plaster to the underside of all ceilings.
Insulation installation to be carried out in accordance with manufacturer's details.
Maintain a 50mm air gap above insulation to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation. Restraint strapping - Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.

STUD ASHLAR/DWARF WALL
To achieve minimum U Value of 0.18 W/m²K
Construct stud wall using 100mm x 50mm head and sole plates and vertical studs (with noggins) at 600mm centres or to structural engineer's details and calculations. Insulation between and over studs; 100mm Celotex GA4000 between plus 37.5mm Celotex PL4000 insulated plasterboard with VCL. Finish with 3mm skim coat of finishing plaster. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally.

Provide the equivalent of 25,000mm² of ventilation at the front eaves of the roof.

Provide 300 mm Crownwall Insulation at ceiling level to be two layers of Rockwool insulation to total 300mm laid between over joists (cross direction). U-Value to achieve minimum of 0.15 W/m²k.

Ventilated ridge required
5mm continuous ventilation is required between each rafter for the length of the ridge

Ridge Beam B1 - 152 x 152mm x 30kg Column Section to support flat roof joists to dormer.

Ensure that the firings will reduce down to a min of 50mm otherwise the dormer lintels will block the ventilation space.

2no 50x200mm C24 timbers bolted together.

Provide counter battens to tile hanging to new dormer window.

Code 4 lead flashing

New loft floor has 30 min fire protection

Beam B2 - 203 x 203 x 46kg U Beam on 600x100x25 Deep Steel spreader Plates either end

Beam B3 - 203 x 203 x 46kg U Beam on 600x100x25 Deep Steel spreader Plates either end

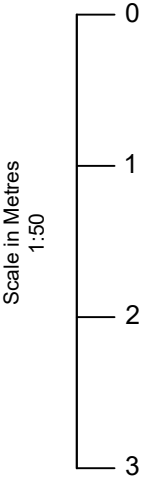
Beam B3 - 203 x 203 x 46kg U Beam on 600x100x25 Deep Steel spreader Plates either end

Existing steel

SECTION A-A

Notes

All drawings to be signed off by building control before the commencement of any works. If works commence on a Building Notice, the Builder/property owner commences works at their own risk and ELA Design (or its Officer's) cannot accept any liability whatsoever for these works carried out.



Rev	Date	Details	By
A	17/03/26	Revision A	CE

Project:	Loft Conversion
Drawing:	Section A-A
Address:	78 North Road, London, N6 4AA
Drawing N°:	ELA/7
Rev:	A

A3 Scale:	Drawn By:	Job No:	Date:
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