HAVANT BOROUGH COUNCIL
14 JUL 2010
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PERMIT

BCO Letter 15 July 2008

Where floor joists hang 30mm or more below supporting element solid noggin to be provided to stop twisting.

External walls to dormer to be fire resisting for one hour as specified.

Cross ventilation of roof spaces by means of 50mm air gap from eaves vents equal to 25mm continuous gap, to three ridge vents to comply with Approved Document C.

Existing foundations / lintels subject to additional loads to be exposed and proven adequate.

iding Regulations and ecification notes.

OM IN ROOF

se Structural Engineers details and calcs for ructural steelwork to roof.

teel beams built in to load bearing wall on earing plates or padstones as specified.

(ISTING ROOF (U=0.20)
ncrease depth of rafters to 50x150 C24 @ 00 c/cs

sulation of roof void skillings by means of Rare Celotex, 90mm between and 45mm over rafters. 50mm air gap is to be aintained

AR DORMER ROOF (U=0.20)
gh performance torched-on membrane to BS 47 Class 1 in accordance with BS CP144 to anufacturers instructions on 12mm ply ecking on treated s/w forings on 50 x 147 s/w ists C24 @ 400 c/c's

3mm air gap 90mm CELOTEX insulation tween joists and 25mm Celotex insulation over joists
45kg 12.5mm foil-backed plasterboard, vented

DWER CHEEKS
stable 50 x 150mm s/w joists to support ver cheeks
ncrete plain tile hanging on treated s/w tten on sarking felt BS 747 on 4mm OSB ard on studwork.
50mm CELOTEX insulation between studs thermal surface of 12.5mm Gyproc soterboard on 12.5mm foil backed soterboard fixed to studwork

RTY WALL INSULATION
s be provided by means of 25mm Gyproc holmed plasterboard on slabs

INDOWS (U=2.0)
thite Upvc double glazed windows Low E glass ndurance frames to be manufactured and nished by FENSA certificated firm and nished on completion
lass in critical areas to be toughened to omply with Part N

LUX ROOFLIGHTS
table outlets to trickle/light openings o be fitted in accordance with manufacturers onmendations

RE DETECTION ALARMS
ired direct to mains with battery back-up, nsure three smoke detectors located one on ch floor in staircase, all alarms to sound ultaneously.

VID EXTRACT
chanical ventilation extract fan to be fitted En suite rated 15 litres/second

ECTRICAL
ectrical installation as Clients schedule to E regulations
ectrical installation to be carried out by a rson competent to do so. Certified on npletion in accordance with part P.

ergy efficient light bulbs to be fitted in kitchen areas and bathroom

IMBING
e 'Wc fitting connected to existing services: vers to BS 5572 as follows: Both 32mm dia. ves' 40mm dia Both with 75mm deep seal ps
connected to manifold connected to p fitted with air admittance valve.

INWATER GOODS
ew gutters in black discharging via ropwise and shoes to existing surface of ne

Provide new 50 x 170 C24 floor Joists at 400mm c/cs partitions adjacent to existing ceiling joists. Hang from s steel beams by means of HD galvanised steel hangers (Max permitted span 3000) Double joists under partitions.

18mm flooring grade T and G chipboard. Waterproof grade in Bathroom. Joist bearing bathroom to be formed below purlin. 50 x 100mm studs at 400 c/cs, with 50 x 100 sole plate and 50 x 100 purlin at head. Studs to be faced with 12.5mm foil backed plasterboard and 100mm Celotex insulation between studs

Form access cupboard doors to roof void. Incorporate joist retaining angle stowed on Structural calcs.
All existing doors to habitable rooms onto staircase are to be FD30

Beam: Flat Roof Joists
Span: 3.2 m. Reactions: R1: 0.96 kN R2: 0.86 kN
Use 50 x 147 C16
Use 147 x 50 C16 Flat Roof joists at 400mm centres

Beam: Rafters
Span: 2.2 m. Reactions: R1: 0.73 kN R2: 0.73 kN
Use 50 x 100 C16
Existing 100 x 50mm Rafters at 400mm centres satisfactory

enclosure to be fire resistant or wired

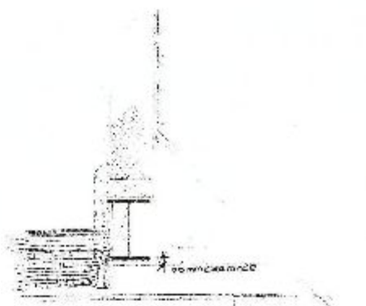
New door to room in the roof to be FD30

ST4205
Staircase enclosure to be half hour fire resisting
Student's clad both sides in 12.5mm plasterboard and skimmed.

New staircase 800mm wide to rise in 13 equal risers. Maximum riser 220, Minimum going 220mm. Pitch max 42 degrees. Handrail height 900mm. Handrail to clear trimmer min 50mm. Minimum clearance 2000. No gap to exceed 100mm. 40mm going at tapered treads 300mm Soffits of winders to be swept in plasterwork on galvanised expanset.

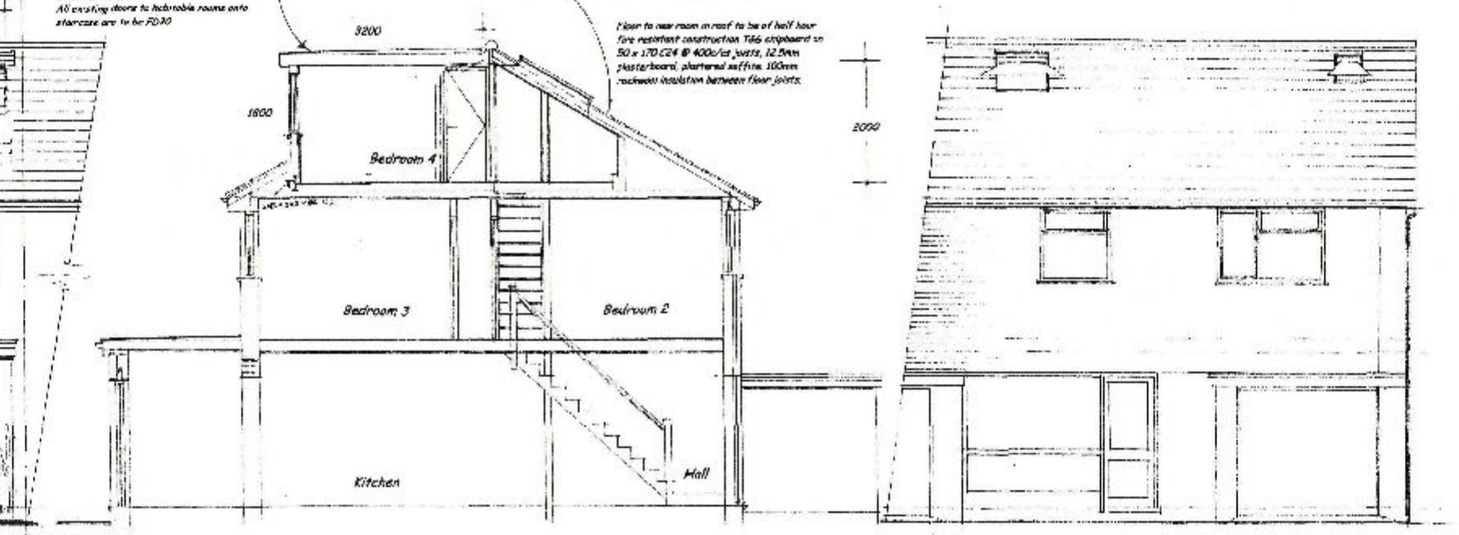
Floor to new room in roof to be of half hour fire resistant construction T&G chipboard on 50 x 170 C24 @ 400c/cs joists, 12.5mm plasterboard, plastered soffits. 100mm rockwool insulation between floor joists.





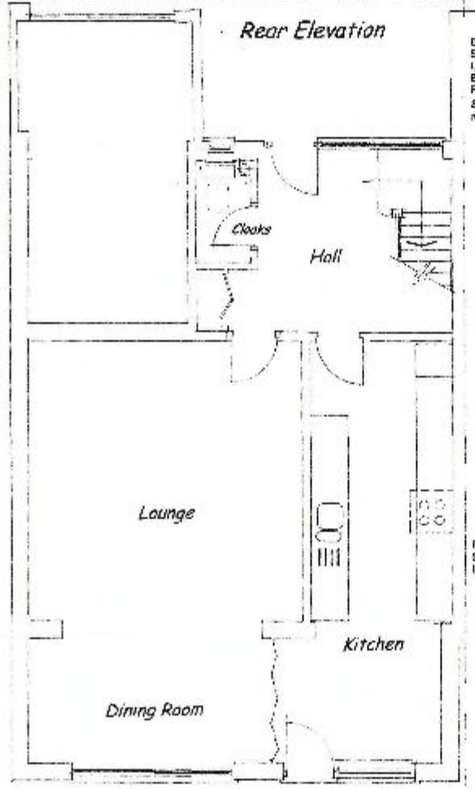


Rear Elevation



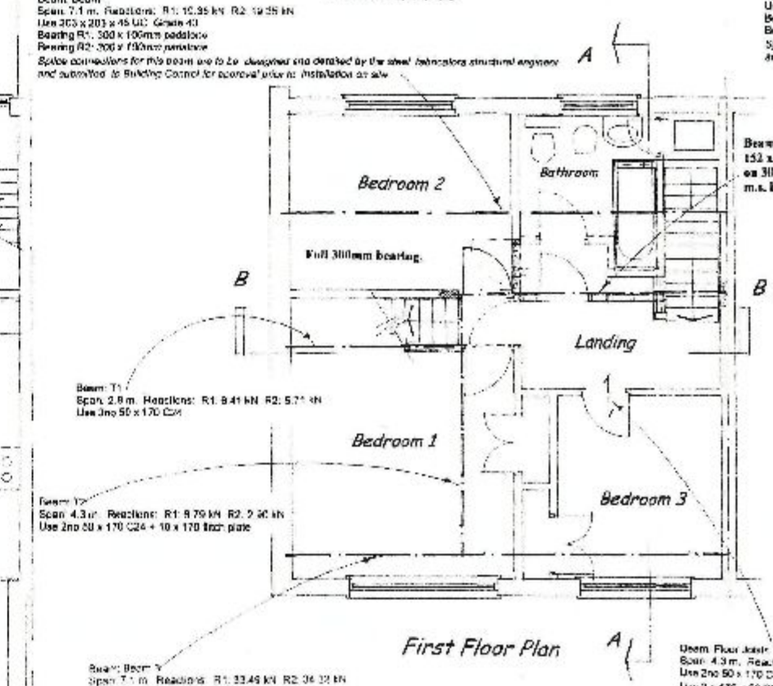
Section A-A

Existing Front Elevation



Ground Floor Plan

Beam: Beam 1
Span: 7.1 m. Reactions: R1: 10.35 kN R2: 10.35 kN
Use 203 x 203 x 46 UC Grade 43
Bearing R1: 300 x 100mm padstone
Bearing R2: 300 x 100mm padstone
Splice connections for this beam are to be designed and detailed by the steel fabricators structural engineer and submitted to Building Control for approval prior to installation on site



Beam: T1
Span: 2.8 m. Reactions: R1: 9.41 kN R2: 5.71 kN
Use 3no 50 x 170 C24

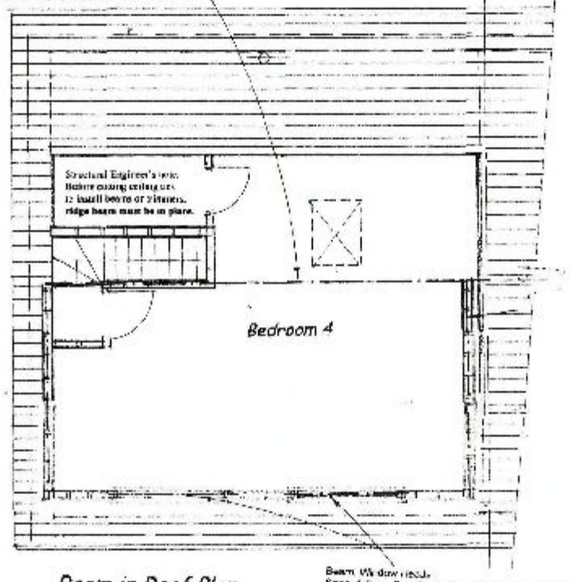
Beam: T2
Span: 4.3 m. Reactions: R1: 9.79 kN R2: 2.90 kN
Use 2no 50 x 170 C24 + 10 x 170 thick plate

First Floor Plan

Beam: Beam 2
Span: 7.1 m. Reactions: R1: 33.46 kN R2: 36.32 kN
Use 203 x 203 x 86 UC Grade 43
Bearing R1: 650 x 100mm padstone
Bearing R2: 650 x 100mm padstone
Splice connections for this beam are to be designed and detailed by the steel fabricators structural engineer and submitted to Building Control for approval prior to installation on site

Beam 2A
152 x 152 x 23kg UC
on 300 x 100 x15mm thick m.s. bearing plates.

Beam: Ridge Beam
Span: 7.1 m. Reactions: R1: 19.33 kN R2: 19.36 kN
Use 203 x 203 x 46 UC Grade 43
Bearing R1: 350 x 100mm padstone
Bearing R2: 350 x 100mm padstone
Splice connections for this beam are to be designed and detailed by the steel fabricators structural engineer and submitted to Building Control for approval prior to installation on site

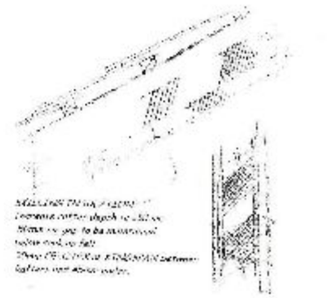


Beam: Floor Joists
Span: 4.3 m. Reactions: R1: 1.63 kN R2: 1.63 kN
Use 2no 50 x 170 C24
Use 2 x 170 x 50 C24 bolted together as floor joists at 400mm centres over 4.3m span assumes two 170 x 50 C24 at 400mm centres

Beam: Wardrobes
Span: 1.9 m. Reactions: R1: 2.25 kN R2: 2.25 kN
Use 2no 50 x 147 C16

Room in Roof Plan

Total volume of GF Extention and Room in Roof = 66.464 m3



Insulation Detail 1:10

EXISTING ARRANGEMENT

Proposed Porch

2, Grange Close,
Havant, Hants.

Mr and Mrs Allman. Drg No GRA/2

Scale : 1:100; July, 2010

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