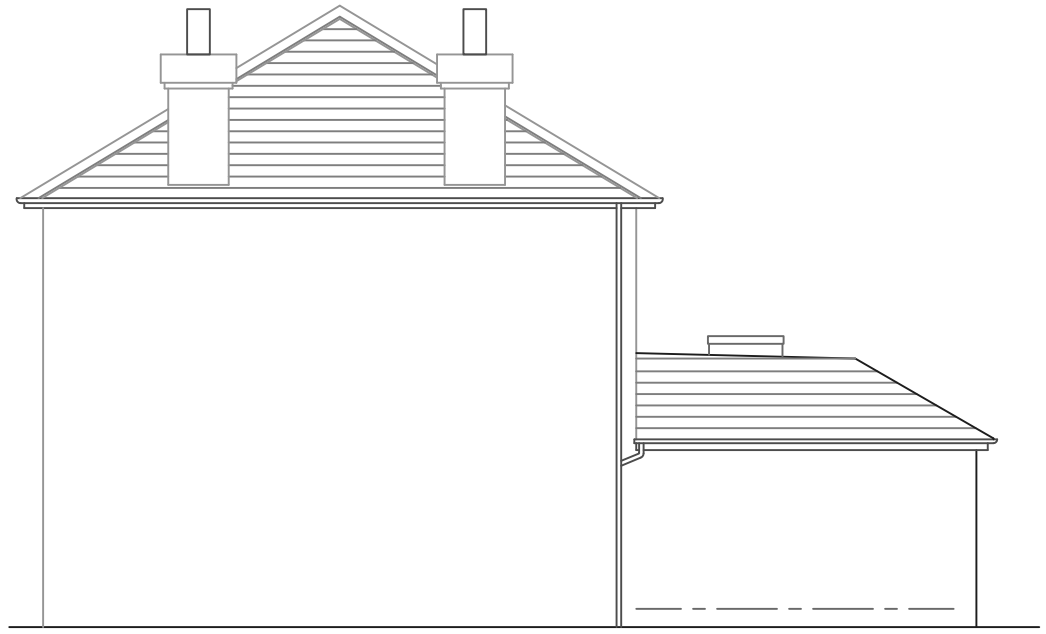
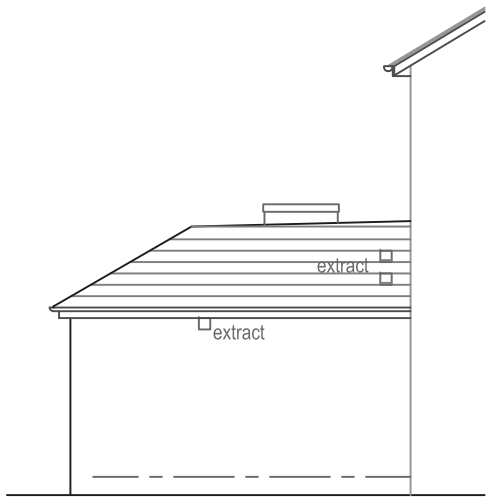
North Elevation
1:100 scale



East Elevation
1:100 scale



East Elevation
1:100 scale

STRUCTURAL ENGINEERS

All items requiring engineering as described to be designed by a structural engineer (SE) with all details, calculations and a design certificate forwarded to LABC for approval prior to works commencing.

FOUNDATIONS

600 x 200 mm concrete strip foundations to external walls.
Bearing level to be min. 750 mm and to LABC approval.
Type of foundations are assumed and are subject to ground conditions. SE may need to be consulted for detailed design. Foundations and bearing to LABC approval.
NB excavation of existing floors or adjacent to existing walls may expose base of existing walls which may need underpinning. Depth of existing foundation/wall base to be determined on site with trial holes prior to work commencing. Any required underpinning to be designed by SE.

GROUND FLOOR CONSTRUCTION (SUSPENDED)

Suspended construction comprising; floor finish to clients specification, over nominal 75mm thick sand / cement screed, on 1000g polythene separating membrane on 90 mm thick Celotex FF4000 insulation, on 1200 gauge Visqueen dpm membrane,over pre cast concrete beam and block floor.
Beam & block floor to design by specialist manufacturer, details and calculation are to be submitted to Building Control prior to installation.
Sub-floor void to be free of vegetation with min. 150 mm cross ventilated air gap between underside of beams and ground level, perimeter ventilation to be provided via periscope through wall vents to provide min. 1500 mm sq / m run of wall.
20 mm thick Celotex insulation to be turned up at perimeter of screed, all joints in insulation are to be aluminium tape sealed and otherwise installed in strict accordance with manufacturer's latest instructions, floor construction to achieve 0.19 with a P/A ratio of 0.61
VCL is to be turned up against insulation upstand and all joints tape sealed to act as complete separation layer between screed and insulation.
DPM to be turned up inside face of external leaf, and sealed under Hyload DPC at finished floor level.

EXTERNAL WALL CONSTRUCTION TO NEW EXTENSIONS

300 mm wide cavity wall construction comprising 100 mm wide dense concrete blockwork inner skin 7.3 N/mmsq strength, 100 mm wide clear cavity, 100 mm wide facing brick outer skin to match existing house.
Cavities to be partially insulated using 50mm thick Celotex insulation installed in accordance with manufacturers instructions. Walls achieve 0.27 U-Value.
Blockwork to be internally finished using 12.5 mm thick plasterboard on dabs with a plaster skim finish.
Cavity to be closed at jambs and cills of all openings with proprietary insulated cavity closer.
100 x 75 mm treated SW wall plate to be strapped to top of internal block skin using 30 x 5 x 1000 mm galv. m.s. straps fixed at max. 1.8 m cts.
Heads of openings to be supported using insulated Catnic lintels. All lintels with min. end bearings of 150 mm.
Stainless steel cavity wall ties of length appropriate to cavity width to provide between 62.5 mm and 75 mm embedment to be installed between block skins at 900 mm horizontal staggered cts, 450 mm vertical cts and at 225 mm vertical cts within 225 mm of jambs of all openings.
Hyload DPC installed over all skins, non bridging, at FFL.
Cavity wall filled with lean mix concrete below floor insulation and struck off at 45° to outside face with weep holes at max 900mm cts.
Substructure wall construction as above.
Where drains pass through substructure walls 100 x 65 mm prestressed concrete lintels to be installed to each leaf with min. 150 mm end bearings and rot and vermin proof board installed either side of opening.

PITCHED ROOF CONSTRUCTION

Local natural slate to match existing house in colour & coursing, centre fixed using 2 no. copper clout nails on 50 x 25 mm treated SW battens at gauge to suit size of slate and pitch of roof on Klober Permo Forte vapour open roofing membrane on sw 100 x 47mm C16 treated rafters at 400mm cts. Rafters birdsmouthed over all wall plates. Steel support frame to be designed by SE.
First 3 no. rafters to be strapped to verges using 30 x 5 mm galv. m.s. straps at max. 1800 mm cts, treated SW noggins installed between rafters beneath strap line, strap installed down internal face of gable by 1000 mm.

Klober membrane installed in strict accordance with manufacturer's latest instructions with min. 150 mm laps between sheets and draped by 8 mm over rafters.
Eaves formed using 32 mm thick PAR treated SW stub fascia boards fixed to ends of rafters with 12 mm thick treated SW t&g soffit fixed to top of rafters (exposed rafter feet) with continuous treated SW tilting fillet fixed over. Klober Eaves Carrier fitted to top of tilt fillet and Klober roofing underlay cut and lapped over (not exposed beyond fascia).
Hips formed with mitred slates over lead soakers to every course.
Pitched roof insulated with 70mm Celotex insulation friction fitted between rafters, maintaining 25mm space between underside of roof membrane and top of insulation.
Raking ceilings to be finished using 12.5mm thick plaster board with a plaster skim finish over, 50 x 25 mm SW battens at max. 600 mm cts over 50mm thick Celotex insulation, with VCL between battens and insulation. Roof construction achieves 0.17 U-Value.
VCL to be sealed at laps and all abutments / penetrations.
Lead soakers installed to each slate at side abutments with single step lead cover flashing over chased into brick work under new 'Cavitytrays' stepped cavity tray installed in the outer leaf of teh existing cavity wall.
All lead sheet to BSEN12588:1999 installed in strict accordance with the Lead Sheet Manual published by the Lead Sheet Association. All lead to receive 1 no. coat Patination Oil on all faces.

FLAT ROOF DECK CONSTRUCTION (WARM)

New flat roof construction to be warm deck build up consisting of; Sarnafil single ply membrane bonded to 140mm thick Sarnatherm G insulation mechanically fixed with thermally broken fixings, over VCL, over 22mm thick Class 3 plywood laid to design falls of 1:40 over, SW firings mechanically fixed to; 47x170 C16 SW treated roof joists at max 400mm cts, for the purpose of access and maintenance only. All abutment, eaves, flashing & ventilation details to Sarnafil standard details. Full specification to be obtained by Sarnafil prior to ordering materials, as part of manufacturer guarantee. Flat roof achieves U-value of 0.17W/m$_c$k.
Rainwater goods as described elsewhere, discharging into new gully.
Flat timber roof beams to be supported off steel frame to SE design
First 3 no. rafters to be strapped to wall using 30 x 5 mm galv. m.s. straps at 1200 mm cts, treated SW noggins installed between rafters beneath strap line, strap installed down external face of existing cavity wall a min 1000 mm.

NOTE

Single ply waterproofing products are to be installed by an approved installer providing guarantee on completion of work.
Waterproofing products are shown in their general arrangement only and the detailed design of the waterproofing is to be completed by the single ply roofing supplier's approved installer by using and obtaining all of the supplier's standard and bespoke details at interfaces etc as required to complete the installation. Approved installer is to consult with the supplier and obtain all necessary site specific advice in order to complete the design and before commencing work.

NOTE

Make reference to Planning Approval and all conditions attached to it, some conditions of which may require approval **prior to works commencing**. Reference to be made to all supporting documentation stated in conditions

DRAINAGE NOTE

The position, route, direction and invert of the foul and storm water drainage illustrated, is assumed only.
Assumed foul connects into existing main sewer system

BUILDING REGULATIONS Proposed Elevations

Extension and Alterations to 192 Hadfield Road, Hadfield

Mr & Mrs G. Parkinson

Nov 16

Scale 1:50

Drawing No 2016GP - 05

Revisions