It is the contractor and client's responsibility to ensure that the contractor is approved plans. All works arc to comply with current Building Regulations, NHBC Technical Standards, tho latest British Standards, Code of Practice & CE Standards, as appropriate.

All dimensions to be checked on site prior to ordering of materials. Errors arising from scaling drawings will not be accepted. The contractor shall notify JPT Design: (01954-717442) of any discrepanies with the documents/drawings prior to beginning any construction.

The contractor is to ensure that current floor and ceiling levels are maintained. Should a possible 'step' occur, owing to the required construction specification, the contractor, client and Building Control Officer to agree a satisfactory solution.

bу

Banksman present during excavation and concrete pouring works.

No un-authorised persons allowed on site during concrete pours.

Warning signs.

PPE to be worn at all times.

Goggles and gloves must be worn during concreting operations.

Risk assessment for excavations and for concrete.

Existing structure including foun loads are to be exposed and chec required by the Building Control

Floor & Ceiling Levels

Wall Plate

New Suspended Block and Beam Ground Floor

Remove top soil and vegetation, apply weed killer —
The underside of beams not less than 150mm above the top of the ground. PCC beams to be supplied, supported and fixed to beam manufacturer's plan, layout and details (details and calculations to be sent to Building Control and approved before works commence).

Minimum bearing 100mm onto Hyload DPC and load bearing walls. Provide double beams below non-load bearing partitions. Lay 1200g DPM with 300mm laps double welted and taped at joints and service entry points over beam and block floor. Lay floor insulation over DPM, 100mm Celotex GA4000 applied as a rigid material.

Lay 500g separating layer over insulation and provide 75mm sand/cement screed with underfloor heating pipes over with 25mm insulation board around floor perimeters to avoid thermal bridging, prepare for floor finishes as required. The top surface of the ground cover under the building shall be above the finished level of the adjoining ground.

Ventilation - Provide cross-ventilation of the under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm² per metre run of perimeter wall or 500mm² per square metre of floor area, whichever is the greater.

Ground Floor Construction to achieve min. 'U' value of 0.18 W/m²K.

To meet min U value required of 0.18 W/m²K

The existing solid floor slab must be checked for stability and be free from defects as required by Building Control. The existing floor will need upgrading to ensure adequate damp protection and to prevent heat loss. Provide 1200mm gauge polythene DPM or 3 coats RIW over existing concrete slab (if required). DPM to be lapped in with DPC in walls. Floor to be insulated over slab and DPM with min 100mm Xtratherm Thin-R insulation, 25mm insulation to continue around floor perimeters to avoid thermal bridging.

A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed. Finish with 65mm sand/cement finishing screed with light mesh reinforcement. Care should be taken to ensure any existing airbricks for the main house are not obstructed by this work. If so, they should be extended through the new floor to external air. Where drain runs pass under floor provision may be appropriate where meeting such a standard would create significant problems in relation to adjoining floor level.

Non load-bearing partitions to be constructed of 100x50 timber studwork at 400mm centres with 100x50mm sole and head plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide minimum 10kg/m³ density acoustic soundproof quilt tightly packed (100mm Rockwool, or similar approved) in all voids the full depth of the stud. Partitions built off triple joists where partitions run parallel or provide noggins where at

right angles. Walls faced throughout with 12.5mm British Gypsum standard wall board with skim plaster finish, taped and jointed complete with beads and stops, to give 30 minute fire protection. Cripple studs to support lintels.

Concrete trench foundation are to be 600 mm wide x 775mm deep (max.) to cavity walls, 1000 mm below ground level or as required by Local Authority Building Inspector and to suite local ground conditions.

Foundation type and depth are to be appropriate to site conditions, (i.e should ground conditions be found to be clay they will need to be designed) and are to be designed in accordance with the "Approved Document" A1/2 Section 2E of Building Regulations Schedule 1 Pt.A or BS EN 1997-1.

Where sulphates are found to be present in the ground dense, fully compacted concrete low permeability must be used in accordance with the recommendations of Building Research Establishment Digest No. 363.

Any trees within 30m Chapter 4.2 'Building I 9m of the proposed works ng Near Trees'.

worn during concreting operations.
and for concrete works to be carried out prior to

Trial hole to be excavated to ascertain whether the garage has a continuous foundation across the infill which is adequate to build off. If there is no foundation provide new foundation as specified above. Depth be a minimum of 1000mm below ground level, to existing foundation depth or to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations the Building Control Officer is to be contacted and the advice of a structural engineer should be sought

Existing Structure

All proposed floor and ceiling levels to unless indicated otherwise. existing levels (or

1000 x

Blockwork to be 7N/mm² to support all concrete floors.

Cavity walls are to be built up from foundation level as two leaves of 100mm dense concret blockwork to BS EN 771-3:2003 with lean mix cavity fill 225mm below lowest dpc. When new pipework passes through external walls form rocker joints either side of wall face of maximum 600mm with flexible joints with short length of pipe bedded in wall. Alternatively provide 75mm deep precast concrete blank lintels over drain (or ducts) to form opening in wall to give 5mm space all round pipe. Mask opening both sides with rigid sheet material and compressible sealant to prevent entry of fill or vermin.

Steel Beams/Columns

Steel Beams/Columns to be encased with 15mm Glasroc F Firecase, fitted to manufacturers requirements. Plaster finish, if required, to be either Thistle BoardFinish, Thistle DuraFinish or Thistle MultiFinish, or similar approved. Joints should be reinforced if plaster finish

All steel beams are indicative and must be located and installed strictly the Structural Engineers design and details.

Windows to be double glazed units to BS5713. Laminated safety glazing to be provided where required as indicated in critical locations and as require by Building Regulations - Approved Document K, Section K4.

Provide means of escape windows to newly created first floor habitable rooms which are to provide a minimum clear opening area of 0.33 square metres with a minimum clear opening size of 450mm x 760mm. The bottom of the opening light should be not more than 1100mm from the finished floor.

Means of escape windows, if required, will provide a minimum clear opening area of 0.33 square metres with a minimum clear opening size of 450mm x 760mm. The bottom of the opening light should be not more than 1100mm from the finished floor.

Glazing to comply with approved document 'K'. To allow for toughened safety glass below 800mm from finished floor level and 1500mm in or within 300mm of glazed doors. All in accordance with BS 6262 and BS 6206, and should not exceed 25% of total floor area without introduction of additional heat loss saving as a trade off from that lost by the equivalent area of excess glazing (Eg low 'E' glazing etc). Once over 25%, SAP (Standard Assessment Procedure) calculations required or Area weighted U-value, possibly specifying a higher U-Value than Part L depicts. Highly glazed extensions will require design calculations prior to starting works. This also includes new glazing in existing buildings, extending openings for Bi folds etc. if exceeding 25% glazing of the total floor area of the dwelling.

Frames to be fitted with patent controllable ventilator to allow secure, draught free background ventilation of 8000m2 to each habitable room Windows (where provided) to give 1/20th room floor area rapid vent

P calculations to be provided to justify excessive glazing, to be provided third party, and forwarded to building control for approval.

Lintels
All external lintels to be IG L1/S (or similar approved)unless shown otherwise, at a size to suit the cavity width, or as specified by Structural Engineer. Please check structural engineers details for deviations.

All wastepipes are to BS EN 12056.

Wastepipe sizes:

WC = 100mm dia

Bath = 40mm dia / 50mm dia if drainage run > 3m, up to 4m max.

Shower = 50mm dia

Basin = 32mm dia / 40mm dia if drainage run > 1.7m, up to 3m max.

Sink = 40mm dia / 50mm dia if drainage run > 3m, up to 4m max.

Should maximum runs be exceeded the branch pipe should be ventilated by a breventilating pipe to external air, ventilated stack (ventilated branch system) or integer use of an air admittance valve.

ing eye to be provided at

WC pans to be fitted with multi-quik

Heating System

Existing heating system to be extended into new extension. All new radiators to have TRV Boiler efficiency should be assessed when extending the heating system and upgrading the system may be required to a 92% efficient boiler. Electric radiators or electric underfloor heating can be an alternative for those not wanting to upgrade but the running cost is likely more

External Cavity

Facing brickwork external walls are to be constructed (in accordance with BS EN 1996) of Brickwork, 100mm Dritherm 32 full fill cavity insulation, or similar approved, and an inner leaf of 100mm thermalite shield blockwork finish, or similar approved . (Note SAP calculated 'U' value of cavity wall is 0.18w/msqk) Internal finish to be 40 mm PIR and 12.5mm British Gypsum or Knauf plasterboard on dabs Brick to match existing finish.

Cavity wall insulation to continue through to back of window/door frames, blockwork not to be returned at jambs. 1:6 gauge mortar mix minimum to C.P. 121 table 6 designation and C.P. 111 structural recommendations.

All concealed spaces (cavities) and openings to be fire stopped in Document B, Volume 1 - Dwelling Houses.

225mm 'HRT 4' wall ties to be provided at 450mm centre horizontally, staggered with additional ties at openings to accordance with Requirement applies to all areas of cavity wall i.e. below and above DPC

Lateral support to walls is to be by 300×5 mm galv. MS anchorage straps used in accordance with BS EN 1996, and the Building Regulations Schedule 1 Pt A (Approved Document A1/2 Section 2C). Provide solid blocking between joists/trusses where strapped, with noggins 38mm thick $\times .5$ depths of joist.

in external walls are to be provided with Dacatie p.v.c. cavity wall closers and cills.

Cavity trays to be installed above window and door openings with stop ends abut cavity walls.

provided at tops of walls

To achieve minimum U Value of 0.28W/m²K

Construct stud wall using 100mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm ctrs or to s/engineer's details and calculations. Provide 100mm Celotex GA4000 between studs and 50mm Celotex TB4000 lining. 12.5mm plasterboard over with VCL fixed to internal face of insulation and finished with 3mm skim coat of finishing plaster. Fix 12.5mm Gyproc FireLine plasterboard to the outer face of the stud wall. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Note: These walls need to go full height and be fire stopped against the roof or floor above. A lesser provision of insulation may be appropriate where meeting such a standard would result in a reduction of more than 5% in the internal floor area of the room.

To achieve minimum U Value of 0.28W/m²K

Construct wall using 100mm light weight block, K value 0.15 or better (Aircrete, solar, Topblock toplite Standard). Fully fill the cavity with 100mm Recticel Euro Celotex CW4000.

Inner leaf to be 100mm light weight block, K value 0.15 (Aircrete, Celcon solar, toplite standard). Internal finish to be 12.5mm plasterboard on dabs.

Cavity wall insulation to continue through to back of window/door frames, blockwork not to be returned at jambs. 1:6 gauge mortar mix minimum to C.P. 121 table 6 designation and C.P. 111 structural recommendations.

225mm 'HRT 4' wall ties to be provided at 450mm centres vertically, 900mm centres horizontally, staggered with additional ties at openings to BS EN 845, and installed in accordance with BS EN 1996. Requirement applies to all areas of cavity wall i.e. below and above DPC.

Lateral support to walls is to be by $300 \times 5 \text{mm}$ galv. MS anchorage straps used in accordance with BS EN 1996, and the Building Regulations Schedule 1 Pt A (Approved Document A1/2 Section 2C). Provide solid blocking between joists/trusses where strapped, with noggins 38mm thick \times .5 depths of joist.

All openings in external walls TF7 to jambs and cills. are to be provided with Dacatie

Cavity trays to be installed above window and door openings and weep holes

Existing walls to be removed

Confirm that walls don't take any existing loads. Should it be found that walls do take any loads Structural Engineer to provide structural solution to the satisfaction of the Building Control Officer.

Existing garage floor to be exposed and checked for suitability to carry the load from the new stud wall prior to commencement of work and as required by the Building Control Officer. Construct an inner leaf of timber studwork using 100mm x 50mm treated timbers with head and sole plates and noggins at 400mm ctrs ensuring a 50mm clear cavity between existing wall and new stud. Provide a breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) on cavity side of studwork. Insulation between and over studs to be 100mm Celotex GA4000 between and 50mm GA4000 lining and 12.5mm plasterboard. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Provide a cavity tray at the base with weep holes at 600 ctrs. Provide horizontal strip polymer (hyload) damp proof course to new leaf minimum 150mm above external ground level. An injected DPC may also be required if one is not already present and working in existing wall. New DPC to be made continuous with floor DPM. ser provision of insulation may be appropriate where meeting such a standard would t in a reduction of more than 5% in the internal floor area of the room.

to

Confirm that wall(s) doesn't take take any loads Structural Enginee: Building Control Officer.

Existing RWP

Soil and Vent pipes to terminate a minimum of 900mm above horizontally, with wire cage on top.

Roof Structure: Trussed roof (minimum U-value 0.15W/m²K)

1. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.

DETAILING BY JPT DESIGN

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Roof structure to comply with ma

ıfacturers Design and Specifi

50mm minimum thickness of compressible material to be provided where it passes new foundations to extension.

Ground floor fittings from WC to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

Stack if required to be encased in studwork with 2 No. layers 12.5mm plasterboard. Sound insulation provided with min. 75mm glassfibre quilt within void.

Soil pipes to be formed in 110mm dia. P.V.C. pipework and to terminate above spillover level of highest connection to be encased in studwork with 2 No. layers 12.5mm plasterboard. Sound insulation provided with min. 75mm glassfibre quilt within void.

Warm deck roof

achieve U value 0.15 W/m²K

drainage (if applicable) to be finalised on once client has firmed up kitche

Water) of existing or proposed drainage may be required

with Regulations

Kitchen/Utility- A fan with an extract rate of 60 litres per second, or extract rate of 30 litres per second, ducted to external air, together w of 4000mm², and a window which if fitted should be openable. Open require a minimum of 3 trickle vents in a room (8000mm² each)

All external windows to be fitted with trickle ventilators.

Windowless accommodation mechanical ventilation to have 15 minute overrun. Exposed Facades in busy areas (main roads etc) will require noise attenuating trickle vents

extract fans to external air is to incorporate condensation traps.

Ducting from extract fans to external air is to incorporate condensation traps. Sho vent duct pass through the garage provide 30minute fire protection using Rockwo Duct Slab, or similar approved, to be installed to the manufacturers requirements. Existing home ventilation guides required to be given to the homeowner by the bu

installation is to comply with the

All wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS 7671:Amendment, the IEE 18th edition wiring guidance and Building Regulations Part P (Electrical Safety). On completion of the works a copy of installers Electrical Installation Test Certificate compliant with BS 7671:Amendment 1 is to be provided to the client and Local Authority.

ELECTRICAL WORKS BY NON-COMPETENT PERSON SCHEME MEMBER:

ELECTRICAL WORKS BY A COMPETENT PERSON SCHEME MEMBER: Prior to covering of all wiring/cables, the installation is to be inspected by an independent 'Competent Person' and on completion of the work, in addition to the above certificate, an additional 'Competent Persons' Electrical Installation Test Certificate compliant with BS 7671:Amendment 1 is to be provided to the client and Local Authority. (Competent personeans a member of O.D.P.M Electrical Competent Persons Scheme).

All wiring and electrical works to be designed, installed, inspected and tested in accordance with the requirements of BS 7671:Amendment 1, the IEE 18th edition wiring guidance and Building Regulations Part P (Electrical Safety) by a member of the O.D.P.M Electrical Competent Persons Scheme.

t person is to send to the Local Authority a 'Self-certification Certificate' of the electrical works completion. Client must receive both copy of on Certificate' and a BS 7671:Amendment 1 Electrical Installation Test

Energy efficient l a luminous effica

All new foul drainage to be 110mm dia uPVC, gradiant not less existing foul network. nection to Soil and Vent pipe to be 450mm

ground drainage to be in

Ridge tiles are to be mechanically fixed.

ification of construction of roof to be-

Tiling to match existing including batten space, ensure tiles are suitable for roof pitch. Tyvek Supro breathable membrane laid over rafters with 38x 50mm counter batten. (check with tile manufacturer to see if counter battens are required) 150mm thick Rockwool loft roll or similar approved laid between rafters with 150mm thick Rockwool loft roll or similar approved laid on top perpendicular to create a total of 300mm thick insulation to roof void.

ground drainage to be

Valleys

Lead Valleys Valleys to be formed from either propietary valley gutters abuts existing roof slopes.

Lead-lined valleys to be formed using Code 5 lead sheet. Valley lead and two tiling fillets to be supported on min. 19mm thick and 225mm wide marine ply valley boards on either side of the rafters. Lead to be laid in lengths not exceeding 1.5m with minimum 150mm lap joints and be dressed 200mm under the tiles. Roofing tiles to be bedded in mortar placed on a tile slip to prevent direct contact. Valley to have a minimum 100mm wide channel (125mm for pitches below 30°). All work to be in accordance with the roof cladding manufacturers and the Lead Development Association recommendations.

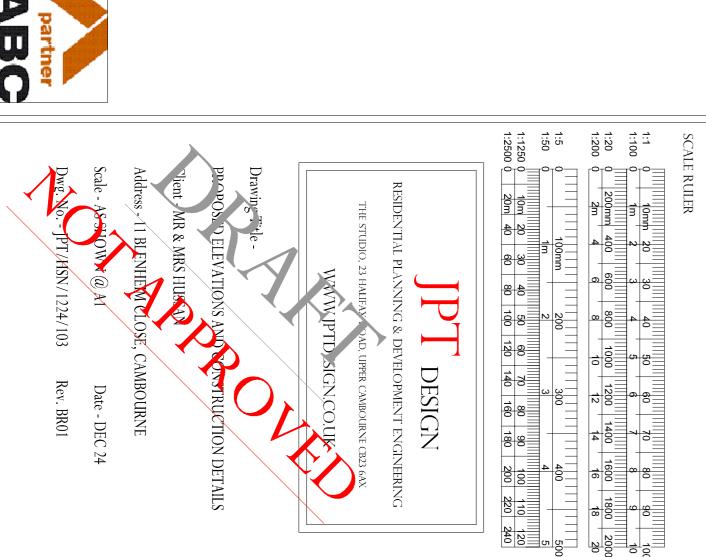
Smoke & Heat Detectors

IF NOT ALREADY INSTALLED - Provide new mains operated interlinked smoke detectors/alarms in hall at each floor level wired to separate fuse circuit with battery back up. Ensure detectors positioned minimum 300mm from any light fitting and installed in accordance with latest IEE Wiring Regulations.

Smoke detectors to be provided in accordance with Building Regulations Approved Document B, Volume 1, Section B1.

Provide mains linked Heat Detector in kitchen.

Appropriate provision to be made (if required) to detect and give carbon monoxide to comply with Approved Document J. warning of the release of



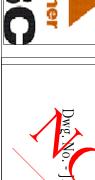












Rubberbond on 22mm external quality ply over 150mm Ecotherm Eco-Versal. Insulation bonded to 22mm exterior grade plywood on firrings to give minimum 1:40 fall on timber joists to Structural Engineers design and details. Ceilings to be 12.5mm plasterboard over vapour barrier with skim plaster finish. Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall. 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 or provide equivalent high and low level tile vents in accordance with manufactures details. Cavity trays to be provided where roof abuts cavity wall. Gang nail roof trusses to be used, specification to be supplied by to be forwarded to Building Control for checking. Code 4 lead soakers and flashings to be used where roof abuts brickwork/blockwork or Code 5 lead where