

Contractor to check all Dimensions on site prior to ordering materials / commencing work.Do Not Scale from this Drawing - If in doubt then please ask

Lay 22mm Weyroc Tongue and Grooved flooring grade wood particle boarding or equal approved on top of first floor joists with staggered joints in a brick bond pattern. Allow a min.12mm gap around perimeter where boards abut a solid wall. Unsupported ends must be supported by noggin. Apply a generous bead of approved wood adhesive to the top of the joists prior to laying the boards. Boards should be fixed using anti rust annular ring shank nails min.55mm long, positioning nails 15mm in from each end of panel with a further nail equidistant between i.e. 3 nails across the width of each panel.Screw fixings may be used for an even more comprehensive fit.

First and last joists to be clear of wall by 25-50mm to aid floor fixing and services installation.

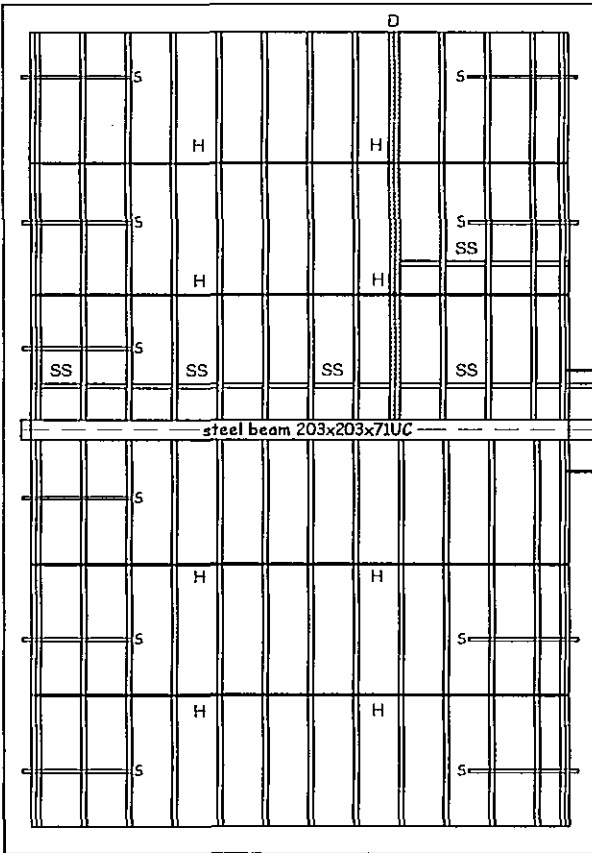
200 x50 joists @ max.450mm ctrs. Solid herringbone strutting (H) @ mid point to spans over 2m. Strutting at third points to span over 4m. Joists to be supported at all junctions with approved Joist Hangers with 75mm min bearing on masonry and joist.Joist to be cut accurately for a tight fit in hanger with max.6mm gap. Joist bottom to be notched to keep ceiling line level.

Provide 203x203x71UC steel beam @ mid point to support new floor joists. Beam to have 250 x 100 x 10 thk bearing plates both ends welded to u/side where supported on walls bearing onto minimum 7.0 N/mm² blockwork.Beam to have min. 30mins Fire Resistance.

Notch joists neatly into steelwork to allow for timber shrinkage, i.e at least 12mm projection at floor side and at least 2mm at ceiling level.

30x5 m/s anchor straps (S) @ 2m ctrs with solid strutting beneath.Notch straps into minimum 3no. joists to allow level floor boards.

All cut ends of joists to be sealed with suitable preservative prior to fixing in position.



Double up joists (D) underneath studwork wall and provide solid strutting (SS) where studwork runs at right angles to joists

Provide 100mm Mineral Fibre Insulation between joists prior to laying floor boards.

Provide solid blocking at the ends of herringbone strutting,between last joist & wall and underneath all restraint straps

Timber solid strutting
Solid blocking should be at least 38 mm thick and extend at least three quarters of the joist depth. The blocking should be close fitting and be fixed either by skew nailing or by offsetting the blocks and end nailing through joists.Full depth blocking should be avoided, since it could project above or below the top or bottom of the joist at some point in its length. This will result in an uneven deck surface and, since the deck or ceiling will not then be in full contact with the joists, could cause nail popping and subsequent noise from movement on the nails.Blocking should be tight fitting, yet not oversized as this may cause distortion in the joists.

Timber herringbone strutting
Timber herringbone strutting should be at least 38 x 38mm but should not be used where the distance between joists is greater than approximately three times their depth. This is because at shallow angles, the effectiveness of the strutting is significantly reduced. For maximum efficiency, the timber herringbones should be nailed towards the top and bottom edges of the joists and should be in full contact. They should not stand proud of the joists as this would interfere with the fixing of decking and ceiling linings. The struts should not be in contact with each other.

Proprietary strutting devices
Care must be taken to ensure that there is a sufficient gap left to avoid contact at the crossover between pairs of struts in herringbone arrangements, since this may result in noise during service. Proprietary strutting systems should be specified and installed in accordance with the manufacturer's recommendations.

ALL TIMBER TO BE SC16 STRENGTH CLASS DRY GRADED TO BS4978 AND MARKED "DRY" OR "KD"

PROPOSED FIRST FLOOR JOIST PLAN
Not to Scale

BLOCK COMPARISON TABLE (to achieve a 'U' value of 0.35W/m ² K)		
Manufacturer	100mm thk Block type	Full Fill Cavity insulation thickness
Thermalite	Shield	65mm
Plascon	Fibolite	85mm
	Agilite	85mm
	Stranlite	85mm
	Plascon	100mm
Tarmac Topblock	Hemelite	85mm
	Lignacite	85mm
	Topcrete	100mm
	Durox Supabloc	65mm

ELECTRICAL INSTALLATION

All electrical work required to meet the requirements of Part P must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council Building Control Officers must be satisfied that either:
1. An electrical installation certificate issued under a competent persons scheme has been issued or
2. An appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

The Engineer is to advise if any appliance or position of appliance does not conform to regulations. Contractor to seek advice from Client with regard to lighting requirements.

HEATING SYSTEM

Provided from existing but all radiators are to be fitted with thermostatic radiator valves. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/m²K and a thickness equal to the outside diameter of pipe upto max. of 40mm.It should be noted that central heating and hot water pipework in unheated areas may need increased insulation thicknesses for the purpose of protection against frost, refer to BRE Report No. 262 2002 Edition.

MASONRY WALL CONNECTORS

Provide Simpson Strong - Tie or similar approved wall connectors to connect new & existing brick / blockwork.Use all specified fasteners.Fasteners must be spaced evenly, unless otherwise specified, and installed into the existing bricks or block and not into mortar joints.Insert wall ties provided at maximum 300 mm centres, bedding the ties into the mortar joints.Detailed site work instructions are provided with each wall connector system and must be adhered to at all times.In exposed locations it may be necessary to incorporate additional protection, for example the insertion of a vertical dpc.

SOAKAWAYS

All rainwater to discharge into soakaways and to be min. of 5m from any building & a min. of 1m³ filled with rubble to within 450mm of external ground level.Overlay rubble with polythene sheet and backfill with clean topsoil.Note the soakaway inlet pipe must discharge to the centre of the soakaway in all directions.

RAINWATER DRAINAGE

uPVC guttering and downpipes to clients approval.Falls for guttering to be 1:600 and brackets fixed at max. 2m ctrs.Downpipes to be connected into underground drains via reducing adapter.Underground drains to be 110mm Ø Osma uPVC or similar approved with flexible joints laid on 100mm peagravel and min 150mm surrounds laid to 1:100 falls to new soakaway.Soakaway specification detailed elsewhere.

CEILING

All ceilings to be 15mm plasterboard to BS1230. Ceilings to be have Coveing and skim finish to clients requirements.Plasterboard sheets to be fixed with joints staggered and must be layed perpendicular to all joist runs.Fix boards at a min.150mm centres.

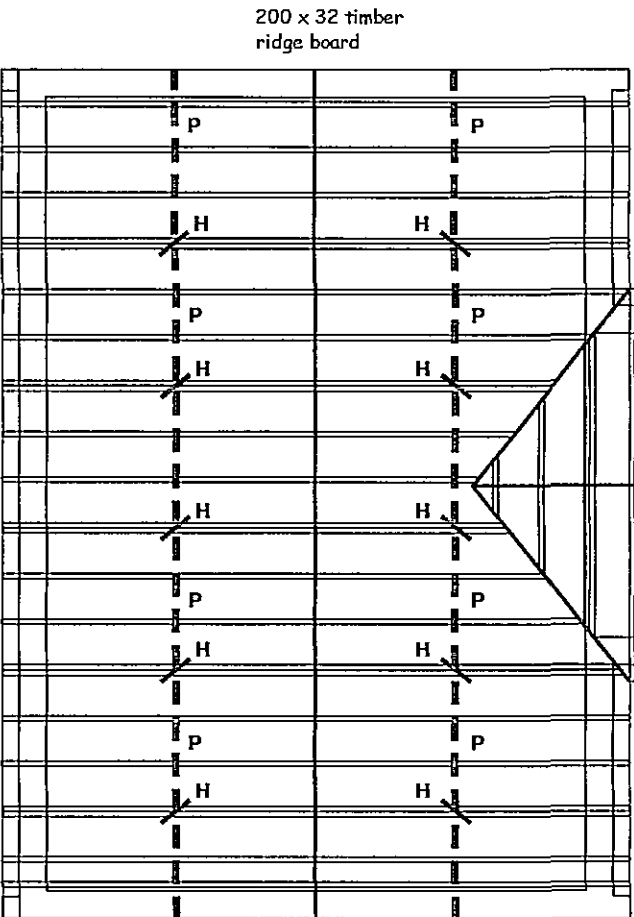
ROOF / LOFT ACCESS

Provide insulated roof access trap door with a fully weathered sealed frame and a 38mm brass bolt or to clients requirements.

Solid pack void between last rafter and blockwork with mineral fibre insulation and solid timber packs.

Support all purlin connections directly over a rafter / strut or connection to be made with a "Scarf" joint near strut so that the joint supports the longer span. Provide metal plate under scarf joint.

Note:Provide 50x50 timber noggings for partition head fixing and pendant light fixings. Position of light fixings to be agreed on site with client.



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PROPOSED ROOF PLAN
Not to Scale

New 150 x 50 rafters @ 450mm ctrs double-up at positions shown (Nominal 1200mm principle rafters) and birdsmouthed over wallplate

uPVC soffit and fascia profile to match existing.

All cut ends of joists to be sealed with suitable preservative

Dotted line shows 225 x 75 continuous purlin (P) birdsmouthed to 150 x 50 rafters at 450mm ctrs and built into gable walls where applicable with 175 x 38 collar & 100 x 50 vertical hangers at positions shown (H). Supply 150 x 50 ceiling joists / collars with strutting / lateral straps as floor joists specification and double up at vertical hanger positions.

Specialist diminishing trusses built off 100 x 22 valley boards with Glass Fibre Valley Troughs.

GENERAL CONDITIONS
Contractors are responsible for checking all dimensions on site when work commences and before ordering any materials.Any discrepancies should be brought to the attention of the Client for remedial action before commencing further.

All details shown are based on typical site conditions for that area; any abnormal conditions should be brought to the attention of the Client and Local Authority.

The notes shown are mainly to cover the requirements of Building Regulations and should not be treated as full specification.

No allowance has been made for any Structural Calculations, a "SAP" calculation, Soil Investigation or Flood Risk Assessment.If deemed necessary then these will be a chargeable extra.All steel beam sizes shown on drawing are all subject to confirmation from Structural Engineer.

All materials not specified to be of a standard suitable for the work proposed and be fit for purpose.All work to be in accordance with good building practice and all necessary BS codes for Workmanship on Building Sites.

Client: **Mr I Wright**
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Site: **Proposed Garage Extension & 2no. Bedrooms above Existing Garage / Utility**

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SHDC
Planning & Development
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DETERMINED PLAN

Date: **mar05** Scale: **1:50 / 1:100**

Drawing No: **rem 1020 - 03**

