

Note:

This drawing is to be read in conjunction with the structural engineer's drawings. Do not scale any part of the drawing. Any discrepancies, errors or omissions to be referred to project manager for resolution. This drawing is produced for use as part of a Full Plans Building Control Application and is not intended for use as a construction drawing.

Note:

Alterations to existing house structure including removal of structural members etc must be in compliance with structural engineers details which must be approved by building control prior to works commencing on site.

The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

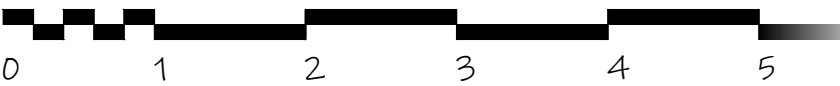
Domestic clients
The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

- (a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.
Or:
(b) Exceeds 500 person days.

This drawings remains the copyright of Tower Residential Design and no portion should be reproduced without permission of Tower Residential Design



| REVISIONS: | | | |
|------------|--|--|--|
| | | | |
| | | | |
| | | | |

Tower Residential Design Ltd.
www.designtrc.com
+4407917842330
info@designtrc.com
West Sussex, RH7 6HT, U. K.



TITLE:

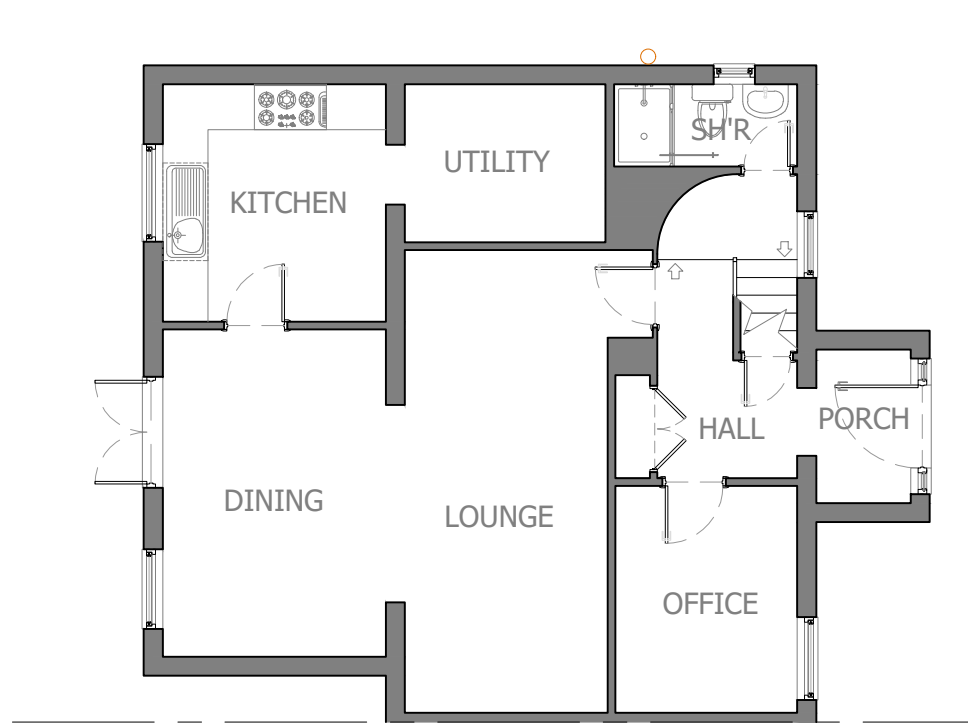
BUILDING REGULATIONS
EXISTING
PLANS + ELEVATIONS

8 CHALK PITT ROAD
BANSTEAD
LONDON
SM7 2HY

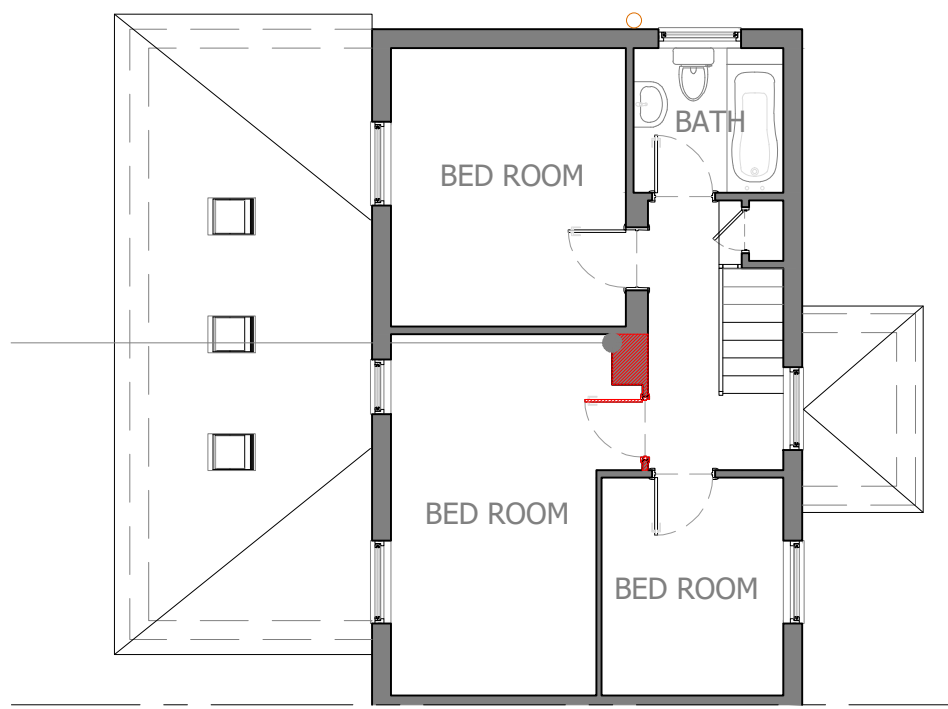
DRAWN: AAV **DATE:** 31/10/2021

SCALES: 1:50 2A1 / 1:100 2A3 **PP# / BC#**

DRG No. TRD-2116BR - A1-03 - Ver. A



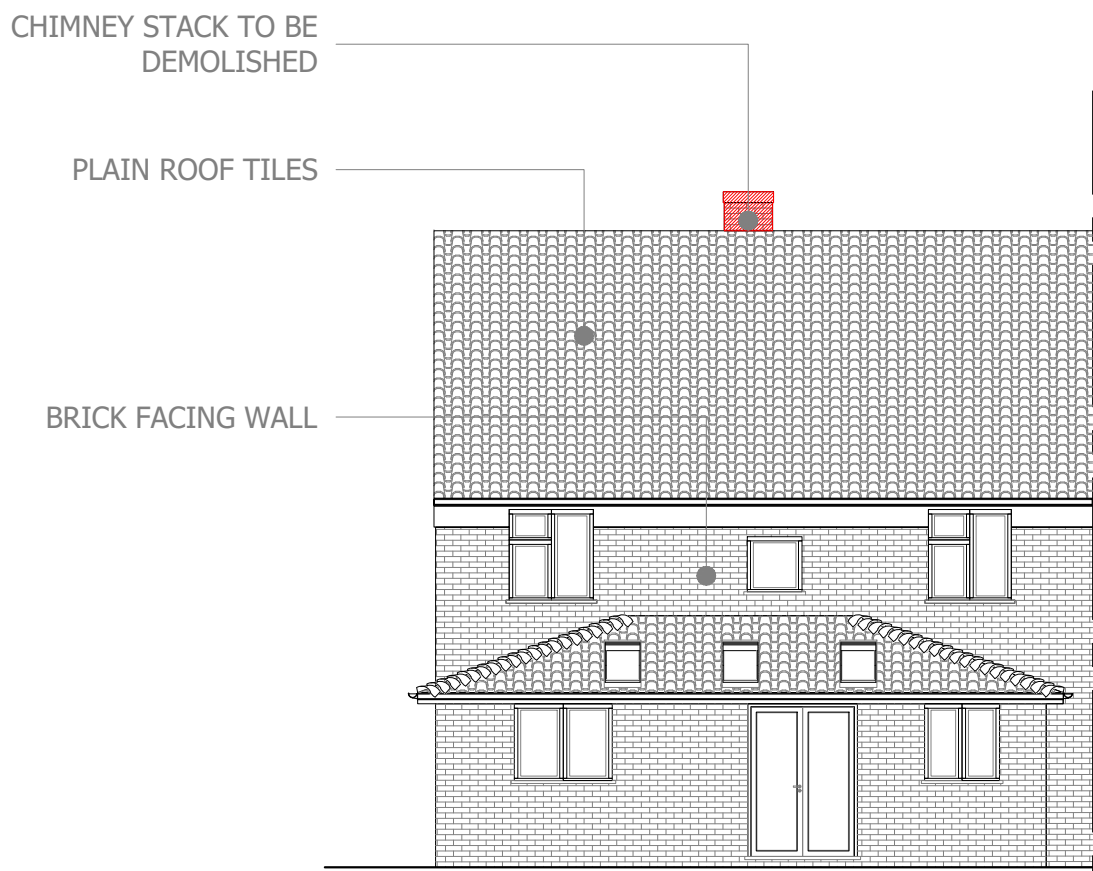
EXISTING GROUND FLOOR
SCALE 1:100



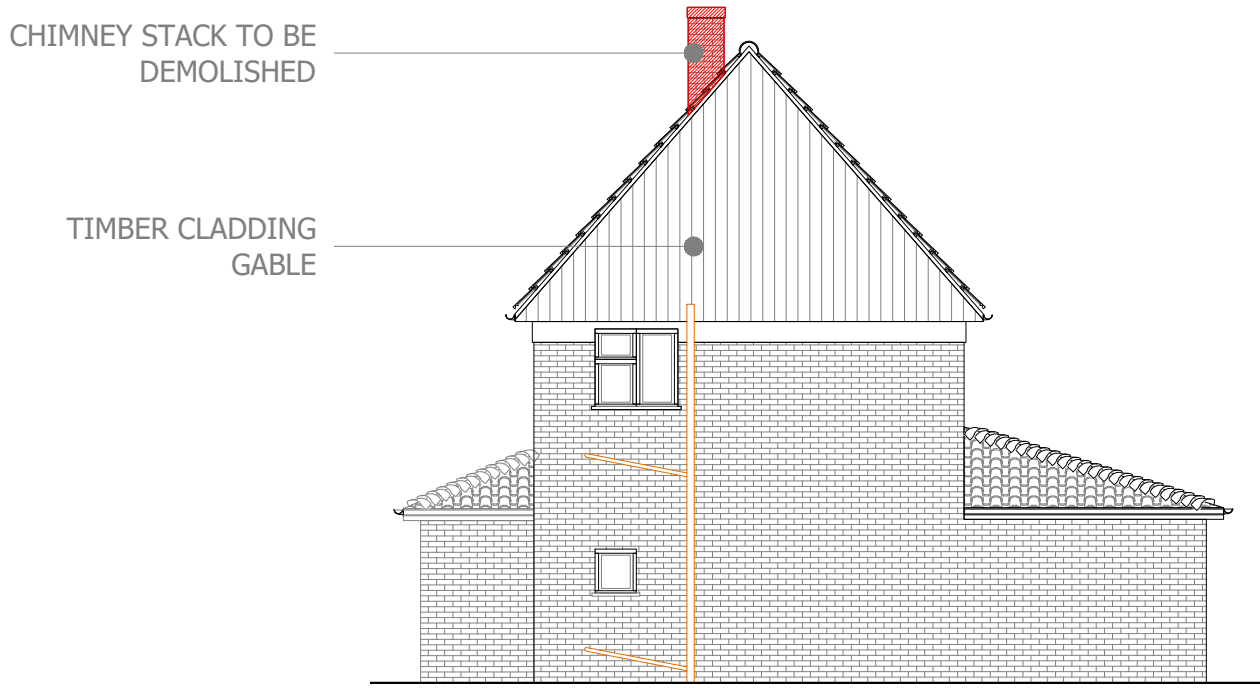
EXISTING FIRST FLOOR
SCALE 1:100



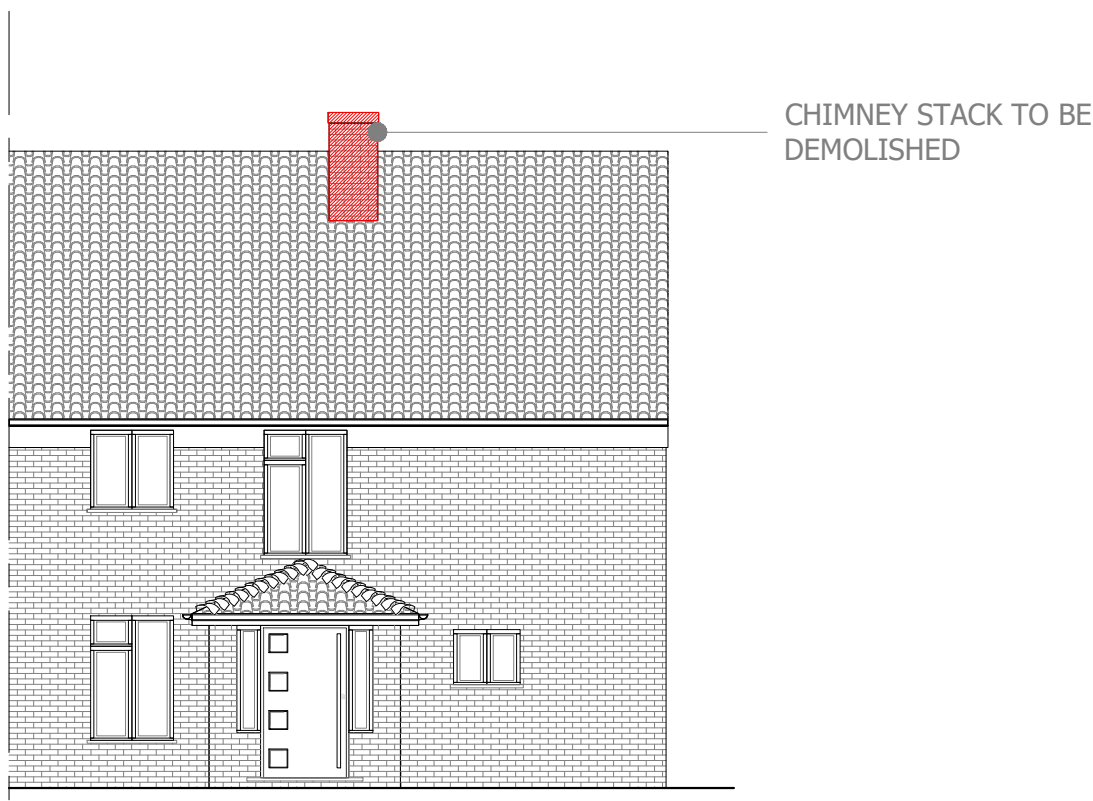
SITE LOCATION PLAN
SCALE 1:500 @A1



EXISTING WEST VIEW
SCALE 1:100



EXISTING NORTH VIEW
SCALE 1:100



EXISTING EAST VIEW
SCALE 1:100

Preparation, protection, access & demolition:
All necessary scaffolding, access ladders, material hoists, temporary protection and working platforms etc for works are to be erected, maintained, certified, dismantled and removed by suitably qualified and insured specialists.
All plumbing, drainage, heating, electrical services etc including re-siting of heating appliances/boilers/flues/tanks etc to be altered/modified/adjusted by suitably qualified & experienced specialists or registered competent persons.
The contractor is to allow for and maintain all temporary protection to the building to maintain weather tightness until completion of works. All timber is to be protected on site to minimise moisture content (not exceeding 22%).

Inspection of existing structure:
Existing foundations, lintels and wall structure that will be built off or support the new upper storey extension loadings from the proposed works may need to be exposed at the discretion of the Building Control Surveyor and structural engineer to ensure they are adequate and suitable - this may include opening up or excavating walls/floors (and subsequent making good) to check internal foundations or walls.
Should the existing structure not appear adequate to support the proposed works then proposed remedial works/alterations may be required to be submitted to Building Control for approval prior to works commencing on site.

CONSTRUCTION NOTES:
These notes are to be read in conjunction with all relevant Architect's drawings and details, Chartered Engineer's details and calculations, and any other specialist consultants' details and specifications.

*It is the responsibility of the contractor to ensure that all their work is in compliance with the appropriate requirements of the relevant building regulations and other allied legislation.
Contractor to thoroughly read plans and calculations before commencement to ensure thorough understanding of all aspects of proposals.*

All work to be carried out in strict accordance with all current Building Regulations requirements, British Standards, Codes of Practice, Agrément Certificates, Yorkshire Water Authority procedures and relevant HSE requirements.

All dimensions must be checked and verified on site prior to commencement of work and architect notified of any discrepancies. Horizontal and vertical setting-out of buildings, roads and drainage to be agreed with LA before commencement of work.

All materials to be installed in strict accordance with manufacturers' recommendations, all relevant Agrément Certificates, British Standards etc and to Local Authority approval.

Any deviation or change from materials as specified in these notes and on the relevant drawings to be agreed in writing with the Building Inspector prior to commencement of work.

It is the Contractor's responsibility to submit all appropriate Building Notices for Building Control inspections before relevant works are covered up.

Calculations where required for loading, strength and structural stability to be submitted by Chartered Engineer for approval by Local Authority.

CONSTRUCTION NOTES cont:
All timbers to be fit for purpose and to have suitable double Vac-Vac preservative treatment or equivalent Local Authority approved pressure-impregnation method.
All structural timbers to be in full accordance with BSS268 Part 2.
All general joinery timber to be in full accordance with BS1186 Parts 1 & 2.
Covered up structural timbers to be fit-for-purpose selected structural grade C24 treated SW timbers to BS EN 338.

Site to be used only for the demolition / construction of the proposed works, which is to be protected at all times along with adjacent properties, not forming part of the works.
care must be taken at all times to ensure that any works on the supply of all services into and from property, ie electricity, water, gas, bt, foul water and surface water drainage, does not, at any time interfere with the supply of services into or out from the adjacent properties, is not affected, if this proves not to be the case, then the contractor is to fully advise properties affected, as soon as problem is known, and is to negotiate with adjacent properties regarding any appropriate action that may be required. prevent smoke, dust, fumes, spillage, and other harmful activities. no fires to be allowed on site, at any time; noise levels to be kept to a reasonable level, complying with bs 5228 - 'noise control on construction sites'.

Rubbish and debris must not be allowed to accumulate on site and is to be carted away to licensed tip as occasion demands. Site to be left clean and tidy on completion.

Contractor, sub-contractors etc. to comply with health and safety regulations during execution of the works.
Locate existing services before works commence. Take all necessary precautions when carrying out demolition works, forming new openings, excavations and working at roof or/and high level. for alteration work requiring new openings in walls or the removal of existing walls, the builder is to follow the guidance in the building research establishment 'good building guides' 15 and 20 - 'providing temporary support during work on openings in external walls' and 'removing internal load-bearing walls in older dwellings'.
Any live mains electrical cables within working distance to be sheathed / protected.

PLEASE NOTE: All the materials specified and the construction details shown are not to be changed) without the full knowledge and prior approval of the client as any changes may have a detrimental effect on the designed/required carbon emissions of the structure as designed.

ABOVE GROUND DRAINAGE
New sinks to kitchen/ bathrooms to have trapped waste pipes.

All new appliances to be fitted with the minimum waste dimensions;

| | Trap diameter | Depth of seal |
|----------------------------------|---------------|---------------|
| Kitchen sink | 40 | 75 |
| Washbasin | 32 | 75 |
| Bath, Shower | 40 | 50 |
| W.C. | 75 | 50 |
| Washing Machine/ Tumble Dryer | 40 | 75 |

All new piping to be connected to new SVP's accordingly based on positioning and layout. Ensure that all joints are adequately sealed.

All boxed in pipework should be wrapped in an acoustic mineral wool to minimise sound transmission.

All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)

Wash basin - 1.7m for 32mm pipe 4m for 40mm pipe

Bath/shower - 3m for 40mm pipe 4m for 50mm pipe

W/C - 6m for 100mm pipe for single WC

All **branch pipes** to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

Or to 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.

Waste pipes not to connect on to SVP within 200mm of the WC connection.

Supply hot and cold water to all fittings as appropriate.

SOIL AND VENT PIPE

SVP to be extended up in 110mm dia UPVC and to terminate min 900mm above any openings within 3m. Provide a long radius bend at foot of SVP.

PART J: HEATING & GAS BOILERS/ APPLIANCES

Extend all heating and hot water services from existing and provide new TVRs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

NEW GAS BOILER (IF REQUIRED)

Heating and hot water will be supplied via a wall mounted condensing vertical balanced flue pressurised boiler with a minimum efficiency of 92% (as defined in ErP(1))

The energy performance of the new components to be assessed. The results should be recorded and given to the building owner.

All accessible pipes to be insulated to the standards in Table 4.4 Approved Document L.

All parts of the system including pipework and emitters to be sized to allow the space heating system to operate effectively and in a manner that meets the heating needs of the dwelling, at a maximum flow temperature of 55°C or lower..

No combustible materials within 50mm of the flue. Rooms to be fitted with thermostatic radiator valves and all necessary zone controls and boiler control interlocks. The system will be installed, commissioned and tested by a GAS SAFE Registered Specialist and a certificate issued that the installation complies with the requirements of PART L. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

PART P: ELECTRICAL

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

INTERNAL LIGHTING

Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

CONSTRUCTION NOTES:

PART A: STRUCTURE

BEAMS

Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

PART B: FIRE SAFETY

Joints between fire-separating elements should be fire-stopped and all openings for pipes, ducts, conduits, cables to pass through any part of a fire-separating element should be kept few in number as possible, kept small as practicable and fire-stopped (allowing for thermal movement in ducts and pipes.) Any such joints between fire separating elements should have a minimum of 30mins fire resistance in line with surrounding construction.

Heat detector in kitchen area to be linked to smoke detectors on landings and hallways.

All smoke alarms should be mains operated and conform to BS 5839-6:2017. They should have secondary power supply. All alarms should be linked so that if one is set off then all will alarm.

(S)

= Smoke Detector

(H)

= Heat Detector

PROVIDE A NEW DRAINAGE RUN TO BE CONNECTED TO EXISTING DRAINAGE. DOUBLE CHECK THAT EXISTING DRAINAGE IS COMBINED OR OTHERWISE BEFORE COMPLETING THIS WORK

EXTRACT TO WC
W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch. Vent to have a 15min overrun if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

NEW MASONRY WALL TO BE ERECTED OVER EXISTING

NEW STAIRCASE

Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

UPGRADING CAVITY PARTY WALL

(cold adjoining space)
The existing party walls must be checked for stability and be free from defects as required by the Building Control Officer. Provide a scratch coat render to existing wall. Provide 67.5 Kingspan Kooltherm insulated dry lining board manufactured to EN ISO 9001:2000 with 3mm skim plaster. Plasterboard to be bonded using dot and dab method to the existing construction with proprietary adhesive at 300mm centres vertically/horizontally and in accordance with manufactures instructions. Tape joints and seal perimeter edges with mastic, to provide a vapour control layer (VCL). All work in accordance with BS 8212: 1995 (Code of practice for dry lining)

PART F: VENTILATION

BACKGROUND AND PURGE VENTILATION

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 8000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²

Purge ventilation - New Windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°

Internal doors should be provided with a 10mm gap below the door to aid air circulation.

Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

EXTRACT VENT FOR PROPOSED WET AREAS

Provide mechanical extract ventilation to shower room/ WC/ Ensuite/ Bathroom ducted to external air capable of extracting at a rate of not less than 15 litres per second. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

EXTRACT VENT TO UTILITY ROOM

To utility room provide mechanical ventilation ducted to external air capable of extracting at a rate of 30 litres per second. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

TOWER

RESIDENTIAL
DESIGN

177

Note:

This drawing is to be read in conjunction with the structural engineer's drawings. Do not scale any part of the drawing. Any discrepancies, errors or omissions to be referred to project manager for resolution. This drawing is produced for use as part of a Full Plans Building Control Application and is not intended for use as a construction drawing.

Note:

Alterations to existing house structure including removal of structural members etc must be in compliance with structural engineers details which must be approved by building control prior to works commencing on site.

The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

Domestic clients

The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

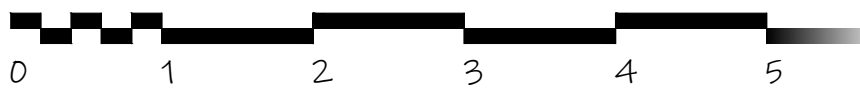
The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.

Or:

(b) Exceeds 500 person days.

This drawings remains the copyright of Tower Residential Design and no portion should be reproduced without permission of Tower Residential Design



REVISIONS:

| NO. | REVISION | DATE |
|-----|----------|------|
| | | |
| | | |
| | | |

Tower Residential Design Ltd.
www.designtrc.com
+4407917842330
info@designtrc.com
West Sussex, RH7 6HT, U. K.



TITLE:

BUILDING REGULATIONS
PROPOSED PLANS

8 CHALK PITT ROAD
BANSTEAD
LONDON
SM7 2HY

DRAWN: AAV **DATE:** 31/10/2021

SCALES: 1:50 2A1 / 1:100 2A3 **PP# / BC#**

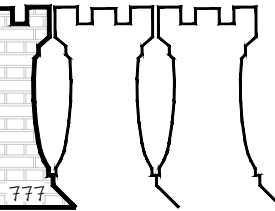
DRG No. TRD-2116BR - A2-03 - Ver. B

EXTRACT TO BATHROOM

Bathroom to have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and to have 15 minute over run if no window in room.

Internal doors should be provided with a 10mm gap below the door to aid air circulation.

Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body

**Note:**

This drawing is to be read in conjunction with the structural engineer's drawings. Do not scale any part of the drawing. Any discrepancies, errors or omissions to be referred to project manager for resolution. This drawing is produced for use as part of a Full Plans Building Control Application and is not intended for use as a construction drawing.

Note:

Alterations to existing house structure including removal of structural members etc must be in compliance with structural engineers details which must be approved by building control prior to works commencing on site.

The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

Domestic clients
The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

- Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.
- Exceeds 500 person days.

This drawings remains the copyright of Tower Residential Design and no portion should be reproduced without permission of Tower Residential Design

**REVISIONS:**

| NO. | REVISION | DATE |
|-----|----------|------|
| | | |
| | | |

Tower Residential Design Ltd.
www.**designtrc.com**
+4407917842330
info@**designtrc.com**
West Sussex, RH7 6HT, U. K.

**TITLE:**

BUILDING REGULATIONS
CROSS SECTION
+
ELEVATIONS
8 CHALK PITTS ROAD
BANSTEAD
LONDON
SM7 2HY

| | | | |
|---------------|-----|-------------|------------|
| DRAWN: | AAV | DATE | 31/10/2021 |
|---------------|-----|-------------|------------|

| | | | |
|----------------|----------------------|------------------|--|
| SCALES: | 1:50 2A1 / 1:100 2A3 | PP# / BC# | |
|----------------|----------------------|------------------|--|

| | |
|----------------|-----------------------------|
| DRG No. | TRD-2116BR - A3-03 - Ver. A |
|----------------|-----------------------------|

WINDOWS/ DOORS

All opening sashes to be draught-stripped to a minimum U-value of 1.4W/m² K. All overhead glazing to be laminated safety glass. New windows to be fitted with 4000mm² trickle vents to head of frame. External leafs of glass to have solar control filters and UV filters to clients requirements fitted to the outer leaf on the cavity side of the pane of glass. **ALL OPENINGS TO BE FINISHED WITH INSULATED CAVITY CLOSERS.** Confirm order with client prior to purchase.

ROOF LIGHTS

Min U-value of 1.6 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.

SAFETY GLAZING

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

NEW AND REPLACEMENT WINDOWS

New and replacement windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.4 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension.

NEW AND REPLACEMENT DOORS

New and replacement doors to achieve a U-Value of 1.4W/m²K. Glazed areas to be double glazed with 16-20mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K (Part N in Wales) of the current Building Regulations. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape.

PART H: DRAINAGE AND WASTE DISPOSAL**RAINWATER DRAINAGE**

New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to new soakaway, situated a min distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill and with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway.

UNDERGROUND FOUL DRAINAGE

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1: 2009.

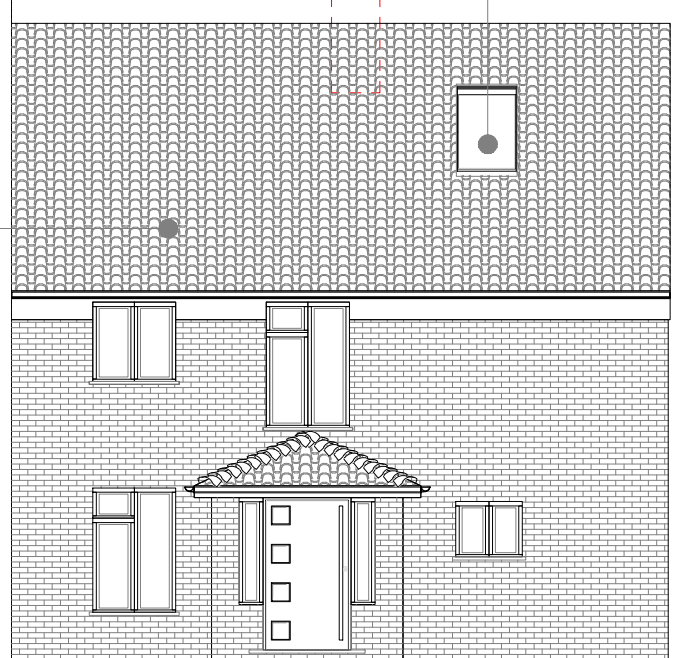
Where drains pass through proposed foundations or other rigid structures a concrete lintel should be used to bridge the pipe run. All existing and proposed drainage runs should be cleaned and confirmed clear prior to covering over.

INSPECTION CHAMBERS

Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have bolt down double sealed covers in buildings and be adequate for vehicle loads in driveways.

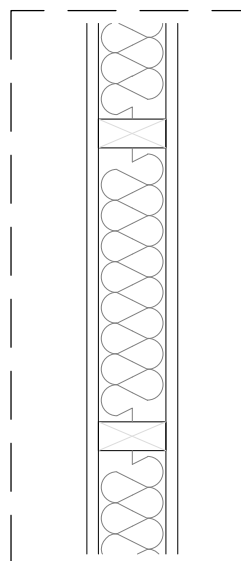
ROOF WINDOWS

Min U-value of 1.6 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings.

PLAIN ROOF TILES

PROPOSED EAST VIEW

SCALE: 1:100 @A1



Internal SW timber stud work
- 15mm Gyproc Soundbloc plasterboard with skim finish
- 100mm x 50mm SW timber stud work
- Tightly packed Rockwool Acoustic insulation between studs
- 12.5mm plasterboard with skim finish

- All to achieve 30 minute fire rating and min. 44db sound rating

DETAIL #3

SCALE: 1:10 @A1

RAKED CEILING TO BE BUILT WITH:
TILES ON BATTENS
SARKING FELT
50mm VENTILATED RAFTER CAVITY
75mm KOOLTHERM K7 INSULATION
57.5mm KOOLTHERM K118 INSULATED PLASTERBOARD
WITH 3mm PLASTER SKIM
U-VALUE = 0,18W/m²K

UPGRADE OF EXISTING FLOORS
Ensure first floor achieves modified half-hour fire resistance. New second floor –Joists to be 50mm minimum from chimney breasts. (Joist size to structural engineer's details and calculations) Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extended to eaves. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208 1988. Joists spans over 2.5m to be strutted at mid span use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid noggins between joists at strap positions.

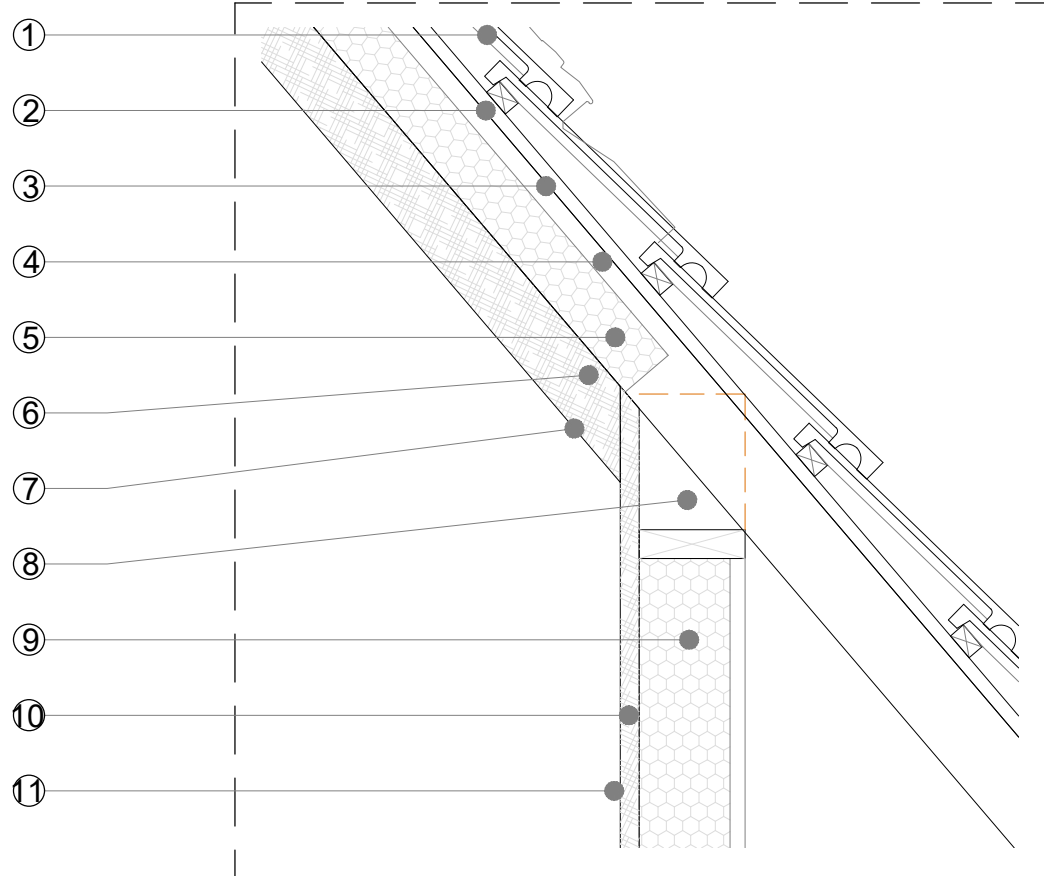
PROPOSED CROSS SECTION A-A

SCALE: 1:50 @A1

NEW Timber Frame Wall, Tile Cladding (1:10@A1)

- Hanging tiles on battens
- Timber battens on breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) eg Tyvek permeable vapour barrier
- 12mm thick W.B.P external quality plywood sheathing.
- timber frame studs constructed using: 140mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to structural engineer's details and calculations.
- Insulation between and over studs; 100mm EcoTherm Eco -Versal between plus 42.5mm EcoTherm Eco liner over with VCL fixed to internal face of insulation.
- 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. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres. Dormer cheeks within 1m of the boundary to be lined externally with 12.5mm Supalux and 12.5mm Gyproc FireLine board internally to achieve 1/2 hour fire resistance from both sides.

To achieve u-value 0,18 W/m²K



DETAIL #2

SCALE: 1:10 @A1

ROOF WINDOWS

Min U-value of 1.6 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings.

PLAIN ROOF TILES

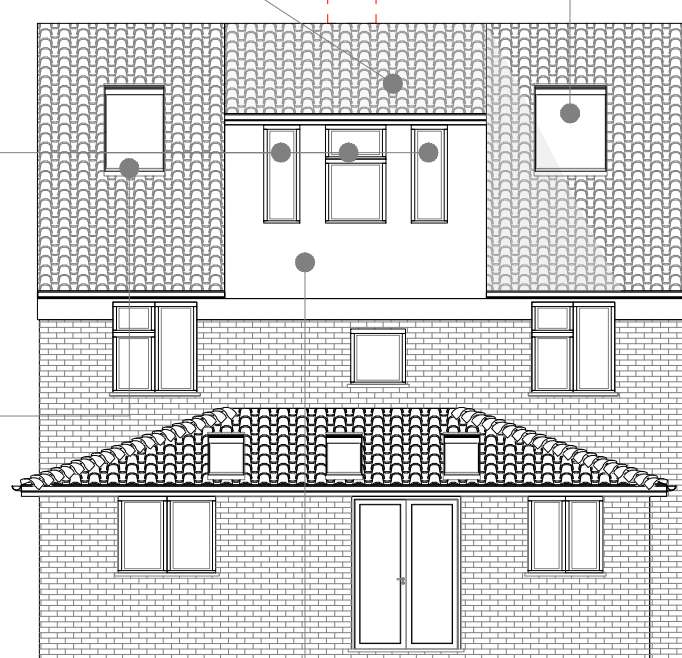
FOR 23° PITCH

NEW WINDOWS

New windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K.

ROOF WINDOWS

Min U-value of 1.6 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings.

RENDER

PROPOSED WEST VIEW

SCALE: 1:100 @A1

UPGRADE OF EXISTING PITCHED ROOF Vented roof – pitch 22-45° To achieve U-value 0.18 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. Insulation to be 100mm Celotex GA4000 between rafters between and 52mm Celotex PL4000 insulated plasterboard under rafters. 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 or provide equivalent high and low level tile vents in accordance with manufacturer's details. Finish with 5mm skim coat of finishing plaster to the underside of all ceilings.

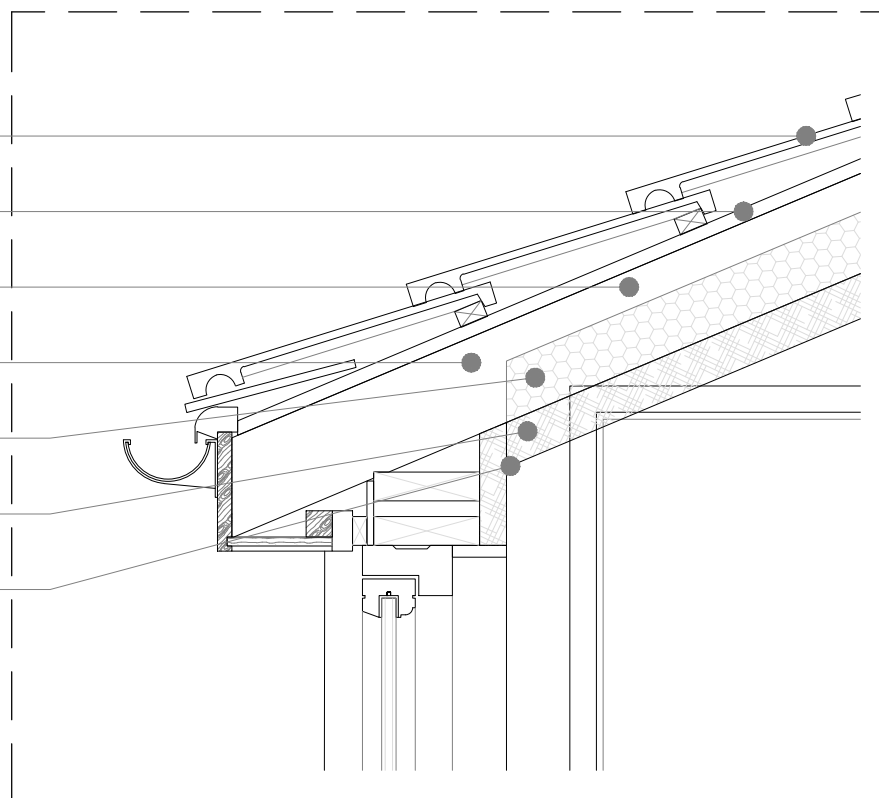
INSULATION OVER CEILING JOISTS TO BE:
TILES ON BATTENS
SARKING FELT
2x 100mm - ROCKWOOL ROLL - LAID ACROSS TOP OF JOIST
100mm - ROCKWOOL ROLL LAID BETWEEN JOIST
U-VALUE = 0,15W/m²K

DETAIL #4

SCALE: 1:10 @A1

NEW loft floor

- Min. 20mm T&G chipboard or timber board flooring
- Chicken wire to be fixed to the joists with nails or staples these should penetrated the joists side to a minimum depth of 20mm
- 150mm mineral wool with 10kg/m³ density laid between joists on chicken wire as required by building control
- Ceiling



DETAIL #1

SCALE: 1:10 @A1

Dormer Pitched Roof

Tiles on battens (Tiles for 23° pitch)

- Sarking Felt
- 50mm Ventilated Rafter Cavity
- Rafters (To structural engineer detail's)
- 75mm Insulation between Rafters
- 57.5mm Insulation under rafters
- 3mm Plaster Skim.

All to achieve minimum u-value 0.18 w/m2K