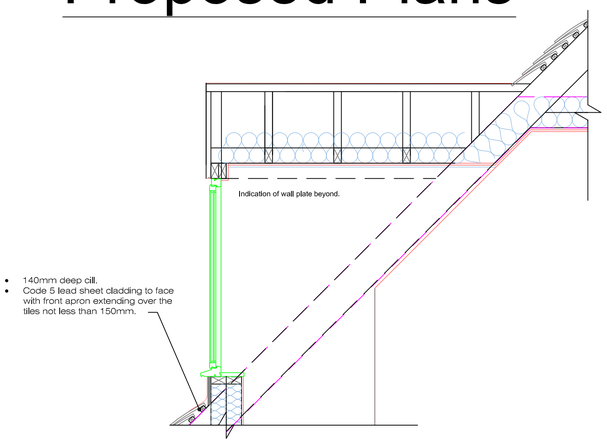
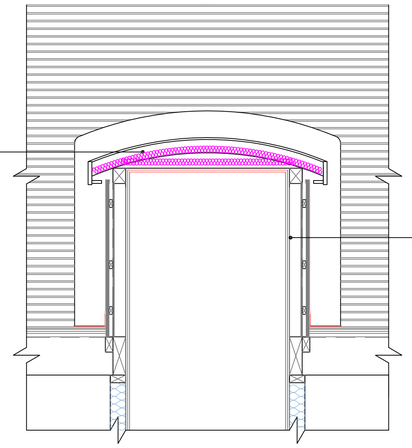
Proposed Plans



- 140mm deep cill.
- Code 5 lead sheet cladding to face with front apron extending over the tiles not less than 150mm.

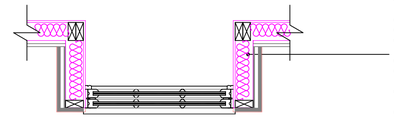
Typical Section through Dormer 1:20



- Code 5 lead sheet roof covering over dormer roof.
- Beneath lead downstands at eaves, form minimum 50mm continuous ventilated void accross roof between firrings.
- 18mm WBP plywood deck;
- Building paper membrane to BS 1521 Class A;
- Code 7 lead covering with rolls.
- Details in strict accordance with Lead Association Guidelines;
- Insulate between joists with 100mm Celotex FR5000 and beneath with 50mm Celotex FR5000;
- All joints to be sealed with self-adhesive aluminium tape to create vapour seal;
- All junction, pipework penetration and flashing details to be in accordance with Lead Association Guidelines
- Where the roof meets the roof pitch capping is bossed or leadwelded.

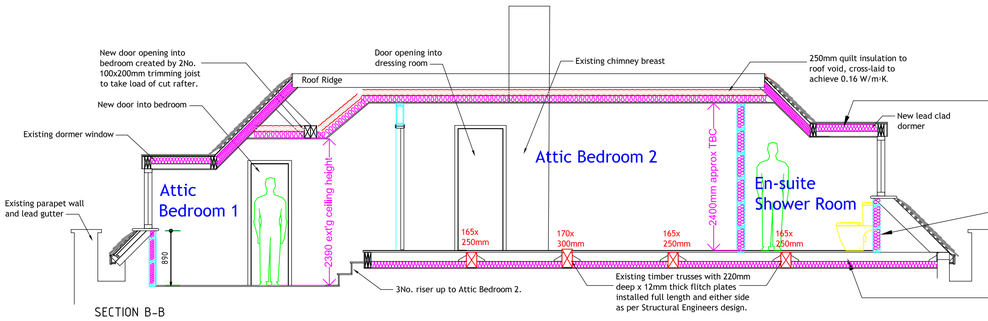
- 2 Layers of Duplex plasterboard around dormer.
- 100x50mm s/w plate (refer to section drawings for fixing height).
- 2 Layers Duplex plasterboard to vertical and sloping surfaces of dormer.

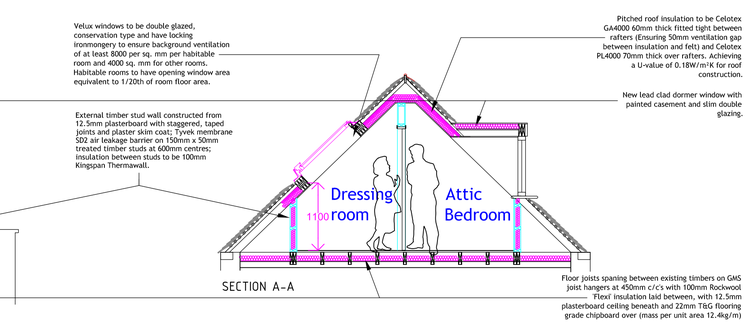
Typical Eaves and Flashing Detail to Dormer Window 1:20



- Dormer cheek clad in Code 5 lead sheet.
- 19mm WBP Plywood substrate.
- Breather paper.
- 9mm Plywood cut between studs on noggins.
- 100x50mm studwork to dormer.
- 2 Layers 12.5mm Duplex plasterboard.
- 1No 100X50mm s/w framing bearing directly onto rafters.
- Code 5 sheet lead cladding to the jambs extends to inside of the window frame.

Typical Plan through Dormer 1:20





Proposed Sections 1:50

GENERAL

The specification notes shown on the drawings are not intended to be exhaustive and are basically for the purposes of showing compliance with the Building Regulations and to indicate main specification items.

The Contractor is to visit the premises with the drawings and specification and ensure that he includes, in his pricing, for everything necessary to complete the works as shown, in accordance with current regulations and good building practice.

Materials generally are to be of the type and quality specified or such alternatives as shall be agreed with the CA / employer prior to use. Unspecified materials are to be of the best quality available and fit for their intended purpose.

All proprietary materials are to be used in strict accordance with the manufacturer's instructions and should be fit for their intended purpose.

DRAINAGE

All works shall comply with the requirements of the Building Regulations, BSCP 301 and 2005 where applicable and shall be executed to the satisfaction of the Building Inspector.

Gradients of pipes to be generally as follows:-
1:40 to all runs with no WC discharge (ie. basin / sink waste only).
1:80 minimum where at least one WC discharges.
1:100 minimum for surface water drainage.

FW drainage runs to be vented to head of run via SVPs and elsewhere via stub stacks with air admittance valves to positions as indicated on the plan.

SANITARY PIPEWORK

Discharge pipework from sanitaryware to be generally as follows - all in accordance with current Approved Documents: Part H.

All waste pipework to be in uPVC by Marley or equal approved manufacturer fitted in accordance with manufacturer's recommendations and BS5572.
All pipework to have cleaning eyes at change in direction.

Wash hand basins to be complete with 32mm diameter bottle traps with 75mm deep seals;

- WCs to have 100mm dia. traps with 50mm deep seals
- Sink(s) to be complete with 40mm diameter bottle traps with 75mm deep seals;
- Baths to be complete with 40mm diameter bottle traps with 75mm deep seals;
- Showers to be complete with 40mm diameter bottle traps with 75mm deep seals;
- Overlength / combined wastes to be 50mm diameter.
- All water pipes to roof or in other unheated voids to be lagged.
- Over-flow positions shall be provided through external walls.

STEELWORK

Protection of steelwork to be in accordance with Part B:
Generally all columns and steelwork supporting upper floors to achieve 1 hour fire resistance.
Structural steelwork passing through a compartment wall to have 1 hour intumescent paint finish to a radius of 1.5m from penetration.

Plasterboard to be fixed to softwood noggins by wedging/shot firing to steel.

UPPER FLOORS: DOMESTIC NON-SEPARATING TYPE

All floor timbers, structural or otherwise to be "tanalised" or equal approved preservative treated.

Timber joists (Grade C24) to size and centres as shown on drawings. Support joists on galvanised steel joist hangers, by Catnic or equal approved, build hangers into masonry or fix to wall plate as appropriate. If built into walls, apply 2 flood coats of green preservative treatment.

Any joists cut on site for notching or drilling to have preservative treatment also.

Spans over 2.5mm to have herringbone or solid timber strutting at mid-span and spans over 3.5m to have two rows of strutting. Joists to be 35mm clear of parallel wall faces.

Top edge joist notching for services not to exceed 30mm deep for 200mm deep joists and 26m deep for 175mm joists.

Floor decking to be 22mm thick T & G softwood boarding. All edges not coinciding with joist positions to be supported with 50 x 50mm treated softwood noggins. 10mm expansion gap is to be left at all perimeter wall abutments.

Insulate between joists with 100mm mineral fibre.

New ceilings (if required) to be formed in 12.5mm thick Gypsum plasterboard with the joints supported on 50 x 50mm treated softwood noggins where not coinciding with joists. Joints to be taped and filled prior to skim plaster coat finish.

RESTRAINTS / ANCHORS / CLIPS ETC.

Lateral restraints to be provided to first floor at 1500mm centres to be secured to 3 no. joists with solid noggins between to BAT galvanised mild steel 30x5mm section to finish flush to top of joists.

Strap restraint to be used to secure rafters to internal face of external wall at 1800mm centres, 1200mm long with twist securedwith BZP screws and plugs or Buildtex screws to blockwork (3 no.)

EXISTING ROOF PITCH

Pitched roof insulation to be Celotex GA4000 60mm thick fitted tight between rafters (Ensuring 50mm ventilation gap between insulation and felt) and Celotex PL4000 70mm thick over rafters. Achieving a U-value of 0.18W/m²K for roof construction.

VELUX CONSERVATION ROOF LIGHTS

Velux windows to be double glazed and have locking ironmongery to ensure background ventilation of at least 8000 per sq. mm per habitable room and 4000 sq. mm for other rooms. Habitable rooms to have opening window area equivalent to 1/20th of room floor area.

EXTERNAL WINDOWS - To achieve minimum U-values of 1.6W/m²K

All glazing to be in 6mm laminated safety glass (in accordance with section 1 part N and BS 6206).

Building to have opening windows minimum 1/20th of the floor area per room for rapid ventilation - please refer to Elevations.

Habitable rooms to have opening window area equivalent to 1/20th of room floor area. Other rooms should have an opening window size but this size is not dictated.

Background ventilation at the rate of 400mm²/m² floor area for occupiable rooms and 4000mm²/WC to sanitary accommodation to be provided via trickle ventilators integral to all windows.

Acoustic trickle ventilators to be used in areas at the direction of the Acoustic Consultant.

Manifestation to glazing to be provided at two levels:- 850mm -1000mm and 1400mm -1600mm. Designs to be agreed with Client as works proceed.

To upper floor bedrooms provision is to be made for means of escape windows, having minimum opening area of 0.33m² and having minimum clear opening dimensions of 450mm each way. Cill heights to be no more that 1.1m from finished floor level.

All opening casements to be weather-stripped and restricted to not project horizontally more than 100mm from wall face.

EXTERNAL PARTITION WALLS - to achieve minimum U-value 0.28W/m2K:

Timber frame construction to comprise :- 12.5mm plasterboard with staggered, taped joints and plaster skim coat; Tyvek membrane SD2 air leakage barrier on 150mm x 50mm treated timber studs at 600mm centres; insulation between studs to be 100mm Kingspan Thermawall.

INTERNAL PARTITION WALLS

Internal stud partitions formed in treated S/W sawn timbers 75x50mm @ 400mm centres between vertical studs with noggins @ 400mm centres vertically, 12.5mm plasterboard each side, taped and filled joints and plaster skim, void filled with 50mm mineral (Crown acoustic partition roll) achieving sound reduction of 40dB (RW).

All structural timbers to be tanalised or equal approved.

All timber to partitions to be restraint at head to roof structure etc.

INTERNAL DOORS DOMESTIC

Internal doors to be FD20s (with intumescent strips) in the style as agreed with the Client. Linings to be 38mm thick and width to match wall thickness. All ironmongery is to be provided of a style and finish to be agreed with the Client.

All internal doors will be 838mm wide providing a clear opening of 800mm.

Linings to be 38mm thick and width to match wall thickness.

All ironmongery is to be provided of a style and finish to be agreed with the Client.

ELECTRICAL INSTALLATION

Electrical work to comply with Part P Electrical Safety of the Building Regulations and a certificate issued upon completion as stipulated by the British Standard.

Lighting and Power Circuits:- NICEIC Approved Electrical Contractor to be employed to carry out the installation which shall comply with BS 7671.

All new switches and socket outlets etc. to be positioned at appropriate heights but between 450mm and 1100mm from floor level. Exact positions of all power outlets to be to Client's requirements and confirmed with CA.

Fire detection and alarm installation to be installed in strict compliance with BS 5839.

New lighting to be of high efficiency/low energy/LED type lamps both internally and externally.

All down lighters not to be spaced closer than 900mm centres. Any insulation around down lighters to be kept clear to allow ventilation.

Recessed light fittings shall not negate the standard of fire resistance or acoustic insulation provided by the ceiling.

Please note: Electrician to register all new works with the relevant Competent Person Scheme (eCPS) on completion in order for the completion certificate to be issued to the owner and local authority.

VENTILATION

Mechanical ventilation systems to be designed, installed and certified by an approved contractor.

All works to comply with the requirements of the Building Regulations - Part F.

Building to have opening windows minimum 1/20th of the floor area per room for rapid ventilation - please refer to Elevations.

Habitable rooms to have opening window area equivalent to 1/20th of room floor area. Other rooms should have an opening window size but this size is not dictated.

Background ventilation at the rate of 400mm²/m² floor area for occupiable rooms and 4000mm²/WC to sanitary accommodation to be provided via trickle ventilators integral to all windows.

In addition to rapid and background ventilation provision, supplementary mechanical extract ventilation is to be installed, in accordance with manufacturer's recommendations, to sanitary accommodation in accordance with Mechanical Consultant's recommendations.

All WCs to be ventilated by ceiling mounted mechanical extractor fans ducted to external air and capable of extracting at a rate not less than 15 litres per second and which may be operated intermittently.

All Bathrooms and Ensuites to be ventilated by mechanical extractor fans capable of extracting at a rate not less than 15 litres per second and which may be operated intermittently.

Mechanical extract ventilation is to be installed as manufacturer's recommendations and set to overrun by at least 15 minutes.

HEATING GENERAL

Heating all in accordance with approved document Part L1B of the Building Regulations.

All mechanical items to be tested and commissioned following completion.

The owner / occupier of the building / dwelling must be given information on the operation and maintenance of the heating / hot water systems on completion of installation - this information should comply with current Health & Safety requirements and should explain how to operate the system and what routine maintenance is advisable for the purposes of conservation of fuel and power.

Space heating to be via LST Radiators with TRVs as specified.

Bath hot taps restricted to 48˚C.

PIPE CASINGS

All pipe work, cables, plumbing are to be concealed in walls and ducts within vertical rising ducts as shown. Where agreed to be surface run they shall be boxed in with suitable softwood framework with sound deadening mineral fibre and fire-stopping and intumescent collars as necessary at at floor / ceiling positions. Clad ducts in 12.5mm plasterboard, bonding and finish. Where the surface is to be tiled useWBP ply in lieu or Aquaboard. Allow for access panels as required.

MEANS OF ESCAPE

All in accordance with Building Regulations: Part B.

Smoke alarms to be provided within dwelling as shown on drawings of self-contained mains operated type which conform to BS5446: Part 1. Alarms to be interconnected so that operation of one alarm operates all units.
System to be permanently wired to a separately fused circuit at the distribution board with wiring in accordance with IEE regulations.

Internal finishes to all rooms over 4m² to achieve spread of flame Class 1 in accordance with Building Regulations: Part B. Otherwise to achieve Class 3.

To first floor bedrooms provision is to be made for means of escape windows, having minimum opening area of 0.33m² and having minimum clear opening dimensions of 450mm each way. Cill heights to be no more that 1100 from finished floor level.

Means of escape to Second Floor / Attic rooms will be via the protected stairwell.

GENERAL GUIDANCE NOTES

Building Control Issue

NOTES:

DO NOT SCALE FROM THIS DRAWING. ALL LEVELS, ANGLES AND DIMENSIONS TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT STRUCTURAL ENGINEERS AND MECHANICAL AND ELECTRICAL ENGINEERS DRAWINGS, DETAILS AND SPECIFICATIONS.

Building Control Issue

Revisions:

A	Revisions following BC Comments	08.06.19

C-PAD
PRACTICAL ARCHITECTURAL DESIGN

Client: Mr Mitchell Colman

2 Theydon Priory
Theydon Garnon
Epping
CM16 7NU

Project: Loft Extension and Additional Windows

2 Theydon Priory
Theydon Garnon
Epping
CM16 7NU

Title: Proposed Sections & Guidance Notes

Date:	Drawn by:	Checked by:
March 2019	Cem Orhan	
Scale @ A1: 1:50	Drawing no.: C-PAD/02/19/103	Revision: A