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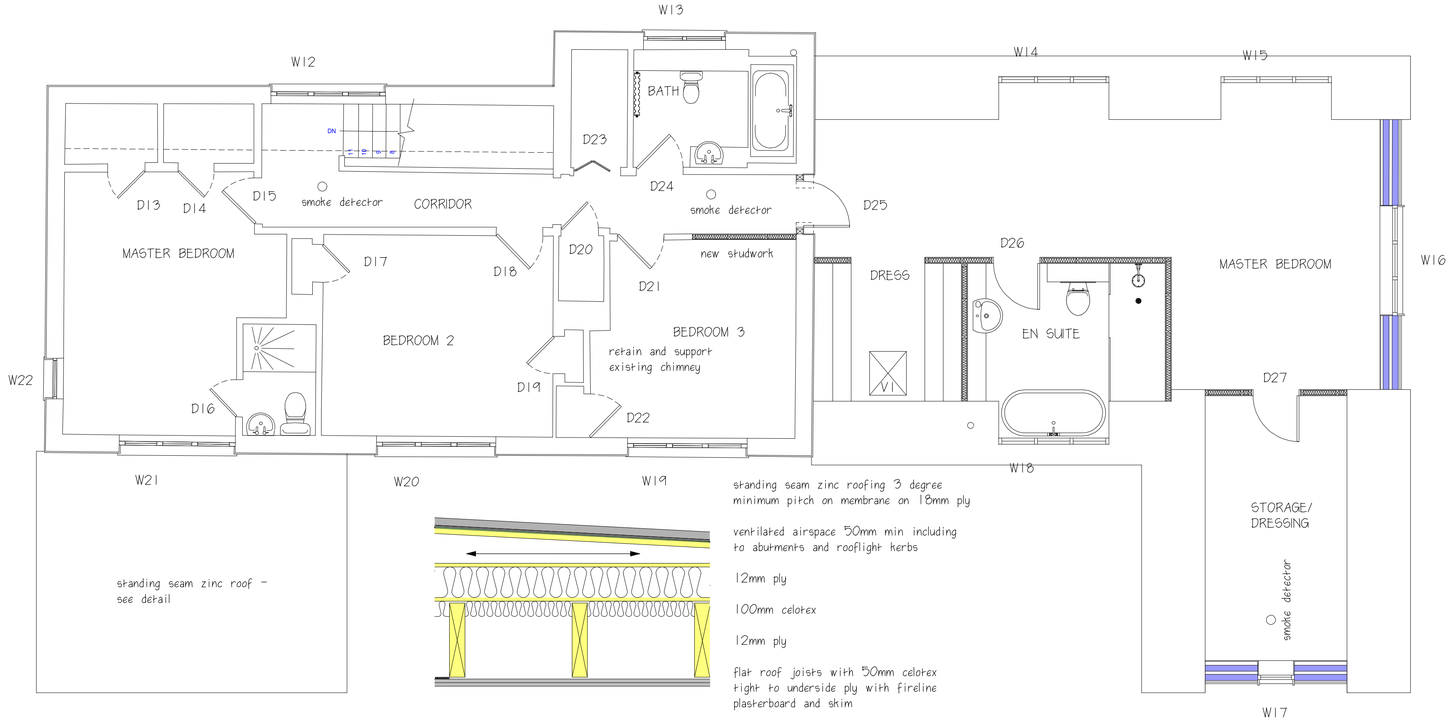
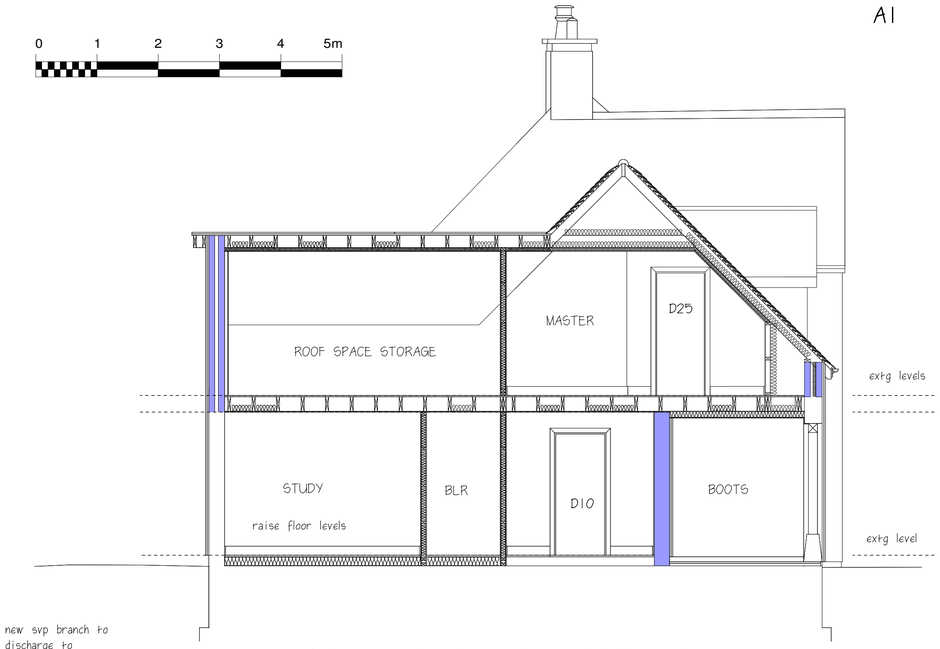
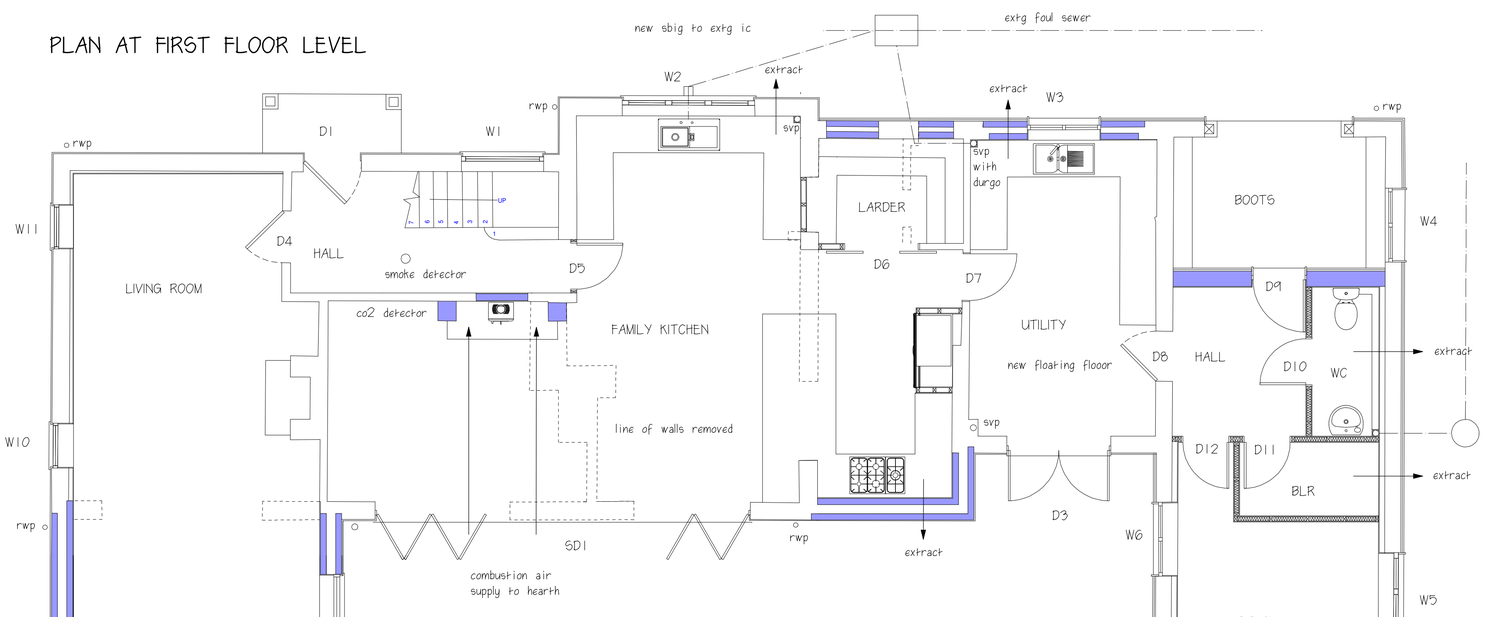
A1





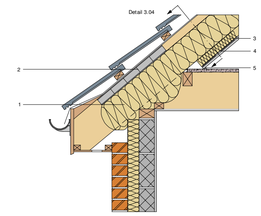
PLAN AT FIRST FLOOR LEVEL



PLAN AT GROUND FLOOR LEVEL

TYPICAL SECTION

3.03 Pitched roof. Ventilated rafter void. Eaves



Notes

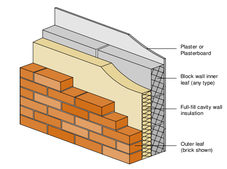
1. Tightly pack any gaps between wall insulation and roof insulation with mineral wool (or similar) to limit air leakage.
2. Use suitable cross flow ventilator and maintain 50mm (min) ventilation path over insulation.
3. Secondary insulation lining to u/s of rafter if required to achieve U-value.
4. Vapour control layer behind plasterboard.
5. Seal gap between floor and sloping ceiling.

Fire stopping may be required with some wall insulation materials.

This detail is also suitable for monopitch roofs subject to suitable ventilation provision.

This detail should be read in conjunction with detail 3.04.

3.00 Introduction



The Robust Details shown here have been developed for a range of fully filled cavity wall constructions.

For this form of construction, details are given for the junctions with a range of roof, ground floor and internal floor types, in addition to details around window openings etc.

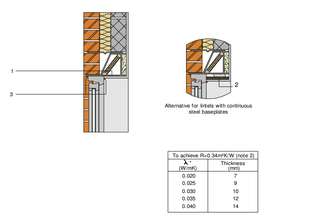
Details which apply to all wall types and guidance on air leakage are included in section 8 - 'General Arrangements'

There are many types of insulating materials and masonry products and the details here, therefore been assessed for any combination of insulation and masonry type which meets the calculated U-values given in section 1.2.3. Unless otherwise stated on the particular detail, any type of concrete block or thermal insulation material can be used providing they are suitable for their intended purpose.

Insulation thicknesses for main building elements have not generally been provided as these depend on the thermal properties of the materials chosen, together with the proposed U-value (which may vary if the Elemental Method of compliance is not followed). The thicknesses should be calculated in accordance with, or by reference to the Approved Document L1, manufacturer's listed published figures and literature, or other authoritative guidance.

All details are shown with a brick outer leaf for simplification. However, other types of masonry materials may be used as a substitution, without any loss of thermal performance or increased technical risk - such as blockwork with render, tile hanging or weather boarding. The suitability of this form of construction is dependent on the exposure of the site and the nature of the outer leaf. Further information is given in BR262 'Thermal Insulation: Avoiding Risks', NHBC Standards, and Zurich Building Guarantees Technical Manual.

3.09 Windows and doors. Lintel.



To achieve Ru-0.34m²K/W (note 2)	
λ (W/mK)	Thickness (mm)
0.020	7
0.025	9
0.030	10
0.035	12
0.040	14

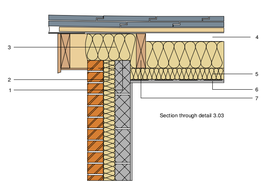
Notes

1. Perforated baseplate with effective conductivity not exceeding 30W/mK (manufacturer's certified data).
2. For lintels with continuous solid steel baseplates soffit should be lined with insulation of minimum R-value of 0.34m²K/W see table (alternative provision for trickle ventilation may be required).
3. Sealant to front and back of frame.

Seperate cavity trays may be required depending on exposure and lintel specification.

* Thermal conductivity

3.04 Pitched roof. Ventilated rafter void. Gable

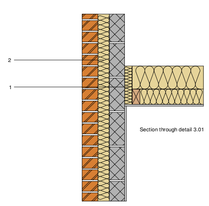


Notes

1. Level top of gable wall with mortar to correct pitch.
2. Wall insulation should be taken up level with top of gable wall.
3. Use mineral wool strip (or similar) compressed between top of gable and underside of sarking felt to prevent thermal bridge and limit air leakage.
4. Maintain 50mm (min) ventilation path over insulation.
5. Secondary insulation lining to u/s of rafter if required to achieve U-value.
6. Vapour control layer behind plasterboard.
7. Rafter.

This detail should be read in conjunction with detail 3.03.

3.02 Pitched roof. Ventilated loft. Gable



Notes

1. Place loft insulation between last truss and gable wall.
2. Continue wall insulation to top of gable or alternatively stop wall insulation 250mm above bottom of ceiling tie and insert cavity tray.

This detail should be read in conjunction with detail 3.01.

HEWLETT TURF & LANDSCAPES LTD

proposed development

at

stoney meadow

dinton

WORKING DRAWING 1

scale 1.50 date july 2023

drawing no Hd/wd/01