

**MATERIALS AND WORKMANSHIP:** ALL WORKS ARE TO BE CARRIED OUT IN A WORKMANLIKE MANNER. ALL MATERIALS AND WORKMANSHIP MUST COMPLY WITH REGULATION 7 OF THE BUILDING REGULATIONS, ALL RELEVANT BRITISH STANDARDS, EUROPEAN STANDARDS, AGREEMENT CERTIFICATES, PRODUCT CERTIFICATION OF SCHEMES (KITE MARKS) ETC. PRODUCTS CONFORMING TO A EUROPEAN TECHNICAL STANDARD OR HARMONISED EUROPEAN PRODUCT SHOULD HAVE A CE MARKING

**SITE PREPARATION & FOUNDATIONS** REFER TO GROUND REPORT PREPARED BY:

GROUND TO BE PREPARED FOR NEW WORKS BY REMOVING ALL UNSUITABLE MATERIAL, VEGETABLE MATTER AND TREE OR SHRUB ROOTS TO A SUITABLE DEPTH TO PREVENT FUTURE GROWTH. SEAL UP, CAP OFF, DISCONNECT AND REMOVE EXISTING REDUNDANT SERVICES AS NECESSARY.

PROVIDE 225MM X 600MM CONCRETE FOUNDATION, CONCRETE MIX TO CONFORM TO BS EN 206-1 AND BS 8500-2. ALL FOUNDATIONS TO BE A MINIMUM OF 1000MM BELOW GROUND LEVEL, EXACT DEPTH 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. BASE OF FOUNDATIONS SUPPORTING INTERNAL WALLS TO BE MIN 600MM BELOW GROUND LEVEL. 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.

**SUSPENDED BLOCK AND BEAM FLOOR:** THE UNDERSIDE OF BEAMS NOT LESS THAN 150MM ABOVE THE TOP OF THE GROUND. PCC BEAMS TO BE SUPPLIED AND FIXED TO BEAM MANUFACTURER'S PLAN, LAYOUT AND DETAILS (DETAILS & CALCULATIONS TO BE SENT TO BUILDING CONTROL AND APPROVED BEFORE WORKS COMMENCE). MINIMUM BEARING 100MM ONTO DPC AND LOAD BEARING WALLS. PROVIDE CONCRETE BLOCKS TO BS6073 PT.1. WET AND GROUT ALL JOINTS WITH 1:4 CEMENT/SAND MIX. PROVIDE DOUBLE BEAMS BELOW NON-LOAD BEARING PARTITIONS. LAY 1200G DPM/RADON BARRIER, WITH 300MM LAPS DOUBLE WELTED AND TAPED AT JOINTS AND SERVICE ENTRY POINTS USING RADON GAS PROOF TAPE, OVER BEAM AND BLOCK FLOOR. LAY FLOOR INSULATION OVER DPM, 75MM CELOTEX G44000 APPLIED AS A RIGID MATERIAL. LAY 500G SEPARATING LAYER OVER INSULATION AND PROVIDE 75MM SAND/CEMENT SCREED OVER AND 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 1500MM PER METRE RUN OF PERIMETER WALL OR 500MM² PER SQUARE METRE OF FLOOR AREA, WHICHEVER IS THE GREATER. SLEEPER WALLS SHALL BE OF HONEYCOMBED CONSTRUCTION OR HAVE PROVISION FOR DISTRIBUTION OF VENTILATION.

**TIMBER FRAME WALL:** TO ACHIEVE MINIMUM U VALUE OF 0.28W/M²K 102MM SUITABLE FACING BRICK WITH 50MM VENTED AND DRAINED CAVITY TIED TO BREATHABLE MEMBRANE (HAVING A VAPOUR RESISTANCE OF NOT MORE THAN 0.6 MNS/G) AND 12MM THICK W.B.P EXTERNAL QUALITY PLYWOOD SHEATHING (OR OTHER APPROVED). PLY FIXED TO TREATED TIMBER FRAME STUDS CONSTRUCTED USING 100MM X 50MM TREATED TIMBERS WITH HEAD AND SOLE PLATES AND NOGGINs AT 400MM CTRS OR TO SIENGINERS DETAILS AND CALCULATIONS. INSULATION TO BE 100MM CELOTEX G44000 BETWEEN STUDS AND 37.5MM CELOTEX PL4000 INSULATED PLASTER BOARD WITH VCL OVER. 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.

**CAVITIES:** PROVIDE CAVITY TRAYS OVER OPENINGS. ALL CAVITIES TO BE CLOSED AT EAVES AND AROUND OPENINGS USING THERMABATE OR SIMILAR NON-COMBUSTIBLE INSULATED CAVITY CLOSERS. PROVIDE VERTICAL DPCS AROUND OPENINGS AND ABUTMENTS. ALL CAVITY TRAYS MUST HAVE 150MM UPSTANDS AND SUITABLE CAVITY WEEP HOLES (MIN 2) AT MAX 900MM CENTRES.

**DPC**  
PROVIDE HORIZONTAL STRIP POLYMER (HYLOAD) DAMP PROOF COURSE TO BOTH INTERNAL AND EXTERNAL SKINS MINIMUM 150MM ABOVE EXTERNAL GROUND LEVEL. NEW DPC TO BE MADE CONTINUOUS WITH EXISTING DPCS AND WITH FLOOR DPM. VERTICAL DPC TO BE INSTALLED AT ALL REVEALS WHERE CAVITY IS CLOSED

**PITCHED ROOF:** PITCH 35° TO ACHIEVE MIN U-VALUE REQUIRED OF 0.19 W/M²K. TIMBER ROOF STRUCTURES TO BE DESIGNED BY AN ENGINEER IN ACCORDANCE WITH NHBC TECHNICAL REQUIREMENT R5 STRUCTURAL DESIGN. CALCULATIONS TO BE BASED ON BS EN 1995-1-1. CONCRETE INTERLOCKING ROOFING TILES FIXED TO TILE BATTENS SECURED OVER BREATHABLE FELT TO RELEVANT BBA CERTIFICATE ALLOWING THE BREATHER FELT TO SAG AT LEAST 10MM OVER PRESERVATIVE-TREATED BATTENS (MIN 38MM X 50MM). ROOF DETAILING AND INSULATION REFER TO FLITCRAFT LTD TIMBER FRAME DETAILS. FINISH WITH 12.5 PLASTERBOARD AND SKIM.

RESTRAINT STRAPPING - CEILING JOISTS TIED TO RAFTERS (IF RAISED COLLAR ROOF CONSULT STRUCTURAL ENGINEER). 100MM X 50MM WALL PLATE STRAPPED DOWN TO WALLS. CEILING JOISTS AND RAFTERS TO BE STRAPPED TO WALLS AND GABLE WALLS STRAPS BUILT INTO CAVITY, ACROSS AT LEAST 3 TIMBERS WITH NOGGINs. ALL STRAPS TO BE 1000 X 30 X 5MM GALVANIZED STRAPS OR OTHER APPROVED TO DSEN 845-1 AT 2M CENTRES.

**STAIRS:** DIMENSIONS TO BE CHECKED AND MEASURED ON SITE PRIOR TO FABRICATION OF STAIRS. 1200MM WIDE 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. HANDRAILS TO BE ON BOTH SIDES IF THEY ARE WIDER. BALUSTRADING DESIGNED TO BE UNCLIMBABLE AND SHOULD CONTAIN NO SPACE THROUGH WHICH A 100MM SPHERE COULD PASS.

**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:** INTERNAL ENERGY EFFICIENT LIGHT TO BE FITTED AS CALCULATED IN THE DER AND IN COMPLIANCE WITH THE DOMESTIC BUILDING SERVICES COMPLIANCE GUIDE. PROVIDE LOW ENERGY LIGHT FITTINGS NOT LESS THAN THREE PER FOUR (EXCLUDING INFREQUENTLY ACCESSED SPACES USED FOR STORAGE, SUCH AS CLOSETS). LOW ENERGY LIGHT FITTINGS SHOULD HAVE LAMPS WITH A LUMINOUS EFFICACY GREATER THAN 45 LAMP LUMENS PER CIRCUIT-WATT AND A TOTAL OUTPUT GREATER THAN 400 LAMP LUMENS. FIXED INTERNAL LIGHTING TO BE PN BASED FLUORESCENT OR COMPACT FLUORESCENT LAMPS OR LOW ENERGY BAYONET OR EDISON SCREW BASE COMPACT FLUORESCENT LAMPS.

**WATER EFFICIENCY:** WATER CONSUMPTION NOT TO EXCEED 125 LITRES PER PERSON PER DAY IN ACCORDANCE WITH APPROVED DOCUMENT G2 (OR 110L PER-PERSON IF REQUIRED BY THE PLANNING CONDITIONS). WATER EFFICIENCY TO BE CALCULATED USING THE LIST OF FITTINGS FROM THE TABLE OF FITTINGS IN APPROVED DOC. G TO COMPLY WITH PART G. THE RESULTS SUBMITTED TO BUILDING CONTROL TO ALLOW CHECKING ON-SITE.

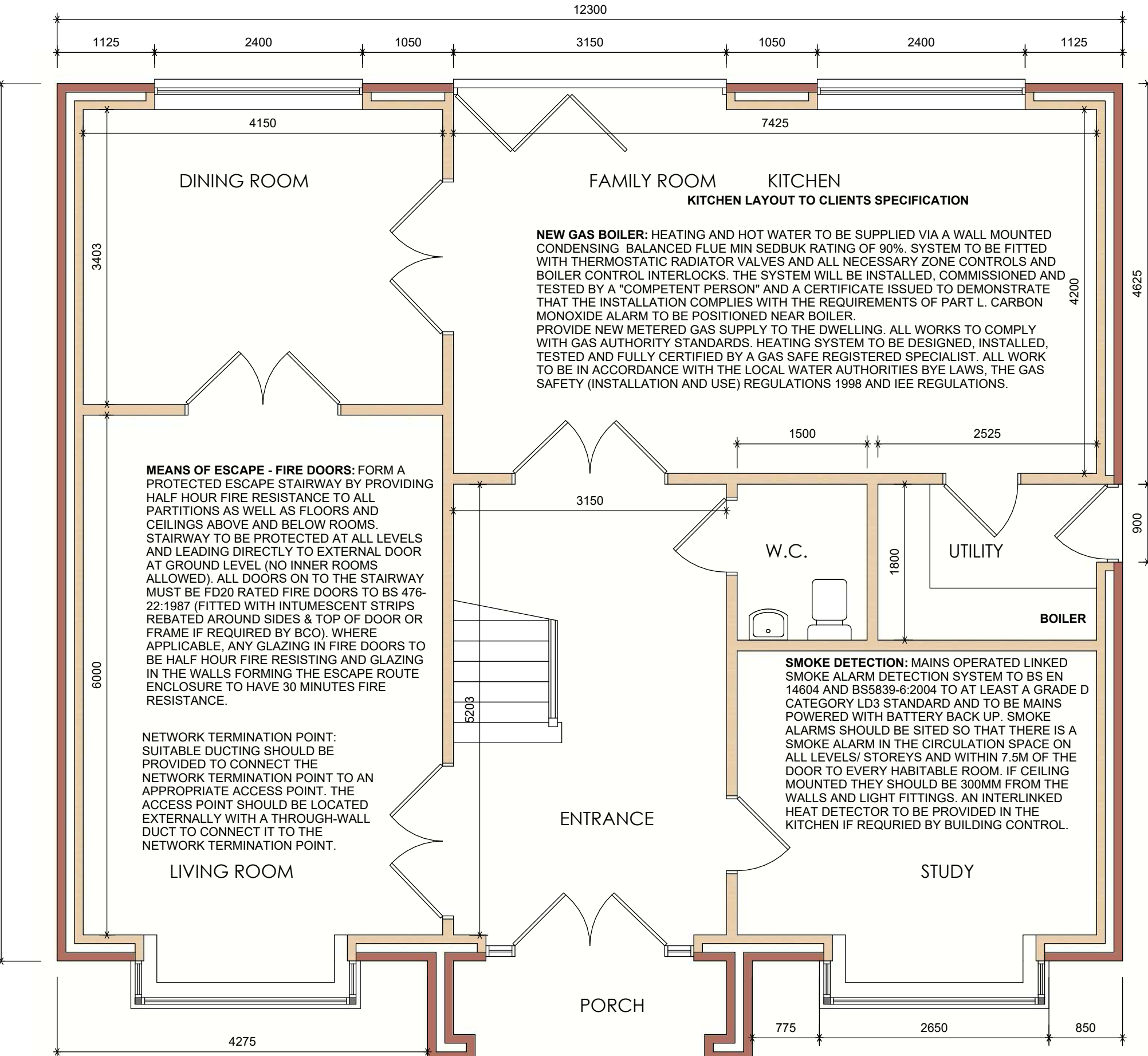
**ABOVE GROUND DRAINAGE:** ALL PLUMBING TO COMPLY WITH BS EN 12056-2:2000 FOR SANITARY PIPEWORK. ALL DRAINAGE TO BE IN ACCORDANCE WITH PART H OF THE BUILDING REGULATIONS. WASTES TO HAVE 75MM DEEP ANTI VAC BOTTLE TRAPS AND RODDING EYES TO BE PROVIDED AT CHANGES OF DIRECTION. BRANCH PIPES TO DISCHARGE INTO VENTED 100MM S&VP.

**SURFACE WATER:** PROPRIETARY PLASTIC SYSTEM MARLEY FLOWLINE OR SIMILAR TO BS EN 607 & 1220

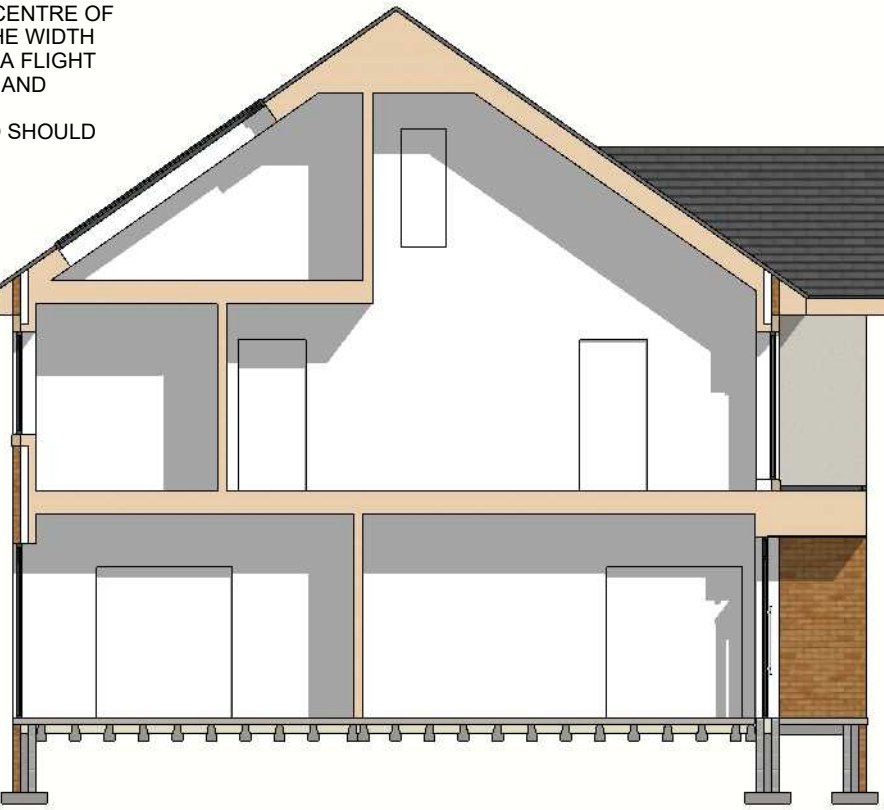
ALL EASILY ACCESSIBLE DOORSETS WHICH PROVIDE ACCESS TO A DWELLING (INCLUDING GARAGE DOORSETS) SHOULD BE SECURE DOORSETS – SECURE DOORSETS SHOULD EITHER MEET PAS 24:2012 OR ANOTHER EQUIVALENT STANDARD

**BLOCK AND BEAM FLOOR 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.

**TIMBER FRAME SYSTEM INCLUDING INNER LEAF, INTERMEDIATE FLOORS, ROOF AND INTERNAL PARTITIONS SUPPLIED AND ERECTED BY FLITCRAFT LTD. BASED ON 140MM INJECTAWALL SYSTEM.**  
REFER TO FLITCRAFTS TECHNICAL DRAWINGS AND DESIGN SPECIFICATION.

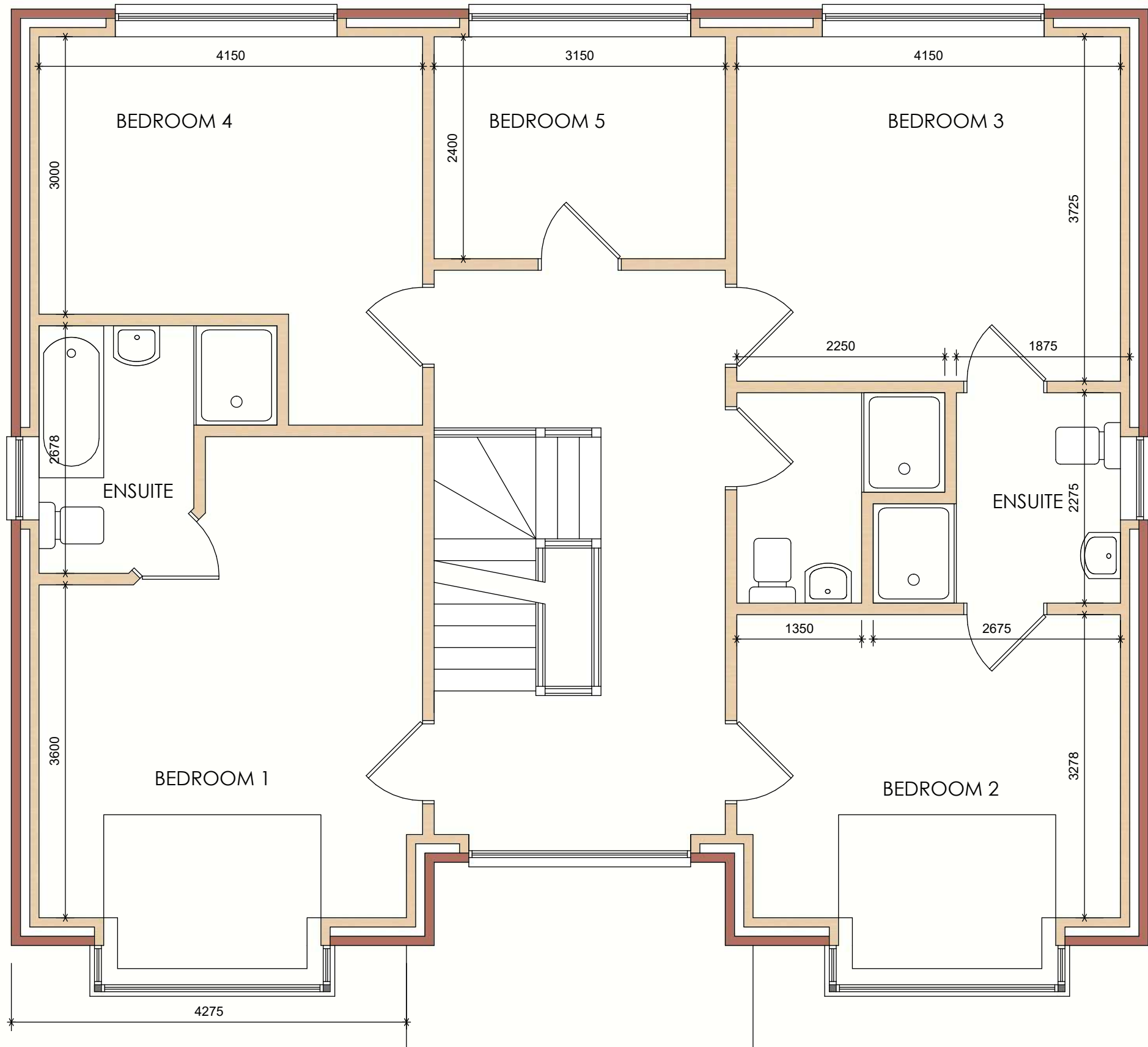


FORM LEVEL THRESHOLD TO MAIN ENTRANCE. MAX 15MM UPSTAND



**STRUCTURAL CALCULATIONS AND FOUNDATION DESIGN:**  
REFER TO DETAILS PREPARED BY PETER HIGBY AT BRIAN CLANCY HIGBY PARTNERSHIP

**BEAM AND BLOCK FLOOR DESIGN: AWAITING DETAILS**



FIRST FLOOR PLAN

A DESIGN STAGE AND AS BUILT SAP CALCULATION AND EPC WILL BE PROVIDED BY C80:SOLUTIONS LTD (ENERGY CONSULTANTS) TO DEMONSTRATE COMPLIANCE WITH APPROVED DOCUMENT L. THEY WILL ALSO UNDERTAKE AN AIR TIGHTNESS TEST ON COMPLETION.



FRONT ELEVATION



REAR ELEVATION

**WINDOWS:** 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.

**DOORS:** DOORS TO ACHIEVE A U-VALUE OF 1.80W/M²K. GLAZED AREAS TO BE DOUBLE GLAZED WITH 16MM 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 12543-1:2011 AND PART K OF THE CURRENT BUILDING REGULATIONS.



SIDE ELEVATION

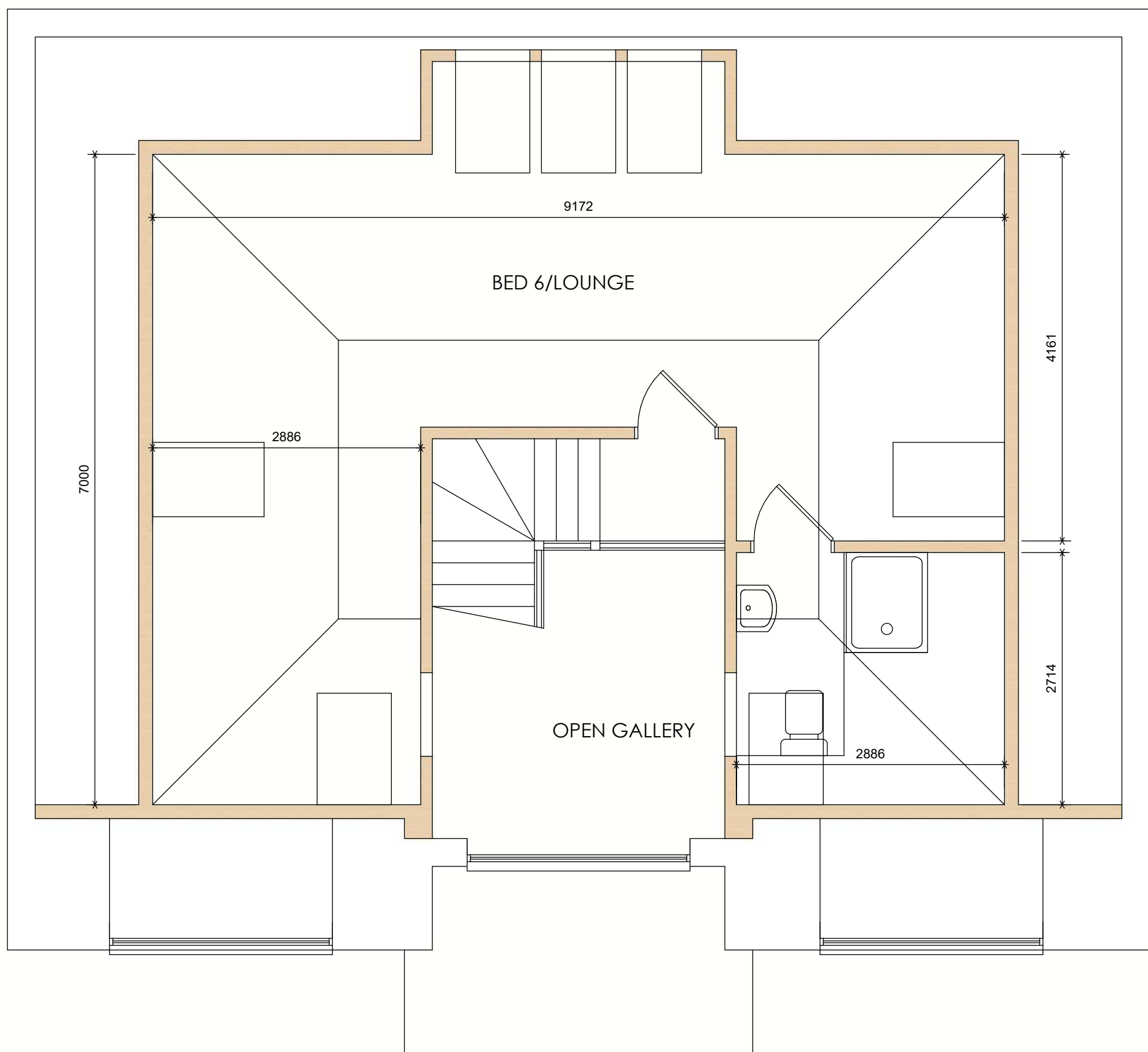


SIDE ELEVATION

**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.

**ESCAPE WINDOWS:** PROVIDE EMERGENCY EGRESS WINDOWS ALL FIRST-FLOOR HABITABLE ROOMS AND GROUND FLOOR INNER ROOMS. WINDOWS TO HAVE AN UNOBSTRUCTED OPENABLE AREA OF 450MM HIGH X 450MM WIDE, MINIMUM 0.33M SQ. THE BOTTOM OF THE OPENABLE AREA SHOULD BE NOT MORE THAN 1100MM ABOVE THE FLOOR.

**SAFETY GLAZING:** ALL GLAZING IN CRITICAL LOCATIONS WITHIN 1500MM ABOVE FLOOR LEVEL IN DOORS AND SIDE PANELS, WITHIN 300MM OF DOOR OPENING AND WITHIN 800MM ABOVE FLOOR LEVEL IN WINDOWS TO BE TOUGHENED OR LAMINATED SAFETY GLASS TO BS 6206 AND PART K



SECOND FLOOR PLAN

# PLOT 6: THE BEECHFIELD (DETACHED GARAGE)

CLIENT Mr. T. CONNOR  
PROJECT PROPOSED RESIDENTIAL DEVELOPMENT FOUR DETACHED HOUSES  
DRAWING LAND AT RAMSDEN FARM, OFF ROUNDTORN ROAD, MIDDLETON M24 1FT  
DATE 4.1.2022 SCALE 1:50 & 1:100@A1 DWG. NO: 6383\_P6

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