

SPECIFICATION NOTES:

FOUNDATIONS

Excavate and construct concrete trench fill foundations to all external walls, chimneys and internal load-bearing walls, minimum 600mm x 600mm wide - set minimum 1 metre deep below the level of any adjacent drain. Walls built up in cavity construction with lean mix concrete cavity fill to 225 mm below dpc - ensure min. 3 courses (or more if site conditions dictate) engineering brick below dpc. Viqueen Zedex dpc. or similar approved to be set minimum 150mm above external ground level comprising to BS5515 1984 to internal and external leaf. Additional dpc to be fitted min 150mm above raised ground level around Part M approach and any raised ground levels. Foundations to be placed at a depth in accordance with the recommendations detailed in the NHBC Practice Note 4.2 and to the satisfaction of the Building Inspector. NOTE: Trenchfill foundations deeper than 2.5m to be designed by Structural Engineer, when designed as such all details supersede this specification.

GROUND FLOOR

Maximum U-value 0.18W/m²K. 75mm conc. screed on 300mu. dpm. on 100mm Celotex XRA4000 or 80mm Kingspan Kooltherm K103 insulation board on Viqueen 300mu. dpm. tapped into horizontal dpc. on beam and block floor to specialist design and specification. Beams to be placed on a DPC over blockwork. Ensure 25mm insulation upstand to perimeter of floor. Provide cross ventilation to sub-floor void with telescopic void ventilators at max. 2.0m c/c tape all joints. (NOTE: Ensure cross ventilation through internal loadbearing and sleeper walls) All non-loadbearing ground floor walls to be built from beam and block floor.

WALLS

Maximum U-value of 0.18W/m²K. Externally of 350mm cavity construction comprising 100mm outer leaf of facing brickwork, 150mm fully insulated cavity and inner leaf of 100mm 3.6W/m² load-bearing Thomas Armstrong Artec Standard block thermal conductivity 0.11W/mK OR similar approved. DRI-THERM 32 or similar insulation to cavities. 250mm stainless steel Cavity ties to BS EN 845-1:2013 + A1:2016 staggered at 50mm horizontal and 150mm vertical centres. 225mm around openings. Internal finish of 12.5mm plasterboard & skim on drywall adhesive. Make allowance for movement joints @ 6.0m c/c in blockwork. @ 12.0m c/c in brickwork, in accordance with manufacturer's details, BS 5628-3, BS 6803 and Structural Engineers advice.

Internal ground floor walls of 100mm blockwork (loadbearing where indicated) with 12.5mm plasterboard and skim on drywall adhesive. Studwork partitions where indicated of 100mm x 50mm softwood framework, compressed quilt (quilt mass equivalent to 10kg/m²) and 12.5mm plasterboard (Gypsum wallboard 10 [10kg/m²] or similar approved) and skim either side.

OPENINGS

All cavities to be closed around openings with proprietary insulated cavity closers incorporating d.p.c. or blockwork & insulated d.p.c. Linets to openings to be Catic or similar with minimum 150mm and bearings with stop ends and are to be factory insulated. Linets to specialist design where indicated. Weep holes above openings at maximum 450mm centres, minimum of 2 per opening. All door openings to be fitted with a proprietary insulated cavity closer including at all level and all sealed to masonry with silicon.

WINDOWS

Maximum U-value of 1.4W/m²K. Double glazed uPVC windows, style as indicated, with 16mm argon filled air gap and a low-E coating to inner pane. Energy rating band B. All new windows to be fitted with trickle vents set min 1700mm above floor level. Refer to background ventilation note for specific areas. Purge ventilation, top hung or pivot windows with an opening angle between 15 & 30 degrees 1/10th floor area of the room operable area, opening angle greater than 30 degrees, sash windows and doors 1/20th floor area of the room operable. Provide draught seals to all windows, doors and rooflights. All habitable rooms are to have egress windows with a clear egress opening of 0.33m², min 450mm wide by 1500mm high, with the sill height 1100mm above FFL. First floor windows with a sill height less than 800mm above FFL are to have a guard rail minimum 900mm above FFL. OR be fitted with restrictors. Controls for all operable windows and skylights are to be located so that they may be opened, closed or adjusted safely. All windows to be mechanically fixed to the building structure.

ROOFLIGHTS

Maximum U Value 2.2W/m²K. Velux, Kaylite or similar installed with flashing kit to suit roof covering, glazed with 15mm double glazed unit G value 0.46 argon filled. Outer pane 4mm toughened glass, inner pane laminated float with low E coating.

GLAZING

Glazing to all doors and sidelights less than 1500mm above FFL, glazing within 300mm horizontally of doors and glazing less than 800mm above FFL are to be either laminated or toughened glass to BS6206:1991 + BS EN 12602:2002

EXTERNAL DOORS

Maximum U-value 1.4W/m²K. Timber doors and frames. Style as shown. Bi-fold / sliding doors, aluminium doors and frames, double glazed with 16mm argon filled air gap and a low-E coating to inner pane. External doors >90% glazing Band B & C Other external doors band B & B.

STEELWORK

Steel work & padstones as indicated to Structural Engineer's details and calculations. All exposed steelwork to be encased in plasterboard and skim to achieve a minimum 12 hr fire resistance either 2 layers 12.5mm plasterboard or 1 layer 15mm firecrete board and skim plaster finish. Alternatively apply intumescent paint to manufacturers specification ensure primer is compatible. Any steel fixed below ground to be treated with 2 coats bituminous paint R/W or similar approved, also in any hidden / concealed location cavity wall apply 2 coats R/W. All in accordance with British Steel handbook - 'The prevention of corrosion of structural steelwork'.

FIRST FLOOR

New floor of 22mm moisture resistant chipboard on either proprietary floor joists to specialist design including trimmers, stops, bradings and strong backs. Or softwood structural grade floor joists as specified, with membrane strutting 1/2 span from 2.5m to 4.5m & 1.0 & 2.0 of span where span of joists exceeds 4.5m) with 100mm mineral wool insulation (min 10kg/m²) laid between joists in accordance with Part E. Joists doubled up to form trimmers to landings, beneath baths and studwork partitions. Lateral restraint to walls / floors via 30mm x 5mm mild steel straps at maximum 1800mm centres. 15mm plasterboard or Gyproc wallboard 10 [10kg/m²] and skim coat to form ceiling. All joists bearing on external walls to be supported on jost hangers or to be built in and sealed in compliance with the DTI/R 'Roofing Details' publication. Where jost hangers are to be used full restraint hangers to comply with BS EN 845-1:2013 + A1:2016 should be adopted and should be clearly marked on the underside of the joist flange with the min. crushing strength of the block for which they are intended to be used. The type and size of hanger must be selected to suit the span and dimensions of the joists to be supported, and should be built-in in accordance with the manufacturers details securely held in place with a sufficient height of masonry above. (The above flange masonry should be allowed to mature adequately before hangers are loaded) Provide solid timber blocking to jost bearing ends.

STAIRCASE

Width of staircase and landings to be minimum 900mm, maximum pitch 42 degrees, minimum headroom of 2 metres above pitch line, hand rails minimum 900mm high, 100mm maximum spacing to balustrading. Maximum rise 220mm, minimum going 220mm. Minimum 50mm going on tapered treads at newel. Structural newel and bearing where required by engineers design. All staircase dimensions to be confirmed with stair manufacturer prior to commencement.

ROOF - VENTILATED

Maximum U-value 0.15W/m²K. Roof covering as specified on 3850mm x 25mm Type A imported timber battens at appropriate centres on Tyvek Supro or similar breather membrane. Additional battens to all unrestrained felt overlaps. Nail all tiles/lates to roof. All fixings to be in accordance with tile/slate manufacturers recommendations and instructions. Ridge ties to be mechanically fixed dry ridge system. Roof void ventilation to be incorporated in all cases, to be 5mm continuous @ ridge, with 10mm @ eaves with insulation at ceiling level, or 25mm @ eaves with insulation at rafter (sloping ceiling) level. All roof works to be carried out in accordance with BS5534:2014 + A2:2018. Trusses - Prefabricated roof trusses by specialist at 800mm centres, designed, erected and braced strictly in accordance with BS EN 1995-1:2004 & A2:2014. Roof areas insulated at ceiling level to receive 100mm fireglass quilt insulation laid between ceiling joists & counter laid with 1 layer 200mm fireglass quilt insulation over. Underdraw ceiling joist with 125MU polythene vapour control barrier & 12.5mm plaster board and plaster skim, or underdraw ceiling joist with 12.5mm foiled back plaster board and plaster skim finish. Sloping ceilings to receive 1No. layer 150mm Kingspan K107 Pitched Roof Board between rafters with minimum 50mm clear air gap over to underside of roof felt with 1No. layer 50mm Kingspan K107 Pitched Roof Board (with taped joints) and plasterboard finish fixed to u/s of rafters. 12.5mm plaster board and plaster skim ceiling.

Vertical studs (min 125mm thickness) within attic truss design to receive 100mm Celotex GA4000 between studs and fix 40mm Celotex GA4000 to the face of studs with plasterboard and skim to achieve U-value of 0.18W/m²K. Dormers of Code 4 lead on 12mm plywood, 120mm Celotex GA4000 insulation (with taped joints) between 125mm x 50mm softwood framework with 30mm Celotex TB4000 (with taped joints) and 12.5mm plaster board and skim fixed internally. Code 4 lead flashing to roof / junctions and abutments, and code 5 lead flashing to valleys in accordance with guidance from Lead Sheet Association, and BS EN 12588.

NEW ROOF AREAS ABUTTING EXISTING CAVITY WALLS

Where extension roof meets existing external cavity walls incorporate new cavity tray into existing wall terminating minimum 75mm above highest point of roof pitch it abuts wall. Provide weep holes at 450mm centres. Cavity tray to laminate above lead flashing.

DRAINAGE

New foul and storm drains with outlet as site plan in 110mm below ground plastic pipes. Bed and surround in pea gravel at minimum 1 in 50 falls. Cast iron covers and frames to chambers. All drains passing under slabs to be surrounded in 150mm concrete including granular surround. Pre-cast concrete lintels to all wall openings where drains pass through.

PLUMBING

110mm slab stacks and S/P's to have rodding eye and access point at base. Air admittance valves to slab stacks to be installed above level of adjacent w.c. pan, any encasing or boxing to be ventilated to the room. S/P's to be wrapped in insulation until prior to boxing. Boxing to consist of 12.5mm plasterboard and skim on min 38x38mm softwood framework. Pipes passing through garages to be double boarded or fitted with an intumescent fire collar. Sink, Bath and Shower 40mm waste and 76mm trap. Wash Basin 32mm waste and 76mm trap. W.C. and Cistern 100mm branch connection. All above ground drainage to comply with BS EN 12056-2. Re-sealing traps where applicable. Head of drainage run to be vented via soil and vent pipe, minimum 900mm above any adjacent opening and terminated with bird proof cowl.

RAINWATER GOODS

New rainwater goods to match existing.

BACKGROUND VENTILATION

All new windows and when replacing existing windows provide background (trickle) ventilation as below:- Minimum 8000mm² to all habitable rooms. 8000mm² to Kitchens. 4000mm² Bathrooms with external walls). All internal doors are to have a 10mm undercut. Ensure all new windows incorporate trickle vents at min 1700mm above floor level.

EXTRACT VENTILATION

Mechanical ventilation is to be installed: Kitchen extractor fan capable of 60 l/s, or cooker hood capable of at least 30 l/s. Utility extractor fan capable of 30 l/s. Bathroom / En-suite / WC extractor fan capable of 15 l/s. Internal Bathroom / En-suite / WC extractor fans to have 15 minute over run & connected to light via separate isolation switch. Air flow testing to be carried out to all cooker hoods, intermittent extract fans and continuous inlet and extract fans and terminals. Certification of performance required on completion. All ducts to be in rigid pipework where possible & insulated where passing through roof voids. Full details of any new ventilation systems to be left with the owner.

SMOKE & HEAT ALARMS

Smoke alarms where indicated to be inter-connected and mains wired with emergency battery back-up supply. To be minimum 300mm from electrical fittings and maximum 7.5 metres from any adjacent habitable room door. All to comply with BS EN 14604 & installed to BS 5838-6 & A1:2020. (min. Grade D, Cat. LD3). Large dwellings More than 1 storey & 1 storey exceeds 200sq m (min Grade B Cat. LD3). Heat alarms mains operated and to conform to BS 5446-2.

CARBON MONOXIDE ALARM

Carbon monoxide alarms to be fitted in all rooms with a solid fuel appliance. Alarm should comply with BS EN 50291-1:2018 and be powered by battery designed for the working life of the alarm. The alarm should incorporate a warning device to alert users when the working life of the alarm is due to pass. Alternatively, a mains powered Type A alarm to BS EN 50291 with fixed wiring (not plug-in type) may be used provided they are fitted with a sensor failure warning device.

BUILDING REGULATIONS PART P

ELECTRICAL SAFETY

All electrical work must be designed, inspected and tested by a person competent to do so and comply with the Electricity At Work Regulations 1989 as amended. Installation to comply with the Electrical Safety, Quality & Continuity Regulations 2002. Installation to be tested before being taken into service and to comply with BS7671:2018 & A2:2022 and certification to be provided.

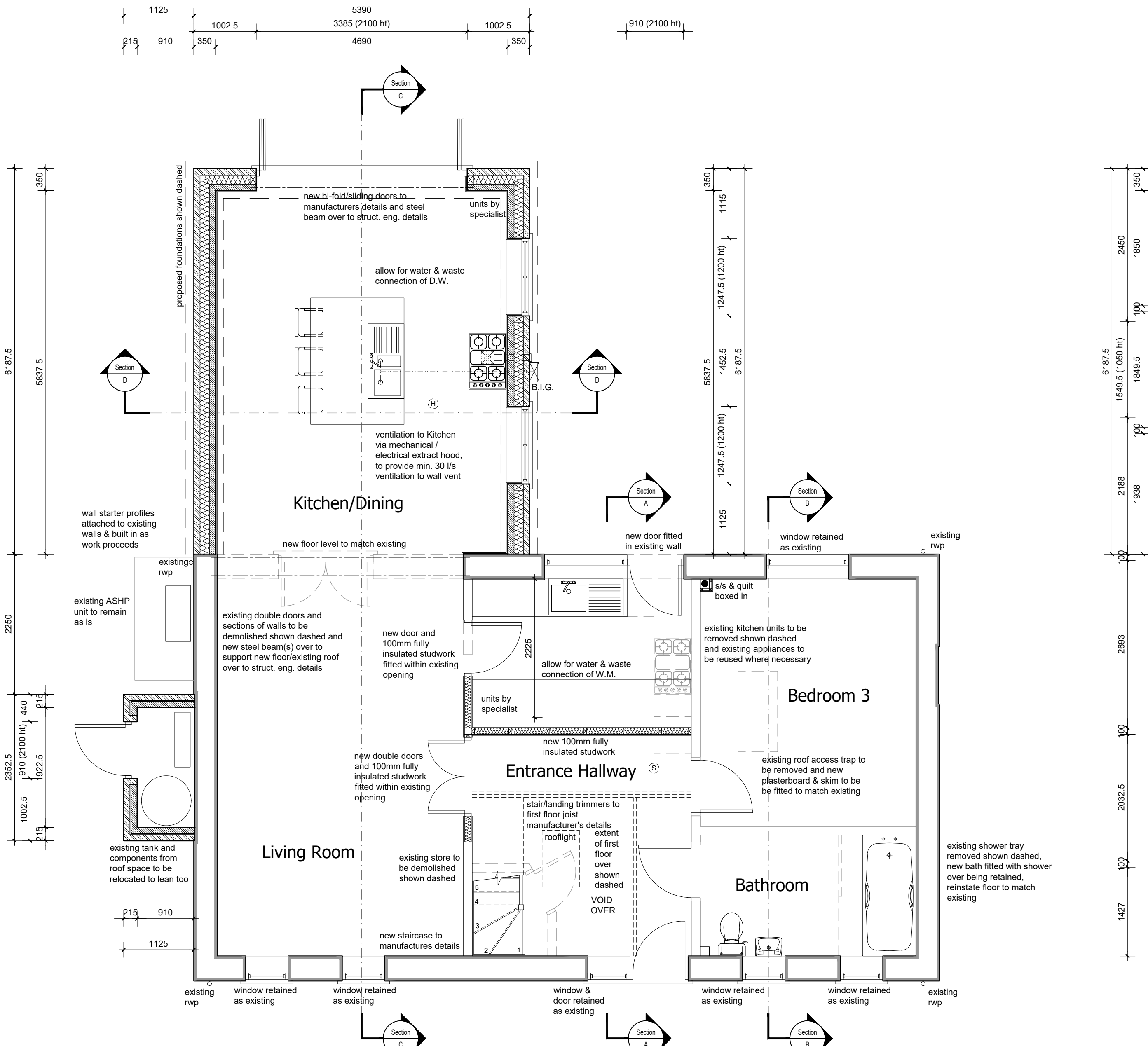
LIGHTING EFFICIENCY

Any fixed lighting should achieve lighting levels appropriate to the activity in the space and spaces should not be over illuminated. Each internal light fitting to have lamps with a minimum luminous efficacy of 75 light source lumens per circuit watt. Internal light fittings to have local controls to allow for the separate control of lighting in each space or zone, controls may be manual automatic or both. Fixed external lighting should have both the following controls:- Automatic controls which switch off luminaires in response to daylight or if luminous efficacy is 75 light source lumens per circuit watt or less than a PIR detector should control, if the luminous efficacy is greater than 75 light source lumens per circuit watt then manual control is acceptable.

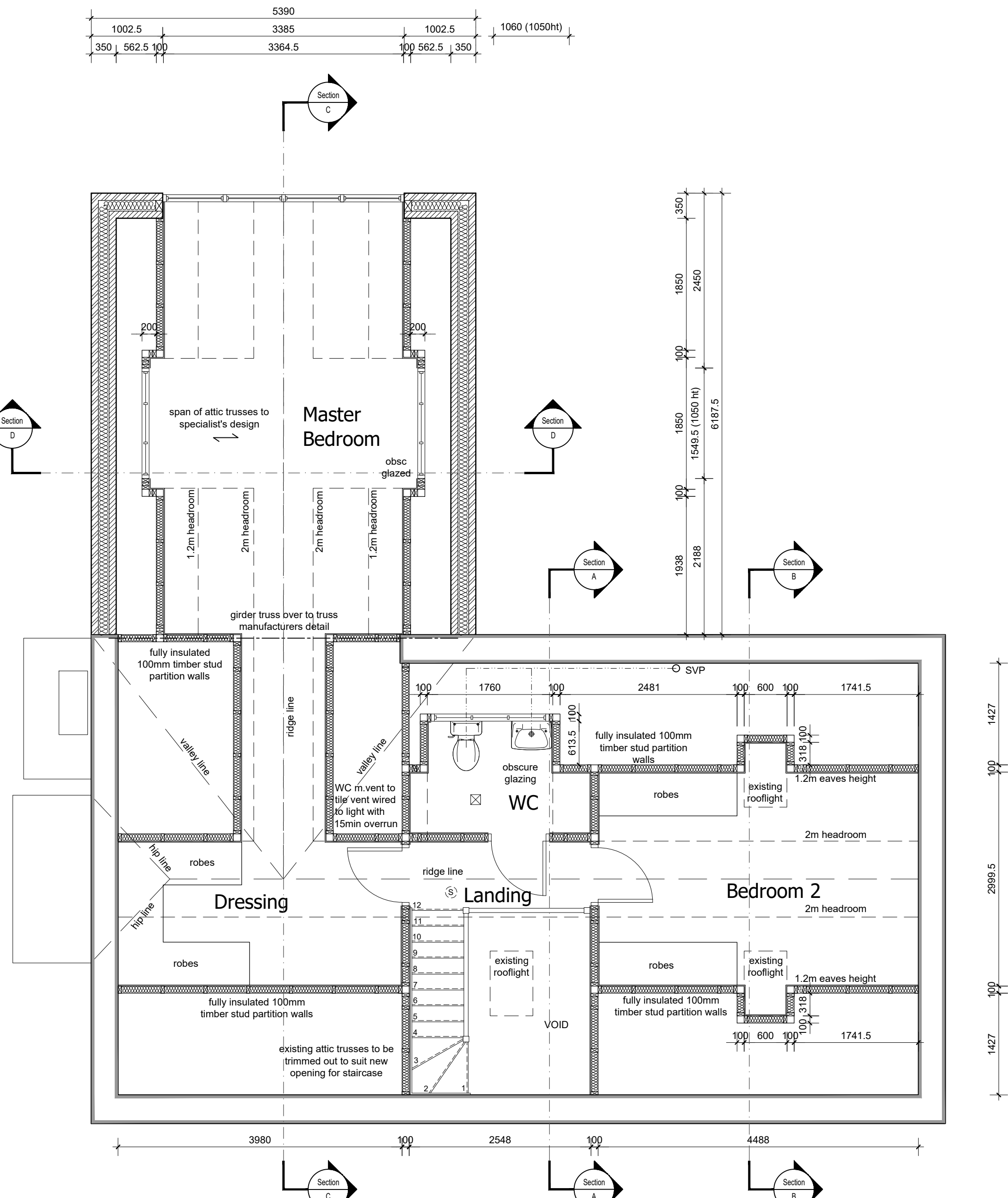
Reasonable provision of efficient light fittings in new buildings to number not less than 100% of total fittings to the dwelling. Fixed lighting capacity (lm) 185 x total floor area. Efficient light fittings are those that only take lamps having a luminous efficacy of 80 lumens per circuit watt.

External lighting system to include:

Automatic extinguisher when there is enough daylight, and when not required at night. OR have sockets that can only be used with lamps having an efficacy greater than 80 lumens per circuit watt (such as fluorescent or compact fluorescent lamp types, and not GLS tungsten lamps with bayonet cap or Edison screw bases).



Ground Floor Plan
Scale 1:50



First Floor Plan
Scale 1:50

B CW 29.10.25 Dormer window made wider				
A CW 25.09.25 Dormer window added to WC & Stair Layout Change				
Rev	By	Date	Details	Chkd
Drawing Status		Construction		
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Project Bluebell Cottage, Nailstone Nuneaton, CV13 0QG				
Title Technical Drawings Specification & Floor Plan				
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