

TIMBER FRAME WALL

To achieve minimum U Value of 0.18 W/m²K  
Timber cladding fixed to 25 x 38mm preservative-treated battens (provide counter battens to ensure vented and drained cavity if required) fixed to breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) and 12mm thick WBP external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using: 150mm x 50mm head & sole plates and vertical studs (with noggins) at 400mm ctrs or to s/engineer's details & calculations. Insulation to be 150mm KINGSPAN KOOLTHERM K112 between studs. Provide vcl and 12.5mm plasterboard over 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.  
Walls 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 and timber cladding to be treated with Fire Retardant Coating for Timber (ESVFR & QVFR) or similar paint system to achieve class 0 and 1 EU SBI/BS1/40.

WALLS BELOW GROUND

All new walls below ground to be constructed using blockwork compliant with BS EN 771 and suitable for below ground level or semi engineering brickwork. Walls to be built using 1:4 masonry mortar mix or equal approved specification to BS EN 1996-1-1. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.

DPC

Provide horizontal strip polymer (hylodax) damp proof course to both internal and external skins. DPC to be placed a 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.

CAVITIES

Provide cavity trays over openings and where roofs abut walls. 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.

CAVITY BARRIERS

30 minute fire resistant cavity barriers to be provided around openings, at tops of walls, gable end walls, vertically at junctions with separating walls and horizontally at separating floors. Cavity trays to be provided over barrier where required. Trays and cavity barriers to be installed according to manufacturer's details.

PITCHED ROOF INSULATION AT CEILING LEVEL

Pitch 22-45° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)

To achieve U value of 0.11 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 1995-1-1:2004 Eurocode 5: Design of timber structures (+A2:2014). Suitable roofing tiles on 25 x 38mm tanalised sw treated battens on breathable felt supported on 47 x 195mm grade C24 rafters at max 400mm centres, max span 4.69m. Rafters supported on 100 x 50mm sw wall plates. Insulation at ceiling level to be 100mm Rockwool insulation laid between ceiling joists with a further 300mm layer over joists (cross direction). Construct ceiling using sw joists at 400mm centres, finished internally with 12.5mm plasterboard and min 3mm thistle multi-finish plaster. Provide polythene vapour barrier between insulation and plasterboard.  
Where required provide opening at eaves level at least equal to continuous strip 25mm wide on two opposite sides to promote cross-ventilation and provide mono pitched roofs with ridge/high level ventilation equivalent to a 5mm gap via proprietary tile vents spaced in accordance with manufacturers details.  
Restraint strapping - 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 1200 x 30 x 5mm galvanized straps or other approved to BS EN 845-1 (+A1:2016) at 2m centres.  
Loft hatches should be suitable designed and installed to ensure optimum air tightness.

INTERNAL STUO PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm c/c. Provide min 10kg/m² density acoustic soundproof quilt tightly packed (e.g.100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions to be built off doubled up joists where partitions run parallel or provide noggins where at right angles, or to be built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plasterboard with skim plaster finish. Plasterboard to be taped and jointed complete with beads and stops.

AIR SOURCE HEAT PUMPS (ASHPs)

External pipework between the dwelling and the ground heat exchanger should be insulated following the TIMSA guidance. Pipe sizes should be in accordance to manufacturers recommendations.

The load-bearing capacity of surface to take the heat pump, hot water cylinder and thermal store (where fitted) equipment to be assessed and access for maintenance should be provided. Increase the rating of the mains electrical power supply if required to accommodate the electrical current drawn by the heat pump. Fix permanent labels and flow arrows to pipework, valves, etc. Where the heat pump is to be backed up by another heat source, the control of that source must be interlocked to ensure that it can never operate as the priority or lead' device.  
Ensure that the system is commissioned properly and tested for correct operation by a member of the Microgeneration Certification Scheme.  
All electrical work to be undertaken by a Part P registered Electrician i.e. NAPIT, ELECSA and NICEIC.  
Installation to be BS EN 14511: Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling (4 parts). BSI 20.  
Provide operating instructions and maintenance recommendations for the homeowner.  
Health and safety Care should be taken to address all issues, including: the risk of Legionnaires disease.

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 within the dwelling primary energy rate and dwelling emissions rate for account for the efficacy of lamps.  
Provide low energy light fittings lamps with a luminous efficacy better than 80 lamp lumens per watt. All fixed lighting to have lighting capacity (lm) 185 x total floor area.

CLADDED WALLS

Where a wall has a surface material that is worse than class B-s3,d2 and is more than 1mm thick, the unprotected area for the wall is divided in half and the rest of the wall remaining is to be provided with Gyproc Fire-Line board from the inside only.

DOORS

Doors to achieve a U-Value of 1.6 W/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 EN 12600:2002, 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.

WINDOWS

Windows to be double glazed with argon filled gap and with a soft coat low-E glass. Window Energy Rating to be Band A or better and to achieve U-value of 1.6 W/m²K. 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.

EXTRACT FOR SHOWER ROOM

Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 l/s. Vent to be connected to 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. 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 TO WC

WC to have mechanical ventilation ducted to external air with an extract rating of 6l/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. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. 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 TO KITCHEN

Kitchen to have mechanical ventilation with an extract rating of 60 l/s or 30 l/s if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. 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.  
Height of Cooker hood to be as manufacturers specification or between 650mm and 750mm.

BACKGROUND VENTILATION - BY CONTRACT DESIGN

Controllable background ventilation at least 1700mm above floor level to be provided to habitable rooms and kitchens at a rate of min 10,000mm², and to bathrooms at a rate of min 4000mm².

Total number of ventilators installed in a dwellings habitable rooms to be at least 4 ventilators for one bedroom dwellings and 5 ventilators for dwellings with more than one bedroom. Background ventilators to be tested to BS EN 13141-1. Background ventilator equivalent area and operation to be measured and recorded.  
Noise attenuating background ventilators should be fitted to facades with sustained loud noise.

PITCHED ROOF VENTILATION

Maintain a 50mm air gap above insulation in the roof pitch 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.

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 Authority approval), filled with suitable granular fill and provided 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 pipework 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 (+A1:2023).

REGULATIONS 26, 26A AND 26C ENERGY PERFORMANCE (SBEM)

The below to be submitted to building control before the work starts:  
- Target primary energy rate and the dwelling primary the emission rate.  
- The target emission rate and the dwelling emission rate.  
- The target fabric energy efficiency rate and the dwelling fabric energy efficiency rate.  
- A list of specifications to which the dwelling is constructed.

No later than 5 days after the work has been completed, drawing control to be provided with:  
- The as-built target primary energy rate and as-built dwelling primary energy rate.  
- The as-built target emission rate and as-built dwelling emission rate.  
- The as-built target fabric energy efficiency rate and as-built dwelling fabric energy efficiency rate.  
- A list of specifications used in the design stage calculations.

All to be calculated using SBEM FOR COMMERCIAL BUILDINGS

BREL report to be given to building control along with photographic evidence of compliance. Energy Performance Certificate (EPC) accompanied by a recommendation report in compliance with Regulation 29, is to be given to the owner of the building and submitted to building control, no later than 5 days after the work has been completed.

REGULATION 43 - AIR PRESSURE TESTING

Air pressure test to be carried out. Certificate to be given to building control by a person who is registered by Elmhurst Energy Systems Limited or the Air Tightness Testing and Measurement Association. Air pressure tests to be performed following the guidance in the Approved Airtightness Test Methodology CIBSE TM23. The measured air permeability to be not worse than 5 m³/(h.m²) at 50 Pa.  
Certificate to be given to building control, then remedial measures should be undertaken and a new test carried out until satisfactory performance is achieved. The results of all pressure tests, including any test failures, should be reported to building control. A copy of the test results to be sent to building control no later than 7 days after the test has been carried out.

REG 40 AND 40A PROVIDING INFORMATION

On completion of the works the owner of the dwelling shall be provided with:  
- Information about the fixed building services and on-site electricity generation and their operating and maintenance instructions, including timing and temperature control settings, and a Home User Guide.  
- A recommendations report generated with the on-construction energy performance certificate.  
- A signed copy of the Building Regulations England Part L compliance report (BREL).  
Information to be easy to understand and in an accessible format.

CONTINUITY OF INSULATION AND THERMAL BRIDGING

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, i.e. around windows and door openings. The building fabric to be constructed so that the insulation is reasonably continuous across newly built elements. Drawings to be provided for junctions to prevent thermal bridging, guidance in Building Research Establishment's BR 497 or other independently assessed thermal junction details to be followed. Before elements are concealed, photographs of the details and an on-site audit to be undertaken to confirm that the designed details have been constructed in line with the guidance in Appendix B of Approved Document L.

REG 44 AND 44ZA – COMMISSIONING OF FIXED BUILDING SERVICES

All fixed building services to be commissioned and a Person Self Certification Scheme to be produced identifying:  
- Systems that need to be tested.  
- How these systems will be tested.  
Commissioning plan to be given to the building control body with the design stage dwelling primary energy rate, dwelling emissions rate and dwelling fabric energy rate calculation. At completion a commissioning certificate to be given to the building control body confirming that the commissioning plan has been followed and that all systems have been inspected and conform with the design requirements.

SYSTEM CONTROLS AND ZONING

Domestic hot water circuits to have:  
- Time control that is independent of space heating circuits.  
- Electronic temperature control.  
Each room or agreed zone should be provided with thermostatic room controls.  
Dwellings with a floor area of 150m² or greater to have a minimum of two independently controlled heating circuits.

LIMITING HEAT LOSSES AND GAINS

In accordance with Table 4.4 Approved Document L Insulation to be provided to:  
- Primary circulation pipes for domestic hot water.  
- Primary circulation pipes for heating circuits where they pass outside the heated living space and voids.  
- Pipes connected to hot water storage vessels or cold growth. Account to be taken of the buildings form and orientation in relation to topography, prevailing winds, sunlight and over-shadowing, and the rate at which humidity is generated.  
Materials with the highest vapour resistance should be located on the warm side of a thermal element. VCLs to be provided where necessary.  
The junctions between elements are designed to Accredited Construction Details or guidance of BRE (P17/01) and BS 5250:2021 Management of moisture in buildings to be followed.

AIR TIGHTNESS

Drawings to be provided which identify the position, continuity and extent of the air barrier.  
Incoming and penetrating services, ducts and cables, wherever possible, to be grouped to minimize how often the air barrier is penetrated. Grommets or flexible collars to be used around flexible services and sealed to the air barrier with air-sealing tape or sealant.

APPENDIX B: REPORTING EVIDENCE OF COMPLIANCE

BREL report  
The Building Regulations England Part L (BREL) report and photographic evidence to be provided to building control and to the building owner.  
Photographs to show thermal continuity and quality of insulation to be made available to the energy assessor and building control of the following details:  
• At ground floor perimeter edge insulation  
• At external door threshold  
• Below damp-proof course on external walls  
• Ground floor to wall junction  
• Structural penetrating elements  
• Joist/rafter level  
• Eaves and gable edges  
• Window positioning in relation to cavity closer or insulation line  
• External doorset positioning in relation to cavity closer or insulation line  
• Air tightness details where required  
• Plant/equipment identification labels, including make/model and serial number  
• Continuity of primary pipework and continuity of insulation  
• Mechanical ventilation ductwork continuity of insulation (for duct sections outside the thermal envelope)  
Each image file name to confirm location, date and time. Plot number and detail reference to be shown on image.

BUIDLING APPROACH

The approach route to the building to have a suitable ground surface. Roadways to be level, gently sloping or where necessary ramped. Minimum clear width to be 900mm, or 750mm where there are localised obstructions. Obstructions should not occur opposite or close to a doorway, or at a change of direction and are to be no longer than 2m in length. Gates to have a minimum clear opening width of 850mm and a 300mm nib to the leading edge.  
**CAR PARKING**  
At least one level standard parking bay that can be widened to 3.3m to be provided. Parking bay to have a suitable ground surface and step free access.  
**PRINCIPAL ENTRANCE**  
Entrance to have a level external landing (covered for a minimum width of 900mm and a minimum depth of 600mm). Landing to be a minimum width and depth of 1200mm. Lighting to be provided which uses fully diffused luminaires activated automatically by a dusk to dawn timer or by detecting motion.  
Door to have a minimum clear opening width of 850mm and a minimum 300mm nib to the leading edge of the door. The extra width created by this nib to be maintained for a minimum distance of 1200mm beyond it.  
The depth of the reveal on the leading side of the door to be maximum of 200mm (if a porch is provided the doors are to be minimum of 1500mm apart and there should be at least 1500 between door swings).  
The threshold is to be an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm), with suitable drainage channel. Landings to have a fall of 1:40-1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorstops.

CAR PARKING

At least one level standard parking bay that can be widened to 3.3m to be provided. Parking bay to have a suitable ground surface and step free access.

PRINCIPAL ENTRANCE

Entrance to have a level external landing (covered for a minimum width of 900mm and a minimum depth of 600mm). Landing to be a minimum width and depth of 1200mm. Lighting to be provided which uses fully diffused luminaires activated automatically by a dusk to dawn timer or by detecting motion.  
Door to have a minimum clear opening width of 850mm and a minimum 300mm nib to the leading edge of the door. The extra width created by this nib to be maintained for a minimum distance of 1200mm beyond it.  
The depth of the reveal on the leading side of the door to be maximum of 200mm (if a porch is provided the doors are to be minimum of 1500mm apart and there should be at least 1500 between door swings).

The threshold is to be an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm), with suitable drainage channel. Landings to have a fall of 1:40-1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorstops.

CIRCULATION AREA AND INTERNAL DOORWAYS

Every corridor to be a minimum 1200mm wide. Any localised obstructions should not occur opposite or close to a doorway, or at a change of direction, and to be no longer than 2m in length. The corridor is not to be reduced below a minimum 750mm width at any point.  
Every door to have a minimum clear opening width as set out in Table 2.1 of Approved Document M and a minimum 300mm nib is to be provided to the leading edge of every door within the entrance storey. To comply with Part M of building regs

LIVING, KITCHEN AND EATING AREA

A minimum 1200mm clear space in front of and between all kitchen units and appliances to be provided.  
Glazing to the principal window of the principal living area to start a maximum of 850mm above floor level.

SANITARY FACILITIES

All walls, ducts and boxings to the WC, and shower room to be provided with additional plywood behind to be strong enough to support grab rails, seats and other adaptations that could impose a load of up to 1.5kN/m².

SERVICES AND CONTROLS

Consumer units to be mounted so that the switches are between 1350mm and 1450mm above floor level. Switches, sockets, stopcocks and controls to have their centre line between 450mm and 1200mm above floor level and a minimum of 300mm (measured horizontally) from an inside corner.  
The handle to at least one window in the principal living area is to be located between 450mm and 1200mm above floor level, unless the window is fitted with a remote opening device that is within this height range. All other window handles to be located between 450mm and 1400mm above floor level unless fitted with a remote device.  
Boiler timer controls and thermostats are to be mounted between 900mm and 1200mm above finished floor level on the boiler, or separate controllers (wired or wireless) are to be mounted elsewhere in an accessible location within the same height range.

C2. CONDENSATION

Walls, floors and roof of the building to be designed and constructed so that their structural and thermal performance will not be adversely affected by interstitial condensation, surface condensation or mould growth. Account to be taken of the buildings form and orientation in relation to topography, prevailing winds, sunlight and over-shadowing, and the rate at which humidity is generated.  
Materials with the highest vapour resistance should be located on the warm side of a thermal element. VCLs to be provided where necessary.  
The junctions between elements are designed to Accredited Construction Details or guidance of BRE (P17/01) and BS 5250:2021 Management of moisture in buildings to be followed.

SOUND PROTECTION AND TESTING -

Separating walls, floors, stairs and party walls to achieve a performance standard of 45 dB (minimum values for airborne sound insulation) and 62 dB to floors and stairs (maximum values for impact sound insulation) to demonstrate compliance with Approved Document E1.

WATER EFFICIENCY

The estimated water consumption not to exceed 125 litres per person per day in accordance with Approved Document G2. Water Efficiency to be calculated using the 'Water Efficiency Calculator for New Dwellings and results submitted to building control before works commence on site.

COLD WATER SUPPLY

There must be a suitable installation for the provision of a wholesome water supply in accordance with Approved Document G. Cold water supply to be provided to washbasins, WCs, showers, any place where drinking water is drawn off and to any sink provided in areas where food is prepared.  
Supply of cold water to comply with section 67 of the Water Industry Act 1991 and the Water Supply (Water Quality) Regulations 2016

HOT WATER SUPPLY

All, washbasins, and showers to be provided with adequate hot and cold water supply in accordance with Approved Document G3. A washbasin with wholesome hot and cold water supply to be provided in or adjacent to all rooms containing a WC. A sink with hot and cold water also to be provided to any area where food is being prepared.

CONTROL OF WATER TEMPERATURE

The installation of the hot water supply to comply with Approved Document G3. All showers are to be fitted with an inline thermostatic mixing valve to ensure that the temperature of the water delivered to the showers is limited to 48°C.

OVERHEATING MITIGATION

Adequate means of removing excess heat and limiting solar gains to be provided.  
Compliance to be demonstrated by using either:  
- The simplified method for limiting solar gains and providing a means of removing excess heat as set out in Section 1 of Approved Document O. Compliance check list (Ad O Appendix B) to be provided to demonstrate compliance, or  
- The dynamic thermal modelling method as set out in Section 2 of Approved Document O, using the guidance set out in - CIBSE TM59 methodology for predicting overheating risk.  
Report to be provided that demonstrates that the building passes CIBSE's TM59 assessment of overheating. Consideration given to provision of adequate daylight as detailed in BS 8206 -2 Code of Maintaining Adequate Level of Daylight, noise pollution and security.

Solar gains in summer to be limited by fixed shading devices, which may be any of the following:  
i. Shutters.  
ii. External blinds.  
iii. Overhangs.  
iv. Awnings.

PROVIDING INFORMATION

The owner of the building to be given information to allow them to use the overheating mitigation strategy. Sufficient information about the overheating mitigation strategy and its maintenance requirement to be given to the owner, information to include:  
- Overall overheating mitigation strategy  
- Location of each element of the strategy  
- Instructions for the operation of each element of the strategy  
- The time of day the different parts of the strategy should be used  
- The time of year the strategy should be used  
- Manufacturer's contact details  
- The location of controls and instruction for setting of controls  
- The location of sensors and how to recalibrate them  
- Cleaning and maintenance instructions  
- Home User Guide to include a section on Staying cool in hot weather

PART Q - SECURITY

Confirmation required that all doors and windows are to be installed in accordance with the advice stated in PAS24:2022 or alternatively comply with the requirements set out in Approved Document Q – Appendix B. Doors to be manufactured to a design that has been shown by test to meet the requirements of British Standard publication PAS24:2022 or designed and manufactured in accordance with Appendix B or Approved Document Q  
For example:  
Doors to be fitted with a viewer, door chain and mechanically fixed as the manufacturer's installation guide.  
The door set should be manufactured from solid or laminated timber with a minimum density of 600kg/m³. Any panel in the door must be a min 15mm thick and suitably secured in place.  
The smaller dimension of the panel must be no larger than 230mm in either width or height.  
Main front doors should be fitted with multipoint locking system.  
Windows:  
Any part of a window or doorway, which is within 2m vertically of an accessible level surface such as the ground or basement level, or an access balcony, or windows within 2m vertically of a flat or sloping roof (with a pitch of less than 30 degrees) that is within 3.5m of ground level should be secure windows in accordance with paragraphs 2.2 and 2.3 of Approved Document Q. Windows to be made to a design that has been shown by test to meet the security requirements of British Standards publication PAS 24:2022.  
Frames to be mechanically fixed to the structure of the building in accordance with manufacturer's installation instructions.

FIXED EXTERNAL LIGHTING

Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt.  
External light fittings to have both the following:  
- Automatic controls which switch luminaires off in response to daylight.  
- If luminous efficacy is 75 light source lumens or less, provide automatic controls which switch luminaires off after the lit area becomes unoccupied, if luminous efficacy is greater than 75 light source lumens, manual control can be installed.  
Dwelling primary energy rate and dwelling emission rate calculations to account for the efficacy of lamps installed in the fixed lighting locations.

TRUSSED RAFTER ROOF

To achieve U-value 0.16 W/m²K  
Pitched roof to be formed using proprietary prefabricated manufactured trusses. Design of roof trusses to be produced by specialist truss manufacturer to BS EN 1995-1-1:2004 Eurocode 5: Design of timber structures (+A2:2014), and submitted to Building Control for approval prior to commencement of work. Trusses to be placed at max 600ctrs in accordance with BS 8103-3:2009 and BS EN 1995-1 (+A2:2014) on suitable wall plates fixed using proprietary galvanised steel truss clips. All strapping, fixing and bracing to be in accordance with manufacturer's instructions. Mechanically fix trusses to 100 x 50mm sw treated wall plates using galvanized steel truss clips. Form ceiling using 12.5mm plasterboard and min 3mm thistle multi-finish plaster. Insulation at ceiling level to be two layers of Rockwool insulation to total 300mm laid between over joists (cross direction. Provide polythene vapour barrier between insulation and plasterboard.  
Where required provide opening at eaves level at least equal to continuous strip 25mm wide on two opposite sides to promote cross-ventilation and provide mono pitched roofs with ridge/high level ventilation equivalent to a 5mm gap via proprietary tile vents spaced in accordance with manufacturers details. Loft hatches should be suitable designed and installed to ensure optimum air tightness. A proctor roofshield breathable membrane will also be required to be fitted as part of construction

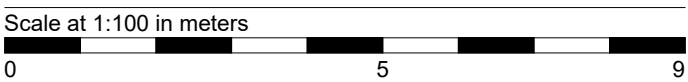
Smoke Detection

**Smoke Alarms:** Category L1 system designed to BS7671 18th edition BS 5839-1:2017 incorporating corrigendum no1BS 7273-6:2019 Code of practice for the operation of fire protection measures. Smoke alarm systems intended to warn deaf or hard of hearing people in the event of fire should conform to the requirements of BS 5446-3 EN 14604, BS 5446-2 and EN 50291-1 respectively. Heat alarms should conform to the requirements of BS 5446-3. Alarms to be fitted min. 300mm away from any light fitting and walls. Refer to floor plans. Emergency lighting to be provided to all common escape routes, to be in accordance with BS 5266-1 and HTM 05-2. All exit signage is to be provided in accordance with BS 5499. Fire alarm system call points and sounders to be located as indicated, to fire officers approval. Fire extinguisher types and locations to be agreed with fire officer by occupant.  
**Fire Doors:** All fire doors are to be in accordance with BS 476 part 22 for performance and integrity, location and type as indicated on drawings, intumescent fire and smoke seals plus overhead door closers provided as necessary and indicated, with all fire safety signage to BS 5499 part 1.

EXTERNAL FLOORING

Veranda floor non-slip and with compliant LRV for guardrail/floor/wall

All dimensions are to be checked on site and any discrepancies reported to the architect before work commences. Figured dimensions only are to be taken from this drawing. This drawing is to be read in conjunction with all relevant consultants and/or specialists drawings/documents and any discrepancies or variations notified to the architect before work commences. This drawing is copyright and may not be reproduced, wholly or in part, without the consent of the architect.



CLIENT  
Wickham & Knowle  
Parish Council

Scale 1:100  
Date: 28/02/2025

Drawn by: MC  
Checked by: GB

TITLE  
New Pavilion, Wickham Recreation Ground,  
Fareham Rd, Wickham, PO17 5BY  
Construction Notes

Drawing No: 24-050 -314

Revision: A

Spaces, 4500 Parkway  
Solent Business Park  
Whitley, Fareham  
Hampshire PO15 7AZ  
T: 01329324045  
e: office@spaces.co.uk  
w: www.spaces.co.uk



A	Title Block Updated	16/04/25	GB
Revision	Date	Initial	