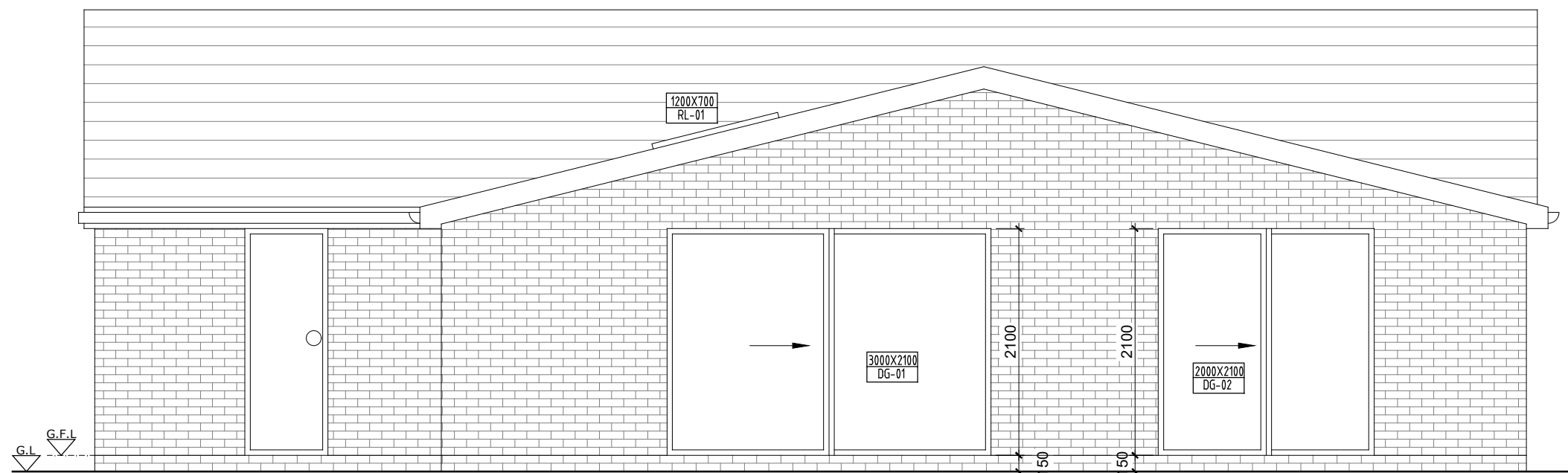




REAR ELEVATION (SCALE 1:50)

INTERNAL STUD 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/cs. Provide min 10kg/m³ 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.

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

Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt. All fixed to have lighting capacity (lm) 185 x total floor area, to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

SMOKE DETECTION

Provide a linked smoke alarm detection system to BS EN 14604 and BS 5839-6:2019 to at least a Grade D2 category LD3 standard. System to be mains powered with battery back up. At least one smoke detector to be provided in each hallway and landing. In hallways exceeding 7.5m in length, no point within the hallway should exceed 7.5m from the nearest detector and no bedroom door should be further than 3m from the nearest smoke alarm. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

Mains-wired, interlinked heat detector to be provided to the kitchen and smoke detectors to principal living rooms, if required by Building Control. A design, installation, and commissioning certificate for the fire detection and alarm system to be issued to Building Control upon completion of the works.

ROOF LIGHTS

Min U-value of 2.2 W/m²K. Roof-lights to be double glazed with16mm argon gap and soft low-E glass. Roof lights to be fitted in accordance with manufacturer's instructions, with rafters doubled up to sides and suitable flashings provided.

NEW AND REPLACEMENT DOORS

New and replacement doors to achieve a U-Value of 1.4W/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 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K 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.

EXTRACT TO BATHROOM

Bathroom to have mechanical vent ducted to external air to provide min 15 l/s. Vent to be connected to light switch and to have 15 minute over run 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 FOR SHOWER ROOM

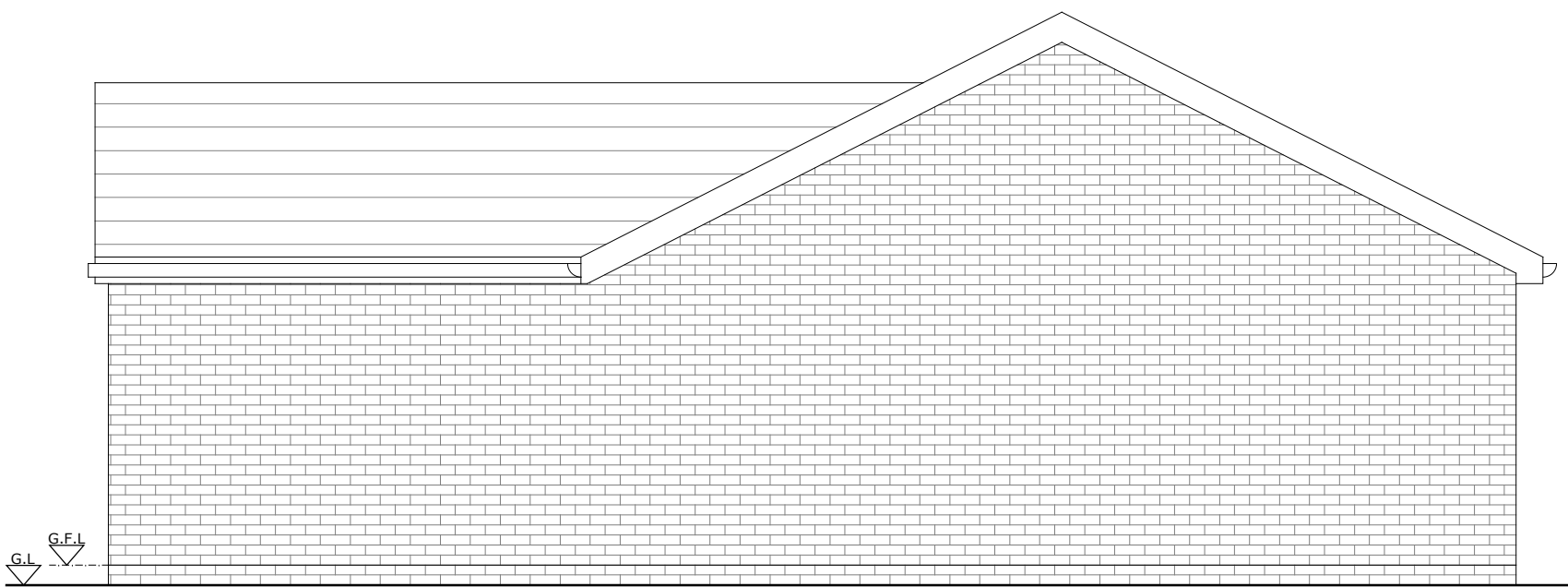
Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 l/s. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air 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 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. 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.

PURGE VENTILATION

Minimum total area of opening in accordance with Table 1.4 Approved Document F1. Hinged or pivot windows with an opening angle of 15 to 30 degrees to have an openable area in excess 1/10 of the floor area of the room. External doors and sash, hinged or pivot windows with an opening angle of equal to or greater than 30 degrees to have an openable area in excess of 1/20 of the floor area of the room. Purge ventilation should be capable of extracting at least 4 air changes per hour per room directly to the outside. Internal doors should be provided with a 10mm gap below the door to aid air circulation.



LEFT ELEVATION (SCALE 1:50)

BACKGROUND VENTILATION

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.

Where the extension connects to in an existing room and as a result the existing room is left with no windows or background ventilation less than 5000mm², then the new room background ventilation to be at least 10,000mm² equivalent area. Where the extension connects to in an existing room and as a result the existing room is left with background ventilation at least 5000mm², then both the following is to be provided:

- Background ventilators of at least 12,000mm² equivalent area should be provided between the two rooms.
- Background ventilators of at least 12,000mm² equivalent area between the additional room and the outside.

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.

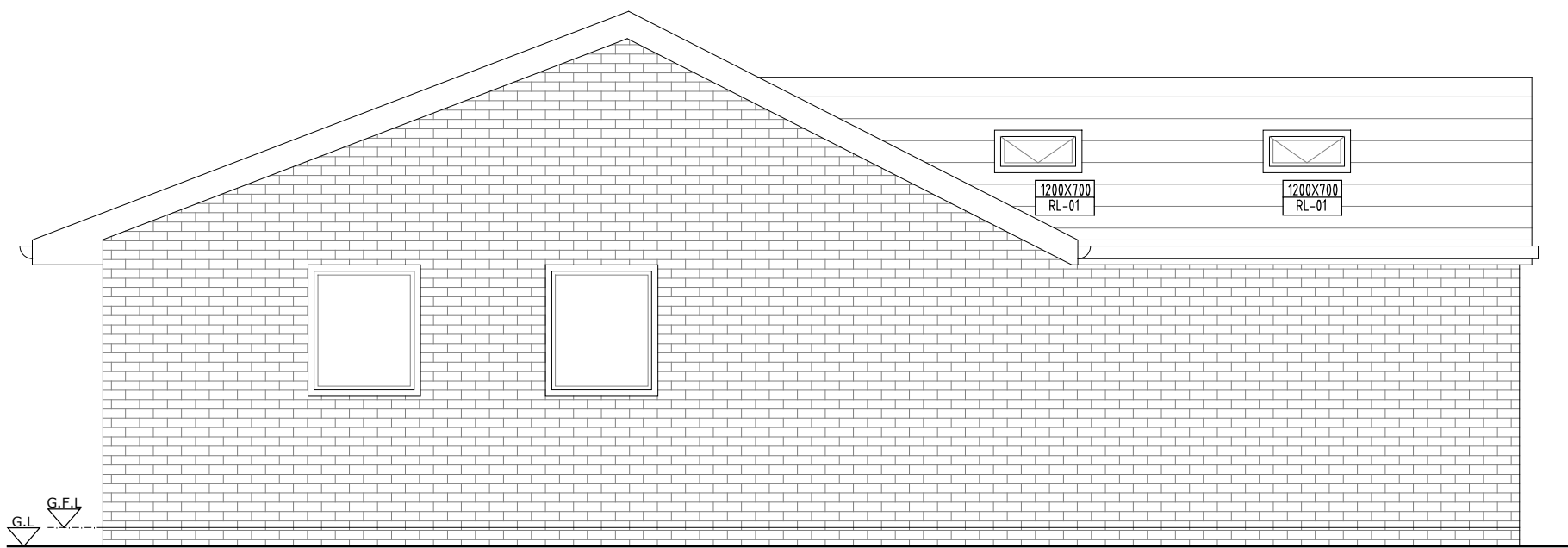
C2. CONDENSATION

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 building's 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 IP17/01] and BS 5250:2021 Management of moisture in buildings to be followed.

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.



RIGHT ELEVATION (SCALE 1:50)

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 0.15 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). Roofing tiles to match existing on 25 x 38mm tanalised sw treated battens on breathable felt supported on 50 x 170mm 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 150mm XR4000 Celotex between ceiling joists with a further 40mm TB4000 over joists. 18mm chipboard to be provided over insulation. 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. Provide cavity tray where roof meets existing wall. 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 manufacturer's 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.

PROJECT	CLIENT			
	2A New Close Avenue			
SHEET	Date	Project Number	Scale (@ A1)	REV
	08/03/2025	150	1:50	
	Drawn by	DRAWING NUMBER		
Building Regulations Drawing	AS	WD002		
	Checked by			
	AS			