

LOG BURNER

- Log burner to be selected by client
- Assumed o be under 5 kW, therefore no permanent open air supply required. Should the burner be over 5 kW a dedicated permanently open air supply will be required.
- Hearth construction meets minimum dimensions and thickness requirements as described in AD J. "
- Flue system to be installed to BS EN 1856 standards, with appropriate diameter and height for safe operation. Flue to terminate Min 600 above ridge or (as per table requirements - AD J)
- Carbon monoxide alarm fitted in the same room as the appliance, complying with BS EN 50291.
- Smoke alarm fitted on circulation routes.
- Chimney notice plate fixed in accessible location, detailing flue type, installation date and appliance served.
- Installation carried out by a HETAS-registered installer or notified to local authority building control (LABC).
- Client to be advised upon completion of safe operation - i.e. fuel type (seasoned wood of under 20% moisture and maintenance requirements).
- Annual chimney sweep recommended.

EXTERNAL STEPS

- Finish of steps TBC by client
- Stairs to incorporate rise of 160mm and going of 300mm
- Continuous handrail to be installed to both sides of steps over 1000mm wide unless abutting up to the dwelling with a height of 900mm.
- Handrails to be positioned 850-1000mm above the pitch line, 1100mm above landing and extend at least 300mm beyond the first and last riser
- Top and bottom landings should be atleast 900mm in length.

INTERFACE WITH EXISTING STRUCTURE, EXPANSION JOINTS

Where new walls abut existing: Allow expansion joints, fully fixed following the manufacturer's instructions. Mastic seals externally and plaster beads on either side of the joint internally.

- Where the new cavity wall abuts the existing rendered wall; cut the existing solid vertically and insert insulated DPC.
- Movement joint to start from the top of foundations and run the full height of the superstructure masonry wall.

Additional expansion joints:

- (1) if DPC is less than 600mm above ground level - movement joint to start from DPC level.
- (2) if DPC is more than 600mm above ground level - movement joint to start from the top of the foundations.
- (3) if a major change in foundations, between foundations of different designs, at the variation of the height of the building/ walls - movement joint to start from the top of foundations.
- (4) if SE designed a movement joint in the foundations then this movement joint is to be continued up through the superstructure.

Material of expansion joint:
- to perform effectively a sealant in a movement joint should be applied against a suitable debonding joint filler/backing rod so that the sealant adheres only to the two opposing masonry faces.

Width of joints:
- For masonry (concrete, stone, blockwork etc.) = 10mm

EXISTING EXTERNAL WALLS

- Existing external cavity walls to be investigated by contractor. If a cavity of over 50mm is found to have no insulation the use of injected small polystyrene beads into the cavity using a bonding agent is to be utilised to achieve Min 0.70W/m²K ✓ complies

FOUNDATIONS

- Foundations are shown only as indicative. "PSK does not specify foundations - All foundations and sub-structure to be designed by a structural engineer".
- The foundation design must be supported by structural calculations provided by an SE.
- Duty-holders will ensure that design and construction follow BS 8004:2015 Code of Practice for foundations (+A1:2020).
- The depth of all foundations should be determined by specific site conditions.
- Constructed to a depth which will not be affected by nearby drainage or other services.
- Everything is in accordance with the Structural Engineer's details, design, and specifications to confirm that the structure has been designed to take into consideration ground conditions and surrounding trees.
- Any trees within 20m of the new foundations to be identified and the impact of the depth and type of foundations should be considered before commencing any work. Arboricultural Impact Assessment to be provided where requested by BCO. Designed to suit soil conditions and to conform to NHC practice. Note 4-2 Building Near Trees. All are subject to BCO approval and site inspections.
- Also foundations are to be taken below the invert level of drain pipes.

NEW EXTERNAL CAVITY WALLS

Construction has U=0.17W/m²K ✓ complies with external walls on extensions: required max. U=0.18 W/m²K, (as per Approved Document L 2021 in England).

Outer leaf: of 100mm Medium density blockwork (Min 1350 - Kg/m³) (see SE design).

150mm cavity fully filled with 150mm "Knauf Dritherm 32" (or Equiv.) Ensure cavity is clean and free of any debris. Friction fit between wall ties (Installation as per manufacturer's instructions).

Inner leaf: 100mm Thermalite Shield (or Celcon or Equiv.) lightweight blockwork (SE design).

Finish externally: Medium density blockwork outer leaf, to be rendered to match existing external walls. Refer to elevations (to the client's choice).

Wall ties to be spaced:

- in general wall area - max. 900mm horizontally and max. 450mm vertically.
- at jamb openings, movement joints, parallel to the top of the gable walls.
- Below DPC level and in parapet wall:
- if using concrete blocks, use frost-resistant blocks (Min 7kN below DPC).
- if using bricks, use either engineering or frost-resistant bricks F2/S2 to BS EN 771-1.

Use frost resistant brick F2/S2 category:

- below ground level DPC, sills, coping/cappings, beneath cappings, in projecting details (e.g., plinths, cornice.) in exposed site locations, retaining walls, fence wall, and chimney above the roof line.
- Damp proofing of the wall where in contact with the soil including junctions:
- to specialist design.

Vertical movement joints should be provided to the outer leaf of cavity walls (SE design).

Wall ties should be provided at 300mm maximum vertical spacing on either side of the expansion joint and within 225mm horizontal spacing of the movement joint. (see diagram 1).

Compressible filler, such as polyurethane foam, should form the joint and be sealed to prevent water penetration.

Movement joints are to be considered for the internal leaf of cavity walls for spaces with unbroken wall lengths above 6m (SE design).

STRUCTURAL WORKS

The structural elements shown in blue are only indicative. Please refer to the structural engineer's details for clarification of all structural works.

The contractor is responsible for setting out the works and checking the position of structural steels and supports before ordering any steels.

GROUND FLOOR

Ground Bearing Slab:

- 75mm sand/cement concrete screed (subject to SE design) on 500 Gauge polythene separation membrane on 25mm perimeter insulation and 150mm Celotex G4400 (or Equiv.) insulation boards tightly butt jointed over DPM on 1200 Gauge polythene DPM, tied into DPC and lapped with existing DPM on concrete slab and granular infill (all to SE design). The thickness of gravel infill max. 600mm altogether, otherwise use Beam&Block.
- Allow for floor finishes. New and existing floor levels to align.
- Cavity insulation to extend below DPC level by min. 150mm (optimum 300mm).
- Minimum 225mm cavity clearance below DPC.
- Proposed approx. U=0.13W/m²K ✓ complies
- Limiting U-values for new fabric elements (RE: Floors) on extensions in existing dwellings U_{maximum}=0.18 W/m²K (see Table 4.2, AD L, 2021).

INTERNAL MASONRY PARTITIONS

- 100mm Thermalite Shield (or Celcon or Equiv.) lightweight blockwork (SE design).
- lined each face with a 12.5mm plasterboard. Use 12.5mm Gyproc Fireline MR plasterboard being fire & moisture-resistant.
- All joints taped and filled. In high moisture areas, apply 2x coats of Gyproc Drywall Sealer to improve moisture resistance. Finish with 3mm skim.
- 75 mm quilt sound insulation Knauf Insulation Acoustic Roll (or Equiv.) between studs.
- Add additional noggings to support radiators, cabinets or other heavy features.

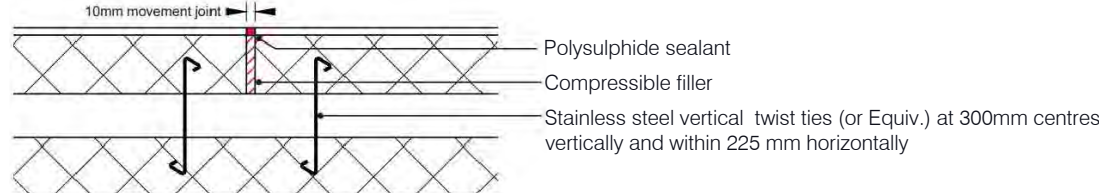
NOTE:

Existing internal wall(s) may be load-bearing and support the ceilings and existing roof structure above. - All internal wall(s) are to be checked by the contractor and/or SE before the internal wall(s) are removed. The contractor is to ensure wall(s) and ceiling(s) are supported before commencing work.

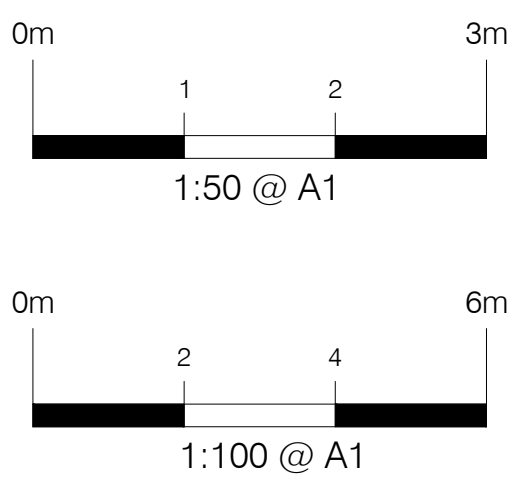
INTERNAL TIMBER STUDS PARTITIONS

- 50x75mm or 50x100mm sw studs @ max. 600mm c/c lined each face with a 12.5mm plasterboard. Use 12.5mm Gyproc Fireline MR plasterboard being fire & moisture-resistant.
- All joints taped and filled. In high moisture areas, apply 2x coats of Gyproc Drywall Sealer to improve moisture resistance. Finish with 3mm skim.
- 75 mm quilt sound insulation Knauf Insulation Acoustic Roll (or Equiv.) between studs.
- Add additional noggings to support radiators, cabinets or other heavy features.

TYPICAL MOVEMENT JOINT DETAIL (DIAGRAM 1)



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General key:

- Existing structures
- Demolished / As existing underlay
- New structures
- Approx. Boundary line
- Structural engineers notes (SE) notes

Drainage key:

- I.C. - Inspection chamber
- R.G. - Roddable gully
- AAVI Durgu - Durgu air admittance valve
- SP /SVP - Soil pipe / Soil vent pipe
- Proposed FW (foul water) drains
- RWP+RG - Rain water pipe + Roddable gully
- Proposed RW (rain water) drains

Heating key:

- Radiator / Towel rail

Fire strategy key:

- min. 30 mins. fire resistant plasterboard/ board
- exist./new Smoke / Heat detector (approx. position)
- Provide Carbon monoxide detector to rooms with fire burning appliance if any

ND (FD30) / ND - New fire door / New door

NW (FE) / NW - New window (Fire Escape type) / New window

List of Abbreviations:

- SE..... Structural Engineer
- BR..... Building Regulations
- AD..... Approved Document

GP=+0.000 - Approx. levels

Rev.	Date	Revisions
A	02/04/26	Utility/GF WC layout updated. U/F heating omitted.

PSK architect
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DESCRIPTION

Single Storey Extension and Internal Alterations

Proposed GF Plan

DATE	10/12/25	SCALE	As noted @ A1
DRAWN	JG	CHECKED	PSK

1249-BR-01A

GROUND FLOOR PLAN AS PROPOSED SCALE - 1:50@A1



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LOG BURNER & FLUE

- Log burner to be selected by client
- Assumed to be under 5 kW, therefore no permanent open air supply required. Should the burner be over 5 kW a dedicated permanently open air supply will be required.
- Hearth construction meets minimum dimensions and thickness requirements as described in AD J. "
- Flue system to be installed to BS EN 1856 standards, with appropriate diameter and height for safe operation. Flue to terminate Min 600 above ridge or (as per table requirements - AD J) and be fitted with appropriate waterproof storm collar and flashings.
- Carbon monoxide alarm fitted in the same room as the appliance, complying with BS EN 50291.
- Smoke alarm fitted on circulation routes.
- Chimney notice plate fixed in accessible location, detailing flue type, installation date and appliance served.
- Installation carried out by a HETAS-registered installer or notified to local authority building control (LABC).
- Client to be advised upon completion of safe operation - i.e. fuel type (seasoned wood of under 20% moisture and maintenance requirements.
- Annual chimney sweep recommended.

REMOVE 2X VELUX AND RE-ROOF PITCHED ROOF

- Roofing slates (to clients choice) to match existing and suit pitch on battens on breathable felt Tyvek 'Supro' (or Equiv.) protected by protector trays at eaves with over fascia ventilator (or Equiv.) on rafters (refer to SE design and instructions).
 - Eaves to be filled with insulation and to have a rafter ventilator (to preserve ventilation).
 - (1) Insulation at ceiling level: min. 300mm insulation Knauf Omnitilt Roll 40 (or Equiv.) between roof ties. Underlay with Vapour Control Layer (VCL) with joints taped and 12.5mm Gyproc Fireline MR plasterboard being fire & moisture-resistant with all joints taped and filled. Apply 2x coats of Gyproc Drywall Sealer to improve moisture resistance of plasterboard. Finish with 3mm skim.
 - Proposed approx. $U=0.14\text{W/m}^2\text{K}$ - complies (required for new fabric elements in existing dwelling $U=0.15\text{W/m}^2\text{K}$).
- Proposed roof approx. $U=0.15\text{W/m}^2\text{K}$ - ✓complies (required for extensions to an existing building: $U_{\text{minimum}}=0.16\text{W/m}^2\text{K}$) following Approved Document L Volume 1, 2021 (AD L1, a).
- Eaves and ridge ventilation with insect protector to be provided, maintain min. 50mm air gap throughout for ventilation.
 - Provide vertical strapping of rafters in compliance with AD A. (Subject to SE)
 - Provide lateral support with noggings between 3 rafters at the gable and provide its strapping to the wall @ max. 2m c/c in accordance with AD A. (SE)
 - Wall plates 50x100mm strapped @ max. 2m c/c and min. 1m long straps in compliance with Building Regulations.
 - (B8) Close cavity at wallplate level with non-combustible material.

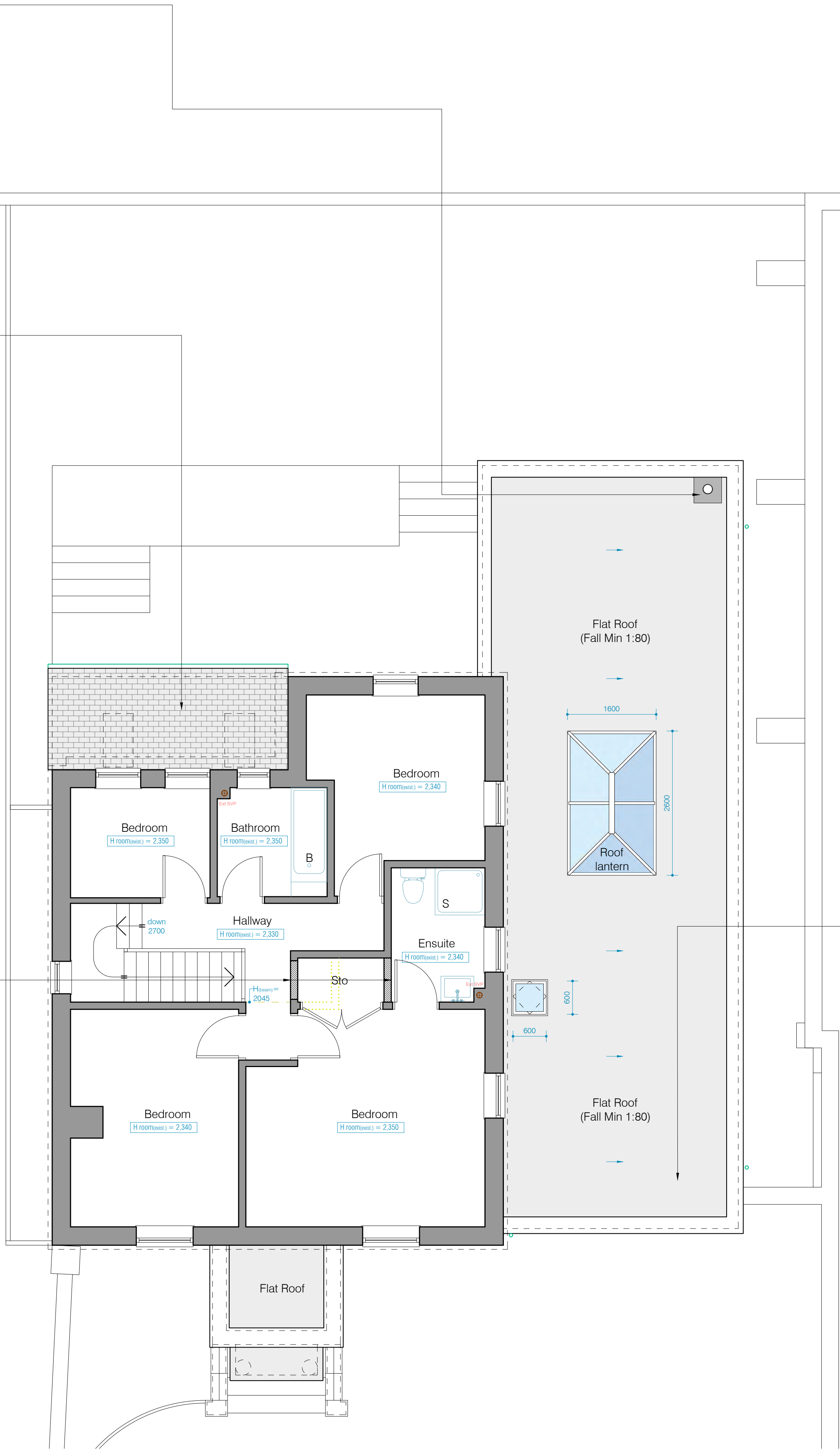
INTERNAL TIMBER STUDS PARTITIONS

- 50x75mm or 50x100mm sw studs @ max. 600mm c/c lined each face with a 12.5mm plasterboard. Use 12.5mm Gyproc Fireline MR plasterboard being fire & moisture-resistant.
- All joints taped and filled. In high moisture areas, apply 2x coats of Gyproc Drywall Sealer to improve moisture resistance. Finish with 3mm skim.
- 75 mm quilt sound insulation Knauf Insulation Acoustic Roll (or Equiv.) between studs.
- Add additional noggings to support radiators, cabinets or other heavy features.

NOTE:

Existing internal wall(s) may be load-bearing and support the ceilings and existing roof structure above. - All internal wall(s) are to be checked by the contractor and/or SE before the internal wall(s) are removed. The contractor is to ensure wall(s) and ceiling(s) are supported before commencing work.

FIRST FLOOR PLAN AS PROPOSED
SCALE - 1:50@A1



NEW WARM FLAT ROOF (no ventilation required)

Proposed roof approx. $U=0.14\text{W/m}^2\text{K}$ - ✓complies (required for extensions to an existing building: (Roofs- $U_{\text{minimum}}=0.15\text{W/m}^2\text{K}$) (Refer to table 4.2 of the Approved Document L Volume 1, 2021 (AD L1, a).

ClassicBond 1.2mm EPDM on 18mm SterlingOSB Zero OSB3 boards (BSA-approved product) on firings on joists, to SE design.

- 150 mm 'Colotex XR4000' (or Equiv.) PIR rigid insulation boards over the top of the joists, tightly butt jointed with gaps filled with expanding spray foam on self-adhesive Visqueen Fully Bonded Vapour Barrier (or Equiv.) taken up and adhered to walls/edges on 18mm OSB3 boards (or plywood to BS EN 636, Class 3) on firings on joists (to SE design).

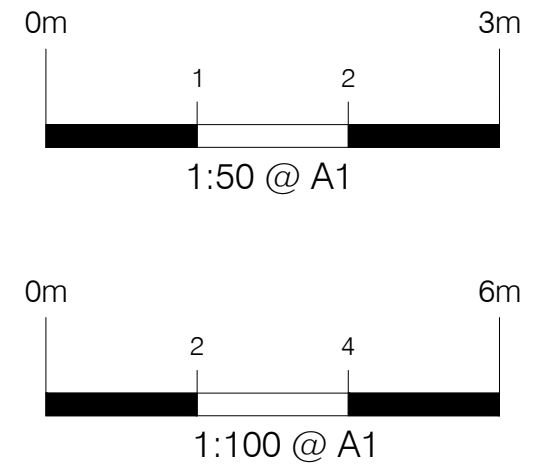
Underlay joists with 12.5mm Gyproc Fireline MR plasterboard being fire-moisture-resistant with all joints taped and filled. In high moisture areas apply 2x coats of Gyproc Drywall Sealer to improve moisture resistance of plasterboard. Finish with 3mm skim.

Roof cladding to ensure appropriate resistance to external fire exposure when measured in terms of penetration through the roof construction and the spread of flame over its surface. Roof covering to ensure that roof construction is classified within the European system as $E_{\text{ROOF}}^{(t4)}$, $C_{\text{ROOF}}^{(t4)}$, $D_{\text{ROOF}}^{(t4)}$.

$E_{\text{ROOF}}^{(t4)}$ or $F_{\text{ROOF}}^{(t4)}$ in accordance with BS EN 13501-5.

- Roof laid to min. falls of 1/80.
- Flat Rooftop/side - Wall abutment: min. 150mm insulated (25mm Colotex) upstand. Code 5 lead flashing with cavity tray to suit wall condition with weep vents.

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- General key:
- Existing structures
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 - Structural engineers notes (SE) notes

- Drainage key:
- I.C. - Inspection chamber
 - R.G. - Roddable gully
 - AAV/ Durgo - Durgo air admittance valve
 - SP /SVP - Soil pipe / Soil vent pipe
 - Proposed FW (toul water) drains
 - RWP+RG - Rain water pipe + Roddable gully
 - Proposed RW (rain water) drains

- Heating key:
- Radiator / Towel rail

- Fire strategy key:
- min. 30 mins. fire resistant plasterboard/ board
 - exist./new Smoke / Heat detector (approx. position)
 - Provide Carbon monoxide detector to rooms with fire burning appliance if any
 - ND (FD30) / ND - New fire door / New door
 - NW (FE) / NW - New window (Fire Escape type) / New window

- List of Abbreviations:
- SE..... Structural Engineer
 - BR..... Building Regulations
 - AD..... Approved Document

Approx. levels

Rev.	Date	Revisions
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PSK architect
Your True Extension Specialists

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Staverton Technology Park
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Tel. 01242 304477

DESCRIPTION

Single Storey Extension
and Internal Alterations

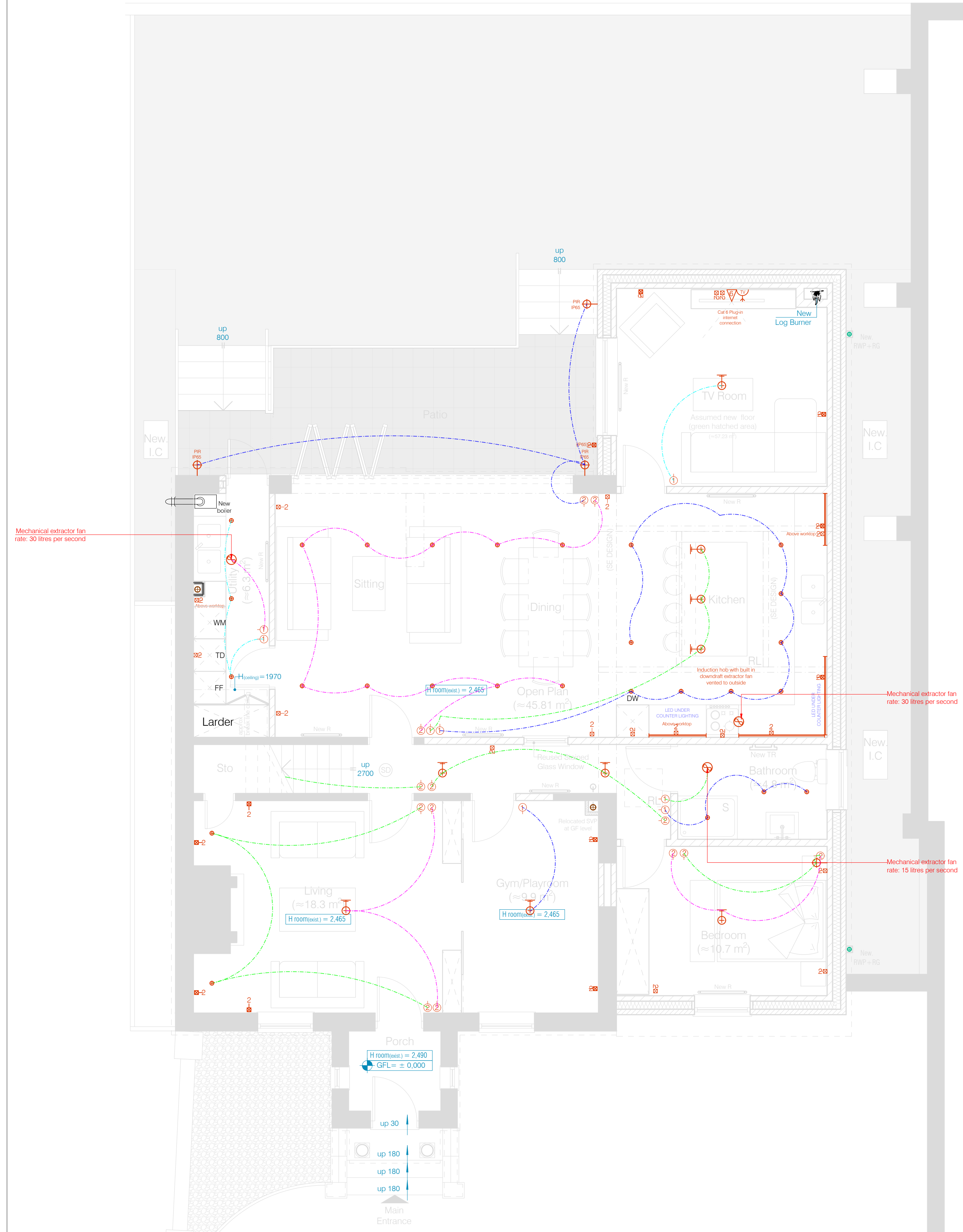
Plans as Proposed

DATE 10/12/25	SCALE As noted @ A1
DRAWN JG	CHECKED PSK

1249-BR-02



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ELECTRICAL LAYOUT

GROUND FLOOR PLAN AS PROPOSED
SCALE - 1:50@A1



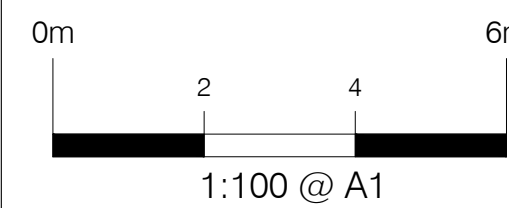
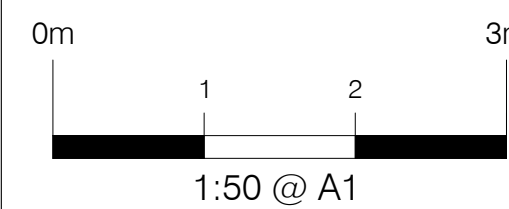
ELECTRICAL LAYOUT

FIRST FLOOR PLAN AS PROPOSED
SCALE - 1:50@A1



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 - Proposed RW (rain water) drains

- Heating key:
- Radiator / Towel rail

- Fire strategy key:
- min. 30 mins. fire resistant plasterboard/ board
 - exist./new Smoke / Heat detector (approx. position)
 - Provide Carbon monoxide detector to rooms with fire burning appliance if any
 - ND (FD30) / ND - New fire door / New door
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Approx. levels

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DESCRIPTION

Single Storey Extension
and Internal Alterations

Proposed Elec Plans

DATE	10/12/25	SCALE	As noted @ A1
DRAWN	JG	CHECKED	PSK

1249-BR-03A

0m 1 2 3m
1:50 @ A1

0m 2 4 6m
1:100 @ A1

Drainage key:

I.C.	- Inspection chamber
R.G.	- Roddable gully
AAV/ Durgo	- Durgo air admittance valve
⊕ SP /SVP	- Soil pipe / Soil vent pipe
— ● —	- Proposed FW (foul water) drains
Ⓜ RWP+RG	- Rain water pipe + Roddable gully
— ● —	- Proposed RW (rain water) drains

Fire strategy key:

- min. 30 mins. fire resistant plasterboard
- exist./new Smoke / Heat detector (approx. position)
- Provide Carbon monoxide detector to rooms with fire burning appliance if a

List of Abbreviations:

SE..... Structural Engineer

BR..... Building Regulations

AD..... Approved Document

[illegible]

Rev.	Date	Revisions
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Plans and Elevations as Proposed

1249-BR-04	
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- Flat Rooftop/side - Wall abutment: min. 150mm insulated (25mm Celotex upstand. Code 5 lead flashing with cavity tray to suit wall condition with weep vents.



Compressible filler, such as polyurethane foam, should form the joint and be sealed to prevent water penetration.

Movement joints are to be considered for the internal leaf of cavity walls for spaces with unbroken wall lengths above 6m (SE design).

- All Installed as per manufacturer's instructions
- Where forming new openings, allow all temporary support where inserting new lintel (to SE detail) and make good all disturbed surfaces to match existing walls



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The diagrams illustrate the layout of a 100m race track. The top diagram shows a 3m track with a 1:50 @ A1 layout. The bottom diagram shows a 6m track with a 1:100 @ A1 layout.

Drainage key:

I.C.	- Inspection chamber
R.G.	- Roddable gully
AAV/ Durgo	- Durgo air admittance valve
⊕ SP, SVP	- Soil pipe / Soil vent pipe
— • — • —	- Proposed FW (foul water) drains
— • — • — RW+RG	- Rain water pipe + Roddable gully
— • — • — RW	- Proposed RW (rain water) drains

Fire strategy key:

ND (FD30) / ND - New fire door / New door
NW (FE) / NW - New window (Fire Escape type) / New window

 $GFL = \pm 0.000$ - Approx. levels

Rev.	Date	Revisions
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Single Storey Extension and Internal Alterations

Building Regulations (Section) as Proposed

1249-BR-05

Compressible filler, such as polyurethane foam, should form the joint and be sealed to prevent water penetration.

Movement joints are to be considered for the internal leaf of cavity walls for spaces with unbroken wall lengths above 6m ([SE design](#)).