

Opening window: Areas to be minimum 1/20th of enclosed floor areas. All new windows to be fitted with minimum 8000gpm trickle vents per room. The maximum area of the double-glazed window not to exceed 20% of total floor area.

New windows: New double-glazed windows to have minimum U-value of 1.60w/m²K. Doors to have a minimum U-value of 1.80w/m²K. Toughened glass in glazed doors and windows in critical locations e.g. alongside doors. Seal around window/wall joints with mastic sealant. Double rafters as roof light trimmers if applicable.

Minimum full opening: Size of escape window 0.33m² minimum clear dimension of edge 450mm with sill below 1.10m from the floor and above 800mm.

Fit mechanical extract fans: To any new W.C. or bathroom areas rated at minimum 15lit/sec.

Duct mechanical extract: From internal W.C. or bathroom areas rated to give minimum 3ach with up to 15-minute overrun. Wired to the light switch. Minimum 12mm air gap under the door.

Steelwork and Timbers: Minimum bearing 100mm on concrete padstones, prestressed concrete lintels or metal bearing plates. Encase in minimum two layers of 12.5mm plasterboard for half-hour fire resistance when fitted at floor levels. **Lengths of steels to be site measured to include bearings. See structural calculations for sizes. Fabrication details to be provided if required by building control.**

The floor in roof-space: 21mm floor grade tongued and grooved chipboard, 2.3 grade in bathrooms on **50mm x 200mm** joists at **400mm** centres. Joists to be doubled where under and parallel to partitions over. Solid strut at third centres of joists spanning more than 2.40m. Remaining roof spaces to be floored as the main area when joists extend out to outer walls. Simpson strong tie or similar galvanised joist hanger connection to steelwork where applicable. Purpose made MS shoe/hanger where flitch beams join to steelwork or other flitch beams. Fit minimum 100mm mineral wool battens between joists for sound insulation.

Studwork enclosing stairwell: 12.5mm plasterboard each side of minimum 75mm x 50mm studwork with taped and filled joints for minimum half-hour fire resistance.

Inner partition: 12.5mm plasterboard each side of minimum 75mm x 50mm studwork. Fit 25mm sound insulation quilt between held in place with battens.

Outer studwork: 100mm x 50mm studwork with Celotex GA4075 rigid battens vertically between the studwork flush with the outer face of studs (25mm cavity) with Celotex TB4012 battens across the studwork face. Tape and mastic joints 12.5mm foil back plasterboard finish.

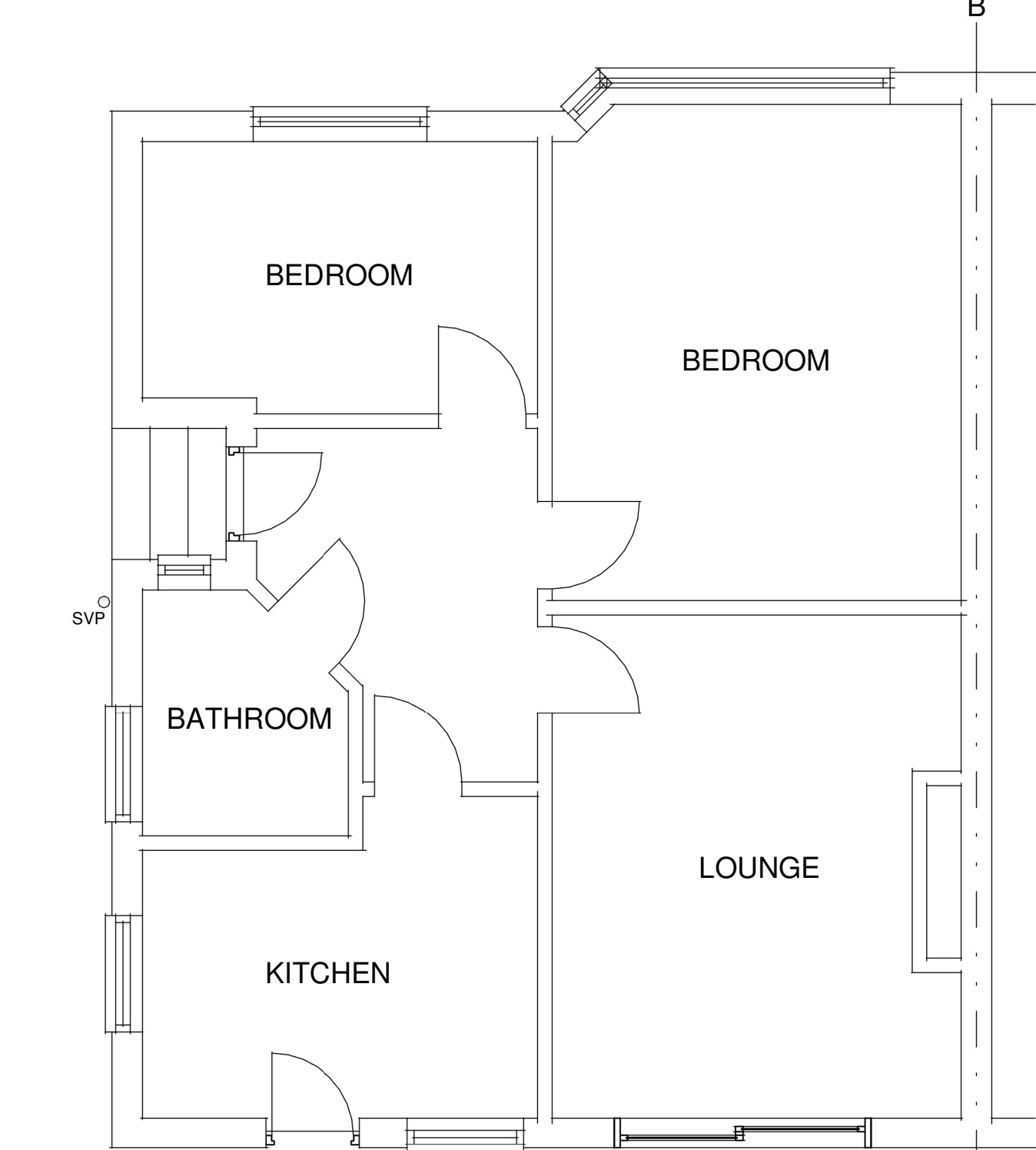
Stairs: Maximum rise 220mm. Minimum going on tread 220mm with minimum 16mm nosings. Minimum going on winders 50mm. Minimum clear width **800mm**. Maximum pitch 42 degrees. Minimum 2.0m clear vertical headroom off pitch line over new and existing stairs. Handrails minimum 900mm with vertical balusters at maximum 100mm centres. Allow to pack off partly/outer wall to accommodate any required dry lining of the wall above. **New staircase dimensions to be confirmed on site prior to manufacture.**

Stair practical limits: Stair risers and goings to be within the practical limits of risers 155/220 to be used with goings 245/260 or risers 165/200 to be used with goings 225/300mm.

Stairs: Any wall or door glazing in the stair enclosure will be upgraded to achieve half-hours fire resistance.

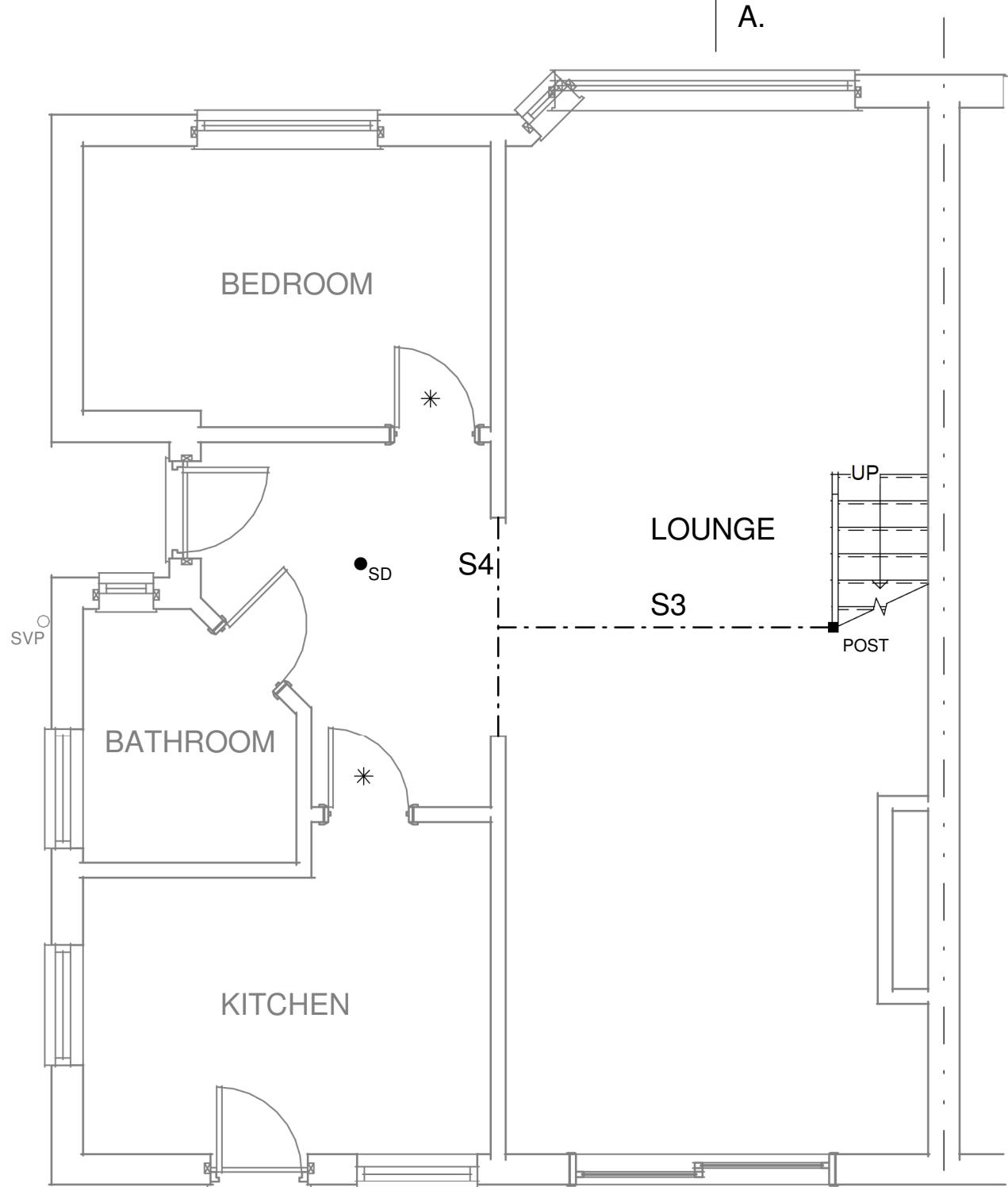
Sloping ceilings: Plant on to achieve 150mm min' depth. Fit Celotex GA4100 battens between rafters and Celotex TB4035 battens beneath rafters. 12.5mm foil back plasterboard finish. Maintain 50mm air gap to the underside of roof covering.

Dormer walls: Tile/slate hanging on battens and breathable felt on 100mm x 50mm studwork with 12.5mm foil back plasterboard finish over Celotex GA4070 battens between studs flush with the outer face of studs (30mm cavity) and Celotex TB4012 across the face of the studs. Tape and mastic joints (12.5mm plasterboard on cheeks where within 1.00m of the boundary). Also, fit 6mm master board web under cheek felt where within 1m of the boundary. Triple rafters under cheeks. Sheath with 12.5mm marine ply under felt for additional lateral support.



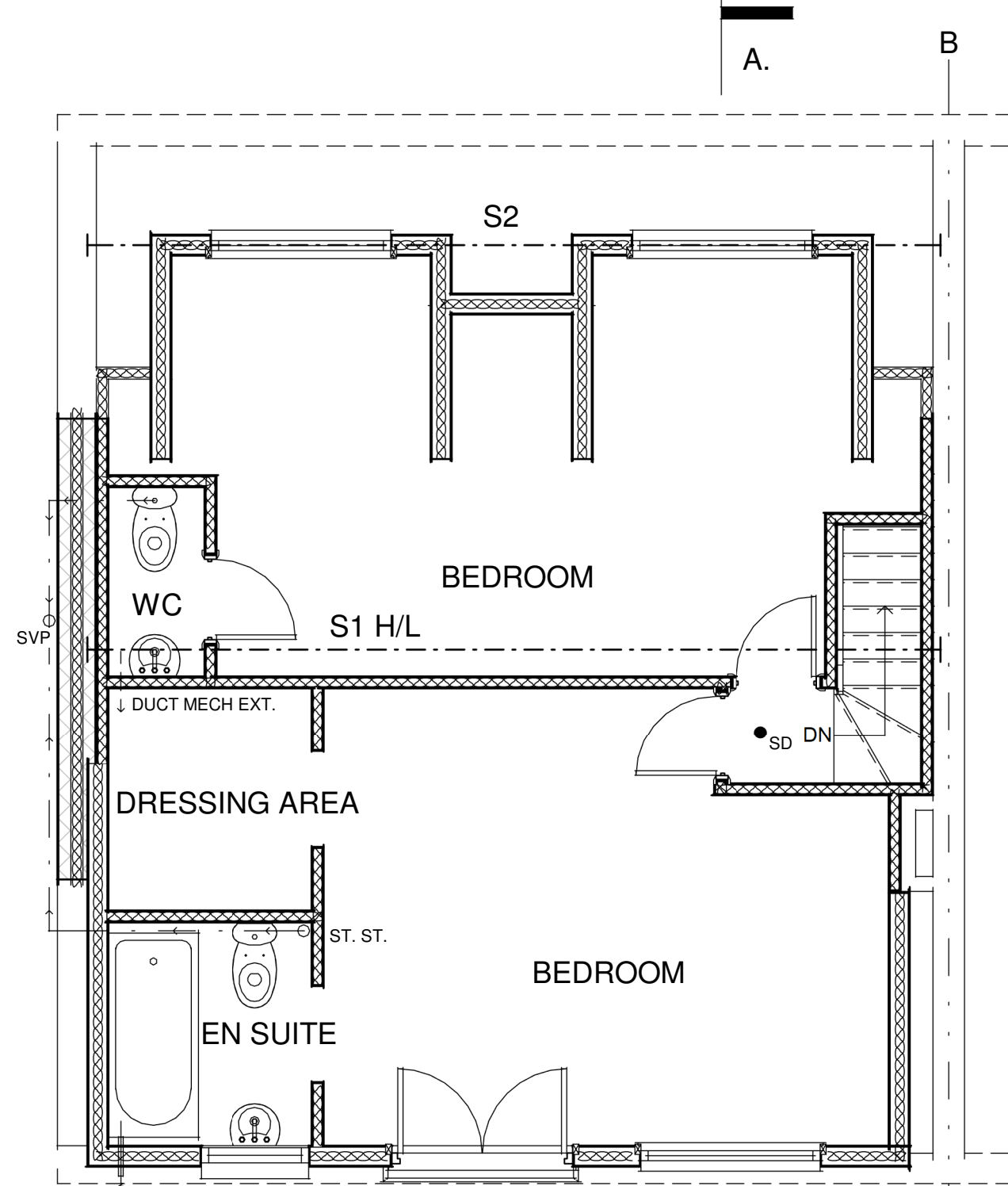
Existing Ground Floor

1 : 50



Proposed Ground Floor

1 : 50



Proposed First Floor

1 : 50

Dormer warm flat roof: Three-layer built up felt to BS747 CP144 P13 on Celotex TD4125 decking on firrings on **50mm x 200mm** joists at **400mm** centres. 12.5mm foil back plasterboard ceiling. Seal warm roof from existing vented roof space at join if applicable. Flat covering should achieve AA, AB or AC clarification for fire protection.

Dormer pitched roof: Tiles/slates on battens and felt on **50mm x 150mm** joists at **400mm** centres. 12.5mm foil back plasterboard ceilings on **50mm x 200mm** joists at **400mm** centres with 100mm fibreglass quilt insulation between and Celotex GA4090 over the joists.

Main roof: Concrete tiles on battens on breathable felt on **50mm x 150mm** joists at **400mm** centres. Strap down with 1m x 32mm galv. ms straps at max' 1.2m centres around the perimeter.

Roof insulation: Roof to be insulated with two layers of 150mm fibreglass insulation quilt. One layer laid between ceiling joist and one layer laid over in opposite direction. Maintain roof ventilation with 25mm continuous air to eaves and vent tiles to the apex as shown.

Plumbing: All to BS EN 2056 plus approved doc H 38mm diam'. Wastes from the sink, bath and shower, 32mm diam'. Waste from wash hand basins, all with rodding access on changes of direction and with deep seal traps. Run to existing/new 100mm diam PVC svp terminating min 900mm above nearest window head and with rodding access at the base.

Stub Stack: Run to 100mm diam stub stack terminating above appliance flood level with Durgoo auto-vent.

Extend existing svp: Into roof space and terminate with Durgoo auto-vent or if no other vent pipe on the drain run, extend svp up and within roof slope to terminate to air min. 900mm above window heads.

Rainwater goods: Run new 100mm diam PVC rainwater gutting and 70mm diam downpipes to existing drainage system.

All new electrical works: To be designed, installed, inspected and tested in accordance with BS7671 (IEE: 17th Ed). The works are to be undertaken by an installer registered under a suitable self-certification scheme or by a suitably qualified professional with a certificate of compliance produced to building control upon completion of the works.

Lighting: Fit high efficacy light fittings minimum three per four new fittings. Any recessed ceiling lights to be 30-minute fire resisting.

SD smoke detectors: Fit a smoke detector system wire to the mains supply and to each other with battery backup system. One per floor minimum. All installed to BS 5839.6.2004. To be over 300mm from doors, walls and light fittings.

Party walls: To be lined with 12.5mm foil back plasterboard over Celotex GA4050 insulation battens on 25mm x 50mm battens at 600mm centres. (25mm air gap) Tape joints before plaster boarding.

Build up gable wall (Tile Hang): Two skins of 100mm Celcon blocks with 50mm Rockwool batt filled cavity, line inner surface with 50mm Celotex battens and 12mm foil backed plasterboard and setting coat. Wall ties at 750mm horizontally and 450mm vertically. Tie to roof joists with 1m x 32mm x 5mm M.S. galvanised straps at 1.2m centres. Tile hang externally with small plain concrete tiles on battens on the felt. New rafters to be 150mm x 50mm at 400mm centres.

Chimney Stack: Trim all timbers minimum 40mm from chimney stack faces.

Radiators: All new radiators to be fitted with TRVs.

Form Juliet balcony: With metal handrail at 1.1m & bolted back to dormer sides. Balusters at maximum 100mm centres. The guarding is to be a minimum height of 1100mm and to have spacings no more than 100mm, and not be climbable. The guarding is to be capable of resisting forces in accordance with BS EN 1991-1-1 and the national annex PD 6688-1-1, these are: 0.74 kN/m for a horizontally uniformly distributed line load, 1.0 kN/m² for a uniformly distributed load applied to the infill and 0.5 kN for a point load applied to part of the infill.



Existing North

1 : 100



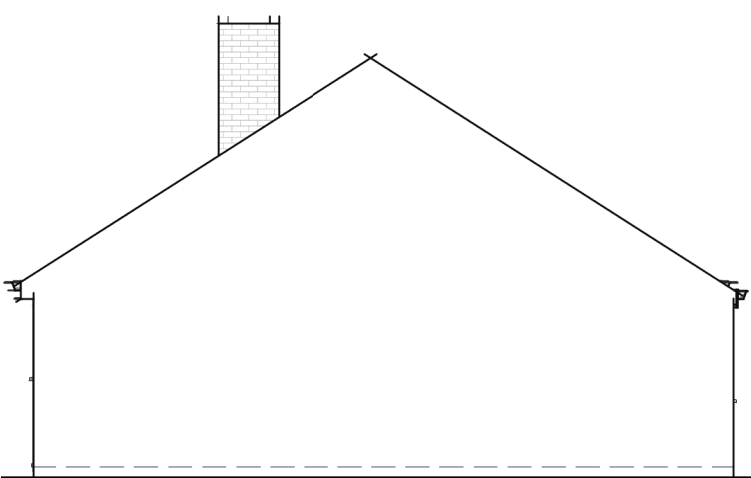
Existing East

1 : 100



Existing South

1 : 100



Existing West

1 : 100



Proposed North

1 : 100



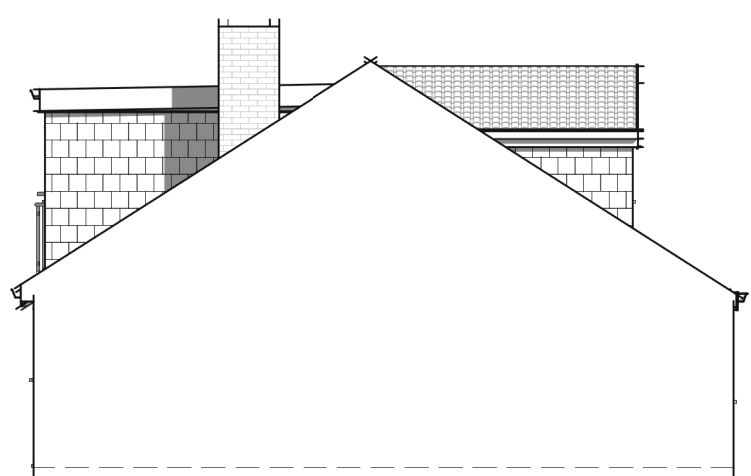
Proposed East

1 : 100



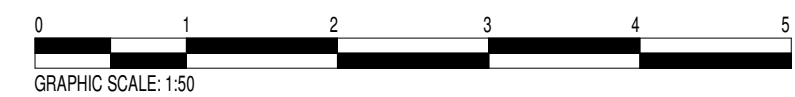
Proposed South

1 : 100

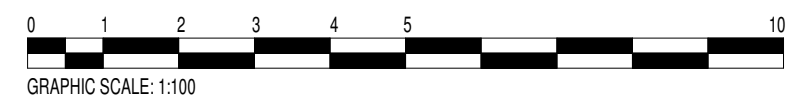


Proposed West

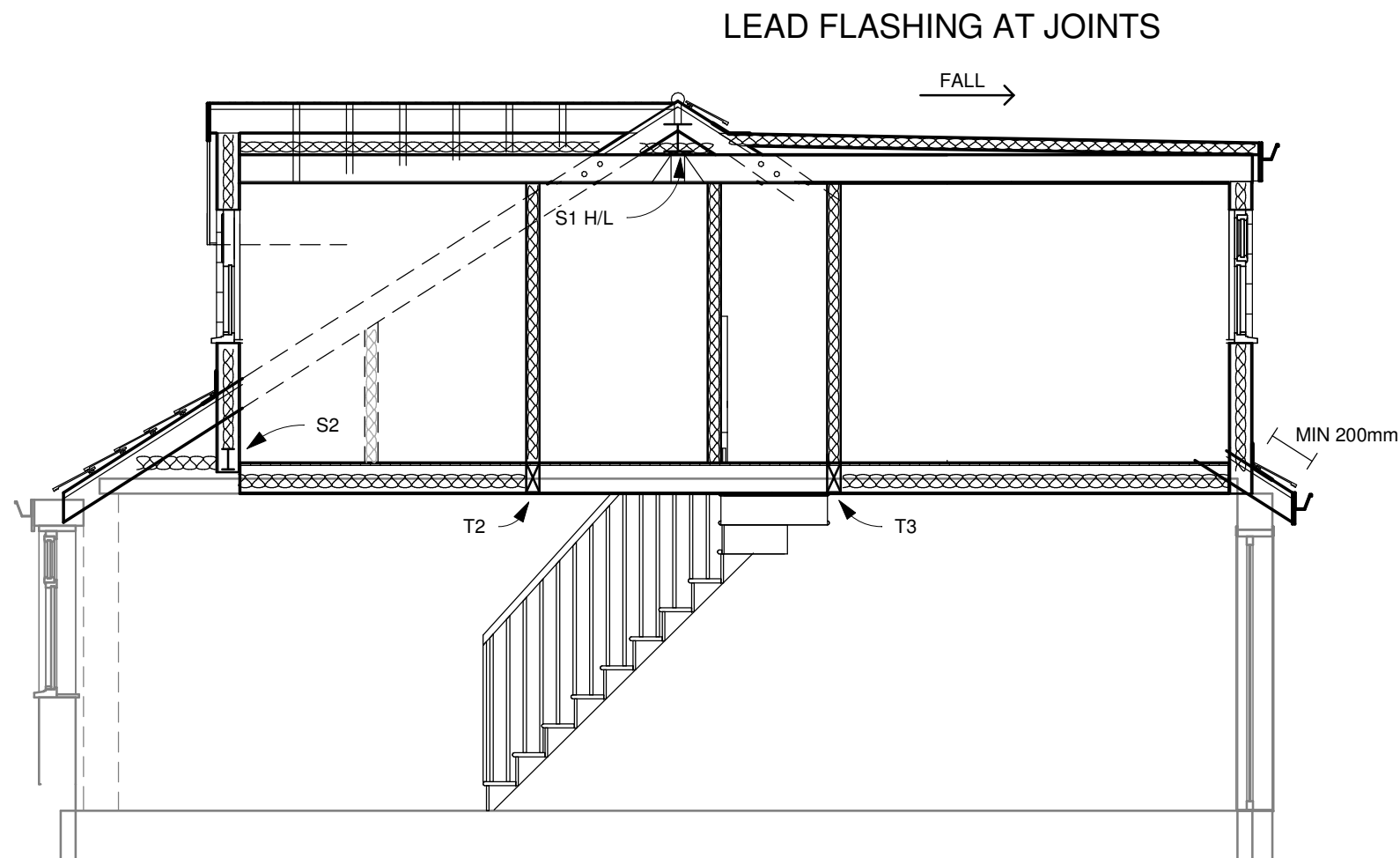
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GRAPHIC SCALE: 1:50



GRAPHIC SCALE: 1:100



Section A.A.

1 : 50

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Principle Contractor is to ensure all materials and workmanship complies with Regulation 7 of the Building Regulations whether or not specifically stated on these drawings. It is the Principle Contractors' duty to ensure all works on site are approved by an appointed Building Control body.

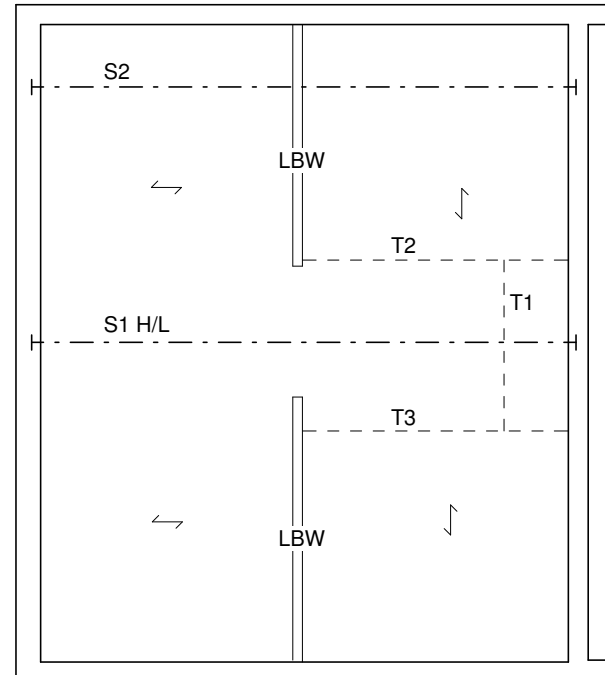
Principle Contractor is to ensure dimensions are taken on site before procurement of any materials/work proceeding. Structural members are not to be ordered scaling from this drawing.

Principle Contractor to ensure full compliance with the amended CDM Regulations (2015) if the project requires.

This drawing, unless noted, does not represent compliance with the Party Wall Act 1996 and if required, all agreements are to be in place before works commence.

It is the Principle Contractors' responsibility to ensure Planning/Building Control approvals are in place prior to works commencing. Should works commence prior to relevant approvals Thorns-Young Architectural accept no responsibility.

Do not scale from this drawing except for the purpose of Local Authority Planning department



Structural Layout

1 : 100

Rev.	Date	Description
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Mrs Jones

Job Title

92 Deverell Place
Waterlooville

Drawing Title

Loft Conversion

Scale As indicated Sheet A1

Date SEP 19 Drawn by CM

Drg. No. 3182 · 19 · 1 Rev.