

09 MAR 2021

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**Front gable build up, new dormers and porch
at 20 Fairmead close Cowplain, PO8 9AL
For Mr Mrs Standen**

rev 2

These notes are for Building Regulation purposes and do not constitute a specification of work to be done. They are to be read in conjunction with drawings and calculations. All dimensions must be checked on site by contractor before and during construction on site. Where the proposed work falls within the scope of the Party Wall etc. Act 1996, it is the responsibility of the owner to give the appropriate notice to adjoining owner(s). Existing Chimney stack in roof to be completely removed down to ceiling level
Note: Lengths of all beams to be site measured to include bearings before ordering.

New pitch roof for gable build up: Interlocking concrete tiles to match existing and colour, 25mm thick battens and "Tyvek Supro" or equivalent breather membrane, min 225 mm laps laid in accordance with Agrément Certificate and manufacturers requirements on 47 X 100mm C24 rafters at 400mm centers. 50x150 stub purlins to be built out from new gable at mid-span. Roof to be birdsmouthed over new wall plates. Insulate all void areas with 100mm fibreglass insulation laid between joist and a further 200mm fibreglass laid across joists. Total thickness 300mm. Ensure insulation is dressed down at eaves to meet wall insulation. PVC-U facias, bargeboards and soffits to clients choice. Where rafters and ceiling joists run parallel with external walls, provide galvanised 5x30ms straps, 1.2m long let into underside of timbers with noggins in between and hooked down cavity face of inner skin. Provide 5x30 ms 1m long vertical straps @ 2m c/c to all plates.

Flat Roof: 12.5mm bitumen bedded stone chippings on 3 Layer high performance roofing felt to BS747 and CP 144, 22mm wpb plywood deck, on furring pieces to give 1:60 fall. New flat roof joists to be 47x 120 C24 timbers @400 c/c with sub ceiling of 47x170 joists at 400 c/c. 12.5mm plasterboard ceiling with plaster finish. Provide double joists and ceiling joists to trim roof lights. Ensure gap between flat roof insulation and wall insulation/pitched roof voids is totally sealed with insulation. Insulate all void areas and light wells with 100mm fibreglass insulation laid between joist and a further 200mm fibreglass laid across joists. Total thickness 300mm. Ensure insulation is dressed down at eaves to meet wall insulation. Ventilate roof via 25mm vent strips in soffits boards on both sides of roof and ensure clear path past insulation. Provide lay board and tilting fillet at flat/ pitched roof junction and extend felt 300mm up roof under pitch roof Tyvec underlay. Provide lead flashing under flat roof felt and lapped over bonnet tiles before laying ridge tiles. Allow for drainage gaps in ridge tiles.

Dormer/ cheeks: Horizontal grey cement fibre boarding by Cedral or similar fixed strictly in accordance with manufacturer's instructions on counter battened treated 25x38mm battens, untearable Tyvek breather membrane on 12.5mm WBP plywood, 50x100 studs and plates. Studs @ 400mm c/c, cross braced. 12.5mm plaster board internal lining. Provide GA 3065 (65mm) Celotex insulation between studs with PL3015 (15mm) Celotex over inner face of studs with taped joints before plaster boarding. 2x50x150 timber beams over bed windows and double studs each side. Provide lead soakers and flashing at roof/dormer junction.

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External gable wall and reclad existing tile hung rear gable: Horizontal grey cement fibre boarding by Cedral or similar fixed strictly in accordance with manufacturer's instructions on treated battens/counter battens, untearable breathable roofing felt on 19mm WBP plywood, 50x150 studs and plates. Studs @ 400mm c/c, cross braced. 12.5mm plaster board internal lining. GA 3065(65mm) Celotex insulation between studs with PL3015 (15mm) Celotex over inner face of studs with taped joints before plaster boarding. 2x50x150 timber beams over bed windows and double studs each side. Provide lead soakers and flashing at roof/dormer junction.

Internal Stud walls: Walls to be 50x 100 studs and plates @ 400c/c faced each side with 12.5mm Plasterboard. Load bearing studwork to be cross braced. Provide double studs adjacent to all openings and where supporting beams. Provide 100mm fiberglass insulation in-between studs of all internal walls. Walls between room and roof space to be in filled between studs with GA4080 (80mm) Celotex insulation with a further layer of GA4012 over the inner face of the studs. All joints taped as above

New First Floor: 22mm t&g chipboard to BS 5669:part 2 type C4 or C5 with glued joints, water resistant type to wet areas. Existing floor joists to be checked as C24 grade 63 x 225 mm deep joists @ 400mm c/c . All floor joists to be provided with Solid or herring bone strutting at 1/3rd and 2/3rd span position. Provide 50x50 battens to support all edges of plasterboard. 15 mm plaster board ceiling with plaster finish. Provide additional/ double joists under studwork partitions and bath. Provide 100mm Rockwool in all floor voids between rooms. Existing ceiling joists to be fixed to new joists at position of removed binders. Fully board out all roof void areas to provide eaves storage.

Structural: See plan and notes/calculation sheets for further structural details. All beams and trimmers to be packed off existing ceiling by 12mm. All structural timber to be C24 grade. Joist hanger to be Simpson Strong Tie with all holes nailed in accordance with manufacturers recommendations. Steel Beams to be encased in 2x12.5mm plasterboard for 30 minutes fire resistance. Inner skin of existing pier in rear wall between new Bifold doors and kitchen window to be rebuilt in 7Nmm strength insulation blocks ie Thermalite Hi strength 7 blocks

Front Porch: Existing bay window in dining room to be removed and opening blocked up to match existing as shown. Flat roof as above but with 50x 100mm joists and Celotex warm deck insulation or similar to a depth to keep top of roof level with top of existing fascia. Provide lead flashing at roof wall junction and run felt min 225mm up under existing tiles on layboard. Guttering matching existing to be joined to existing

External Porch wall: Face brickwork to DPC level then white painted or smooth two coat render finish to match existing on 100mm "Thermalite Shield 2000" to match existing, 100mm cavity with Celotex CW4045 fixed to innerskin in accordance with manufacturers installation guidelines and built in as work proceeds, 100mm "Thermalite Shield 2000" block (or equivalent block by other manufacturer) inner skin. Internal finish to be sand cement render finished with Lime based plaster. Ensure all wall insulation is extended up past eaves to link with roof insulation. Stainless steel wall ties at 750mm horizontally and 450mm vertically staggered and every block course alongside openings. All new work toothed and bonded to existing. Cavities and dpc's to be

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continuous. External dpc minimum 150mm above ground level. Close cavities at reveals with insulated vertical dpc's ('Ruberclose' or similar). Wall insulation to be taken up to underside of window board. Front door and wing lights to client choice but to be double glazed as below windows/doors. IG or Catnic steel lintels (or similar approved steel lintels) over openings insulated with polystyrene with minimum 150mm bearing to each end. Provide all cavity trays with weep holes and end turnups.

Porch Floor: New floor to be level with existing. 50mm screed, 100mm concrete, 70mm Celotex GA4000 with 20mm vertical insulation to external perimeter on 1200 gauge polythene dpm fully lapped to and made continuous with wall dpc on minimum 100mm sand blinded, compacted hardcore. Install 500 gauge polythene Vapour control layer (VCL) over insulation to minimise risk of condensation.

Maintain ventilation to any existing floor voids with 100mm diameter UPVC pipes laid in hardcore taken to new telescopic air bricks in new extension rear wall.

Foundations to be taken down to minimum same depth as existing house, but to firm virgin subsoil, min 600mm wide x 300mm deep concrete.

Windows & External Doors/Ventilation: All fixed roofwindows and windows to be double glazed frames with Low-E glass to give a maximum U-value of 1.6W/m²K i.e. minimum 16mm air gap to sealed units if emissivity = 0.05 – soft coat. Opening vents minimum 1/20th of floor area of enclosed room. Provide trickle vents in window/door frames to give background ventilation of minimum 8000mm². Glazing to be in accordance with Part K, Building Regulations 2013 with safety glazing to all critical areas to BS6206: 1981. Provide mastic seal around all door and window frames. Openable elements of doors and windows to be fitted with draught stripping. Provide obscured glazing to any glass below 1.7m above floor level to new side window in gable. New first floor bedroom roof windows must provide at min 550 wide x 700mm high clear opening to provide means of escape window-with a cill height between 800mm and 1100mm. Provide new 3.6m wide double glazed bifold doors to kitchen room as shown. Existing window in new kitchen/rear elevation above new sink position to be replaced with 1.050 deep UPVc window to match existing. Lintel over new WC window to be heavy duty Catnic or Ig lintel

Stairs: Existing stairs to remain in place but provide balustrading at top as shown on plan CNS01. Balustrade (+ vertical balusters) at 900mm above floor level.

Plumbing: All to BS 5572. Existing S&VP to be re-routed as shown. New branch to be 100mm diameter extended up to terminate 900mm above highest opening window All to BS 5572. Provide rodding access at all change of direction, strap at 1M centres to joists. Hand basin- 40mm branch, shower 40mm branch. All traps to be 75mm deep anti-vac traps.

Mechanical Ventilation: All mechanical ventilation ducted to external air. New ground floor WC, utility room, kitchen, first floor bathroom and en-suite to be provided with mechanical extractor ducted to external air providing 30l/s. Bathroom to have min 15 minute overrun.

Rainwater Disposal: 112mm gutter to roof slopes and 68mm dia downpipes to existing outlets

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Services: Extend/adapt existing heating and electrical and hot and cold water systems to serve new room and appliances in accordance with owners' requirements and relevant bylaws/regulations. Existing Boiler to be checked to confirm capacity to supply new rooms as shown or provide new gas fired, wall hung balanced flue or fan flue condensing boiler if required in position to be determined. Flue outlet to be in accordance with Diagram 3.4 of Approved Document J. Boiler to have a minimum approved SEDBUK rating. Fit thermostatic radiator valves to new radiators.

Provide in new room/areas affected by the proposed building work energy efficient lighting having a luminous efficacy greater than 40 lumens per circuit-watt – the number of such fittings required to be three fitting per four new fittings provided.

All electrical work to meet requirements of Part P (Electrical Safety - dwellings) of the Building Regulations and to be designed, installed, inspected and tested by a person competent to do so. Prior to completion of work the Building Control Surveyor will need to be satisfied that Part P has been complied with. This is likely to require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so.

Smoke detection: If not already installed- provide mains powered self-contained smoke detectors in ground floor hall and first floor landing area (See DS on proposed floor plans) Detectors to have battery back up and to be interconnected and installed in accordance with BS5839-1: Building Regulations 2013.

Fittings, etc: Internal doors, internal fittings and electrical layouts, and decorations all to clients' requirements. Layout of sanitary accommodation as shown on plan is for illustrative purposes only.

Additional Structural note