DORMER CONSTRUCTION

To achieve minimum U Value of 0.18 W/m²K

Structure to Engineer's details and calculations. Tiles hung vertically on 25 x 38mm preservative treated battens (vertical counter battens to be provided 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 W.B.P external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using: 150mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to Structural Engineer's details and calculations.

Insulation to be 120mm Celotex XR4000 between studs with 25mm Celotex TB4000 over. 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. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres. Dormer cheeks 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.

DORMER FLAT ROOF

(imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²) To achieve U value of 0.15 W/m²K

To Structural Engineer's details. Flat roof covering to be single ply roofing membrane with aa fire rating as specialist specification, with a current BBA or WIMLAS Certificate on 18mm exterior grade plywood, laid on firrings to give a 1:40 fall on 47 x 175mm grade C24 joists at 400 centres, max span 3.89m (see Engineer's details for sizes). Cross ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous ventilation, with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a 50mm air gap above the insulation for ventilation. Insulation to be 120mm Celotex XR4000 between joists and 50mm Celotex GA4000 under joists. Provide 12.5mm plasterboard over vapour barrier to the underside of the insulation. Plasterboard to be fixed joists and finished with a plaster skim.

Provide restraint to flat roof by fixing using of $30 \times 5 \times 1200$ mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100×50 mm wall plates and anchored to wall.

UPGRADE OF PITCHED ROOF

(imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²) Vented roof – pitch 22-45°

To achieve U-value 0.16 W/m²K

Existing roof structure to be assessed by a Structural Engineer and any alterations to be carried out in strict accordance with Structural Engineer's details and calculations, which must be approved by building control before works commence on site. The existing roof condition must be checked and be free from defects, as required by the Building Control Officer, any defective coverings or felt to be replaced in accordance with manufacturer's details.

Roof construction - 47 x 150mm Grade C24 rafters at max 400mm centres, max span 3.47m. Insulation to be 100mm Celotex GA4000 between rafters and 60mm under rafters. Fix 12.5mm plasterboard (joints staggered) over VCL. Finish with 3mm skim coat of finishing plaster to the underside of all ceilings.

(Cavity of 25mm provided by fixing battens between plasterboard and under rafter insulation recommended where insulation under rafters exceeds 50mm).

Maintain a 50mm air gap above insulation 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 or provide equivalent high and low level tile vents in accordance with manufacturer's details.

ROOF LIGHTS

Min U-value of 1.6 W/m²K. Roof-lights to be double glazed with16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.



PROPOSED SECTION

1:50

IMPORTANT GENERAL NOTE

ALL WORK TO COMPLY WITH CURRENT BUILDING REGULATIONS AND CODES OF PRACTICE.

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH THE CDM REGULATIONS, AND APPROPRIATE HEALTH & SAFETY ON SITE.

PROPOSED EXTERNAL FINISH MATERIALS TO MATCH EXISTING EXTERNAL FINISH MATERIALS.

TITLE	SCALE	DWG NO.	PROJECT	REVISION		DATE
Proposed Section	1/50@A3	069 - 05	7 Dean and Chapter Cottages Red Street Southfleet Gravesend DA13 9QG			04.2024

SMOKE DETECTION

Provide a linked smoke alarm detection system to BS EN 14604 and BS 5839-6:2019 to at least a Grade D 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.

Mains-wired, interlinked heat detector to be provided to the kitchen and smoke detectors to principal living rooms, if required by Building Control.

Electrical:

All wiring and electrical work will be designed, installed and tested in accordance with the requirements of BS 7671, the IEE 17th edition Wiring Guidance and Building Regulation Part P (Electrical Safety) By a competent person registered with an electrical self certification scheme authorised by the secretary of state (BRE, BSI, ELECSA, NAPIT or NICEIC).

The competent person is to send to the local authority a slf certificate within 30 days of completion of the electrical work. The client must receive both a copy of the self certificate and a BS 7671 Electrical Installation Test Certificate and forward copies to building control

Provide 3/4 light fitting that will only take a lamp with a Luminous efficiency of 45 lumins per circuit watt and total input greater than 400 lamp lumens

Door-Windows:

All new external doors and windows to be double glazed in timber or plastic frames with a soft low-E coating glass to be laminated or toughened within 800mm from floor in windows or within 1500mm from floor in doors (in Critical Locations). Glazing in Critical areas shall be impact resistance. Toughened safety glass to comply with BS 6202 U-value for Window & Roof lights to be 1.6w/m2k U-value for Doors to be 1.8w/m2k window to be 1/10th of the floor area with an openable area of 1/20th of the floor area provide trickle vents to all new windows

Drainage:

Existing drains to be tested to ensure watertight and adequate for additional waste

All drainage above ground to comply with BS 5572 basin/sink - 32mm slotted waste and chain with plug 75mm u.p.v.c. deep seal trap bath - 38mm slotted waste and chain with plug 75mm u.p.v.c. deep seal trap w.c. turned P trap multiquik connector w.c. waste to run seperately to s.v.p. from other wastes

Rainwater to soakaway 5m min from building or to be connected to existing system

LEAD WORK AND FLASHINGS

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.



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