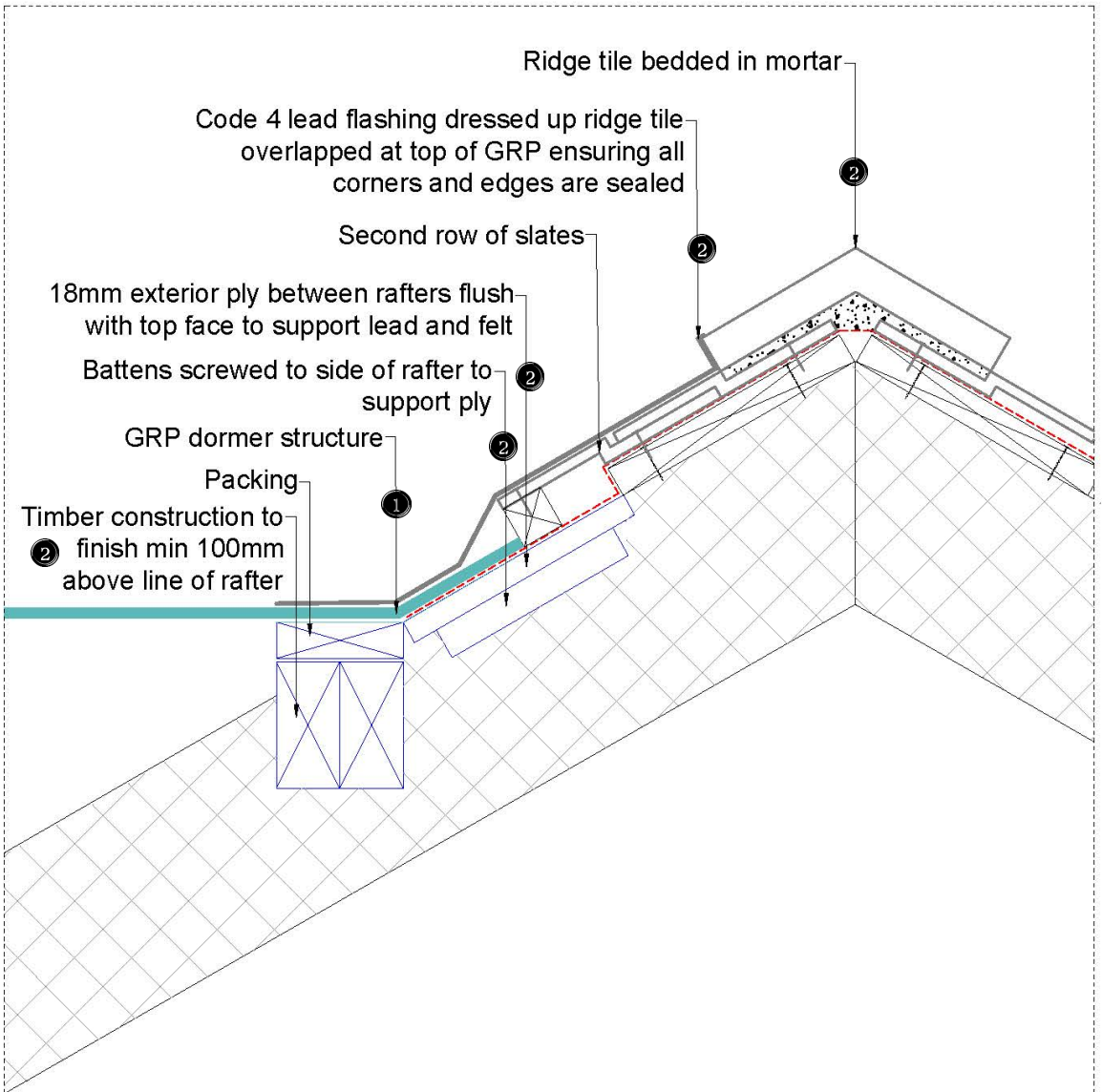


# Typical Detail – GRP Dormer – Lintel Fixing Pattern



**NOTES:**

1. Dormer - GRP (glass reinforced plastic) dormer clad with fibre re-enforced polymer resin (FRP) to BS EN ISO 9001:2008 and BS EN ISO 14001:2004, BBA certified, CGMA approved. Structure: timber framework bonded with 4mm plywood both sides and overlaid with GRP with Flocoat finish with FRP reinforced skirt to aid fixing to the roof trusses and to support roofing lathes and slates and GRP self-draining fixing gutter incorporated cheeks' sides. Colour: slate to match existing roof covering. Manufacturer: APC Mouldings. Structural performance: accepts the loads associated with roofs where no access is provided, other than that necessary for cleaning and repair. Weathertightness: provides adequate resistance to the ingress of precipitation. Relation to fire: Fire proof - class O (fire retardant) to BS 476-3: 2004, Thermal properties: Insulated with 100mm PU Foam Insulation inserted into framework and encapsulated, U-Value 0.184 W/m2K. Condensation risk- minimal, VCL improved. Durability - material subjected to natural exposure, life span in excess of 30 years.
2. Supplementary materials and fixings: (integral with the dormer) internal lining - vapour check plasterboard, vapour control layer (VCL), lead flashing kit, windows, joint sealant (high-performance silicone or polysulfide sealant), screws. (Additional to supply) 4 No Seat Battens (38mm x 25mm x 2400/1200 + 500), 2 No Fixing Support Boards (18mm thick x 2400/1200 + 500). Fixing: Qty Stainless Steel Screws (38mm & 50mm), Seat Battens- 50mm long No 10 stainless wood screws, Support Board 38mm long No 10 stainless wood screws, Galvanized fixing plate - 50mm long No 10 stainless wood screws, Through tiling batten to GRP side flange - 50mm long No 10 stainless wood screws
3. Windows - Consort FS System PVCU Casement Windows. Frame specification: Finish 1: Anthracite Grey 7016, Finish 2: White - Non Foiled, Cill: No Cill, Beading: Shaped 28mm Bead, Drainage: Face, Reinforcing: Casement Full with 4000 Trickle Vent Grey/WHIT and Drain Slot Cap Grey. Glazing: 4-20-4.CLR.LowE Black Warm Edge Argon. Properties: LUMINOUS FACTORS EN410 (2011-04) - Light Transmittance (TL) 81%, Outdoor Reflectance (RLe) 12%, Indoor Reflectance (RLi) 13%. THERMAL TRANSMISSION EN673-2011 - Ug 1.2 W/(m2 .K), Do related to vertical position, MANUFACTURING SIZES - Nominal Thickness 28.00 mm, Weight 20 kg/m2, UV FACTORS EN410 (2011-04), TUV 42%, SAFETY CLASS EN 12600, Pendulum Body Resistance NPD, ENERGY FACTORS EN410 (2011-04) - Transmittance (TE) 64%, Outdoor Reflectance (Ree) 20%, Indoor Reflectance (REI) 20%, Absorptance A1(AE1) 6%, Absorptance A2 9%, Absorptance A3, SOLAR FACTORS EN410 (2011-04) - Solar Factor (g) 73%, Shading Coefficient (SC) 0.83, COLOR RENDERING - Ra Light Transmittance 99, Ra Outdoor Reflectance 94, ANTI-BURGLARY EN356 - Burglar Resistance NPD.

Installation must be carried out in accordance with the Manufacturer Installation Guide. The host roof must be checked that it is able to support the additional loads, including wind loads from the dormer, and any new trimmer members and fixings must be designed to the relevant Codes and Standards.

1. Fix 2No battens to the inside face of double support rafter and adjacent rafter, so both battens are facing each other. Recommended fixings: 50mm long No 10 Stainless Screws at 300mm ctrs
2. Fix 18 mm thick external grade plywood on battens to the rafters to support the lead flashing and felt. Secure fixing support board between the rafters with stainless screws at 300mm centres securing into each batten. Recommended fixings: 38mm long No 10 Stainless Screws at 300mm ctrs
3. Install a base layer membrane over fixing support boards and secure as recommended.
4. Fix timber sole plate with an upstand projecting 100 mm above the top of the supporting rafters.
5. Lay lead soaker flashing with 300 mm felt underlay to the upstand (Lead flashing to be fitted under bottom edge of dormer and then carried over roof slates to allow to run off). Attach lead apron to sill support timber & ply (dressed over tilting fillet).
6. Fix dormer in place using metal fixing plates (supplied). Minimum of 6No screws used on each plate. 2 plates must be used on each side. Plates must be installed a maximum of 300mm from front and rear of the dormer. Recommended fixings: 50mm long No 10 Stainless Screws
7. Lap an additional membrane under roof membrane and lay on top of rear GRP fixing flange to channel any moisture into the GRP gutter. Apply underlay to the host roof and secure using a timber tilting fillet at the bottom flange.
8. Fix battens to rafters and over dormer edges up to dormer window batten stop. Slate up to dormer sill, dress lead over slates ensuring continuous downward fall. Continue slating up roof. Slates over double ribs to be laid on bed of mortar.
9. Over top flange run lead apron over roof slates and seal all edges with sealant.
10. Fix internal lining of a VCL and plasterboard to the dormer frame.
11. Fix windows to the dormer frame and seal in accordance with standard practice.

To achieve the recommended values, follow Manufacturer's technical instructions and Detailed Architect's drawings when installing the dormer and windows.