

ROOF TILES

WHERE POSSIBLE ROOF TILES ARE TO MATCH EXISTING AND TO BE FIXED TO MINIMUM 38 mm x 25 mm TREATED BATTENS AND BREATHABLE TYVEK OR CHESTERBREATH REINFORCED ROOFING FELT 1F TO BS 747 WITH MINIMUM 450 mm LAPS AND FIXED WITH 50 mm x 3.35 MINIMUM GALVANISED WIRE-CUT IMPROVED OR ALUMINIUM CLOUT HEAD NAILS TO BS 5534 PART 1

ROOF VOID VENTILATION SHOULD NOT BE USED WITH BREATHABLE ROOFING FELT PROVIDED MANUFACTURERS' INSTALLATION RECOMMENDATIONS ARE IMPLEMENTED IN FULL ON SITE

ROOF TILE UNDERLAY TO BS 5534 AND BS 5250 WITH EAVES COURSE OF TILES TILTING TO RUN OUT TO CENTRE LINE OF GUTTER AND OVER CONTINUOUS SOFTWOOD TREATED TILTING FILLET

RAFTERS TO BE BIRDS-MOUTHED OVER INNER SKIN WALL PLATE AND SUITABLY SPIKED OR FIXED TO WALL PLATE OR GALVANISED FIXING PLATES

ROOF RESTRAINT

- WALLS RESTRAINED BY MILD STEEL STRAPS AT 1200 mm CENTRES TIED ACROSS A MINIMUM 3 CEILING JOISTS
- GALVANISED MILD STEEL 30 mm x 5 mm x 1000 mm LONG RESTRAINT STRAPS AT MAXIMUM 1800 mm CENTRES TIED BACK ACROSS A MINIMUM 3 NUMBER TIMBER MEMBERS
- JOISTS TO HAVE SOLID INFILL TIMBER NOGGINS PROVIDED UNDER RESTRAINT STRAPS

PITCHED ROOF INSULATION

- TO ACHIEVE CURRENT 0.16 W/m² K PROVIDE A TOTAL 270 mm THICKNESS MINERAL FIBRE COMPRISING 100 mm MINIMUM THICKNESS MINERAL FIBRE INSULATION QUILT BETWEEN CEILING JOISTS AND 170 mm THICKNESS MINERAL FIBRE INSULATION QUILT OVER CEILING JOISTS LAID AT RIGHT ANGLES
- MAINTAIN MINIMUM 50mm AIR GAP BETWEEN THE INSULATION AND ROOFING FELT VIA A PROPRIETARY VENTILATION TRAY TO SOFFIT LEVEL TO MAINTAIN CROSS AIRFLOW TO ROOF VOID
- ROOF INSULATION LAID BETWEEN CEILING JOISTS IS TO BE LINKED WITH FULL CAVITY WALL INSULATION Batts AND IN ALL CASES THE CROSS AIR FLOW TO THE ROOF VOID IS TO BE MAINTAINED AT THE WALL AND ROOF INSULATION JUNCTURE

WALL PLATE

- ALL NEW WALL PLATES TO LINE THROUGH TO LEVEL WITH THOSE OF THE EXISTING ROOF UNLESS STATED OTHERWISE
- TO BE MINIMUM 100 x 50 mm 'TANALISED' TIMBERS SECURED BY GALVANISED MILD STEEL RESTRAINT STRAPS
- WALL PLATES ARE TO BE EMBEDDED LEVEL AND SQUARE AND TIED TO BLOCKWORK WITH 30 x 5 x 900 mm LONG VERTICAL RESTRAINT STRAPS SPACED AT MINIMUM 1800 mm CENTRES AND AT MAXIMUM 1800 mm CENTRES
- HALF WALL PLATE AT ALL JOINTS

TIMBER TREATMENT

- ALL TIMBERS ARE TO BE TANALITH OR SIMILAR APPROVED TREATMENT TO BS 4072-1974 AGAINST HOUSE LONGHORN BEETLE INFESTATION OR SIMILAR INSECT CAPABLE OF STRUCTURAL TIMBER DAMAGE
- ANY TIMBER CUT ENDS MUST BE SUITABLY TREATED ON SITE

LEAD LINED VALLEYS

THE UNDERLAY ON EACH SIDE OF THE VALLEY SHOULD OVERLAP THE VALLEY SIDES AND PASS UNDER THE LEAD LINING
THE UPSTANDS OR TILTING FILLETS AT EACH SIDE OF THE VALLEY ARE REQUIRED TO PREVENT WATER WITHIN THE CENTRE AREA OF THE VALLEY + WILL PREVENT WATER INGRESS EVEN IF THE MORTAR IS MISSING OR DAMAGED
AS A FINAL BARRIER AGAINST WATER INGRESS THE EDGES OF THE LEAD SHOULD BE TURNED OVER TO FORM A WELT
MORTAR BEDDING SHOULD NEVER BE LAID DIRECTLY ONTO THE LEAD AS THE EXPANSION AND CONTRACTION OF THE LEAD WITH TEMPERATURE CAN QUICKLY CRACK THE MORTAR

THE MORTAR SHOULD BE LAID ONTO AN UNDER-CLOAK OF TILE OR FIBRE-CEMENT BOARD TO ALLOW MOVEMENT BETWEEN THE LEAD AND THE UNDER-CLOAK

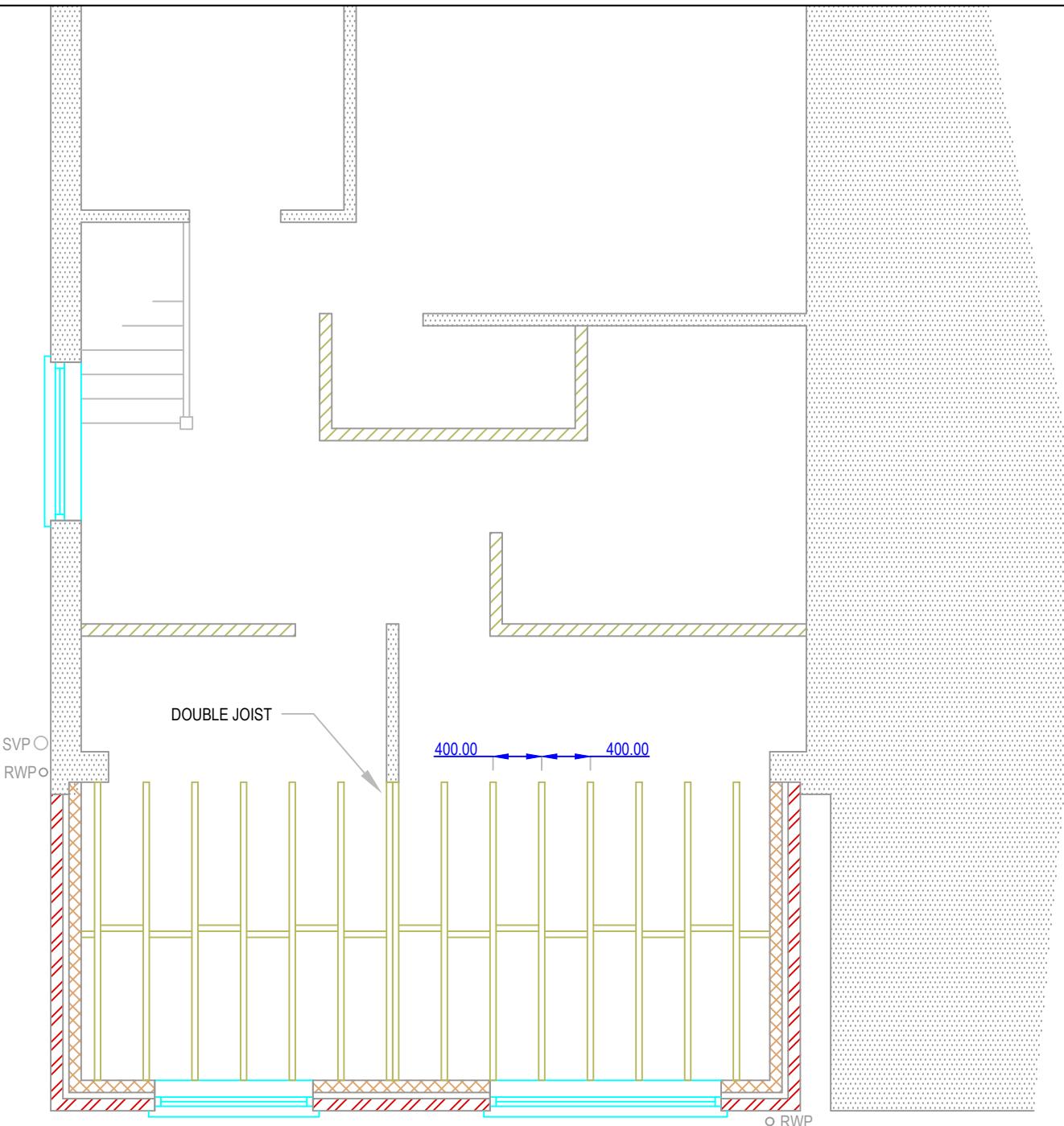
TO PREVENT WATER PASSING OVER THE UPSTANDS THERE SHOULD BE A GAP OF AT LEAST 25 mm BETWEEN THE MORTAR BED AND THE UPSTAND

TILES SHOULD BE CUT NEATLY TO FORM THE REQUIRED OPEN VALLEY WIDTH AND ALL CUT PIECES MUST BE TWICE FIXED BY A COMBINATION OF NAILING OR SCREWING AT THE HEAD AND CLIPPING AT THE TAIL

ALTERNATIVELY

PREFORMED GRP VALLEYS

SOME GRP VALLEYS ARE SUFFICIENTLY ROBUST TO ENABLE THEM TO BE LAID DIRECTLY OVER THE RAFTERS RATHER THAN BEING SUPPORTED ON VALLEY BOARDS BUT THE CONTRACTOR MUST CONFIRM THIS WOULD BE SUITABLE WITH THE VALLEY MANUFACTURER
THE UNDERLAY CAN BE LAID DIRECTLY UNDER THE VALLEY LINING AND IT IS GOOD PRACTICE TO LAY A WIDTH OF UNDERLAY ALONG THE VALLEY AND THEN OVERLAP THE GENERAL UNDERLAY ON EACH SIDE OF THE VALLEY OVER THIS
GRP VALLEYS HAVE PRE-FORMED UPSTANDS TO PREVENT THE INGRESS OF WATER AND FOR MORTAR BEDDING + SOME HAVE INTEGRAL SAND STRIPS TO ENSURE A GOOD ADHESION BETWEEN THE MORTAR AND VALLEY LINING



FIRST FLOOR JOISTS

150 x 50 mm C16 GRADE SOFTWOOD + TREATED FLOOR JOISTS LAID @ 400 mm CENTRES ALL TO COMPLY WITH APPROVED DOCUMENTS AND PROVIDE MINIMUM 100 mm THICK MINERAL WOOL INSULATION- DENSITY TO BE MINIMUM 60 kg/m³ BETWEEN FLOOR JOISTS WITH CEILING OF 12.5 mm THICK PLASTERBOARD - MINIMUM 10 kg/m² - AND SKIM FINISH

PROVIDE DOUBLE JOISTS SPIKED OR BOLTED AT 900 mm CENTRES WITH 12.5 mm DIAMETER MILD STEEL BOLTS AND DOG TOOTH CONNECTORS WHERE SUPPORTING TIMBER PARTITIONS SPANNING PARALLEL TO JOIST SPAN

ALL JOIST ENDS TO BE SOLELY FULLY FIXED TO GALVANISED RESTRAINT TYPE FLOOR JOIST HANGERS TO PREVENT AIR LEAKAGE AND COLD BRIDGING WITH ALL HOLES FULLY NAILED TO COMPLY WITH BS 6178: PART 1: 1990 AND AS PER MANUFACTURERS INSTRUCTIONS

SOLID TIMBER NOGGINS TO MATCH JOIST DEPTH OR GALVANISED STEEL HERRINGBONE JOIST STRUTS TO BE PROVIDED AT MID-SPAN