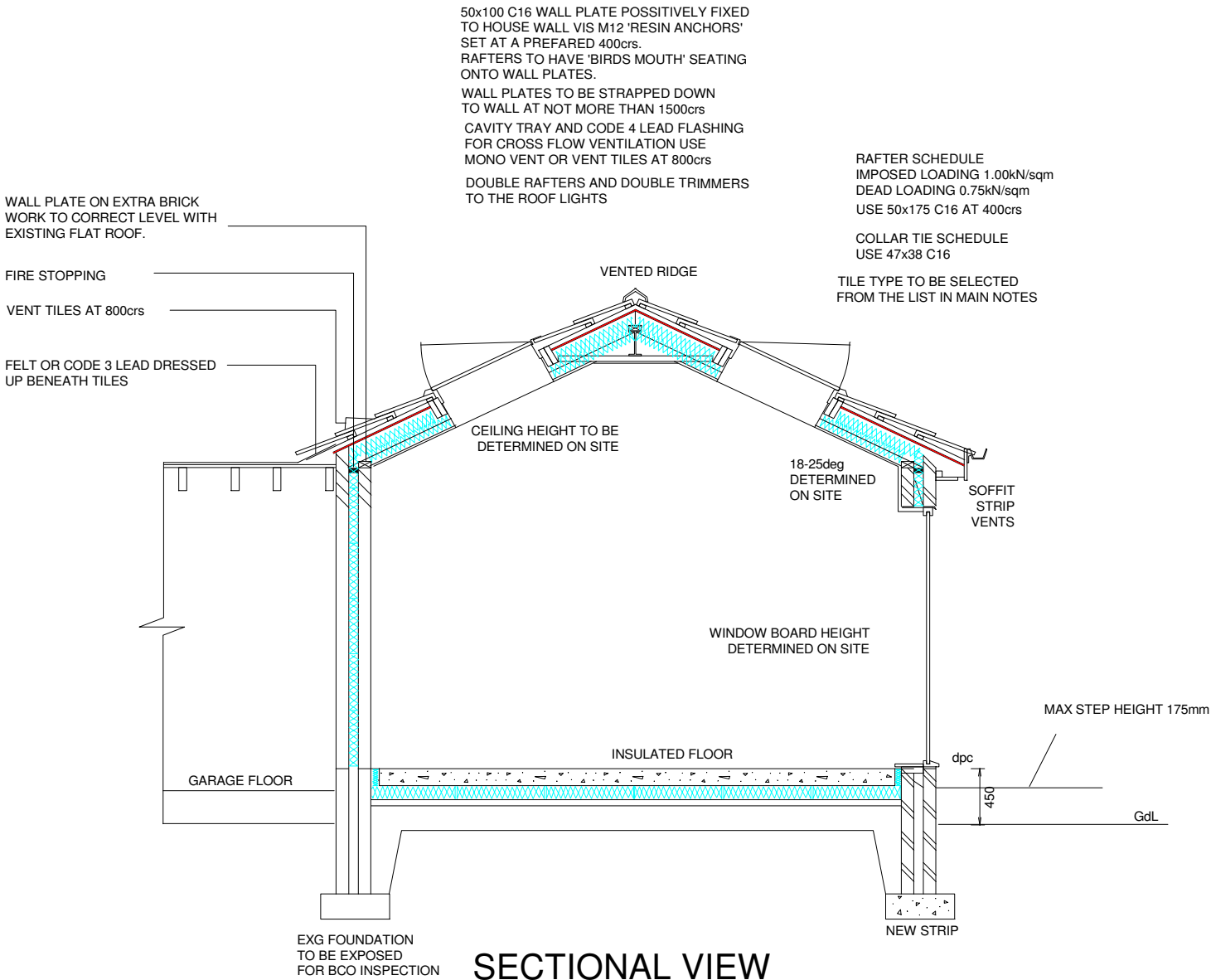
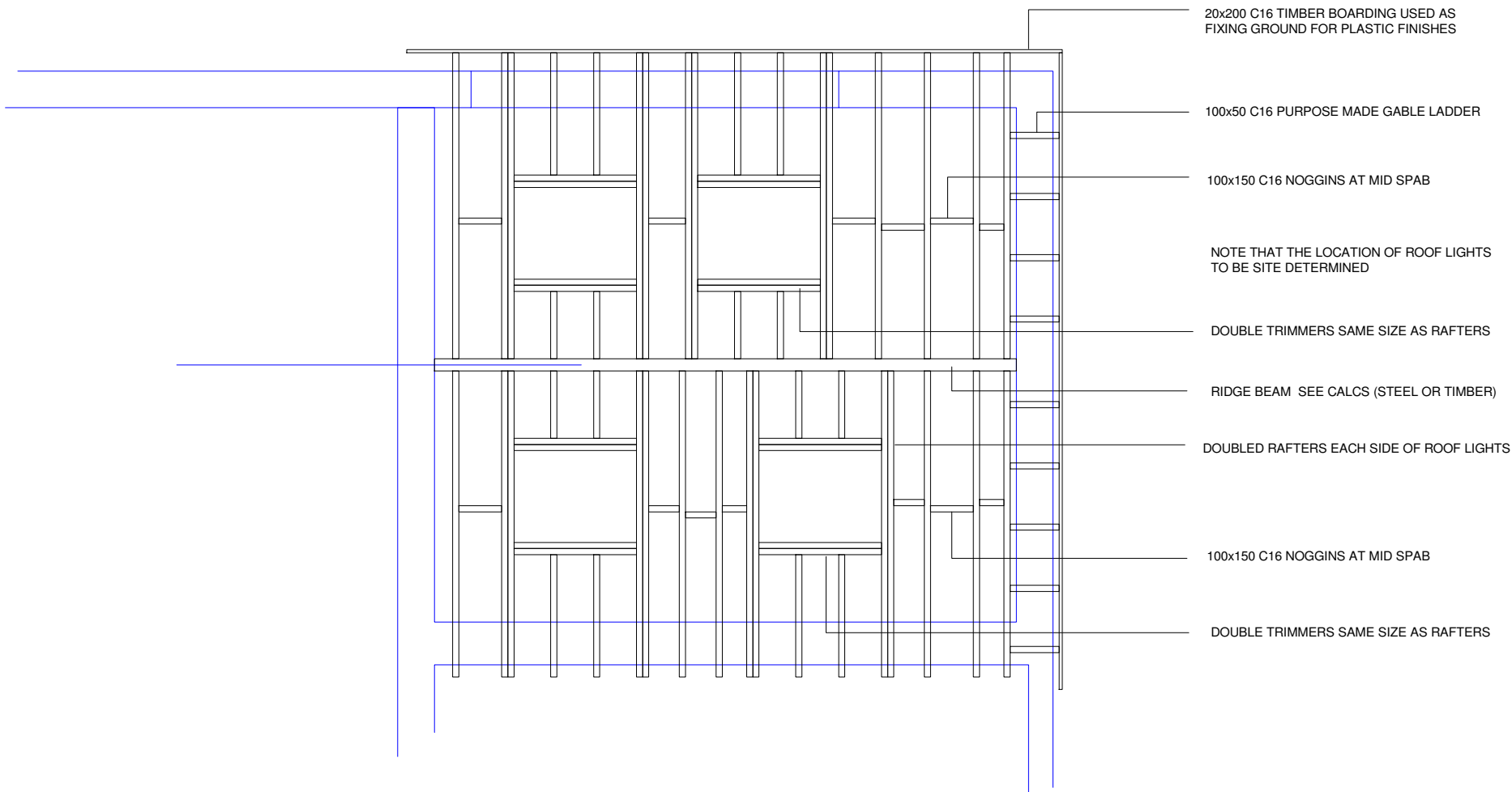


ROOF PLAN ELEVATION



SECTIONAL VIEW

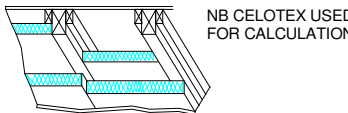
PITCH ROOF CONSTRUCTION

SELECT TILES FROM LIST PROVIDED & FIX
ON 38x25 TANALISED BATTENS, ON ONE LAYER
KINGSPAN MILVENT BREATHABLE MEMBRANE
INSULATION BETWEEN AND OVER CEILING JOIST
EARTHWOOL 100mm BETWEEN AND 170mm OVER
ROCKWOOL 100mm BETWEEN AND 170mm OVER
CEILING SOFFITS 12mm PLASTER BOARD & 'ARTEX'
FINISH. INSULATION LOCATED NOT TO OBSTRUCT
CROSS FLOW VENTILATION WHICH IS PROVIDED
BY VENT TILES EQUAL TO 25mm CONTINUOUS
EAVES OPENING AND 25mm SOFFIT STRIP VENTS.
BUILDER IS TO ESTABLISH PRECISE ACHIEVABLE
PITCH BEFORE BUYING AND/OR LAYING TILES.
REFER TO ARCHITECT IF IN DOUBT.

NOTE THAT WHERE THERE IS AN ANGLED CEILING
THEN THIS MUST BE INSULATED AND A 50mm AIR
SPACE PROVIDED FOR CROSS FLOW VENTILATION.
USE CELOTEX 100mm BETWEEN RAFTERS AND 35mm
UNDER RAFTERS. THIS GIVES 0.18W/sqmK
ALTERNATIVELY USE FULL FILL KINGSPAN K7
INSULATION BETWEEN RAFTERS WITH NILVENT
BREATHABLE MEMBRANE AND 38x38 COUNTER
BATTENS. NOTE USE K7 OR SUITABLE EQUIVALENT.

LOFT INSULATION BETWEEN RAFTERS

VENTED COLD DECK PITCHED ROOF
CELOTEX 100mm BETWEEN & 35mm UNDER
KINGSPAN KOOLTHERM 127mm K7 BETWEEN
& 25mm K18 DRY-LINING BOARD



INNER & OUTER SURFACES	= 0.18
INSULATION 0.135/0.022	= 6.14
PLASTER BOARD CLG 0.013/0.16	= 0.08
'U' VALUE = 0.156 W/sqmK	= 6.4
'U' VALUE ALLOWABLE = 0.18W/sqmK	

PITCH ANGLES FOR MARLEY TILES

ALL SMOOTH FINISH

PANTILE	75mm HEADLAP	23deg
EURO 9	75mm HEADLAP	30deg
MONARCH	75mm HEADLAP	23deg
BOLD ROLL	75mm HEADLAP	18deg
WESSEX	75mm HEADLAP	15deg
MODERN	100mm HEADLAP	18deg
MENDIP	75mm HEADLAP	23deg
LUDLOW MAJOR	100mm HEADLAP	23deg
DOUBLE ROMAN	100mm HEADLAP	23deg
ANGLIA PLUS	100mm HEADLAP	25deg
LUDLOW PLUS	100mm HEADLAP	23deg

DO NOT USE TILES BELOW RECOMMENDED PITCH.

RAIN WATER GOODS.

SURFACE WATER TO DISCHARGE FROM ANY NEW
ROOF INTO 100 1/2RD GUTTER AND 63da DOWN
PIPE.
PIPES AND GUTTERS MADE OF DURABLE PLASTIC
AND BE FIRMLY SUPPORTED AND REMAIN WATER
TIGHT.

STRUCTURAL USE OF TIMBER

ALL STRUCTURAL TIMBER MEMBERS ie JOISTS, RAFTERS,
PURLINS, LINTELS, TRIMMERS, TIMBER TIES ETC. SHALL
BE IN ACCORDANCE WITH BS 5268-2:2002.
TIMBERS USED SHALL BE C16min FROM SUPPLIES THAT
WERE STAMPED 'DRY' or 'KD' (REF. TO ANY CALCS)
TIMBERS USED SHALL BE FROM GRADE-STRESSED STOCK
MAXIMUM THICKNESS OF ANY MEMBER TO BE 100mm AND
MAXIMUM DEPTH OF ANY MEMBER SHALL BE 300mm.
ANY NOTCHES IN A TIMBER MEMBER SHALL BE LIMITED
TO MAX 18mm DEPTH, BE BETWEEN 1/20th & 1/4 OF
SPAN FROM A SUPPORT. DRILLED HOLES TO BE AT THE
MIDDLE AXIS OF MEMBER AND NOT MORE THAN 1/4 OF
DEPTH, NOT LESS THAN THREE DIAMETERS APART, & BE
BETWEEN 0.25 AND 0.4 SPAN.
NAILED JOINTS TO HAVE MIN. 2 SCREW DRIVEN NAILS.
WHERE BEAMS AND TRIMMERS ARE BOLTED TOGETHER
THEN THE PREFARED BOLT SIZE IS M16 WITH NUT
AND WASHER AND 400mm APART.

INSULATED GROUND FLOOR

NON-GAS RESISTING WITH 'U' < 0.25W/sqmK
UNDER SLAB INSULATION REQUIRES 200mm THICK
OVERSITE HARDCORE FULLY COMPACTED, LEVELLED
WITH BLINDING SAND. 1200g DPM LAID OVER AND
LAPPED UP SIDES AND LAPPED WITH DPC.
FOR MOST APPLICATIONS USE CELOTEX GA4100
CELOTEX GA4100 OR FF4100 LAID OVER DPM
WITH VERTICAL STRIPS OF CUT BOARD TO FIT
AROUND THE PERIMETER TO STOP THERMAL BRIDGE.
NEVER INSTALL INSULATION BELOW DPM.
LAY A SEPARATING LAYER OF 500g DPM OVER THE
BOARDS.
POUR CONCRETE SLAB TO 150mm THICK ALLOWING
FOR SURFACE FINISHES OR LEVELLING COMPOUND.

STRIP FOUNDATION

GENERALLY IN ACCORDANCE WITH APPROVAL DOC 'A'.
CONCRETE STRIP TO NEW BWK AND BLOCK WALLS. BCO
INSPECTIONS APPLY IN RESPECT TO DEPTH FOR FROST
AVOIDANCE AND FIELD TESTS FOR THE DETERMINATION
OF EXCAVATION DEPTH REQUIREMENT ONTO SUITABLE
SUB-STRATA THAT IS BELOW LEVEL OF ANY ADJACENT
DRAINS AND AWAY FROM INFLUENCE OF ANY TREES
SHOULD ANY EXIST CLOSE BY
EXCAVATION DEPTH IS IN RELATION TO THE GROUND
LEVEL AND NOT DPC OR FORMATION LEVEL.
FOUNDATION MUST BE SUITABLE FOR CARRYING A TWO
STOREY DEVELOPMENT.
MINIMUM STRIP SIZE SHALL BE 600mm x 200mm. BUILDER
TO CONSULT WITH BUILDING CONTROL PRIOR TO ANY
EXCAVATING TO ESTABLISH THE STRATA STABILITY &
THE LOCAL GROUND CONDITIONS.
TRIAL/TEST HOLES SHALL BE DUG & A DETERMINATION
MADE IN REGARDS TO THE FOUNDATION REQUIRED.
DO NOT UNDERMINE ANY ADJACENT FOUNDATIONS AND
REFER TO MATTERS CONCERNING PARTY WALL ACT
FOR THIS SITE.
SPECIAL CARE SHOULD BE EXERCISED WHEN EXCAVATING
ADJACENT TO OR CLOSE BY AND OTHER BUILDING OR
STRUCTURE. BUILDER SHOULD SEEK EXTRA ADVICE FOR
LAYING FOUNDATIONS IN MULTIPLE STAGES.
IF SPECIAL FOUNDATIONS ARE REQUIRED (IE OTHER
THAN STRIP FOUNDS) THEN DIFFERENT PROCEDURES
WILL APPLY I.E. SOIL SURVEY, GROUND SURVEY, BORE
HOLE SURVEY ETC.. WORK MUST NOT PROCEED UNTIL
LOCAL AUTHORITY HAVE APPROVED SPECIAL FOUNDN
PROPSALS.

KEITH SWAIN DESIGN

KEITH SWAIN 01744 885131 07980 555415
swain.keith@sky.com



DRAWING NUMBER

PROPOSED DEVELOPMENT

KITCHEN/LOUNGE EXTENSION

AT

17 TEYNHAM AVENUE
KNOWSLEY
L34 0JQ

C

WORK MUST NOT BEGIN UNTIL APPROVAL FROM LOCAL AUTHORITY

USE THIS SCALE BAR FOR DIMENSION REFERENCING.



SCALES 1 : 50

sht 3