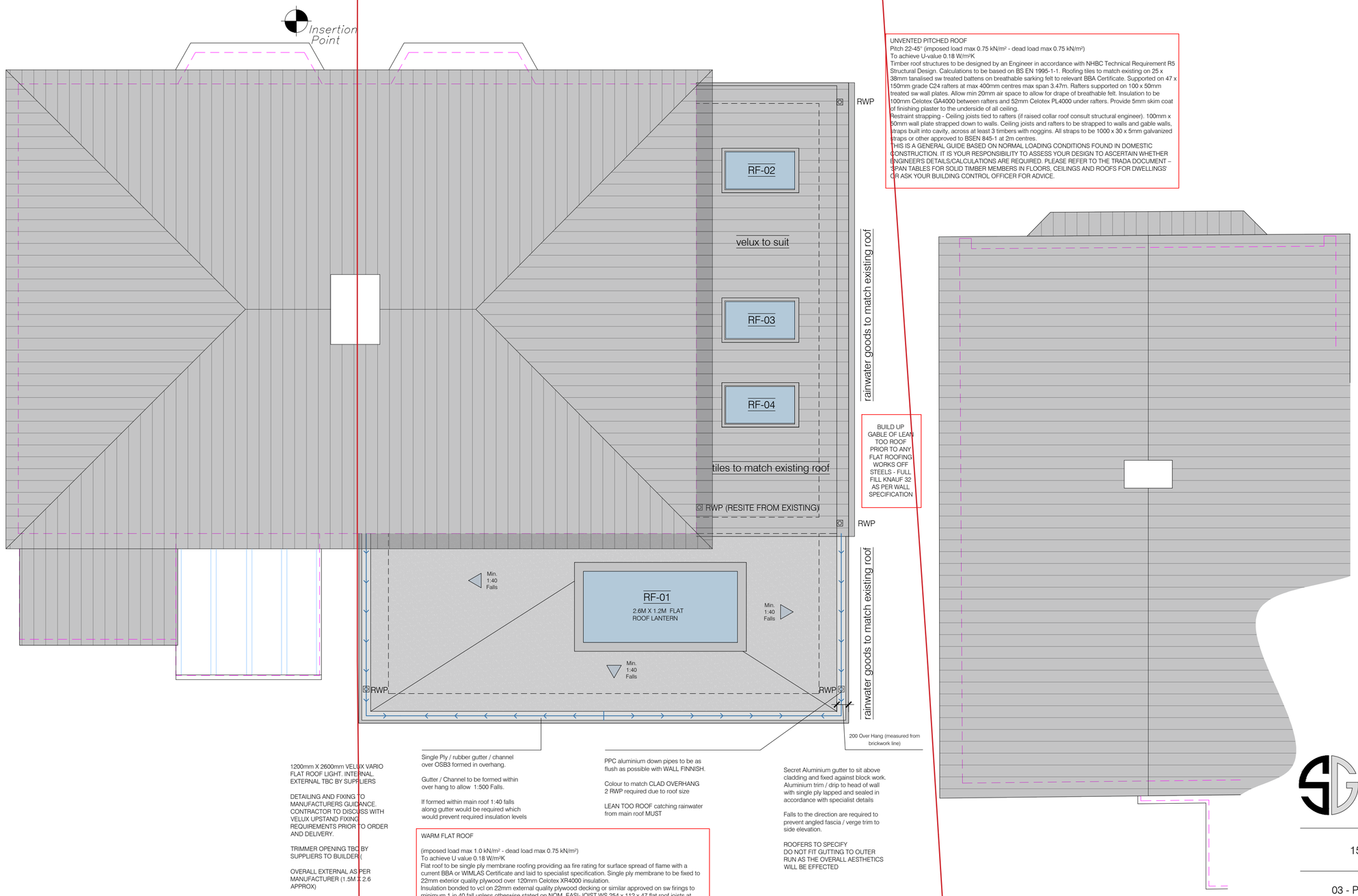
# ROOF LAYOUT PLAN




UNVENTED PITCHED ROOF
Pitch 22-45° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)
To achieve U-value 0.18 W/m²K
Timber roof structures to be designed by an Engineer in accordance with NHBC Technical Requirement R5 Structural Design. Calculations to be based on BS EN 1995-1-1. Roofing tiles to match existing on 25 x 38mm tanalised sw treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 47 x 150mm grade C24 rafters at max 400mm centres max span 3.47m. Rafters supported on 100 x 50mm treated sw wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 100mm Celotex GA4000 between rafters and 52mm Celotex PL4000 under rafters. Provide 5mm skim coat of finishing plaster to the underside of all ceiling.
Restraint strapping - Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.
THIS IS A GENERAL GUIDE BASED ON NORMAL LOADING CONDITIONS FOUND IN DOMESTIC CONSTRUCTION. IT IS YOUR RESPONSIBILITY TO ASSESS YOUR DESIGN TO ASCERTAIN WHETHER ENGINEER'S DETAILS/CALCULATIONS ARE REQUIRED. PLEASE REFER TO THE TRADA DOCUMENT – 'SPAN TABLES FOR SOLID TIMBER MEMBERS IN FLOORS, CEILINGS AND ROOFS FOR DWELLINGS' OR ASK YOUR BUILDING CONTROL OFFICER FOR ADVICE.

BUILD UP GABLE OF LEAN TOO ROOF PRIOR TO ANY FLAT ROOFING WORKS OFF STEELS - FULL FILL KNAUF 32 AS PER WALL SPECIFICATION

1200mm X 2600mm VELUX VARIO FLAT ROOF LIGHT. INTERNAL EXTERNAL TBC BY SUPPLIERS

DETAILING AND FIXING TO MANUFACTURERS GUIDANCE. CONTRACTOR TO DISCUSS WITH VELUX UPSTAND FIXING REQUIREMENTS PRIOR TO ORDER AND DELIVERY.

TRIMMER OPENING TBC BY SUPPLIERS TO BUILDER (

OVERALL EXTERNAL AS PER MANUFACTURER (1.5M X 2.6 APPROX)

Final dims TBC

Structural Engineer To Confirm Beam Requirements -

ENGINEER TO CONFIRM IF 2X ENGINEERED JOISTS EASI - JOIST WS 254 - WILL SUFFICE - TRIPLE UP IF REQUIRED. NO STEEL PREFERED

Single Ply / rubber gutter / channel over OSB3 formed in overhang.

Gutter / Channel to be formed within over hang to allow 1:500 Falls.

If formed within main roof 1:40 falls along gutter would be required which would prevent required insulation levels

PPC aluminium down pipes to be as flush as possible with WALL FINNISH.

Colour to match CLAD OVERHANG
2 RWP required due to roof size

LEAN TOO ROOF catching rainwater from main roof MUST

Secret Aluminium gutter to sit above cladding and fixed against block work. Aluminium trim / drip to head of wall with single ply lapped and sealed in accordance with specialist details

Falls to the direction are required to prevent angled fascia / verge trim to side elevation.

ROOFERS TO SPECIFY
DO NOT FIT GUTTING TO OUTER RUN AS THE OVERALL AESTHETICS WILL BE EFFECTED

WARM FLAT ROOF

(imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U value 0.18 W/m²K
Flat roof to be single ply membrane roofing providing aa fire rating for surface spread of flame with a current BBA or WIMLAS Certificate and laid to specialist specification. Single ply membrane to be fixed to 22mm exterior quality plywood over 120mm Celotex XR4000 insulation.
Insulation bonded to vcl on 22mm external quality plywood decking or similar approved on sw firings to minimum 1 in 40 fall unless otherwise stated on NOM. EASI-JOIST WS 254 x 112 x 47 flat roof joists at 600mm ctrs to as Structural Engineer's details and calculations. Underside of joists to have 15mm foil backed plasterboard and skim.

Provide cavity tray to existing house where new roof abuts existing house.
Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to steel as required by S.E and anchored to wall.

THIS IS A GENERAL GUIDE BASED ON NORMAL LOADING CONDITIONS FOUND ENGINEER'S DETAILS/CALCULATIONS ARE REQUIRED. TBC BY BUILDING CONTROL OFFICER PRIOR TO PROCUREMENT.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154 FAR LAUND BELPER

03 - PROPOSED ROOF PLAN - A2

| SG PROJECT NO. | PAPER SIZE | DRAWN BY |
|---|---|---|
| 401 | A2 | SG |

REVISION: BREGS / PLANNING
SCALES: 1:50


Drawing measurements shall not be obtained by scaling. Verify all dimensions prior to construction. Immediately report any discrepancies on this document to SG ARCHITECTURAL DESIGN.


| REV. | DESCRIPTION | DATE | BY | CHK'D |
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Scale 1:50

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