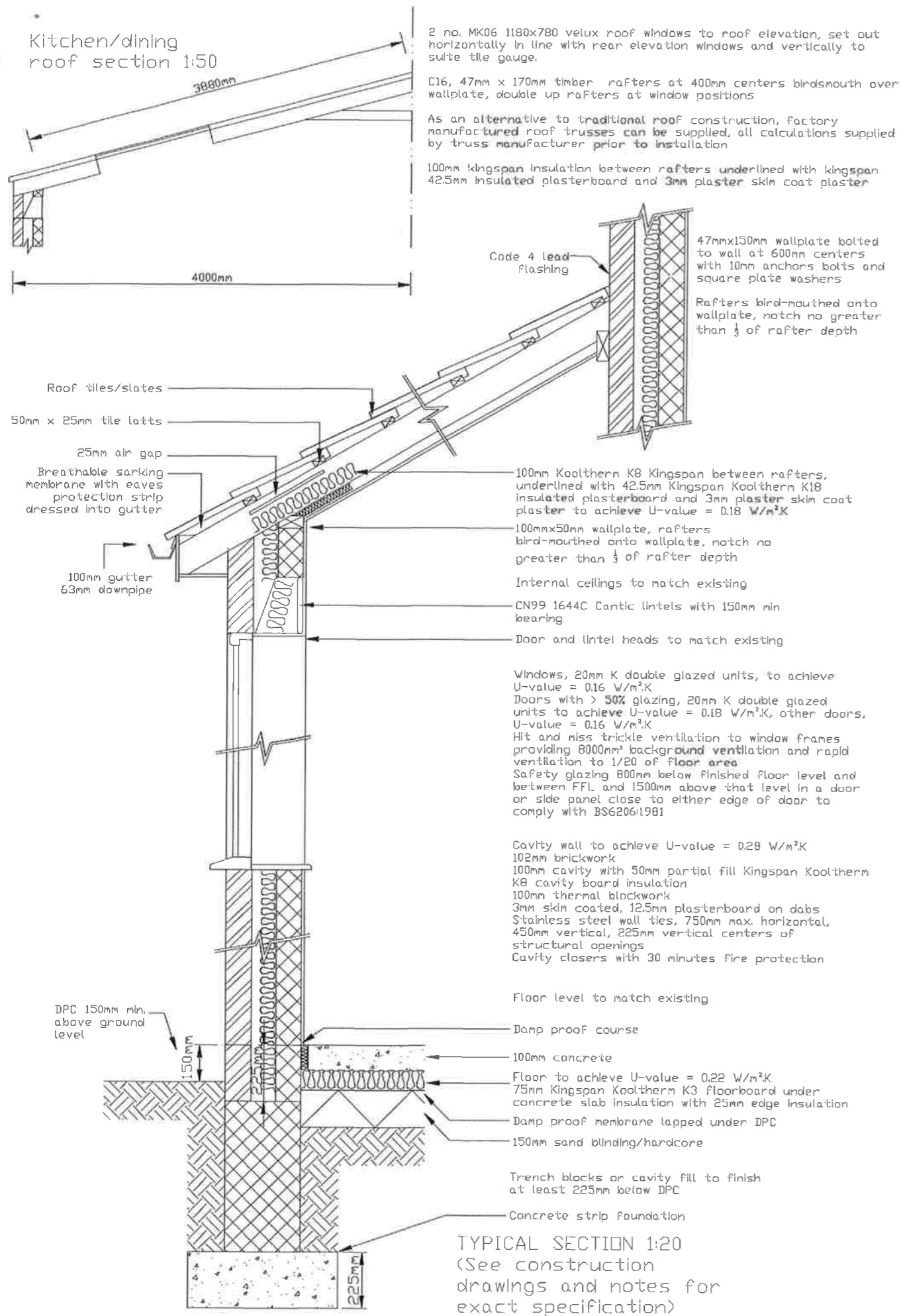


Kitchen/dining
roof section 1:50



2 no. MK06 1180x780 velux roof windows to roof elevation, set out horizontally in line with rear elevation windows and vertically to suite tile gauge.
C16, 47mm x 170mm timber rafters at 400mm centers birdsmouth over wallplate, double up rafters at window positions
As an alternative to traditional roof construction, factory manufactured roof trusses can be supplied, all calculations supplied by truss manufacturer prior to installation
100mm kingspan insulation between rafters underlined with kingspan 42.5mm insulated plasterboard and 3mm plaster skim coat plaster

47mmx150mm wallplate bolted to wall at 600mm centers with 10mm anchors bolts and square plate washers
Rafters bird-mouthed onto wallplate, notch no greater than 1/3 of rafter depth
Code 4 lead flashing

Roof tiles/slates
50mm x 25mm tile latts
25mm air gap
Breathable sarking membrane with eaves protection strip dressed into gutter
100mm gutter 63mm downpipe

100mm Kooltherm K8 Kingspan between rafters, underlined with 42.5mm Kingspan K18 insulated plasterboard and 3mm plaster skim coat plaster to achieve U-value = 0.18 W/m²K
100mmx50mm wallplate, rafters bird-mouthed onto wallplate, notch no greater than 1/3 of rafter depth
Internal ceilings to match existing
CN99 1644C Cantic lintels with 150mm min bearing
Door and lintel heads to match existing

Windows, 20mm K double glazed units, to achieve U-value = 0.16 W/m²K
Doors with > 50% glazing, 20mm K double glazed units to achieve U-value = 0.18 W/m²K, other doors, U-value = 0.16 W/m²K
Hit and miss trickle ventilation to window frames providing 8000mm² background ventilation and rapid ventilation to 1/20 of floor area
Safety glazing 800mm below finished floor level and between FFL and 1500mm above that level in a door or side panel close to either edge of door to comply with BS6206:1981

Cavity wall to achieve U-value = 0.29 W/m²K
102mm brickwork
100mm cavity with 50mm partial fill Kingspan Kooltherm K8 cavity board insulation
100mm thermal blockwork
3mm skim coated, 12.5mm plasterboard on dabs
Stainless steel wall ties, 750mm max. horizontal, 450mm vertical, 225mm vertical centers of structural openings
Cavity closers with 30 minutes fire protection

DPC 150mm min. above ground level

Floor level to match existing
Damp proof course
100mm concrete
Floor to achieve U-value = 0.22 W/m²K
75mm Kingspan Kooltherm K3 floorboard under concrete slab insulation with 25mm edge insulation
Damp proof membrane lapped under DPC
150mm sand blinding/hardcore
Trench blocks or cavity fill to finish at least 225mm below DPC
Concrete strip foundation

TYPICAL SECTION 1:20
(See construction drawings and notes for exact specification)

CONSTRUCTION NOTES

Foundations:
Excavate to a depth of 900mm from ground level, 600mm wide or to Building Control requirements, 1:2:4 mix concrete foundation, 600mm wide, 225mm deep. Trees on adjoining property close to boundaries, depth of foundation may alter if building near to trees, see enclosed building regulation guidance notes for building close to trees.

Floor:
Grd floor 100mm concrete steel float finish, 75mm kingspan floor insulation, 25mm floor edge insulation, 1200g DPM lapped under DPC, hardcore/sand blinding to make up levels.

Walls:
102mm brickwork to match existing, 100mm cavity with 50mm kingspan insulation, 50mm clear cavity, 100mm thermolite block, thermabate or equivalent cavity closers at reveals, 12.5mm plasterboard and skim on dabs.
DPC 150mm min. above ground level.
Stainless steel wall ties 750mm horizontal, 450mm vertical staggered, 225mm vertical centers of structural openings.
Catic or equivalent lintels over all openings.
New brickwork/blockwork tied to existing with propriety wall connectors.
Provide where applicable continuous cavity where new building joins existing
Timber stud walls 50mm x 75/100mm studs, with 75/100mm insulation min. density 10kg/m³ between studs, finished with 12.5 mm plasterboard and skim.
12.5mm plasterboard and skim to all new ceilings.

Roof:
15° minimum pitch, Redland Regent tiles at 100mm headlap, through coloured (smooth), colour to match existing, 50mm x 25mm battens on breathable roof tile underlay with eaves protection strip dressed into gutter. Factory manufactured roof trusses, all calculations supplied by truss manufacturer prior to installation, 100mm x 50mm wallplate with 30mm x 5mm anchor straps at not more than 2m centers, 30mm x 5mm straps as lateral support to gable wall at not more than 2m centers.
Code 4 lead to valleys and flashings.

Windows and Doors:
UPCV doors and windows with hit and miss trickle ventilation to window frames providing 8000mm² background ventilation, 20mm double glazed units, K glass-glazing. Internal doors and frames to match existing.

Ventilation:
Roof, breathable roof tile underlay. Rapid ventilation window openings to be 1/20th min. of floor area. Provide mechanical ventilation where applicable to kitchen 30 litres/second adjacent to hob, 60 l/s elsewhere, 15l/s to WC/bathrooms, 30l/s to utility rooms.

Drainage:
Soil and rainwater drainage to existing drainage system. New UPVC drainage pipework to trapped gullies and inspection chambers on 100mm gravel bed and backfill to a fall of 1:60. SVP's to finish 900mm above nearest opening. Provide concrete lintels over drainage passing under new building to give 50mm space all around the pipe, fill void with compressible sealant and mask both sides with rigid sheet material.

Other:
Provide cavity trays or silicone wash to existing brickwork above new roof line, where new extension joins existing building
Provide 2 no. low energy light fitting.
Extend existing central heating system to accommodate new building, provide thermostatic control valves to all new radiators.
Confirm all electric installation required to meet the requirements of Part P (Electrical safety) must be designed, installed by a person competent to do so.
Prior to completion an appropriate BS 7671 electrical installation certificate is to be issued for the work by a person competent to do so.

Drawings by
ROSCAMP
CONSTRUCTION
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Notes
1. All dimensions to be verified on site prior to any site works commencing.
2. Any discrepancies reported to client before any work put in hand.
3. This drawing must be read in conjunction with relevant consultants and specialist drawings.

NAME	Mr T Burnside
ADDRESS	111 Geneva Crescent Darlington, DL1 4LA
TITLE	Kitchen/dining room rear extension
SCALE/REF	1:20 Org. 4 of 4 July 20