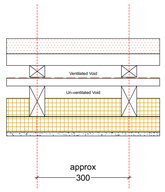
Typical Roof Build-ups (Renovation)



Bay House (BH)

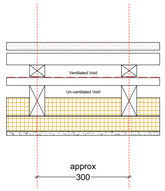
Insulation between and under rafters
Insulated from below

U-value target: 0.18 W/m2K

- existing clay tile relaid and replaced to match existing were necessary. New and Re-laid grouped with separate pitches to avoid patchwork.
- new 50x38 timber batten
- new 50x38 timber counterbattens cavity
- new Breathable Sarking felt (Nilvent)
- existing sarking board (wooden slats)
- 50x100mm existing timber rafter with 40 cavity over 60mm thick Kooltherm K7
- 62.5mm Kooltherm K118 (50mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of rafters

or

- 50x180mm existing timber rafter with 80 cavity over 100mm thick Kooltherm K7
- 32.5mm Kooltherm K18 (20mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of rafters

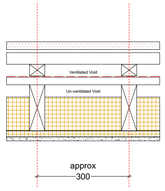


Skeel Library (SK)

Insulation between and under rafters
Insulated from below

U-value target: 0.18 W/m2K

- existing clay tile relaid and replaced to match existing were necessary
- new 50x38 timber batten
- new 50x38 timber counterbattens cavity
- new Breathable Sarking felt (Nilvent)
- existing sarking board (wooden slats)
- 50x100mm existing timber rafter with 40 cavity over 60mm thick Kooltherm K7
- 62.5mm Kooltherm K118 (50mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of rafters

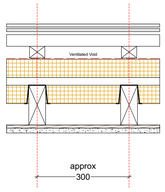


Dudin Brown (DB)

Insulation between and under rafters
Insulated from below

U-value target: 0.18 W/m2K

- existing clay tile relaid and replaced to match existing were necessary
- new 50x38 timber batten
- new 50x38 timber counterbattens cavity
- new Breathable Sarking felt (Nilvent)
- existing sarking board (wooden slats)
- 50x150mm existing timber rafter with 40 cavity over 110mm thick Koolthern K7
- 32.5mm Koolthern K118 (20mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of rafters

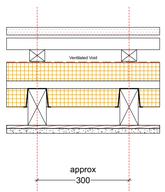


Kidderpore Hall (KH)

Insulation between and over rafters
Insulated from above

U-value target: 0.18 W/m2K

- existing slate tile fixed with copper nails relaid and replaced to match existing were necessary
- new 50x38 timber batten
- new 50x38 timber counterbattens cavity
- new Breathable Sarking felt (Nilvent)
- 60mm thick Koolthern K7 rigid insulation
- existing sarking board (wooden slats) removed and replaced to allow for insulation between the rafters
- 55x130mm existing timber rafter with 70 cavity under 60mm thick Koolthern K7
- existing lath and plaster (repaired and skimmed where necessary)

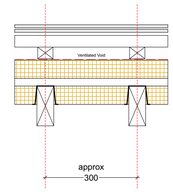


Maynard Wing (MW)

Insulation between and over rafters
Insulated from above

U-value target: 0.18 W/m2K

- existing clay tile relaid and replaced to match existing were necessary
- new 50x38 timber batten
- new 50x38 timber counterbattens cavity
- new Breathable Sarking felt (Nilvent)
- 60mm thick Koolthern K7 rigid insulation
- existing sarking board (wooden slats) removed and replaced to allow for insulation between the rafters
- 55x130mm existing timber rafter with 60 cavity under 60mm thick Koolthern K7
- existing lath and plaster (repaired and skimmed where necessary)



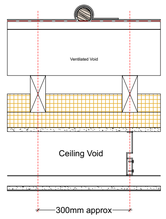
Chapel (CH)

Insulation between and under rafters
Insulated from above

U-value target: 0.18 W/m2K

- existing slate tile fixed with copper nails relaid and replaced to match existing were necessary
- new 50x38 timber batten
- new 50x38 timber counterbattens cavity
- new Breathable Sarking felt (Nilvent)
- 60mm thick Koolthern K7 rigid insulation
- existing sarking board (wooden slats) removed and replaced to allow for insulation between the rafters
- 55x130mm existing timber rafter with 70 cavity under 60mm thick Koolthern K7
-ventilated void , metal truss, suspended ceiling

Typical Flat Roof Build-ups (Renovation)



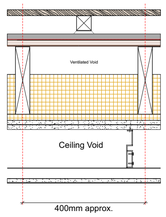
Typical Flat Roof - Lead Cover

Insulation between and under Joist
Insulated from below

U-value target: 0.16 W/m2K

- existing leadwork relaid and/or replaced to match existing were necessary
- new Breather Membrane
- existing sarking board (wooden slats)
- 150x50mm existing Roof Joist repaired where neccesary
- 120x50mm existing Ceiling Joist with 90mm Koolthern K7 between the joists
- 62.5mm Koolthern K118 (50mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of joists
- Ceiling Void (Varies)
- MF Suspended Ceiling

Note:
- Leadwork should be made with reference to details approved by the lead sheet association.
- Sarking board to be laid over New or existing Joists.

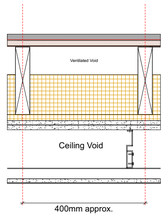


Typical Flat Roof - Mastic Asphalt + Decking

Insulation between and under Joist
Insulated from below

U-value target: 0.16 W/m2K

- Grooved Balou Hardwood Decking (32x150mm) face fixed decking screws with 5mm gap between boards
- 48x48mm Treated battens resting on PVC Pedestal
- 20mm Mastic Asphalt
- 25mm WPB Plywood
- 0.5mm Kingspan Nilvent .17 breathable membrane or similar separating membrane)
- 47x220mm Timber Joist
- 130mm Kingspan Kooltherm K7 or similar between the joists
- 32.5mm Kooltherm K118 (20mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of joists
- 15mm Plasterboard SoundBlock
- Ceiling Void (Varies)
- MF Suspended Ceiling



Typical Flat Roof - Mastic Asphalt

Insulation between and under Joist
Insulated from below

U-value target: 0.16 W/m2K

- 20mm Mastic Asphalt + Solar Reflective paint layer
- 25mm WPB Plywood
- 0.5mm Kingspan Nilvent .17 breathable membrane or similar separating membrane)
- 47x220mm Timber Joist
- 130mm Kingspan Kooltherm K7 or similar between the joists
- 32.5mm Kooltherm K118 (20mm rigid insulation with 12.5mm PB with integrated VCL) fixed to the U/S of joists
- 15mm Plasterboard SoundBlock
- Ceiling Void (Varies)
- MF Suspended Ceiling

REFURBISHMENT & UPGRADING OF EXISTING ROOFS

In order to ensure that roofs are sound, watertight, free from rot and decay and to preserve and provide enhanced performance for private residential use of the converted apartments under, the following works are proposed:

Carefully remove existing roof finish of tiles or slates with the intention of salvaging as much as possible for reuse. Take note of any particular patterns, measure all gauges and typical tiles or slates. Take photographs and any other measurements necessary to be able to relay the roof in the pattern of the original. Stack all salvaged material on pallets suitably labelled and quantity recorded, to facilitate later re-use. Salvaged material to be protected and stored in a secure storage area for later reuse.

Existing battens and sarking felt to be removed and sarking boards (where appropriate) inspected for decay or defect. Where applicable, as described opposite, carefully remove existing sarking boards with the intention of reusing after the installation of roof insulation from above. Where sarking boards retained or reused, replace damaged boards with like for like material.

Install new underlay felt over, with eaves or exposed areas, dressing into gutters etc, to BS 747, type 5U, or equivalent UV durable type. Sawn softwood preserved counter battens and battens to be fixed with galvanised steel fixings. Battens to be positioned to suit tiles or slates previously removed.

All existing lead flashings, soakers, gutters etc to be removed and renewed. Code 5 lead sheet in gutter linings and flat roof areas, Code 4 Lead in cover flashings etc, all laid and fixed in accordance with the Lead Sheet Association recommendations.

Assess the quantity of tiles required against those salvaged and prepare proposals for approval of which pitches to have reused material and where new, to match, is to be utilised. Avoid scattering new with old, unless specifically agreed.

Relay existing and replacement tiles or slates, following the original pattern to the finish type. Add appropriate accessories where ventilation required, as opposite, by GlideVale or similar approved, in colour to match finish type. Add appropriate accessories where ventilation required, as opposite, by GlideVale or similar approved, in colour to match finish at ridge level, or eaves under tile vents.

Replacement tiles, where required, to be ‘Dreadnought’ clay tile, Brown Antique with a smooth face. Replacement slates to be Welsh Slate, or similar approved, to sizes to match existing salvaged slates. All roofs to incorporate ‘GlideVale’ or similar approved, through tile vent, in colour to match finish, for SVP or MEV vents etc. No protruding SVP vents allowable in pitched roofs.

Rebed hip, ridge, bonnet tiles etc, or form replacement details where lead used. Renew to match any missing or damaged tiles.

Where fire separating compartment walls below roof, completely fill space between top of wall and underside of tiles with wire reinforced mineral wool, to provide fire stopping.

Inspect all chimneys for structural stability. Remedial works to be agreed with the Structural Engineer. If necessary chimney to be carefully dismantled and reconstructed. Renew all haunching and replace any damaged pots to match. Insert bird proof vents to all pots/flues.

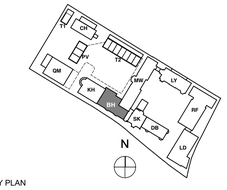
See drawing 9000-DRG-00GN-AL040 for works to rainwater goods.

Existing mastic asphalt roof finish to be removed and renewed where identified. Inspect existing timber decking under for decay or defect and replace where necessary, to match. New 20mm mastic asphalt on isolating felt all in accordance with Mastic Asphalt Council recommendations. Asphalt to be finished with solar reflective paint.

Existing or new lead to dormers and lead roofs to be removed and renewed where identified. Inspect existing timber decking under for decay or defect and replace where necessary, to match. New Code 5 Lead roofing, in pattern to match existing (rolls etc) over isolating layer, all to the Lead Development Association recommendations, including all necessary ventilation.

0 10 50 100mm

DIMENSION AT ORIGINAL SHEET SIZE



KEY PLAN

NOTE:
ALL INFORMATION SHOWN ON THIS DRAWINGS IS SUBJECT TO DESIGN DEVELOPMENT

FOR TENDER

	REVISION	DR'N	CH'KD	DATE
-	First Issue	KrC/GC	KC	11/07/2016
T1	Issue for Tender	KrC/GC	KC	08/08/2016
T2	Planning comments incorporated	KrC/GC	KC	16/08/2016

A&Q PARTNERSHIP

CLIENT
MOUNT ANVIL LTD

PROJECT
KIDDERPORE AVENUE

DRAWING
General
Typical Roof Treatment and Renovation

SCALE 1:10 @ A1
DATE August 2016
DRAWING No. 15 230 9000-DRG-00GN-DE016
DRAWN BY KrC/GC
REV T2

A&Q PARTNERSHIP (LONDON) LTD
THE LUX BUILDING, 2-4 HOXTON SQUARE, LONDON N1 6NU
Tel: 020 7613 2244 Fax: 020 7613 2642 Email:london@aqp.co.uk
ARCHITECTURE DESIGN MASTERPLANNING INTERIORS