

Uniclass L512+L521	EPIC E223+E311
C/S/B (41)+(47)	Ng2

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MODEL SPECIFICATION AND TECHNICAL GUIDE



KEYMER
hand made clay tiles



Certificate No. Q05516



All **KEYMER** products are manufactured under a Quality Assurance System approved by BSI, Certificate No. Q 05516 and complying with EN ISO 9002, and meet the performance criteria of EN 1304.

KEYMER tiles to be laid in accordance with BS 5534 : Part I : 2003, Code of Practice for Slating and Tiling, and BS 8000 : Part 6 : 1990, Code of Practice for Workmanship on Building Sites for slating and tiling of roofs and cladding.

TILES

The roof is to be covered with 265mm x 165mm Keymer Hand Made Clay Plain Tiles equal to sample approved and laid to a gauge to give a minimum headlap of 65mm. Below 60° roof pitch each tile at least in every fifth course is to be twice nailed with 38mm x 3.35mm alloy nails. Above 60° roof pitch all tiles to be twice nailed. Fix Keymer In-line™ tile vents in accordance with the manufacturer's instructions.

At eaves and top edges two courses of tiles to be nailed.

At verges, abutments and at each side of hips and valleys the end tile in every course to be twice nailed.

UNDERLAY

Reinforced bitumen felt, or other approved reinforced roofing underlay, is to be laid over rafters, lapped 100mm horizontally and 100mm vertically, carried well into gutters, and secured using 19mm x 3mm extra large head felt nails. The underlay must drain any moisture into the eaves gutter. It must extend, therefore, over the tilting fillet and fascia board and be fixed so that no troughs are formed in which water can be trapped. If necessary, full support must be provided. If using a vapour permeable membrane the manufacturer's installation guidelines must be followed.

BATTENS

Quality softwood tiling battens of minimum length 1200mm and minimum size 38mm x 25mm, for rafters set at 450mm centres or for rafters set at 600mm centres. These battens to be gauged to give a minimum headlap of 65mm for roof tiling and secured with suitable nails. Battens to be fixed to rafter with at least one nail. Joints in each batten cut squared and nails skew driven on each side of the joint. No more than one batten in four to be joined over each support.

For vertical tiling battens to be minimum size 38mm x 25mm at 450mm span and 600mm span, gauged to give a minimum headlap of 38mm. Counter battens are required when fixing to a structural background. They should be of sufficient size to resist predicted withdrawal loads and be fixed at maximum 600mm centres.

EAVES

Eaves are to have double courses throughout, using purpose-made eaves tiles supplied by the manufacturers for the undercourse. In both courses each tile is to be twice nailed.

An eaves ventilation system should be installed according to the manufacturer's instructions.

TOP EDGE

Finish tiling with a course of eaves/top tile to maintain gauge. Each tile in the top two courses to be twice nailed. In vertical tiling the top edge to incorporate an eaves/top tile where under a window sill or soffitt. A lead flashing to be dressed down over the top course.

VERGES

All verges to be laid broken-bond with full tile and tile and a half tile in alternate courses, bedded on a verge of plain tiles laid with the 165mm edge showing, face side downwards and projecting approximately 35mm to 50mm over the gable walls or bargeboard. The bedding mortar to be struck off and pointed in one operation. No additional mortar to be used.

RIDGE

The ridge to be covered with half-round, hogback or mono ridge of similar colour and texture to that of the main roof tiles, edge-bedded on the tiles, with solid bed at butt joints. Solid bed end ridge tiles and fill with tile slips. Securely fix Keymer In-line™ ridge ventilation terminal in accordance with manufacturer's instructions. (Keymer In-line™ tile ventilator, fixed at high level, can be used as an alternative, if preferred.)

HIPS

(a) Hips to be covered with bonnet hip tiles to suit rafter pitch. The bonnet hip tiles to be of similar colour and texture to that of the main roof tiles and to be nailed to the hip rafters with 65mm x 2.65mm aluminium alloy nails. Mortar bedding is to be used under each bonnet hip tile, struck back approximately 13mm from the over/edge of the hip tile. Solid bed the bottom bonnet hip tile and fill with tile slips to reduce visual impact of mortar bedding.

(b) Hips to be covered with third-round hip ridge of similar colour and texture to that of the main roof tiles, edge-bedded on the tiles, with solid bedding at butt joints. A 6mm galvanised hip iron to be screwed to the foot of each hip rafter as support.

VALLEY

Valleys to be formed with coursing valley tiles to suit rafter pitch, the valley tiles to be of similar colour and texture to that of the main roof tiles. The adjacent plain tiles to be neatly cut to form a smooth intersection.

ABUTMENT

Tiled intersections with abutments to have tile and tile and half tiles in alternate courses to maintain broken bond. Soakers to be fitted in each course.

MORTAR AND BEDDING

All mortar bedding used should consist of 1 part cement to 3 parts fine aggregate or 1 part cement and 1 part lime to 5 parts of fine aggregate. Bedding mortar to be struck off and pointed in one operation to give a clean face. Pointing not to be carried out with separate materials.

ROOF VENTILATION

Ventilation of the roof space to be in accordance with requirements of Building Regulations Approved Document F2 : 1995 and BS 5250 : 2002 'Control of Condensation in Buildings.'

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH

Keymer hand made clay plain tiles and fittings do not present any risks to health when used as supplied.

However, if either hand or powered tools are used to cut Keymer products, a certain amount of dust and chippings will be produced. Persons carrying out these operations must wear suitable eye protection and a respiratory mask.

TECHNICAL INFORMATION

<i>PRODUCT RANGE</i>	PLAIN TILES	COUNTY PEG	KENT PEG	ORNAMENTAL (on verticals)
<i>SIZE (nominal)</i>	265 x 165mm	250 x 150mm	250 x 150 mm	265 x 165mm
<i>ROOF PITCH (min)</i>	40 degrees	40 degrees	40 degrees	90 degrees
<i>PITCH RANGE</i>	40 - 90 degrees	40 - 90 degrees	40 - 90 degrees	
<i>FIXINGS</i>	Below 60 degrees roof pitch, each tile in every fifth course is to be twice nailed. At eaves and top edges, two courses of tiles to be nailed and all perimeter tiles. Over 60 degrees roof pitch, all tiles to be twice nailed.			All tiles to be twice nailed
<i>COLOURS</i>	Wealden Red Antique Elizabethan	Weathered	Antique	Wealden Red Antique Elizabethan
<i>GAUGE (max)</i>	100mm	95mm	95mm	114mm
<i>COVERAGE at max gauge Tiles/sq m</i>	60	70	70	53
<i>APPROX. WEIGHT at max gauge kg/sq m Per 1000 Tiles</i>	76.2 kg 1270 kg	79.1 kg 1130 kg	79.1kg 1130 kg	58.35kg 1100 kg
<i>BATTENS REQUIRED at max gauge m/sq m</i>	10.0m	10.52m	10.52m	8.7m
<i>BATTEN SIZE at less than 450mm c/c at less than 600mm c/c</i>	38 x 25mm 38 x 25mm	38 x 25mm 38 x 25mm	38 x 25mm 38 x 25mm	38 x 25mm 38 x 25mm

FITTINGS & ACCESSORIES

<i>PRODUCT RANGE</i>	ROOF TILING			VERTICAL TILING
<i>EAVES</i>	Plain Tiles with undercourse of Eave Tiles			Plain or Ornamental Tiles with Plain Eave Tile undercourse
<i>VERGE</i> <i>(Wet fix only)</i>	Plain Tiles and Tiles-and-a-half (Gables)			Gable Tiles with Plain or Ornamental Tiles
<i>RIDGE</i> <i>(Wet fix only)</i>	Half Round Ridge or Hog-back Ridge			N/A
<i>HIP</i>	40-45 degree pitch - Traditional Bonnet 40-50 degree pitch - Standard Bonnet 50-60 degree pitch - Kent Bonnet			N/A
<i>VALLEY</i>	40-45 degree pitch - Gull-Wing Valley 40-50 degree pitch - Standard Valley 50-60 degree pitch - 60° Valley			N/A
<i>ANCILLARIES</i>	In-line™ Ridge Ventilator In-line™ Tile Ventilator Half-Round Mono-Ridge Half-Round Porch Ridge Third-Round Ridge (for hips) Little and Large Bonnets			Ornamental Tiles incl. Club, Bullnose, Fishtail, Arrowhead, Diamond Vertical Angle Tiles - 90° External handed 90° Internal handed 135° External handed
<i>TILE FIXING</i>	PLAIN TILES 38mm x 3.35mm Alloy Nails	COUNTY PEG 38mm x 3.35mm Alloy Nails	KENT PEG 30mm x 4.5mm Alloy Pegs or Hardwood Pegs	PLAIN/ORNAMENTAL 38mm x 3.35mm Alloy Nails

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For further details please visit our web site at **www.keymer.co.uk** which now includes our award winning technical manual, or contact our sales office on 01444 232931

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