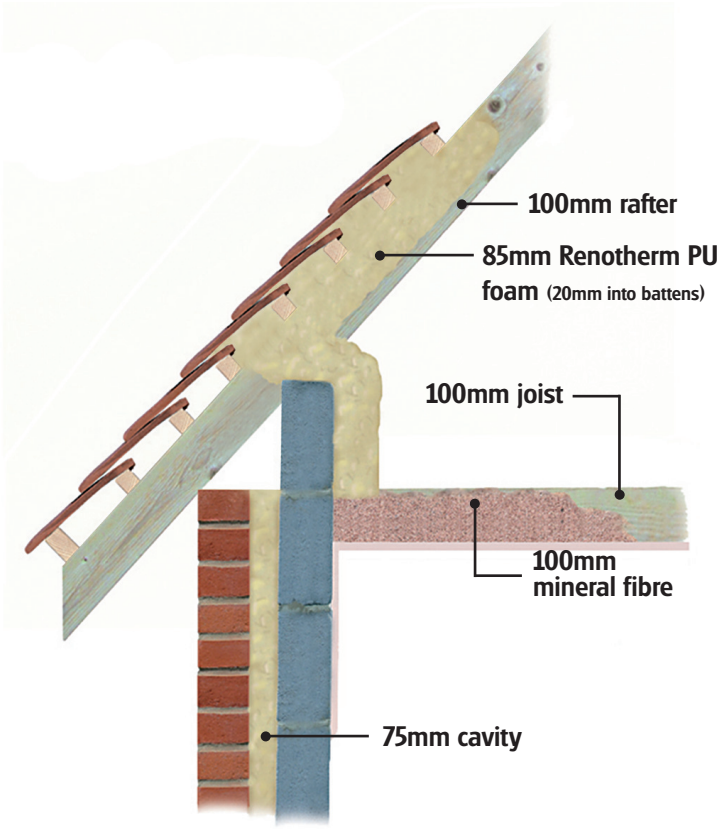
Technical data sheet

Existing pitched roof horizontal ceiling

Foamseal



General

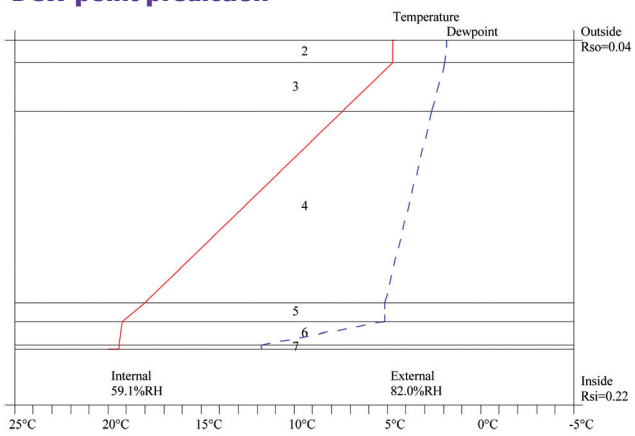
Specification: BBA Certificates 93/2939 and 02/3964
Spray applied Renotherm polyurethane foam between battens and rafters
Average depth: 105mm
U-value: 0.16W/m²K
Condensation risk: Zero
Ventilation: Unventilated loft space
Additional insulation: 100mm mineral fibre at ceiling level

Renotherm, applied to the underside the roof, bonds slates or tiles to each other and to structural or supporting timbers to replace the anchorage of fixing nails. It also seals the gaps between slates or tiles, preventing the ingress of wind-blown rain, snow and dust. Renotherm is applied between rafters in pitched roofs which enclose a non-habitable and unventilated loft space with additional thermal insulation between horizontal ceiling joists as required. Existing structures must be in a good state of repair with no evidence of rain penetration or damp. Defects should be made good prior to installing the product. The product also minimises unwanted air infiltration and reduces airborne noise pollution from air and road traffic.
It is essential that the movement of moisture from the occupied space below by diffusion and convection is restricted by ensuring that all penetrations into the loft are sealed, the water tank is covered and the ceiling lining board has filled or sealed joints (i.e. plastered).'

U-value and Condensation Risk Analyses

Construction details **Hybrid warm pitched roof**	**Thickness (mm)**
Clay tiles	12.0
Renotherm PU Foam (between battens)	20.0
Renotherm PU Foam (between rafters)	85.0
Loft space between flat ceiling and pitched roof lines	-
Mineral fibre	100.0
Gyproc Wallboard	12.5
Thistle Finish Plaster (Multi Board)	2.0
U-value - 0.16W/m²K	

Dew point prediction



These calculations take into account repeating thermal bridges using methods in ISO 6946 (walls and roofs), ISO 13370 (ground floors) and analyses interstitial condensation risk using the method in BS EN ISO 13788:2002 (and BS 5250 Appendix D) to help you demonstrate compliance with the Building Regulations and Building Standards. Each project must be assessed individually and therefore examples here can only be illustrative.