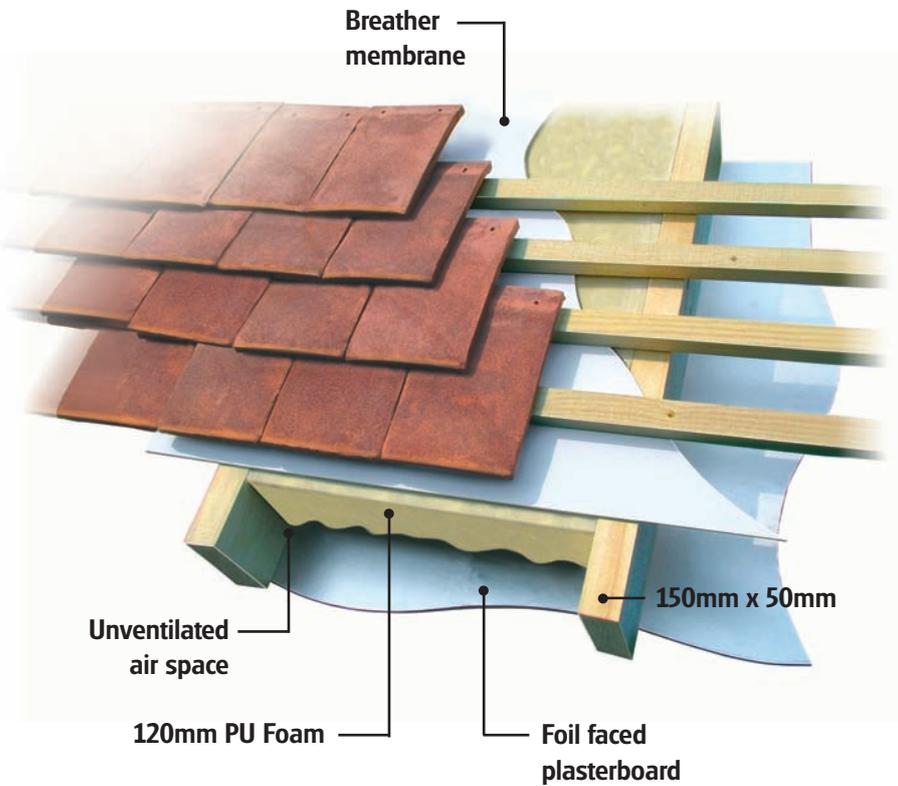


New pitched roof, ceiling at rafter line



General

Spray applied polyurethane foam between rafters, directly onto breather membrane.

Average depth: 140mm 160mm 240mm
U-value: 0.18W/m²K 0.16W/m²K 0.13W/m²K
Condensation risk: Zero
Ventilation: Unventilated warm deck
Additional insulation: Foil-faced plasterboard at ceiling level

PU foam is applied directly to the breathable roofing membrane between timber rafters in tiled or slated pitched roofs without the need for a ventilation gap to remove condensation. PU foam has an inherently high water vapour resistivity so the risk of interstitial condensation in normal situations will therefore be minimal. Particular constructions should be favourably assessed in accordance with BS 5250:2002. PU foam provide U-value and Condensation Analyses free of charge to help the client show compliance to Building Regulations. Polyurethane foams are hypoallergenic; contain no fibres or dust and no noxious vapours. Mechanical and electrical services can be fixed between the foam and the plasterboard. PU foam is very quick to install and minimises on overhead costs and site waste. Foil-faced plasterboards give better thermal performance and higher water vapour resistance.

U-value and Condensation Risk Analyses

Construction details Pitched roof, ceiling at rafter line	Thickness (mm)
Tiling including batten space	-
Breather membrane	-
PU Foam between rafters	160.0
Cavity >=25mm, roof (CIBS)	-
Vapourcheck Wallboard	12.5
Thistle Finish Plaster (Multi Board)	2.0
U-value - 0.16W/m²K	

Dew point prediction

