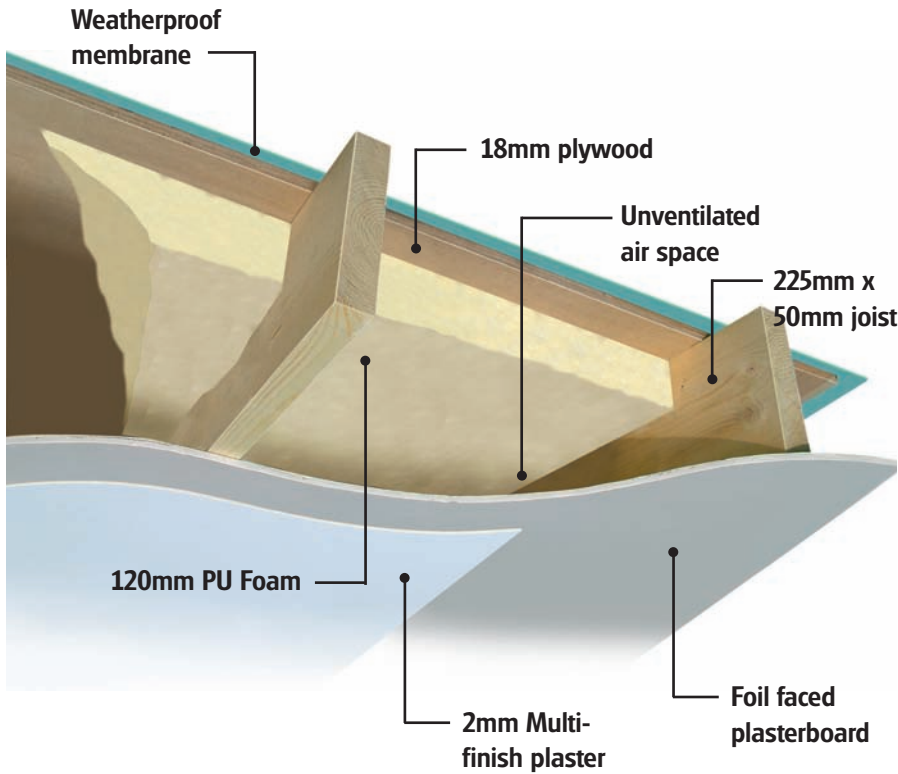


# New flat roof



## General

Spray applied polyurethane foam between joists, directly onto OSB ply.

Average depth:	160mm	225mm
U-value:	0.18W/m <sup>2</sup> K	0.13W/m <sup>2</sup> K
Condensation risk:	Zero	
Ventilation:	Unventilated warm deck	
Additional insulation:	Foil-faced plasterboard at ceiling level	

PU foam is applied directly to the underside of the timber decking to create a warm deck composite roof structure without the need for a ventilation gap to remove condensation. It is essential that elements are designed and constructed to incorporate normal precautions against moisture ingress before the application of the product.

PU foam is hypoallergenic and contains no fibres, dust or noxious vapours. The sound attenuation properties of the structure are improved.

## U-value and Condensation Risk Analyses

Construction details Pitched roof, ceiling at rafter line	Thickness (mm)
Alwitra Evalon	2.2
Smartply 3 OSB	18.0
Spray Applied PU Foam	160.0
Cavity >=25mm, roof (CIBS)	-
Vapourcheck Wallboard	12.5
Thistle Finish Plaster (Multi Board)	2.0
<b>U-value - 0.18W/m<sup>2</sup>K</b>	

## Dew point prediction

