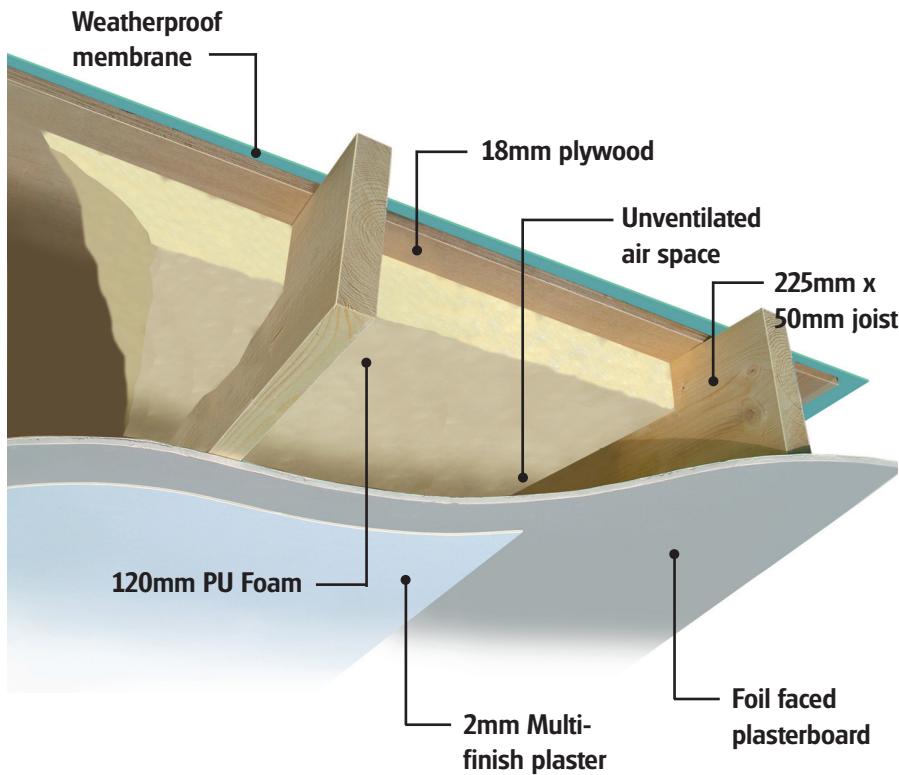


New flat roof

Foamseal



General

| | | |
|--|--|------------------------|
| Specification: | BBA Certificate 02/3964 | |
| Spray applied Foamseal polyurethane foam between joists, directly onto OSB ply. | | |
| Average depth: | 120mm | 150mm |
| U-value: | 0.19W/m ² K | 0.16W/m ² K |
| Condensation risk: | Zero | |
| Ventilation: | Unventilated warm deck | |
| Additional insulation: | Foil-faced plasterboard at ceiling level | |

Foamseal 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. When installed in a floor, wall or ceiling, the product will be contained by the floor finish or lining board until these layers are destroyed. Therefore the product will not contribute to the development stages of a fire or present a smoke or toxic hazard. When installed between the joists and lined with a minimum of 12.5mm thick Type 5 plasterboard, a period of fire resistance, from inside to out, in excess of 30 minutes will be achieved. Foamseal 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) | Dew point prediction |
|--|-------------------|--|
| Alwitra Evalon | 2.2 | |
| Smartply 3 OSB | 18.0 | |
| Foamseal Spray Applied PU Foam | 120.0 | |
| Cavity >=25mm, roof (CIBS) | - | |
| Vapourcheck Wallboard | 12.5 | |
| Thistle Finish Plaster (Multi Board) | 2.0 | |
| U-value - 0.19W/m²K | | <p>The graph plots Temperature (°C) on the x-axis (from 25°C down to -5°C) against Dewpoint on the y-axis. It shows internal conditions (59.1%RH at 20°C) and external conditions (82.0%RH at 5°C). The graph illustrates that the dew point remains above the internal temperature throughout the entire thickness of the roof assembly, indicating no condensation risk.</p> |