



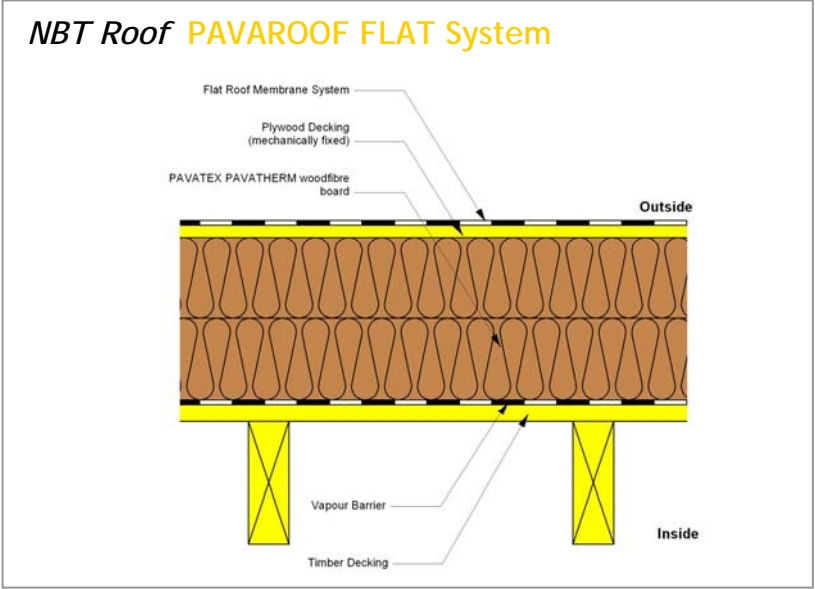
# Roof Solutions

## PAVAROOF FLAT / System description:

NBT Pavarooof Flat roofing system is for flat roofs with vapour closed unvented roof coverings of all sorts.

The Pavarooof Flat system comprises of square edged woodfibre boards over the decking in an unbridged layer, to provide a highly insulated roof both thermally and acoustically, with excellent summer overheating protection.

There are a number of flat roofing systems available from NBT, including breathing roofing systems, green roofs, and systems with different types of boards and different fixing methods. Please contact NBT for further details.



## System Application:

NBT Flat roofing systems are suitable for all types of flat roofs, particularly where the roofs are directly above living or working areas, where summer overheating or noise pollution are a concern.



- System Benefits:**
- Good thermal performance, with very low thermal bridging, utilising airbased insulation material
  - Excellent summer overheating protection, due to high thermal mass of the boards
  - Excellent acoustic insulation for both airborne and impact (rain) noise
  - Full design and site support from NBT
  - Full systems parts available from NBT
  - Tried and tested system

**Environmental Performance:**

Woodfibre boards are non-toxic, contain over 95% waste wood from sustainable forests, and lock up 1.2 tonnes of CO<sub>2</sub> for every tonne of boards produced. They are BREEAM Green Guide, and WRAP assessed.

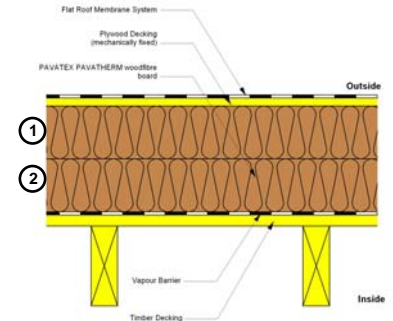


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## Technical details: Thermal values

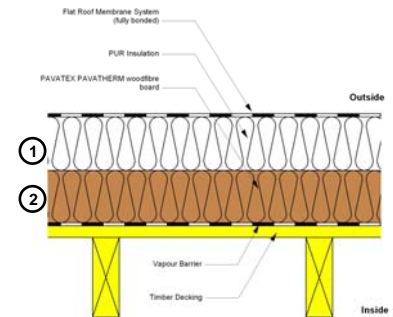
### Woodfibre Solution

Insulation Layer ①	100mm Pavatherm	60mm Pavatherm	60mm Pavatherm	80mm Pavatherm	80mm Pavatherm	100mm Pavatherm
Insulation Layer ②	none	60mm Pavatherm	80mm Pavatherm	80mm Pavatherm	100mm Pavatherm	100mm Pavatherm
U-Value* [W/m²K]	0.34	0.29	0.25	0.22	0.20	0.18
Decrement Factor	0.75	0.64	0.53	0.43	0.34	0.27
Decrement Delay [h]	5.1	6.3	7.6	8.9	10.2	11.5
Admittance [W/m²K]	1.87	1.87	1.87	1.87	1.87	1.87



### Mixed Solution with PUR (k=0.025)

Insulation Layer ①	100mm PUR	75mm PUR	100mm PUR	50mm PUR	75mm PUR	100mm PUR
Insulation Layer ②	none	60mm Pavatherm	60mm Pavatherm	100mm Pavatherm	100mm Pavatherm	100mm Pavatherm
U-Value* [W/m²K]	0.23	0.20	0.17	0.20	0.17	0.14
Decrement Factor	0.95	0.70	0.66	0.49	0.44	0.40
Decrement Delay [h]	2.0	5.2	5.7	7.3	7.9	8.5
Admittance [W/m²K]	1.56	1.95	1.95	1.88	1.88	1.88



Other flat roof solutions and systems are available. Please contact NBT.

### Full System Components:

**Insulation boards:** Square edged Pavatherm boards (20, 30, 40, 60, 80, 100mm) and also interlocking, more waterresistant Isolair boards (22, 35, 60mm) and Pavatherm Plus boards (60, 80, 100mm).

**Fixings:** A range screw fixings for different boards and systems

**Roofing membranes and systems:** NBT works with a number of roofing membrane suppliers and other roofing systems providers and can help to arrange for full flat roof systems provision if required.

### NBT Support:

**Design support:** Full design support including drawings review, assistance with detailing, and thermal bridging (New Part L) and interstitial moisture calculations

**Training:** either at NBT or on site for applicators, site managers etc

**Site Support:** NBT will assist on site, giving advice on technical, application and quality issues. NBT have a service to work with contractors who are new to the product

**Approved Applicators:** NBT have a list of trained and approved applicators for the various systems processes.

