

Our Nu-lok solar slates are compatible with other slates in the Nu-lok range, including heavy duty natural and ceramic slates, and Nu-lok Photovoltaic laminates.

The slates are made of toughened glass, and are fixed to the roof using a unique easy to fit, low labour, metal batten and clip system. They can be installed across the whole roof, or as a patch surrounded by other Nu-lok pattern slates.

The visual effect of the slates is a uniform medium to light grey, a combination of the reflection from the surface and the black colour of the absorber mat which lies beneath them. Planning authorities have welcomed these roofs as a more aesthetically pleasing alternative to solar panels.



Installing Nu-lok natural slates



Installation

The roof is built up as a warm roof type construction, with a minimum 25mm of insulation board across the rafters, a breather membrane and vertical counterbattens.

The metal Nu-lok battens are fitted across these counterbattens in conjunction with fitting the silicone absorber mat. The metal battens are very easily spaced at the correct intervals by means of a couple of link channels which act as spacers.

At the beginning of the first course of the solar roof a manifold is fitted to the absorber mat. At the end of this course the absorber is looped up under the batten, and back along the next course. At the top of the roof (or the top of the first circuit on a large roof) the mat is terminated with a second manifold. The manifolds are connected to the pipework in the building, and the roof is now ready for the glass tiles.

Link channels are clipped to the battens at the appropriate intervals. The glass slates then simply slip down into the stainless steel clips, and are secured from windlift by the link channels in the course above.

Slate Types

Standard slates are 400mm x 400mm.

At verges 1½ size verge slates are available. For valleys, around details, and other places where odd shapes are required, matching polycarbonate slates, 1200mm x 400mm, are available which can be cut to suit.

Optionally 600mm x 400mm glass slates are available for matching 300mm wide Nu-lok natural slates.

PV Laminates

Photovoltaic laminates are available which fit with both the solar thermal slates above, and natural and ceramic slates. These are 1200mm x 400mm, and each have an output of 42Wpeak. An array of 24 of these fitted together will make up a 1kWpeak system, which, with the addition of an inverter, can provide power to the building, and feed excess back into the National Grid.



Nu-lok slates on Kevin's House – Grand Designs



Specifications

SLATES	Slate system	Nu-lok
	Material	4mm float glass, toughened to BS 6206
	Standard slate size	400mm x 400mm, option 600mm x 400mm
	Headlap (fixed)	90mm
	Laying gauge (fixed)	308mm +/-2mm
	Coverage	8.06/m ²
	Loading	16kg/m ² (22.5 kg/m ² with full absorber mat)
	Minimum pitch	22.5° (below 22.5 contact Solex)
	Maximum pitch	90°
	Battens	Galvanised steel
	Link channels	Galvanised steel, stainless steel clips
Guarantee on fixings	50 years	
ABSORBERS	Material	Silicone rubber
	Expected life	35 years +
	Size	300mm x up to 50m
	Coverage	0.246m ²
	Loading	5.5kg/m ² with fluid
	Fluid volume	500ml/m / 1600ml/m ²
	Maximum fluid pressure	1 bar
	Average annual output	400 kwh/m ²
Guarantee on absorber	10 years	