

Solex solar tiles are designed to be installed as an area surrounded by compatible concrete tiles – Marley Modern or Redland Mini-stonewold.

The tiles are made of transparent polycarbonate plastic, which is extremely tough and weather resistant.

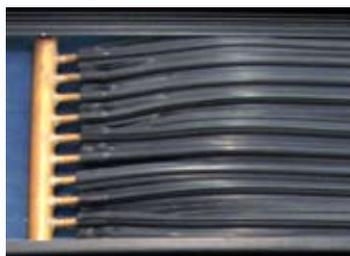
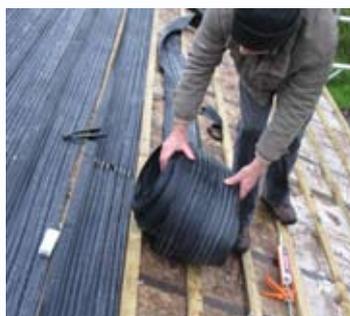
The visual effect of the tiles is a uniform medium to light grey, a combination of the reflection from the surface and the black colour of the absorbers panels which lie beneath them. Planning authorities have welcomed these roofs as a more aesthetically pleasing alternative to solar panels.



Installation

The slates are installed on a conventional roof construction, typically consisting of rafters with a breathable roofing felt, with or without sarking boards or insulation to suit the design. Vertical counterbattens and horizontal battens, are fitted over the felt.

The silicone rubber solar absorber strip, which is supplied on a roll, is fitted over the battens. At the end of a course the strip is simply looped under the batten and up to the next course. At the top and bottom of the roof the absorber is terminated with a manifold.



The solar collecting area is tiled with the transparent solar tiles, and is surrounded on all sides by concrete tiles laid in the normal manner.

Each solar tile is securely held against wind lift with two nails in the head of the tile, a nail to one lower corner, and a lug locking into an adjacent tile on the other.



Specifications

TILES	Material	3mm UV stabilized polycarbonate	
	Minimum pitch	22.5°	
	Maximum pitch	90°	
	Headlap	75mm	85mm
	Laying gauge	320mm (max)	310mm (min)
	Coverage	11.1/m ²	11.5/m ²
	Cover width	290mm	
	Loading	5.7kg/m ² (14.5kg/m ² with absorbers & insul)	
	Battens	25 x 50mm +/-2mm, durable timber	
	Fixings	30 & 60mm copper or aluminium nails	
ABSORBERS	Material	Silicone	
	Width	320mm	
	Water channels	10	
	Channel diameter	8mm id / 12mm od	
	Fluid volume	500ml/m	
	Loading	6kg/m ² , with fluid	
	Maximum fluid pressure	1 bar	
	Average annual output	410 kwh/m ²	
INSULATION	Type	25mm mineral fibre batt, 105kg/m ³	
	R value	0.037 Km ² /W	
	Loading	2.5kg/m ²	