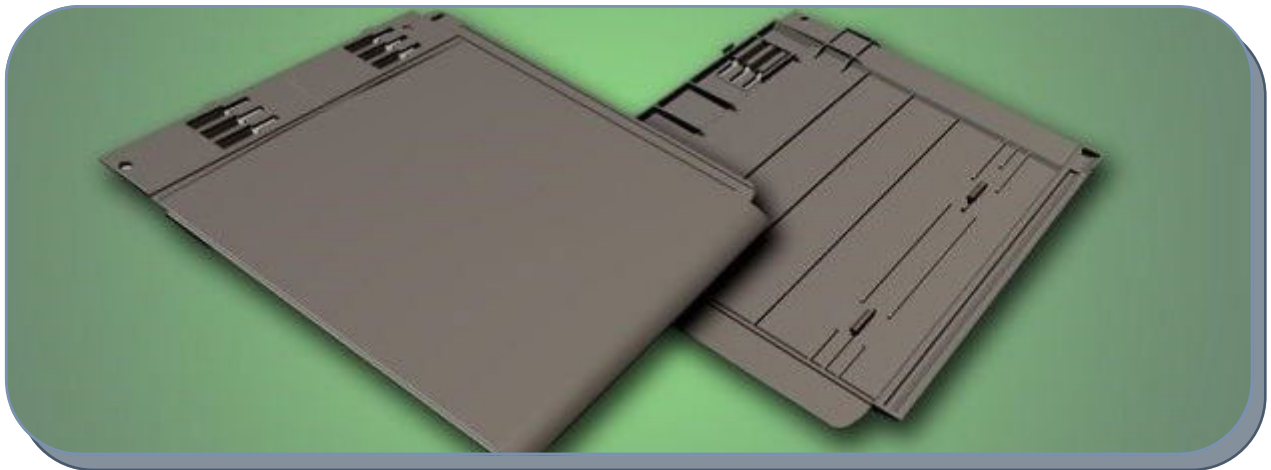


Ultimate Performance



The Envirotile System

Envirotile is part of a total dry fix system including unique underlay and unique eaves bar fixing. The innovative interlocking holds each tile securely in eight different places, this means that each Envirotile roof is secure and can be laid to roofs anywhere within the UK.

Envirotile has been designed to be simple and easy to lay, less labour intensive, provides quicker installation. It is self plumbing (no more snaking) and incorporates snap off nibs to overcome and accommodate fixing of tiles to warped wooden battens and boarded roofs where nibs are not required.

It's polymer composition ensure no-transportation or handling breakages, minimising waste, it is also completely non-porous and excellently suited to coastal areas where salt content tends to be higher.

The unique eaves bar means that extra eaves courses are no longer required, saving time and materials. No tile clips are required either as Envirotiles are fixed using 2, 30x3.35mm stainless steel roofers drive nails per tile..

No tile/half or double requirements, one tile does it all

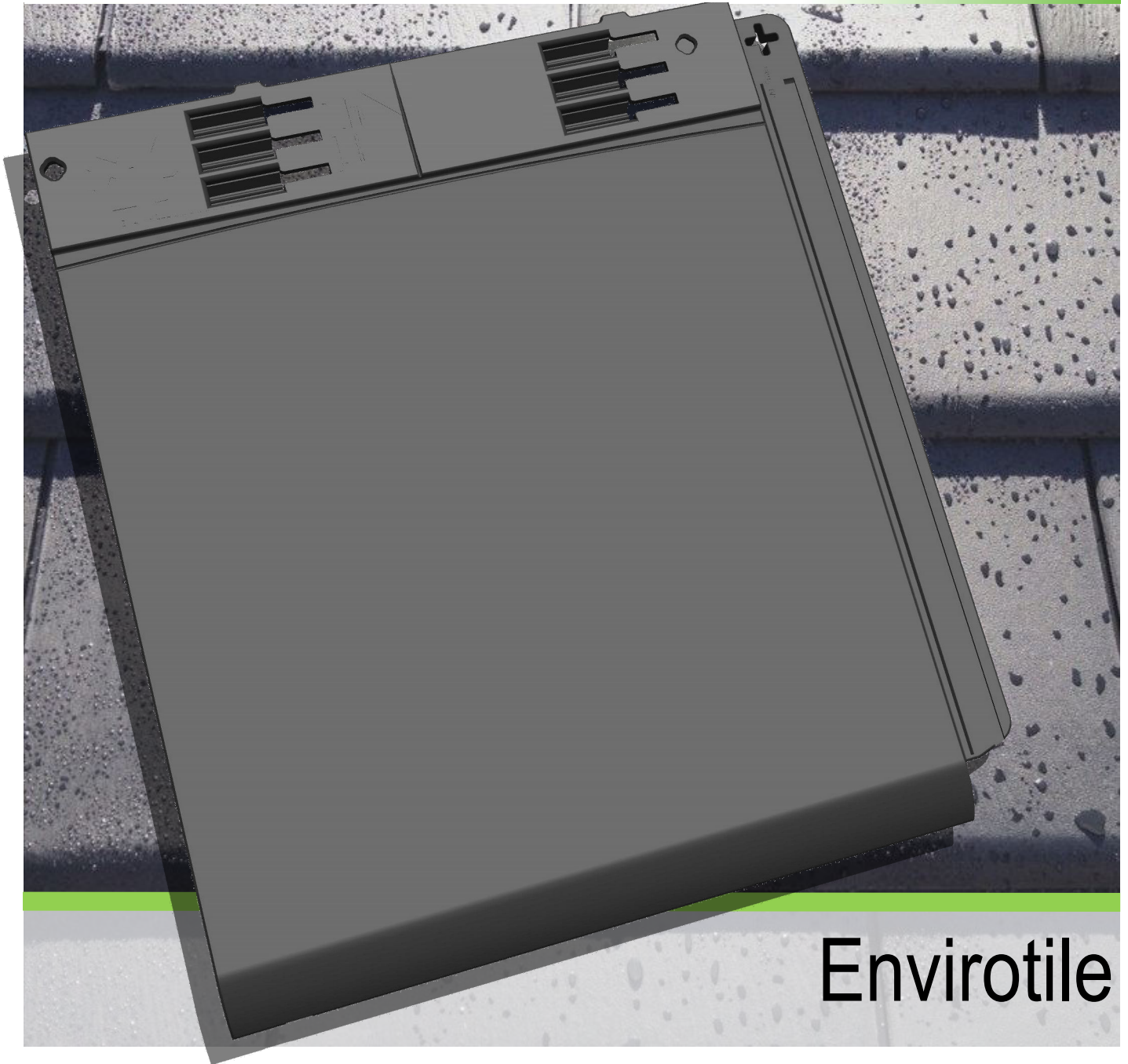
The tile mechanism assists roofers in the hip and valley areas of roof work, Envirotile no matter what size cut tiles are held securely in place, making working procedure much easier in these two key areas where loose tiles need to be accommodated with positioning while fixing.

By laying tiles to the 5mm marker, expansion caused by temperature fluctuations can be catered for., ensuring the Envirotile system performs in all types of weather conditions. Stretching between tiles is easily achieved thanks to the innovative interlocking system, creating a looser less restrictive interlock means that un-square roof areas can be catered for, as tiles can be stretched to cover more or less distances as required.

Other benefits of Envirotile are: they can be laid in either half or single bond layout. (Half bond on low pitched roofs beneath 22.5 degrees), they can be laid down to a low pitch of 12.5 degrees and up to 90 degrees vertical. (Testing carried out by BRE) Three different gauges are available 250mm, 265mm, and 280mm (the lower the pitch the lower the gauge).

The Envirotile System is fire tested to BS 476-3 and rated A for fire penetration on pitched roofs when used in conjunction with Envirolay, our unique underlay designed especially for Envirotiles.

Green Sustainable Roofing Products



Envirotile

Colour



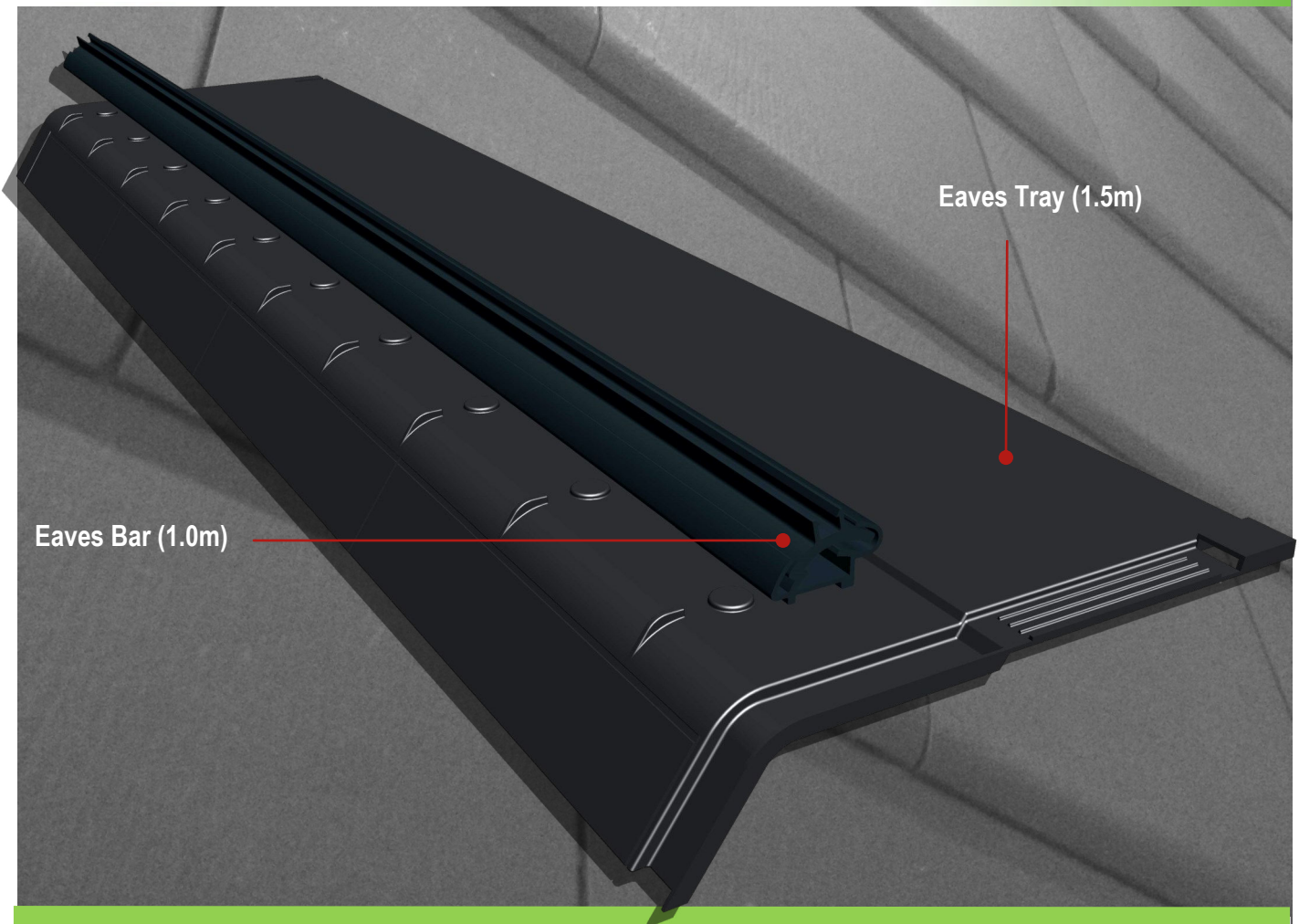
Anthracite

Envirotile is one of the most advanced recycled polymer roof tiles currently available. It is both high performing and environmentally friendly.

Envirotile roof tiles actually help to reduce build and labour costs as well as reducing the carbon footprint of any building project



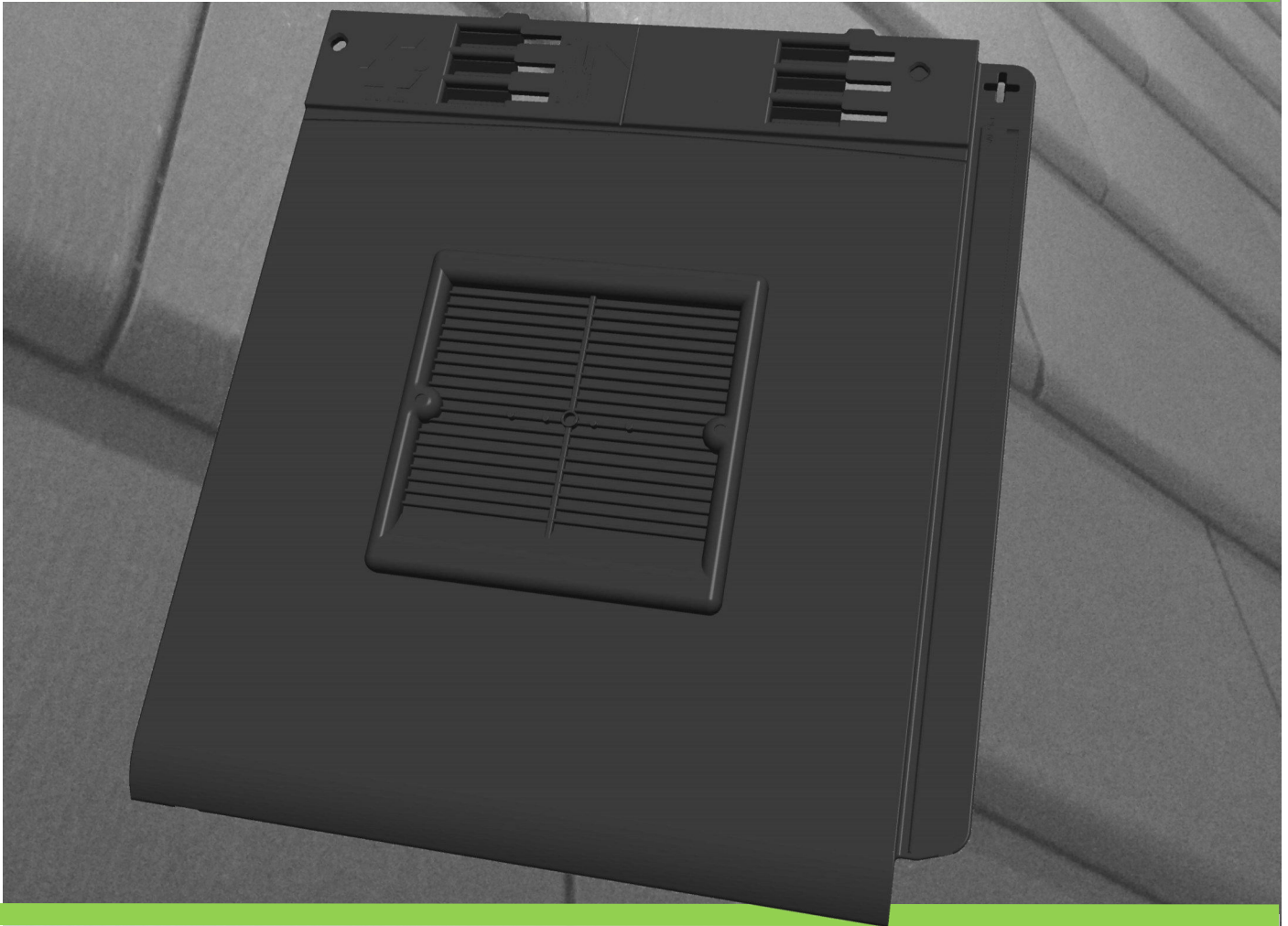
2D CAD Drawings for architectural layouts available.



Envirotile Eaves Guard

The fully reprocessed polymer Eaves Guard/Felt Support Tray is the most cost-effective way of providing a complete and robust felt support system that will not deteriorate, giving additional protection to the fascia detail.

- Environmentally friendly, UV stable polypropylene – made from 100% re-processed material.
- Eaves Protectors have 1000mm length and 200mm cover width: significantly more than competitive products.
- Suitable for roofs between 15 and 70 degrees pitch when either 10mm or 25mm ventilation is required.
- Strong and durable – designed to resist , with an easy fit overlapping engagement.
- Unique ‘Split Skirt’ feature which allows 240mm sections to be easily lifted, to enable easy installation of gutter brackets.
- Positive engagement of the separate Envirotile fixing channel
- Satisfies all NHBC requirements. Complies with BS 5250: 2002.



Ventilated Envirotile

The Envirotile “Low Line” vent has been designed to be both unobtrusive and practical. The 10k ventilation area has no sharp edges to trap leaves and other debris from the roof significantly reducing the risk of blocked ventilation.

Each vent has all of the features necessary for full interlocking with other Envirotiles ensuring for seamless and secure integration with the whole roof.

USE: Permits entry of air into roof space for cross flow ventilation or for use with mechanical extract or natural ventilation. Suitable for pitches 22.5° and above. For pitches below 22.5 cowl vents can be supplied

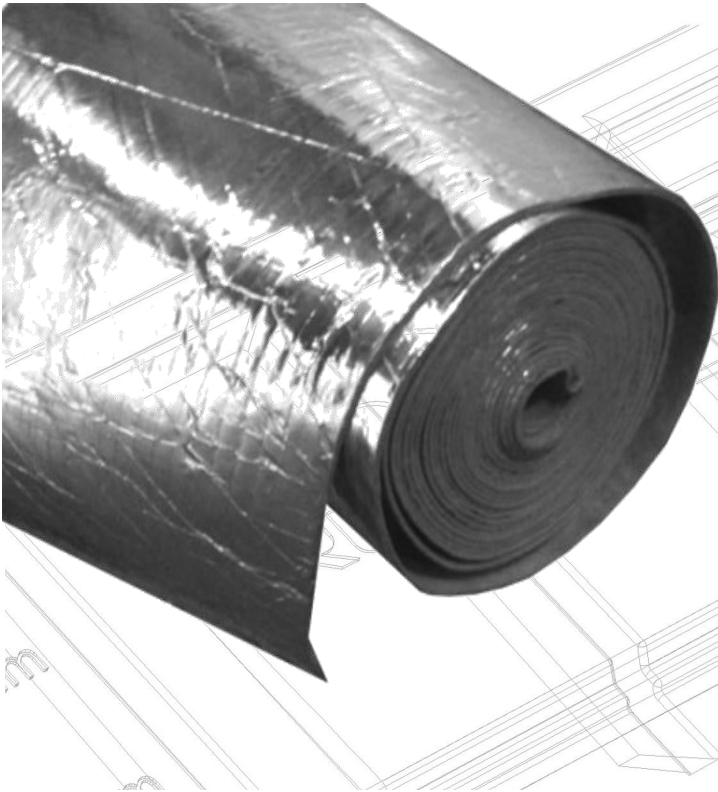
MATERIAL: Vent Moulded in Black “HIPS”, set into Reprocessed Polypropylene Envirotile.

Colour



Anthracite

Green Sustainable Roofing Products



Envirolay is a thin, flexible multi-foil perfectly designed to ensure Envirotile performs to required levels.

It works in combination with glass wool to reduce the total thickness of insulation needed as with rigid insulation to cut installation time.

Fully BRE approved, Envirolay reduces air leakage by providing an air-tight vapour barrier and restricting air movement in its multi-foil layers.

When used in conjunction with Envirotiles, it achieves an 'A' rating against fire penetration.

Is the next generation of tough and environment friendly high performance pitched roofing underlay. It is a type HR underlay and roof space ventilation is needed at both high and low level.

BRE certified, it meets BS EN 13859-1 and BS EN 12310-1 and is suitable for both warm and cold roof, supported and unsupported, ventilated roof constructions throughout the UK.

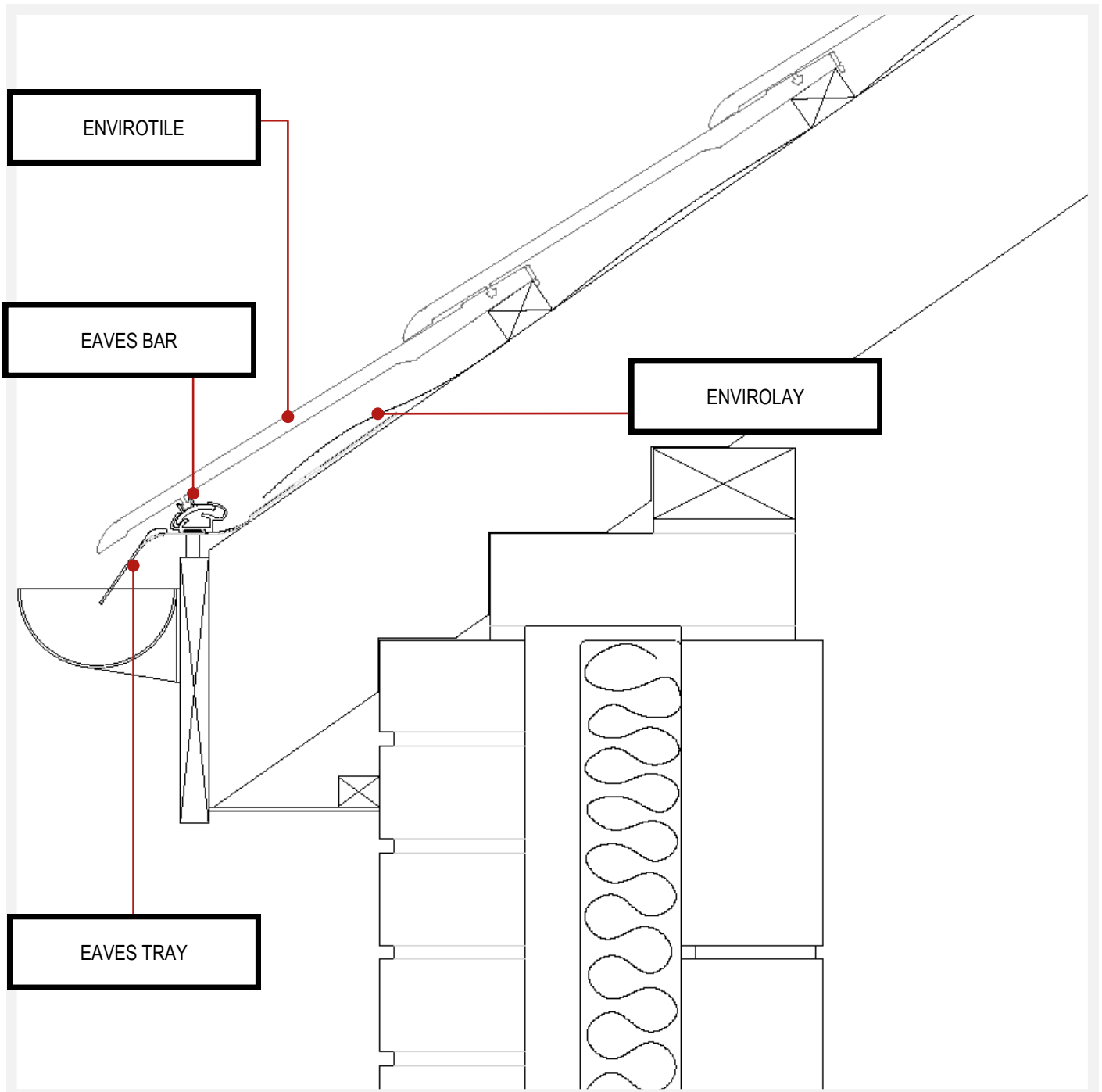
The flame retardant woven glass fibre cloth and aluminium foil weave is vapour permeable and has a high nail tear resistance which makes it untearable in normal use.

The thermal reflectivity of the material is designed to reduce the convection and radiant heat loss through the roof.

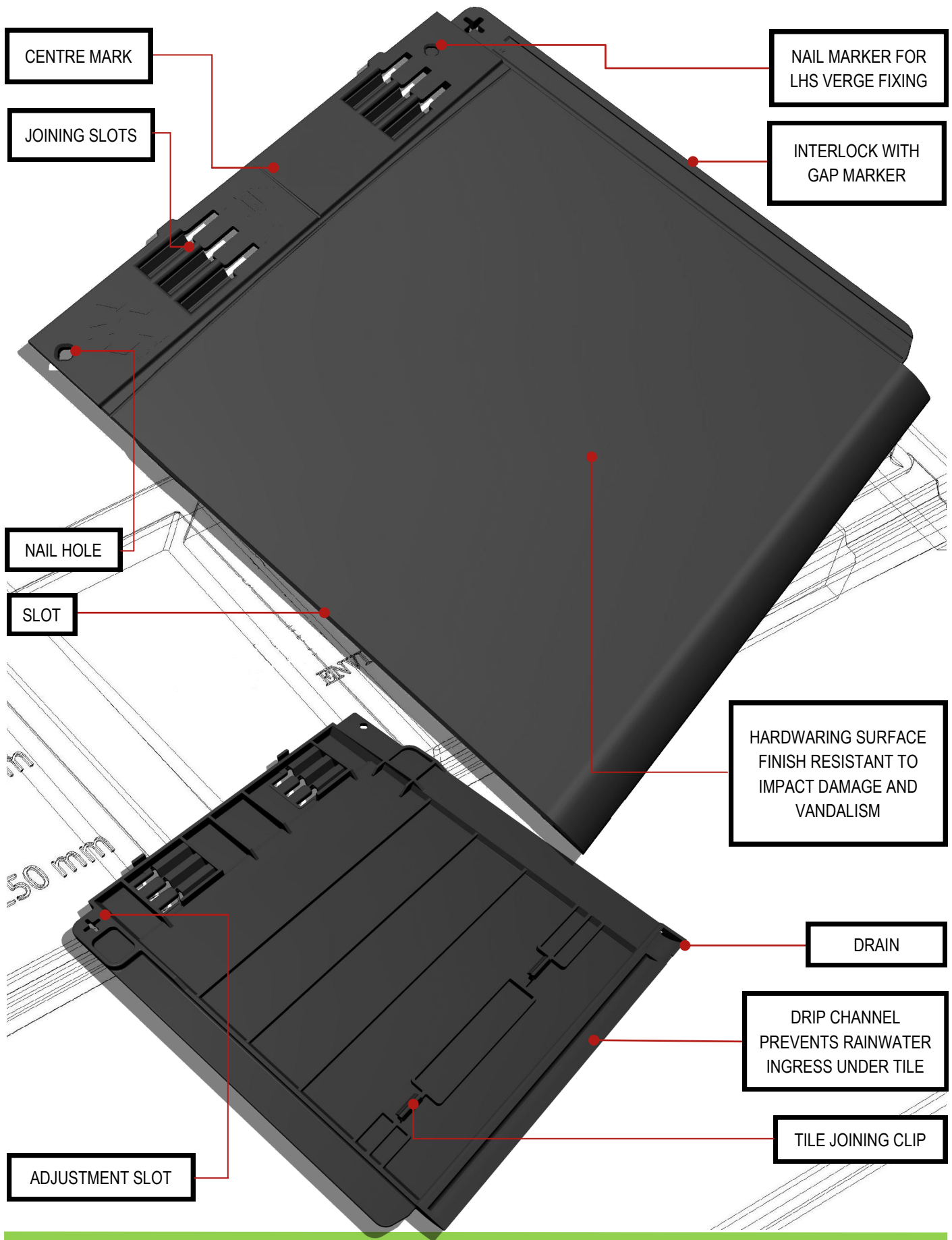
In the summer months it reduces heat entering into the building, but also helps to maintain the heat in the building during the winter.

Envirolay

Sectional Detail



Approved Document F2 (1995) Building Regulations and BS5250:2002 'Control of Practice for Condensation in Buildings' detail the requirements and practicalities of minimising condensation. Condensation must be managed in order to prevent damage to the thermal and structural properties of the materials used in the roof eaves prevent rain from damaging the building walls and ensures effective collection and release of run-off.



Envirotile Features

Envirotile Technical Data

Envirotile composition	Recycled polymer containing approx. 75% re-processed polypropylene
Tile Size	325mm x 365mm
Tile Weight	610g
Gauge Settings	Three available gauge settings facilitating low pitch requirements and straight forward installation
Coverage per m²	At 280mm gauge—12 tiles At 265mm gauge—13 tiles At 250mm gauge—14 tiles
Roof Pitch	12.5° to 90° (Vertical)
Batten Recommendations	38mm x 25mm wooden battens treated with preservative. Staggered every 3rd course. Spaced at no more than 600mm
Bond	A single or half bond can be used without the need for additional fixings 4—5mm gap between tiles is required for expansion.
Fixing Method	30mm long Stainless Steel Countersunk Wood-screw (with 10mm head) Alternatively a 38mm Stainless Steel or Galvanised clout nail with 8mm head can be used - one per tile
Cutting	Can be cut with a medium toothed handsaw or powered saw. The use of a gauge line is recommended for best results when creating hips and valleys
Storage	If subject to sub-zero temperatures cover with tarpaulin sheeting and allow 24-48 hours before roof installation
Product Certifications	BBA Part Certification Conforms to BS 5534:2003 Conforms to BS 15087:2005

Environmentally Sustainable... ...Responsibly Sourced

Every care has been taken to ensure Envirotiles are environmentally sustainable and responsibly sourced. Made from 79% re-processed polypropylene, they use everyday waste products which would otherwise be disposed of by being thrown into landfill or incinerated.

Transportation costs and environmental impacts are greatly reduced too when compared to conventional roofing products. A single Envirotile weighs 610g, less than a quarter of the weight of a conventional concrete roof tile. For 15,000 tiles transported a distance of 200 miles, by road, the reduced weight results in a saving of 1.24 tonnes of CO₂ emissions. The integration of 1 tonne of reprocessed Polypropylene within Envirotiles, in place of virgin material, results in a gross energy saving of 6,800 kWh and a 2 tonne reduction in CO₂ emissions.

Conventional roof tiles are heavy and brittle, so installers typically adhere to a 5% allowance for breakages. Envirotiles are virtually unbreakable and as such make a positive contribution to the Site Waste Management Plan.

Envirotile is completely recyclable at the end of its useful life.



Envirotile - 2011
Winner of the Lord
Stafford Awards for
Environmental
Sustainability



Won MEBC Innovation
Award 2012

Exceeding Current Performance Norms:

- 110mph driven rain with no loss of integrity, any dislodgement or breakages
- Achieved a BRE record, with superb performance at roof pitch levels of just 12.5°
- Over 5 times the uplift resistance compared with conventional roof tiles with standard clip fixings.
- Fire resistance test in accordance with BS476: Part 3: 2004, External Fire Exposure Roof Test. Achieved the EXT.S.AA rating, which is the highest rating for resistance to fire spread
- Currently, the only plastic roof tile that can be laid on a breathable membrane Envirotile comprises of approximately 75% reprocessed polypropylene.

Driving Rain

The UK is susceptible to severe driving rain and heavy rainfall, even in sheltered locations. Guidance relating roof exposure to driven rain can be found in the following publications:

For buildings up to 12m in height - **BS5534**

For buildings over 12m in height - **BS6399-2**

Roof Pitch

Roof pitch is equal to rafter pitch. The pitch of individual tiles should be established using the following parameters:

- For plain tiles a pitch of 7° less than the pitch of the rafters is required
- For interlocked slates and tiles that are single-lap in nature a pitch of 5° less than the pitch of the rafters is prescribed
- For fibre-cement slates that are double-lap in nature a pitch of 1.25° less than the pitch of the rafters is recommended.