

Eco Slate Installation Guide

V2 July 2012

ECO Systems
DISTRIBUTION LTD

Getting Started

It is essential you ensure that you have all required tools and fixings before proceeding with the installation of Eco Slate. It is also essential that all access to roof and relevant areas where Eco Slate is to be installed and stored are safe and none hazardous environment and conform to Health & Safety regulations (UK, Health & Safety at work act 1974 <http://www.hse.gov.uk/pubns/hsc13.pdf>.) It is recommended that Roofing Building and / or Health & Safety professional advice is taken at every stage of the installation process.

Additional Material

Eco Slate MUST be installed onto solid roof decking which is recommended to be either 18mm plywood or oriented strand board (OSB)

A minimum of one layer of roof felt or synthetic underlay/breathable membrane (e.g. Til-R or Rubershield), must be installed over the entire roof. **The use of any tar-based felt underlay will void your warranty.**

*** For AA Fire Rated Roof Systems use Vulcan Firefly underlay***

Eco slate can be used on valleys and ridges and as under flashings (soakers) utilising its unique flexibility, conventional flashings can also be used such as lead, copper or zinc coated steel. Please ensure adequate cover (lap) is used on any flashing used and be aware that Ecoslate will bond to itself and NOT to any other material.

Fixings, New Tech Eco Slates must be secured using the relevant size (dependant on thickness of board used, SIP Panel etc) copper, aluminium, stainless steel nails as per BS5534.

Vents: All roof structures should be vented in order to allow heat build-up and moisture to escape the attic area. Vents are to be placed proportionately at the eaves/soffits. Dry Ridge or Slate vents should be used.

Important Reminder:

Always ensure that your roof has adequate roof ventilation regardless of the roofing material being used. If not, you may be at risk of serious structural damage.

<http://www.planningportal.gov.uk/permission/commonprojects/roof>

Tools

It is of course up to the individual professional which tools are to be used, here are some suggestions for the installation of Eco Slate.

- Pencil/Marker
- Chalk Line
- Hammer/Nail Gun/Screwdriver
- Knife/Snips
- Relevant Health & Safety Equipment including PPE.

Registered Office : Eco Systems Distribution Ltd, Highgates Cambridge Mews, Rylstone Road, Eastbourne Bn22 7hn

Tel: 01323 648269 Fax: 08721 133269 Email : info@ecodeckingsystems.com

Web: www.ecosystemsdistribution.com Company Reg: 6234488 Vat: 925 9230 16

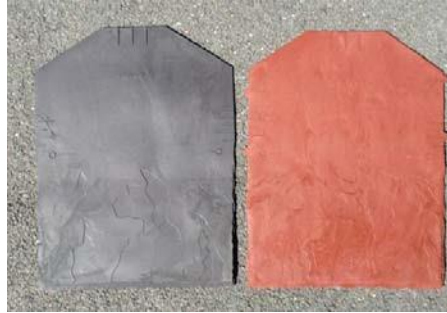
Eco Slate Installation Guide

V2 July 2012

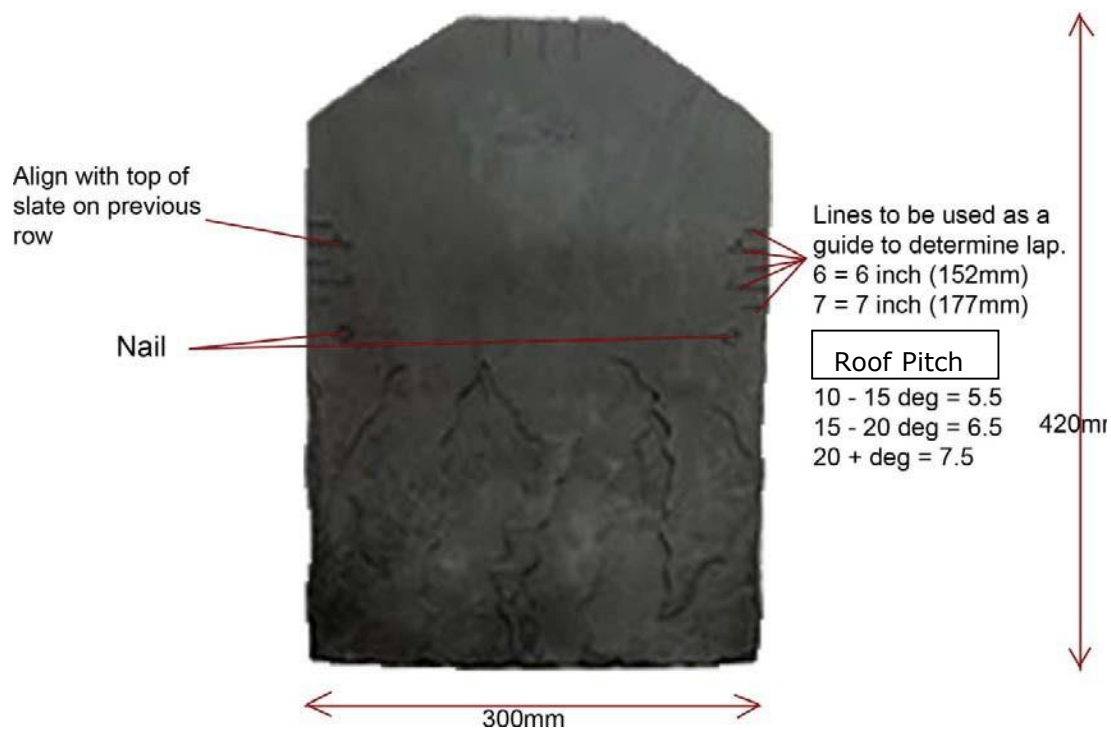
ECO Systems
DISTRIBUTION LTD

Details of Eco Slate

- Colour options – Grey & Old World Red.



- Size – 420mm x 300mm



- Weight – 0.75kg
- 34 slates per box (23.4kg not including packaging)
- 49 boxes per pallet (1146.6kg not including packaging)

Eco Slate

Installation Guide

V2 July 2012

Aesthetics

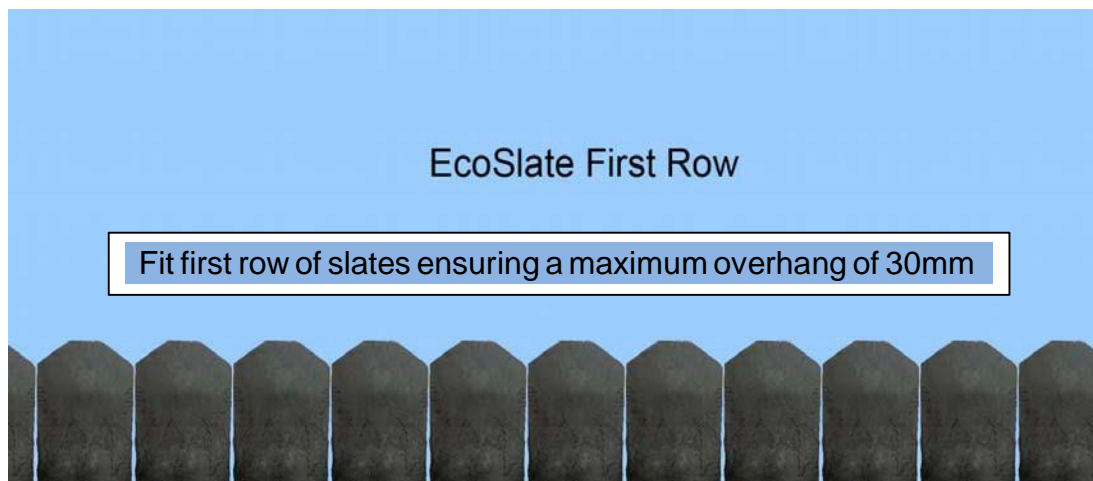
Eco Slate is manufactured in 2 mouldings, each with a different pattern and packaged in boxes of 34

To ensure the aesthetics of your roof is maximised and to achieve an authentic look Eco Slate is pre-mixed, ensuring a random distribution of pattern and any minor colour fluctuation..

Installation Procedure

Before installation ensure all design consideration have been taken into account as outlined in Eco Slate Design document, this can be found on our website, Eco Slate, Roof Design Considerations.

1. Prepare Roof deck - ensure nails and screws are fully hammered or screwed home, remove all dirt & debris. Any ill fitted or damaged roof deck will have an adverse effect on your installation of Eco Slate.
2. Under felt / Breather Membrane – After roof deck is prepared you may install the under felt or breather membrane, using ELH Clout Nails. When fitting this membrane ensure it is flat to the deck, using wooden blocks to flatten to roof deck if necessary.
3. Eco Slate – first row can now be installed ensuring maximum lap of 30mm over both verge and bargeboard, it is essential Eco slate is supported and the maximum of 30mm is adhered to. Cut slates at end of row to suit with knife or snips.

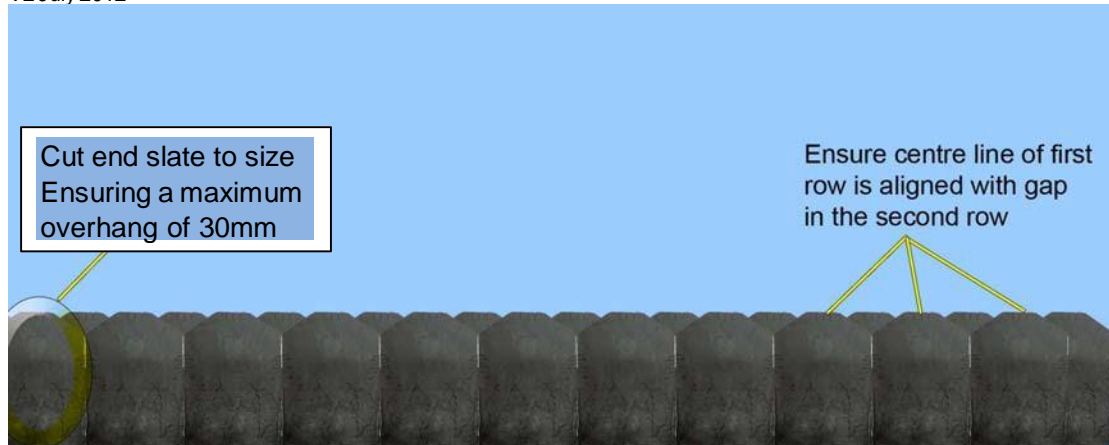


4. Second row can now be fitted directly on top of the first row, stagger Eco Slate so that the centre of the second row lay over the gap of the first row.

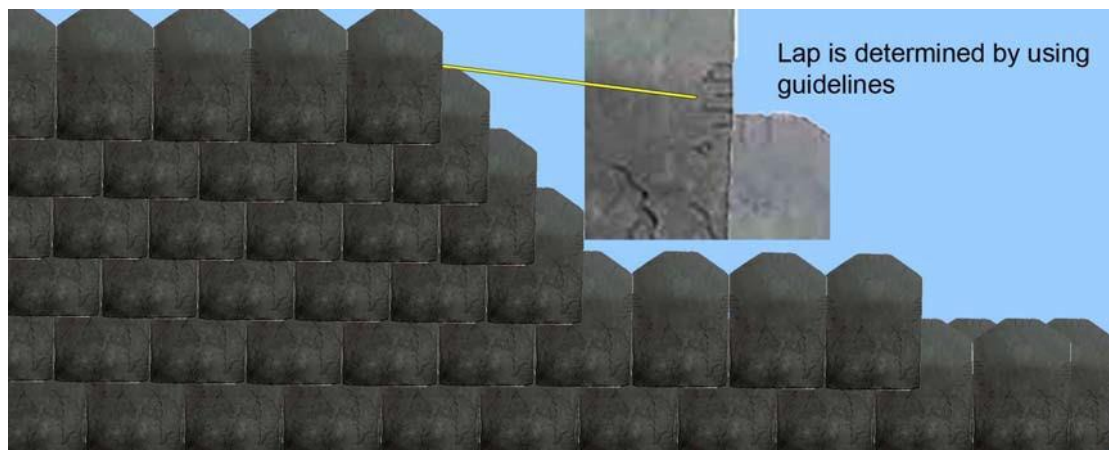
Eco Slate Installation Guide

V2 July 2012

ECO Systems
DISTRIBUTION LTD



5. Third row is fitted in the same staggered pattern as the second row aligning the relevant exposure line 1* to the top of the slate on the second row. Ensure the centre line of the slate 2* is aligned with the gap of the slate of the second row.
6. Fourth and continuing rows should be fitted in a similar way to stage 5, third row until valley or ridge is reached.



7. Ridges & Hips – Eco Slate can be used for ridges and hips by folding the slate over the ridge & nailing or screwing in a similar way to the roof deck. Ridges or hips should be fitted at 7 per linear metre ensuring at all times maximum lap is achieved (5.5 mark on Slate).
8. Valleys – The valley is fitted in the same way as the ridge but in the reverse, ensuring the slate is moulded into the valley as much as possible and secured in place by nails or screws at 7 per metre. The valley slates must be in place before the main roof slates are installed. Ensure there is adequate lap of slate into valley. * for larger valleys conventional products such as lead should be used as total coverage for Eco Slate is 300mm excluding any lap

** When measuring up for Eco Slate, please ensure you have taken into consideration the initial double row and all ridge, hip and valley requirements before ordering the volume of slates to cover your roof. Not only does this eliminate any inconvenience on completing your roof it also ensures your slates come from one batch, subsequent orders could be from another batch and be slightly different shade.

Eco Slate Installation Guide

V2 July 2012

ECO Systems
DISTRIBUTION LTD

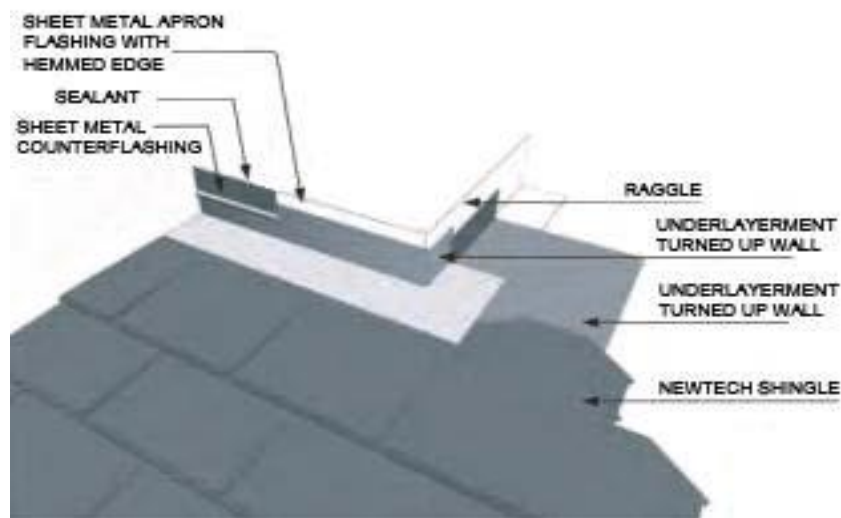
Flashing -

Flashing is to be used around all obstructions on the roof. Such as dormers, chimneys, valleys, etc. EcoDecking & Roofing Systems suggest lead as one of the most durable materials that will last just as long as the Eco Slate itself.

Apron (Roof to wall) Flashing

Apron flashing is used when a roof terminates to a wall causing a course to be cut and face nailed. It is installed over the Eco Slate and behind siding or counter/cap flashing.

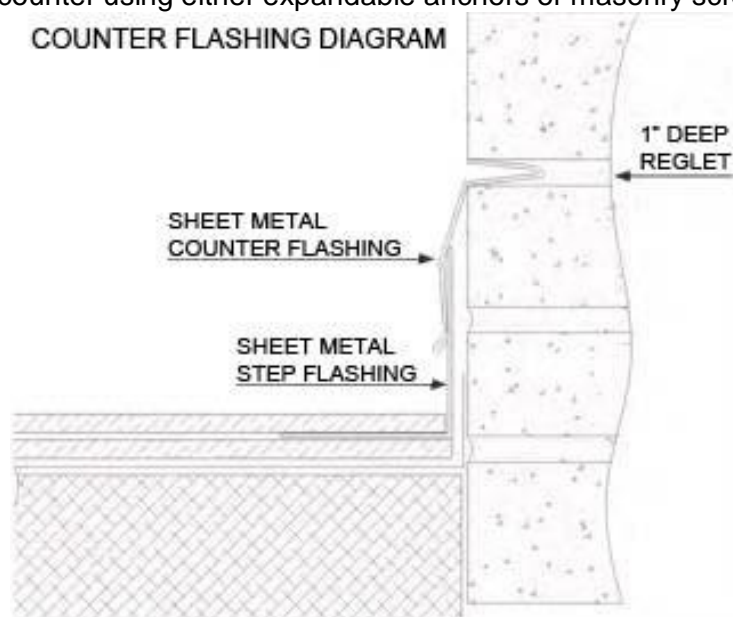
APRON FLASHING DIAGRAM



Counter Flashing –

1. Cut a minimum 1" (25.4mm) deep reglet into the masonry material.
2. Custom bend the counter flashing to fit the reglet.
3. Start by installing lowest piece first and work upwards for proper water runoff.
4. Fasten the counter using either expandable anchors or masonry screws.

COUNTER FLASHING DIAGRAM



Eco Slate Installation Guide

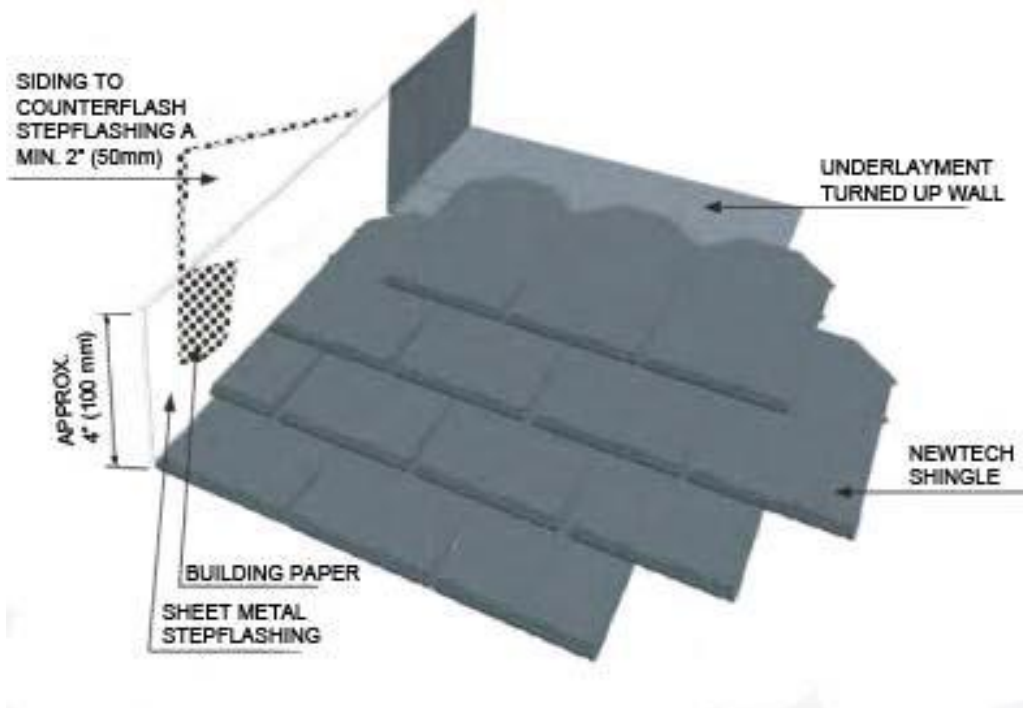
V2 July 2012

ECO Systems
DISTRIBUTION LTD

Step Flashing -

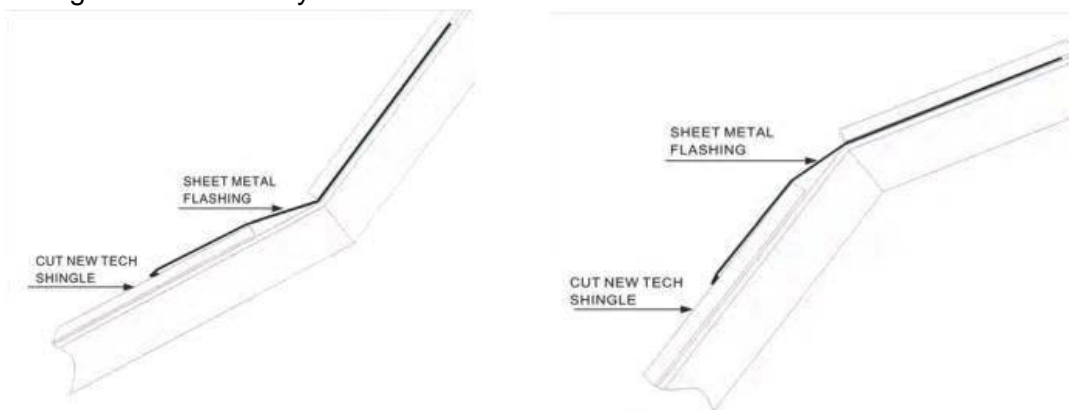
Step flashing is to be used over or under the roof coverings and are turned up on the vertical surface. Step flashing should extend under the uppermost row of the roof tile the full depth of the roof tile or at least 4" (101.6mm) over the roof tile immediately below the metal. The vertical leg of the metal should be turned up a minimum of 4" and extend 4" on the roof tile with $\frac{3}{4}$ " (19.05mm) hem. Flashing should have a minimum length of 9" (228.6mm) and must overlap a minimum of 2" (50.8mm).

STEP FLASHING DIAGRAM



Pitch Changes –

Eco Slates can be installed onto rolling roofs with a gradual pitch change. However, in the case of some roof designs, drastic pitch changes will require the use of metal flashing where necessary.



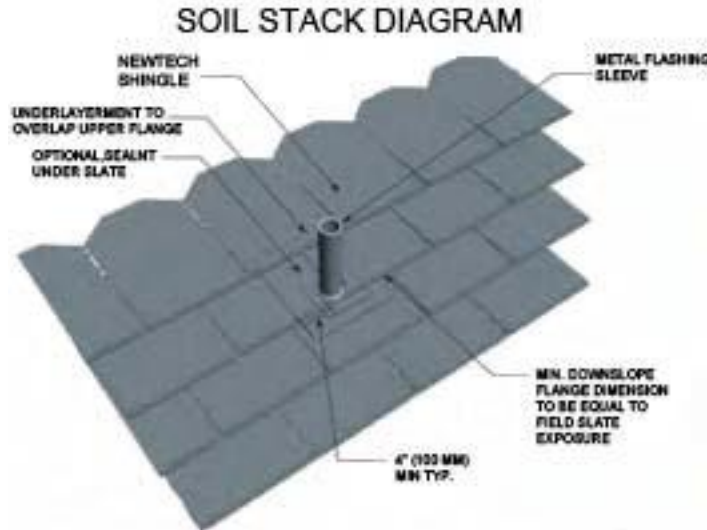
Eco Slate Installation Guide

V2 July 2012

ECO Systems
DISTRIBUTION LTD

Vent Flashing –

Normal type of roof vents or pipe boot flashing can be used. A lead or PVC stack for plumbing pipes is recommended. Materials with extended-life should always be used.



Chimney Saddles –

With chimneys more than 2 feet (60.96cm) wide it is recommended that a saddle be installed to divert water from the back of the chimney.

Chimneys less than 2 feet may require only a simple pan flashing.

