# Cambrian Slate
## Supplementary Information

Installation of Solar Limpets onto Cambrian slate should only be undertaken by an experienced and currently certificated Solar Limpet slate installer.

### Important Information

These slates are thin single skinned, interlocked top and sides and fixed with nails and metal clips.
They are exceedingly difficult to replace.

Replacing a broken slate due to careless feet/knees or poor installation technique, may involve substantial stripping of the remaining slates or referring to the Redland repair system.

See attached documents for information on how to replace broken tiles. Such repair work would be a job for an experienced slate roofer.

Locating the rafters can be challenging using the Bosh GMS120 Professional metal detector, due to the positioning of fixings holding the slate in place, but once established, the rafter position can be confirmed with a test hole in the same way as for a standard type slate instructions.

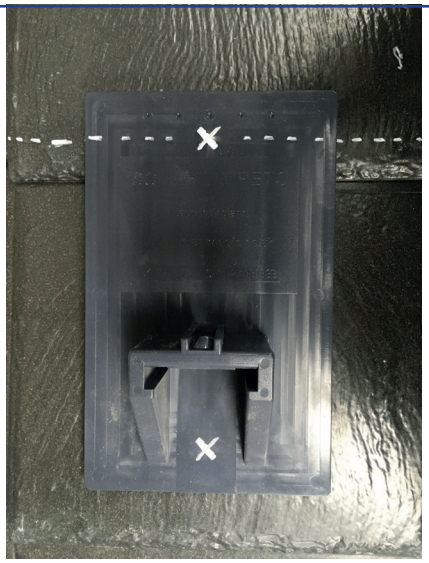
While I have stood on Limpets once installed on this type of covering without causing any damage, as they are a nightmare to replace if broken you strongly advised to utilise the 4 x 2-inch timbers laid across 3 Limpet roof hooks to further access the roof. Do not simply rely on the rails to support your weight.

### Additional Information

The only alternative fixing system for this type of roof covering that I am currently aware of would be an integrated panel system. Should you wish, additional training on Cambrian Interlocking slate tiles for your slate trained installer/s this can be arranged.

For further clarification or to book training call Carl Reynolds at Solar Limpets on 07968 231145.

## Positioning the Limpet baseplate



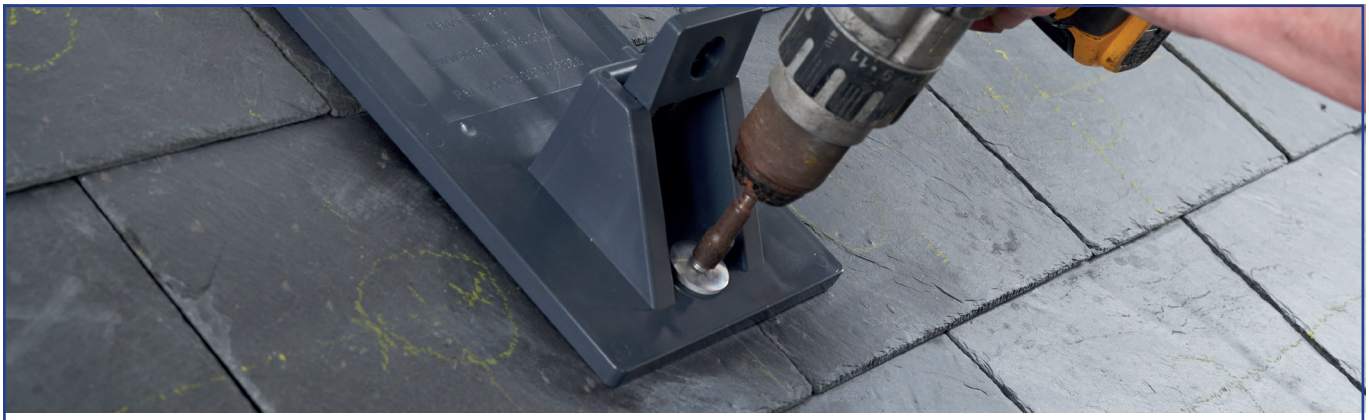
Position the Limpet as shown in the photo, ensuring the whole circumference of the top EDPM seal and housing sits flat onto the slate surface. Drill through each X marked fixing point on the Limpet using a 7mm tile drill. Sufficient to mark the slate below. Then drill out the two marked fixing hole positions with a 7mm tile drill.

## Sealing the Limpet baseplate

Ensure that the primary EDPM seals both make full contact with the slate surface, it may be necessary to double up on the lower seal by applying a second EDPM seal on top of the first seal or by applying a little more CT1 sealant to the slate.

**SOLAR LIMPETS FOR SLATE ONLY COME WITH SUFFICIENT EDPM SEALS FOR A SINGLE SEAL TO BE FITTED, SO WHEN ORDERING PLEASE ASK FOR AND ADDITIONAL SHEET OF SEALS TO BE ADDED TO YOUR ORDER.**

## Tightening the Limpet baseplate



The same rules apply as for standard natural slate applications. Fix into place using the screws & aluminium EDPM washers supplied. Tighten only until the aluminium washer cover starts deflecting. When finally tightening the lower screw fixing the Limpet baseplate will defect slightly to achieve compression of the primary EDPM seal and contact with the slate surface.

**DO NOT USE IMPACT DRIVERS**

SOLAR LIMPETS

**www.solarlimpets.co.uk**
Helpline: **07968 231145**
**sales@solarlimpets.co.uk 01993 869278**

# CAMBRIAN REPAIR SYSTEM

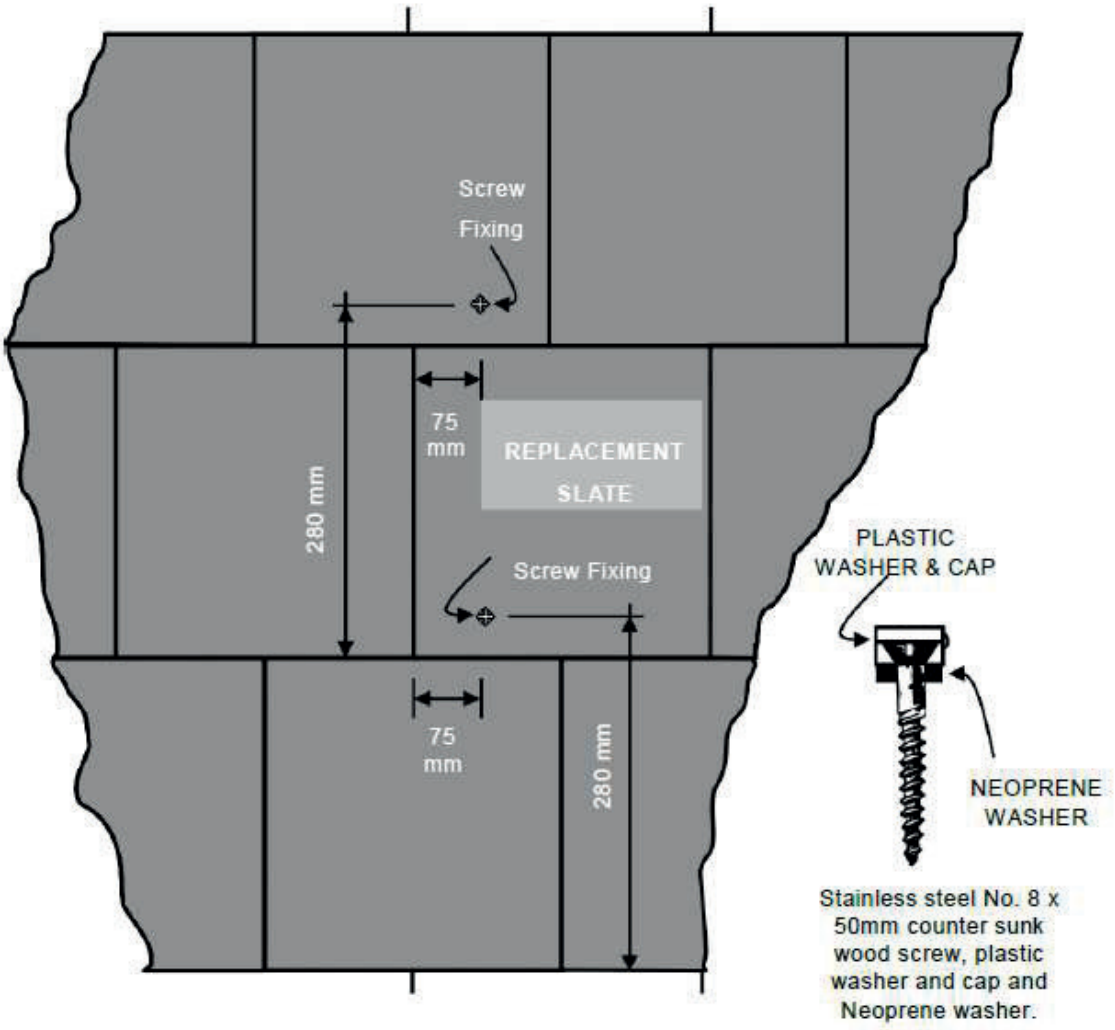
1. Remove damaged tile and head nail fixing.

2. Remove nibs from replacement slate and slide into position

3. Mark and drill screw holes with No. 8 masonry drill, 75mm horizontal, 280mm vertical (see below, dimensions are a guide only)

4. Assemble the screw, cap and washers, screw assembly into batten until the Neoprene washer will not rotate. Do not over-tighten the screw as you may break the slate.

5. Use two screw fixings per replacement slate.

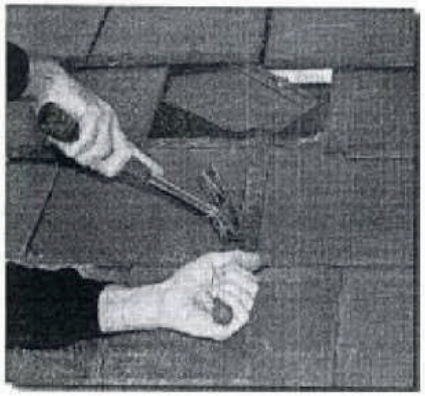



The wood screws (4.0 x 50mm S/S Countersunk) can be purchased at Travis Perkins (Product Code 930820). The plastic caps used to hide the head of the screw, can be purchased at B&Q (Product Code 03211106).

**Redland Technical Solutions**
**Tel 0330 123 4585**
**E-mail: Technical.Redland@bmigroup.com**

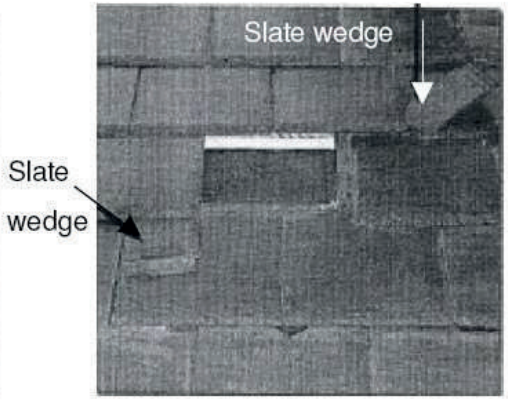
# Cambrian Slate Replacement Kit (**20001219**)
# FIXING INSTRUCTIONS

Pack contains sufficient to replace 5 slates:
- 5 wipes
- 5 m adhesive roll
- 1 set of fixing instructions



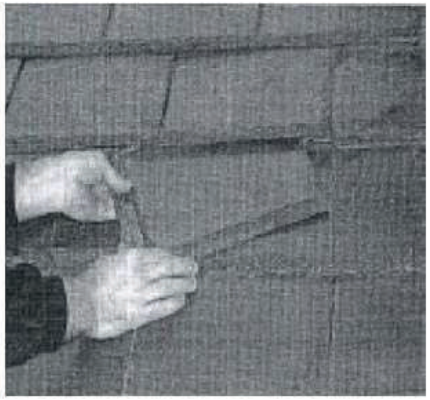
## 1. Removing the broken Cambrian Slate

- Using a Slate Ripper or similar remove the nails at the head of the slate and rotate the tail clip on the left hand side upwards.
- Clean away any debris and dirt.



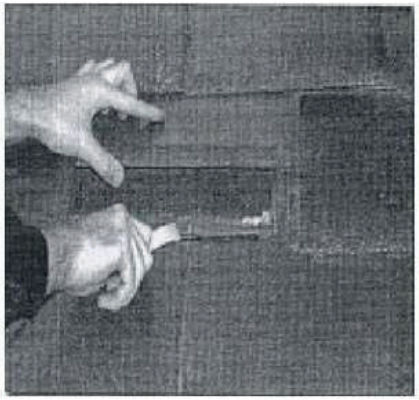

## 2. Preparation for inserting the new Cambrian Slate

- Wedge two pieces of broken slate between the adjacent slates to make it easier to slide in the new Cambrian Slate.



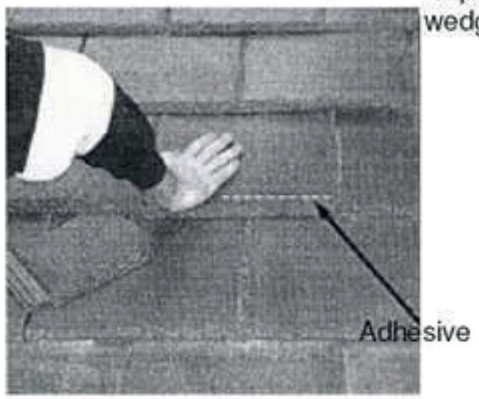
## 3. Cleaning and positioning the new Cambrian Slate

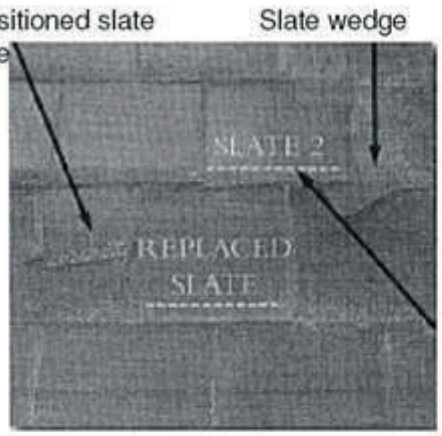
- Take a new Cambrian Slate and using the wipes provided clean the head on the face of the slate and the weatherbars on the underside of the tail.
- Slide the new slate into position and push up towards the ridge to expose the head of the slate below.

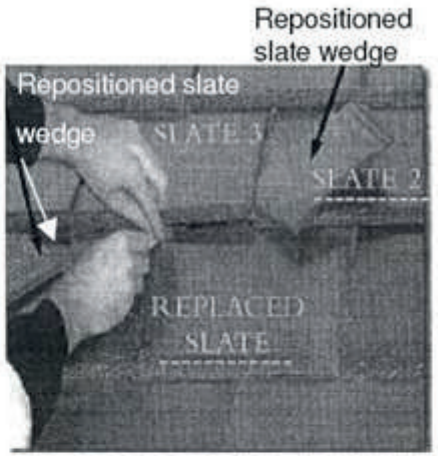


## 4. Apply the adhesive

- Clean the head of the lower slate using the wipes provided.
- Cut a length of adhesive 250mm long and stick it below the weatherbars of the slate below. Do not insert adhesive across the right hand slate interlock as this would prevent water discharging from the interlock.
- Peel off the adhesive cover.





**5. Fixing the new Cambrian Slate**

- Slide the new Cambrian Slate down into position and press into the adhesive.
- Slide the Slate Ripper carefully in, hook around the clip and rotate back into position.
- Remove the left hand slate wedge.

**6. Re-fixing the surrounding Cambrian Slate (slate 2)**

- Move the left hand wedge up one course and reposition it as shown above.
- Use the wipes provided to clean under slate 2 and the head of the slate below.
- Cut a length of adhesive 250mm long and position it under slate 2. Again ensure that neither of the interlocks and weatherbars are blocked.
- Peel off the adhesive cover, remove the wedges and push down the bond.

**7. Re-fixing the surrounding Cambrian Slates (slate 3)**

- Reposition the right hand slate wedge between slate 3 and slate 2.
- Reposition the left hand slate wedge to the left of slate 3.
- Repeat operation 6 by positioning a length of adhesive 250mm long under slate 3, ensuring that neither of the interlocks and weatherbars are blocked.
- Peel off the adhesive cover, remove the wedges and push the slate down to bond.

**8. Cleaning the surrounding area**

- Trim any excess adhesive with a sharp knife. Wetting the blade prevents clogging.