## **Guide to using Reclaimed Slate**

Welsh Slate

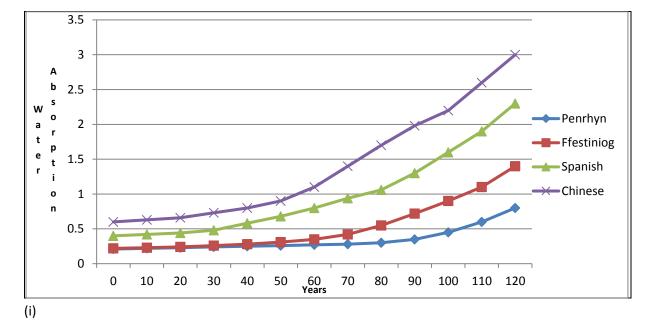


## **Re-use of Welsh Slate.**

Good quality Welsh Slate can often be re-used after over 100 years on a roof. The percentage of salvage will be dependent on a number of factors some of which are below.

Knowing the provenance of a slate being considered for reuse is of prime importance. Its origin and age are key.

As a slate ages on a roof its water absorption (WA) increases fig (i). Due to its hardness and durability this process is much slower in welsh slate than in any other slate. However when a Penrhyn Slate gets to about 150 years old its WA will be reaching about 1% and similarly a Ffestiniog slate of about 120 years old will be about the same. In our climatic conditions it is at about this level of WA when the slate starts to deteriorate. So a Penrhyn slate removed from an 1870 building may have less than 10 years useful life left. Even the age of a building may not give you the full story; is that the first time these slates were used, have they already been reclaimed once in their lives?





Slates need to be carefully removed, ideally with a slate ripper, avoiding damage to the nail holes.

Slates for reuse need an initial visual examination of the fabric of the slate. Particular attention should be paid to ensure that there is no excessive spalling to the nail holes and that there is no sign of delamination to the slate.

The slate should still "ring true" when struck, if there is a dull thud then the slate is no good.

If the backs of the slate are powdery it is an indication of deterioration and the slates should not be reused.

Check that the existing holes are at the correct gauge to maintain the specified head-lap. If the existing holes are enlarged then re-holing will be necessary and will only be possible if the new holes can be positioned no more than 30mm from the edge of the slate. In some cases the slates will have been re-fixed already during their lifetime and there may be multiple nail holes in the slate which would make its re-use almost impossible.

If re-holing the slates, it is recommended that slates should be nailed above the original nail hole by a minimum of at least 20-25mm. You must never nail slates inside the original nail hole. Sort reusable slates into batches of slate of the same thickness laying the thickest slates at the eave and the thinnest up to the ridge. If you require any clarification on this please contact your local LBS representative.



Photo of a reclaimed slate. The slate has already been re-fixed at least one in its life. The second set of nail holes are too close to the centre. This slate should **NOT** be reused.

For further technical information please contact:

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