

HOW TO SELECT AND PURCHASE A GOOD QUALITY ROOFING SLATE

UK manufactured slates (Welsh, Cambrian, Cornwall and Scotland) are/were generally of very good quality and have a useful life of 70 years plus.

Today, say 85% of roofing slate sold in the UK is imported and of variable quality.

The following guide aims to aid the self builder to purchase a good quality product.

1. Only purchase slate with a pallet label, stating the source of the slate by country and quarry. (If the distributor does not know where the slate has come from how can he be sure of the quality?).



2. Only purchase slate which has a CE mark on the label. (This is a legal requirement and confirms the slate has been tested in accordance with European standards).



3. Testing to European standards (EN 12326) does not make any statement regarding quality just that the slate has been tested.
4. Only purchase slates that have been tested and the label on the crate shows the following minimum test results:

T1 (As opposed to T2 & T3) checks for metallic sulphates which cause rusting leading to holes in the slate.

S1 (As opposed to S2 & S3) checks for carbonate content which causes loss of colour, loss of density and slate failure.

A1 water absorbency.

Test	Product Specification: BS EN 12326 (CE mark affixed: 10)	Welsh Slate Product Conformity
Dimensional tests	Compliant with requirements of BS EN 12326	YES
Nominal thickness	Declared by the manufacturer	9mm
Individual thickness	Can vary by $\pm 35\%$ nominal thickness	YES
Bending strength	Mean failure load	LONG 2490 N TRANS 1450 N
	Declared by the manufacturer	LONG 63.9MPa TRANS 35.5MPa
Water absorption	Characteristic modulus of rupture (MoR)	A1: $< 0.6\%$; A2: $> 0.6\%$
		0.13%
Thermal cycle	T1: Characterised by no change in appearance, although has the potential for surface oxidation of metallic minerals and/or colour changes that neither affect structure nor form runs of discoloration. T2: oxidation with runs of discoloration. T3: oxidation leading to structural change.	T1
Carbonate content	Declared by the manufacturer	2.7%
Sulphur dioxide exposure (where carbonate content is $< 5\%$)	S1: no change in appearance. S2: shows signs of splitting/cracking/swelling/surface flaking, with need to increase min. thickness by 5%. S3: sign as in S2, with need to increase min. thickness to $> 6mm$.	S1
Non-carbonate carbon content	Non-carbonate carbon content of slates shall be $< 2\%$	0.7%
External fire exposure	Deemed to satisfy without the requirement for testing	
Reaction to fire	Deemed to satisfy the requirements for the characteristic of reaction to fire performance - Class A1 (without the requirement for testing)	
Dangerous substance release	None in conditions of use as roofing or external cladding	

Welsh/Slate
CE
SIZE: 50
QTY: 33
HOLED: 1
AUTO: 1
Welsh Slate
Penrhyn Quarry
Bethesda
Bangor, Gwynedd
LL57 4YG
Tel: 01248 600659
Fax: 01248 60117

5. If the price is "too good to be true" it probably is. There is no such thing as a good cheap slate.
6. Consider
 - Have you spent as much time selecting your roofing material as time spent selecting your internal floor coverings?
 - How much are you paying for your internal floor coverings compared to your roofing material?
 - Did we ask the ready mix concrete supplier for the cheapest concrete grade for the foundations? So why do we want to put the cheapest slate on our roof?

THE GOOD (Penrhyn Quarry)



THE BAD (Chinese slate – 3 years old!)



& THE UGLY – Self-build (House not yet rendered!)

