

Certificate of Testing & Analysis

3-Point Flexural Strength of Dimension Stone

BS EN 12372: 1999

Client and Sample Details			
Client	The Ardósia Slate Company Limited, The Chase, Park Street, Lynton, Devon, EX35 6BY		
IBIS Ref. No	1113/1-6	Sample No	1-6
Source	Ardosia slate advised to be from Brazil		
Sample Details	Specimens taken from 400mm square samples		
Sampled by	Client	Date Sampled	Not advised
Tested by	PS/BEL	Date Tested	11.07.03

Methods of Testing and Analysis	
Method	BS EN 12372: 1999. Natural stone test methods – Determination of flexural strength under concentrated load.
Comments	Six nominal 300mm by 50mm by 10mm specimens were tested in the recommended dry condition. The loading rate was 200N/s.
Accreditation	The test was carried out by a UKAS accredited laboratory with specific UKAS accreditation for the test

Results			
Flexural Strength, MPa	52.9	Range	32.4 – 65.9

Remarks

Presently there is no guidance given by the European Standards Commission for the results of this test.

The direction of testing with respect to the presence of a grain or secondary splitting direction was not known. It is possible that if the slate did exhibit a grain then this would explain the variation in the results.

There was one very low result which may have been anomalous, causing the range to be greater than $\pm 20\%$. By removing the result the average becomes 57.0MPa whilst the range of the remaining values is within 20% of this value suggesting that the revised average may be more realistic.

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Barry J Hunt
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Materials

*building stone
roofing slate
concrete
external cladding
plaster
render
high alumina cement
screed
paint
internal lining
rock
aggregate
mortar
composites
brick
ceramic
terracotta
faience
dimension stone
glass
lime & hydraulic lime
pozzolana
cement
dusts*

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