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AMBER CONSULTING COMPANY

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May 7, 2014

Doug Sheldon
Vermont Structural Slate Company
P. O. Box 98
Fair Haven, VT 05743

Dear Mr. Sheldon,

ASTM testing of Grayson Roofing Slate from the Arvonja VA Quarry (James River Slate) was completed on May 6th. A summary of the results is as follows:

1. Water Absorption, C121-09. 0.183 % (ASTM max. for S1 slate is 0.25%).
2. Flexure, C120-12. Breaking Load 771 lbs, Ave. thickness 0.282 in.
(ASTM min. for S1 slate is 575 lbs)
3. Weather Resistance, C217-09.. Depth of Softening 0.0002 in. (ASTM max. for S1 slate is 0.002 in.)

Tables 1, 2 and 3 list the individual tests. From the specimens tested, this variety of roofing slate qualifies as a S1 grade slate (75+ projected life) per the requirements of ASTM C406-06 (Specification for Roofing Slate).

Modulus of Rupture tests were conducted on a Tinius Olsen Testing Machine calibrated October 2013. The Weather Resistance tests were conducted using the hand scraping method. Thickness measurements were taken at three (3) different locations along the scrape track. The average depth of softening was recorded.

Please let us know if we can be of further assistance.

Very truly yours,



Thomas H. Olson
Test Engineer

Enclosure: Page 2 – Results, Invoice

FINAL RESULTS – Vermont Structural Slate Company.

ROOFING SLATE- Grayson; James River Slate Company, Arvonnia, VA Quarry

TABLE 1- WATER ABSORPTION

Specimen No.	Absorption %
VS1A	0.1555
VS2A	0.1996
VS3A	0.1792
VS4A	0.2133
VS5A	0.1482
VS6A	0.2001
Average	0.183% (S1 max 0.250%)

TABLE 2- FLEXURE

Specimen No.	Breaking Load lbs	Thickness in
VS1R	817	0.304
VS2R	625	0.250
VS3R	835	0.287
VS4R	778	0.287
VS5R	742	0.290
VS6R	771	0.282
VS7R	1025	0.286
VS8R	794	0.276
VS9R	736	0.285
VS0R	591	0.272
Average	771 lbs.	0.282 in. (S1 min 575 lbs)

TABLE 3- WEATHER RESISTANCE

Specimen No.	Depth of Softening inches
VS1W	0.0001
VS2W	0.0002
VS3W	0.0002
Average	0.0002 in. (S1 Max 0.002 in)