

ELSV-1701

Elegant Stone Veneer, LLC

Tests of Veneer Mix

The following are results of our tests of samples of veneer submitted by you on March 23, 2017 and identified as indicated below.

Laboratory No. 10-147862 and 147863: Veneer Mix cast by client on 3/17/2017

DENSITY (lb/ft³) [ASTM C567 per AC51 3.1.1]

<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 4</u>	<u>Unit 5</u>	<u>Average</u>
81.4	80.6	82.9	79.9	81.2	81.2

SATURATED WEIGHT (lb/ft²) [per AC51 3.1.2] – based on a design thickness of 1.25"

<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 4</u>	<u>Unit 5</u>	<u>Average</u>
10.0	10.0	10.0	9.9	12.9	10.6

AC51 3.1.2: maximum saturated weight = 15 lb/ft²

WATER ABSORPTION (% by dry weight) [AC51 4.6]

<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 4</u>	<u>Unit 5</u>	
17.3	17.0	16.9	17.4	17.1	
<u>Unit 6</u>	<u>Unit 7</u>	<u>Unit 8</u>	<u>Unit 9</u>	<u>Unit 10</u>	<u>Average</u>
19.7	19.3	19.4	19.5	20.0	18.4

AC51 – Table 2: maximum water absorption = 22%

COMPRESSIVE STRENGTH (psi) [ASTM C49 per AC51 4.3] – tested at 28 days

<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 4</u>	<u>Unit 5</u>	<u>Average</u>
2830	2780	2780	2660	2710	2752

AC51 3.1.3.1: minimum compressive strength = 1800 psi

FLEXURAL STRENGTH (psi) [ASTM C348 per AC51-4.4]

<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 4</u>	<u>Unit 5</u>	<u>Average</u>
744	801	692	796	775	762

AC51 3.1.3.3: all samples must be within 10% of the average (838 to 686)

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TENSILE STRENGTH (psi) [ASTM C190 per AC51 4.5]

<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 4</u>	<u>Unit 5</u>	<u>Average</u>
365	345	400	390	335	367

AC51 3.1.3.2: all samples must be within 10% of the average (330 to 404)

The above samples were tested in accordance with AC51 and meet the requirements of AC51 for the tests performed.

Respectfully submitted,

PENNONI ASSOCIATES INC.



Chas M. Snyder PE
Laboratory Manager

ELSV-1701

Elegant Stone Veneer, LLC

Tests of Veneer Mix

The following are results of our tests of samples of veneer submitted by you on August 3, 2017 and identified as indicated below.

Laboratory No. 10-152189: Veneer Mix cast by client on 7/12/2017

FREEZE-THAW [ASTM C67 per AC51 4.2]

	Original Dry <u>Mass (g)</u>	Final Dry <u>Mass (g)</u>	Mass <u>Loss (%)</u>
Unit 1	1331.0	1322.5	0.6
Unit 2	1362.0	1359.0	0.2
Unit 3	1259.0	1253.0	0.5
Unit 4	1242.0	1237.5	0.4
Unit 5	1237.5	1233.5	0.3
	Average Mass Loss (%)		0.4

AC51 3.1.5: maximum mass loss = 3% of original mass

The above samples were tested in accordance with AC51 and meet the requirements of AC51 for the test performed. All weights conducted on an oven dried basis.

Respectfully submitted,

PENNONI ASSOCIATES INC.



Chas M. Snyder PE
Laboratory Manager