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CONSULTING ENGINEERS

Project Number: **SSWLX 22001**

Report Date: **February 1, 2023**

Client: **Stafford Stone Works LLC**
Address: **Jesse Hawthorne**
PO Box 698
Fredericksburg, VA 22404

Project Name: **Stafford Stone Works LLC Lab Tests**

Date Received: **January 10, 2023**

Unit Specification: **ASTM C1364**

Unit Designation and Description: **Architectural Cast Stone Mix #124**

Laboratory Number: **10- 202249**

Summary of Test Results

ASTM C1194 - Compressive Strength of Architectural Cast Stone

Specimen Cast Date: **12/19/2022**

Date of Compression Testing: **1/25/2023**

Age when Tested: **37** days

Individual Unit Test Results

Specimen No.	Compressive Strength		Specification
	lbs	psi(gross)	
4	28658	7160	
5	37306	8700	
6	34594	8270	
Average	**33519**	**8040**	**6500 psi (min.)**

Specimen No.	Density (lb/ft^3)	
	SSD	Oven Dry
4	132.6	125.7
5	132.7	125.8
6	133.8	127.4
Average	**133.0**	**126.3**

Dimensions (in)			
Specimen No.	Length	Width	Height
1	2.05	2.12	1.94
2	2.02	2.11	1.98
3	2.03	2.02	2.00
4	2.05	1.95	2.09
5	2.03	2.11	2.00
6	2.05	2.04	1.96

ASTM C1195 - Absorption of Architectural Cast Stone

Specimen Cast Date: **12/19/2022**

Test Method: **A, Cold Water Test**

Specimen No.	Absorption	Specification
	%	
1	5.5	
2	5.5	
3	5.1	
Average	**5.3**	**6 % (max.)**

Specimen No.	Absorption Weights (g)	
	Oven Dry	SSD-Cold Wtr
1	278.70	294.00
2	279.35	294.63
3	274.76	288.72

Remarks: The above samples were tested according to ASTM C1194 and C1195. This set meets the compressive strength and absorption requirements of ASTM C1364.

Shannon A. Williams, PE
Laboratory Manager

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Project No.: **SSWLX 22001**

Report Date: **April 24, 2023**

Client: **Stafford Stone Works LLC**
Address: **Jesse Hawthorne**
PO Box 698
Fredericksburg, VA 22404

Project Name: **Stafford Stone Works LLC Lab Tests**

Date Received: **January 10, 2023**

Unit Specification: **ASTM C666 Procedure A, as modified by Section 5.5 of ASTM C1364.**

Laboratory No.:**10- 202249**

Specimen Information

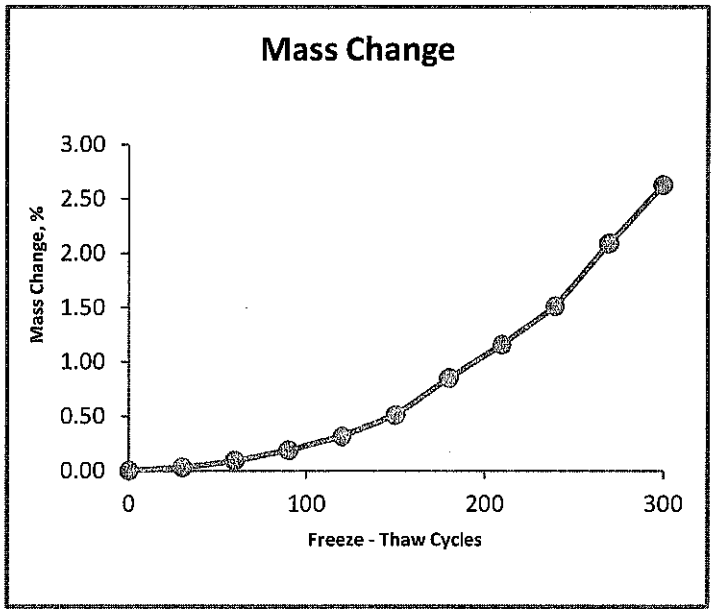
Sample ID: **12/16 F/T Test**

Specimen Cast Date: **December 16, 2022**

Summary of Test Results

Freeze-Thaw Cycles	Mass Change (%)
0	0.0
30	0.0
60	0.1
90	0.2
120	0.3
150	0.5
180	0.9
210	1.2
240	1.5
270	2.1
300	**2.6**

Values are the Average of Three Samples.



Remarks: One slab of cast stone was reduced to one set of three beams with nominal dimensions of 3" x 4" x 16". This set meets the requirement of 5% maximum mass loss after 300 freeze-thaw cycles.
Photographs of the samples after completion of the tests are attached.

Chas M. Snyder, PE

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