

# **Cast Stone Submittals**

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Website: <a href="www.valleystone-inc.com">www.valleystone-inc.com</a> \* Email: info@valleystone-inc.com



# Letter of Introduction

Valley Stone specializes in the manufacturing of high quality custom cast stone products for both the commercial and residential market. We assist architects, designers, contractors & homeowners in any way we can to create their architectural cast stone ideas into a timeless handcrafted work of art. VSI is committed to complete customer satisfaction from the conceptual design to the completed project. VSI will be here to assist you every step of the way to insure you are completely satisfied with our products.

Valley Stone was founded in 2006 with the focus on producing a superior cast stone product at an affordable price without compromising quality. Proudly located in Huntsville, Alabama with easy interstate access we are able to supply your cast stone project on time without delay. We use our own trucks with moffetts for delivery and offloading locally, and common carriers to handle shipping anywhere else in the Continental United States.

VSI has the production capacity & capabilities to handle any size job with our design team, highly skilled craftsmen and pattern makers on staff ready to serve your cast stone needs.

We welcome your business and would be honored to assist you in any way that we can on your next project.

Sincerely,

Chris Sylvester - President / CEO

Valley Stone Inc.

Chris Sylvester



# Letter of Certification

### To Whom It May Concern:

This is to certify that Cast Stone manufactured by Valley Stone Inc. meets or exceeds ASTM C1364. Attached you will find test reports as performed by an independent laboratory.

Please call if you need additional information.

Sincerely,

Chris Sylvester – President / CEO

Chris Sylvester

Valley Stone Inc.

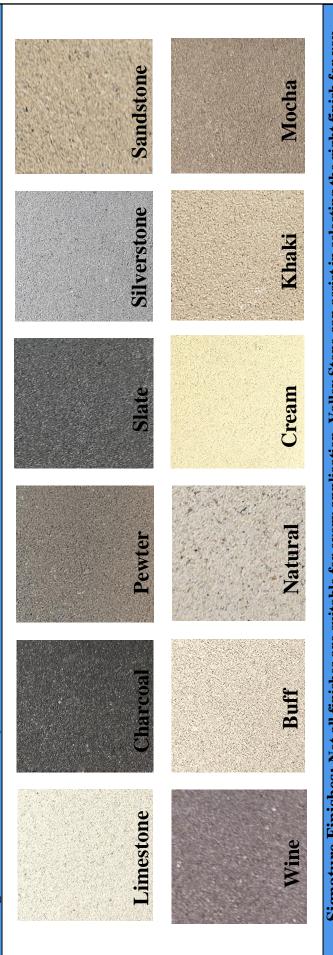


# "American Made, Valley Stone Strong"

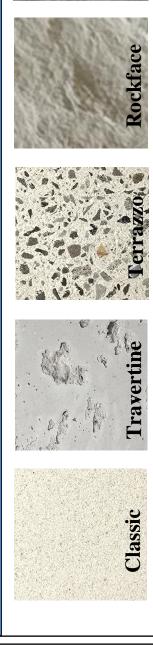


Due to the nature of the raw materials used in the production of Valley Stone products, slight color variations between parts may occur. Colors shown may vary from actual stone. Final color selection should always be made from physical samples.

Signature Colors: Valley Stone is available in 12 standard colors. Custom colors are available with an additional fee.



Signature Finishes: Not all finishes are suitable for every application. Valley Stone can assist in selecting the right finish for you.







500 Shields Road / Huntsville, Alabama 35811(256)-851-1922 /info@valleystone-inc.com / valleystone-inc.com



# Absorption of Architectural Cast Stone ASTM C1195

Project: Valley Stone, Inc. - Lab Testing

Valley Stone, Inc.

Sample ID: Cast Stone - Cast 7/24/2015

Test Age: 33 Days

Client:

Test Method A - Cold Water Absorption

Project Number: 3282-15-028

Test Date: 8/26/2015 Report Date: 8/26/2015

Sample	1	2	3
Dry Weight (g)	259.9	249	247.8
SSD Weight (g)	273.8	263.6	261.6
Absorption (%)	5.3%	5.9%	5.6%

Average Absorption (%)

5.6%

### ASTM C1364 - Physical Requirements:

5.2 Absorption, Cold Water—At 28 days after manufacture, not greater than 6 %, when tested in accordance with Method A, Cold Water of Test Method C1195.

Note: The above units meet ASTM C1364 requirements for the test performed.

Brian E. Cooley
Technical Responsibility

Signature /

<u>Laboratory Manager</u> <u>Position</u> 8/26/2015 Date



# Compressive Strength of Architectural Cast Stone ASTM C1194

Project: Valley Stone, Inc. - Lab Testing

Client: Valley Stone, Inc.

Sample ID: Cast Stone - Cast 7/24/2015

Test Age: 31 Days

Project Number: 3282-15-028 Test Date: 8/24/2015

Report Date: 8/25/2015

Sample	4	5	6
Avg. Width (in)	1.95	1.96	1.95
Avg. Area (in^2)	3.80	3.84	3.80
Maximum Load (lb)	32346	33404	32652
Strength (psi)	8510	8700	8590

Average Compressive Strength (psi) 8600

### ASTM C1364 - Physical Requirements:

5.1 *Compressive Strength*—At 28 days after manufacture, not less than 6500 psi (45 MPa), when tested in accordance with Test Method C1194.

Note: The above units meet ASTM C1364 requirements for the test performed.

Brian E. Cooley
Technical Responsibility

Signature /

<u>Laboratory Manager</u> <u>Position</u> 8/25/2015 Date

# Form No. TRR-HSV Revision No. 0

Revision Date: 8/29/2017

# **Test Result Report**



S&ME, Inc. - Huntsville: 360D Quality Circle NW, Suite 450, Huntsville. AL 35806 Project #: 3282-20-018 Report Date: 3/9/2020 Project Name: Valley Stone 2020 Lab Testing Test Date(s) 2/28/20 - 3/2/20 Client Name: Valley Stone, Inc. Cast Date: 1/31/2020 Client Address: 500 Shields Road, Huntsville, AL 35811 Date Received: 2/14/2020 Material: **Architectural Cast Stone** Valley Stone, Inc. Source: Description: **Dry-Cast Stone** S&ME Sample #: 1 through 6

# Standard Test Method for Compressive Strength of Architectural Cast Stone ASTM C1194

Sample	1	2	3
Avg. Width (in)	2.00	2.00	2.08
Avg. Area (in <sup>2</sup> )	3.98	4.00	4.32
Maximum Load (lb)	45,023	39,570	45,362
Strength (psi)	11,310	9,890	10,500
Average Compressive Strength (psi)		10,570	

## Standard Test Method for Absorption of Architectural Cast Stone Method A, Cold Water Test Method - ASTM C1195

Sample	4	5	6
Dry Weight (g)	286.4	282.4	290.1
SSD Weight (g)	295.5	291.2	299.4
Absorption (%)	3.2%	3.1%	3.2%
Average Absorption (%)		3.2%	

References / Comments / Devia	tions:		
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Rich Pacana	<u>Brian E. Cooley, PE</u>	6 CJ	<u>3/9/2020</u>
Technician Name	Technical Responsibility	Signature	Date

Test result(s) relate only to the item tested. This report shall not be reproduced, except in full, without the written approval of S&ME, Inc.

# Form No. TRR-HSV

Revision No. 0

Revision Date: 8/29/2017

# **Test Result Report**



S&ME, Inc. - Huntsville: 360D Quality Circle NW, Suite 450, Huntsville. AL 35806 Project #: 3282-20-018 Report Date: 1/27/2021 Project Name: Valley Stone 2020 Lab Testing Test Date(s) 1/21/21 - 1/27/21 Client Name: Valley Stone, Inc. Cast Date: 12/24/2020 Client Address: 500 Shields Road, Huntsville, AL 35811 Date Received: 1/21/2021 Material: Architectural Cast Stone Source: Valley Stone, Inc. S&ME Sample #: Description: Wet-Cast Stone 1 through 6

# Standard Test Method for Compressive Strength of Architectural Cast Stone ASTM C1194

Sample	1	2	3
Avg. Width (in)	1.98	2.00	2.00
Avg. Area (in <sup>2</sup> )	3.91	4.00	4.00
Maximum Load (lb)	26,947	26,571	27,143
Strength (psi)	6,890	6,640	6,790
Average Compressive Strength (psi)		6,770	

# Standard Test Method for Absorption of Architectural Cast Stone Method A, Cold Water Test Method - ASTM C1195

Sample	4	5	6
Dry Weight (g)	269.7	265	259.2
SSD Weight (g)	285.0	280.1	271.0
Absorption (%)	5.7%	5.7%	4.6%
Average Absorption (%)		5.3%	

tions:		
Robert Gray	Rebert Drug	<u>1/27/2021</u>
Technical Responsibility	Signature	Date
		Phut Bus



November 29, 2016

Valley Stone, Inc. 500 Shields Road Huntsville, Alabama 35811

Attention: Mr. Chris Sylvester

Reference: Report of Laboratory Testing

**Valley Stone Lab Testing** 

Huntsville, Alabama

S&ME Project No. 3282-15-028

Dear Mr. Sylvester:

S&ME, Inc. is pleased to present the results of freezing and thawing resistance of the three samples delivered to our Huntsville, Alabama laboratory on September 24, 2016. Testing was performed by our consultant, Testing, Engineering and Consulting Services, Inc. (TEC Services), who received the samples on September 26, 2016.

Three freeze/thaw samples were tested in accordance with ASTM C1364-16 Standard Specification for Architectural Cast Stone. The samples were tested using ASTM Test Method C666-15 Resistance of Concrete to Freezing and Thawing, Procedure A, and were evaluated based on the cumulative percent loss in mass. Per ASTM C1364-16, the cumulative percent mass loss (CPWL) shall be less than 5.0% after 300 cycles of freezing and thawing.

The average CPWL after 300 cycles of freezing and thawing for the three samples tested was **0.7%**. The results **do meet** the requirements of ASTM C1364-16, and are listed in the attached Tables 1-3.

S&ME appreciates the opportunity to provide these services to you. Should you have questions pertaining to this report or if we may be of further assistance, please contact either of the undersigned.

Sincerely,

S&ME, Inc.

Brian E. Cooley, EI Staff Engineer

Construction Services Group Leader

Attachments: Results (Tables 1-3)

Table 1 – Freeze-Thaw Testing Results – Sample 1

Number of Cycles	Mass of Residue (g)	Total of Oven Dry Mass of Beam and Residue After 300 Cycles (g)	Percentage Loss
0	0.0	6716.8	0.0%
34	3.9	6716.8	0.1%
68	7.8	6716.8	0.1%
104	11.7	6716.8	0.2%
140	15.8	6716.8	0.2%
176	19.7	6716.8	0.3%
212	24.5	6716.8	0.4%
229	28.4	6716.8	0.4%
246	33.6	6716.8	0.5%
279	36.9	6716.8	0.5%
300	42.6	6716.8	0.6%

**Table 2 – Freeze-Thaw Testing Results – Sample 2** 

Number of Cycles	Mass of Residue (g)	Total of Oven Dry Mass of Beam and Residue After 300 Cycles (g)	Percentage Loss
0	0.0	6144.4	0.0%
34	3.4	6144.4	0.1%
68	6.9	6144.4	0.1%
104	10.9	6144.4	0.2%
140	14.7	6144.4	0.2%
176	18.0	6144.4	0.3%
212	21.7	6144.4	0.4%
229	24.9	6144.4	0.4%
246	28.5	6144.4	0.5%
279	32.4	6144.4	0.5%
300	36.8	6144.4	0.6%

TEC Laboratory ID: 16-1059

Table 3 – Freeze-Thaw Testing Results – Sample 3

Number of Cycles	Mass of Residue (g)	Total of Oven Dry Mass of Beam and Residue After 300 Cycles (g)	Percentage Loss
0	0.0	6607.5	0.0%
34	5.3	6607.5	0.1%
68	10.5	6607.5	0.2%
104	15.8	6607.5	0.2%
140	22.2	6607.5	0.3%
176	28.1	6607.5	0.4%
212	34.3	6607.5	0.5%
229	39.8	6607.5	0.6%
246	45.9	6607.5	0.7%
279	51.6	6607.5	0.8%
300	57.1	6022.2	0.9%

Testing, Engineering and Consulting Services, Inc. appreciates the opportunity to provide our professional services for this important project. If you have any questions regarding this report, or if we can be of further assistance please contact us at 770-995-8000.

Sincerely,

TESTING, ENGINEERING, AND CONSULTING SERVICES, INC.

Brian Smith

Project Manager

Brusn Amth

Steven Maloof Project Manager

Stopholof



# **Cast Stone Patching Instructions**

### Tools/Material:

- Patch kit supplied by VSI or grinding up left over stone material from the same job.
- Non staining acrylic concrete bonding agent, which can be obtained at any building supply store.
- Clean water
- Mixing container
- Spray bottle
- Plastic, wood or stainless steel trowel
- Sponge
- Blue painters tape
- Damp cloth

### Procedure:

- 1. Mix a small amount of patch material (1 part white cement & 3 parts aggregate) with enough water to make it ball up without leaving a paste on your hand. This mixture should be really dry.
- 2. Add a small amount of the concrete bonding agent to the mix. Stir the patching mix for 3-5 minutes.
- 3. Soak the area to be patched and the surrounding area with a spray bottle.
- 4. Apply some of the bonding agent to the area to be patched.
- 5. Press the patch mixture into the damaged area with a trowel and smoothen the patch to match the surface texture of the stone. Too much tooling will create a slick surface.
- 6. After the initial set, rub the patch with a sponge or sand paper to achieve a sugar cube finish.
- 7. Cover the patch with a damp cloth or burlap for 24 hours to keep from drying out too fast.
- 8. Wash down with a masonry cleaner once the stone patch has cured out, usually 5-7 days.
- 9. It can take up to 12 months for a patch to match the color of the surrounding area, depending on the climate.

Website: www.valleystone-inc.com \* Email: info@valleystone-inc.com



# Cleaning of Cast Stone

When using Cast Stone every effort should be taken to protect it during storage, setting, and even after it is installed. Keep Cast Stone stored above ground on pallets or non-staining planks and protected from construction traffic. The most common stains during the installation of Cast Stone are dirt and mortar. Excess mortar or dirt should be removed with a masonry detergent following the manufacturers cleaning recommendations. Metal or abrasive tools should not be used for cleaning as it could scar the Cast Stone. Once Cast Stone is installed it is recommended that it be covered for the remainder of construction to avoid staining or damage.

Regardless of the degree of protection a final wash-down will be needed. The use of raw acid is not recommended on any Cast Stone surface. Valley Stone Inc. (VSI) recommends the use of EaCo Chem NMD 80 New Masonry Detergent for cleaning Cast Stone. For best results use the EaCo Chem cleaning process found on our website at <a href="https://www.valleystone-inc.com">www.valleystone-inc.com</a>.

Please contact Valley Stone Inc. to purchase your EaCo Chem cleaning products. For additional information on all the EaCo Chem cleaning products visit <a href="www.eacochem.com">www.eacochem.com</a>.

Should you have additional questions or concerns regarding how to care for you Cast Stone feel free to reach out to us at **256-851-1922** or email <a href="mailto:info@valleystone-inc.com">info@valleystone-inc.com</a>.

