

ASTM C1670/C1670M-16 Compliance Report

Job No.: 17-247A
Report Date: 4/4/2017

Client: Living Stones Masonry
Address: 1653 Lititz Pike
Lancaster, PA 17601

Testing Agency: National Concrete Masonry Association
Address: Research and Development Laboratory
13750 Sunrise Valley Drive
Herndon, VA 20171-4662

Standard Specification: ASTM C1670/C1670M-16

Sampling Party: Living Stones Masonry

Unit Description: Manufactured Stone Masonry Veneer

Date Samples Manufactured: 3/6/2017

Date Samples Received: 2/22/2017

Summary of Test Results

Physical Property	ASTM C1670-16			Physical Property	ASTM C1670-16	
	Specified Values	Average Test Results	Units		Specified Values	Maximum Test Results
Net Compressive Strength	2100 min	6260	psi	Net Cross-Sectional Area	5 max	0.18 ft ²
Density	****	111.1	pcf	Unit Face Dimension	36 max	7.09 in
Absorption	****	14.0	pcf			
Saturated Unit Weight	15 max	10.0	lb/ft ²			
Average Thickness	2.625 max	0.730	in.			

Individual Unit Test Results

Cylinder* Compression Units	Specimen	Received Weight	Average Diameter	Average Height	Net Area	Max. Load	Compressive Strength
	No.	lb	in	in	in ²	lb	psi
Date Tested: 4/3/2017	#1	6.11	3.97	7.83	12.39	62400	5040
	#2	6.08	4.03	7.83	12.75	59470	4660
	#3	6.28	3.98	7.43	12.47	88580	7110
	#4	6.23	3.97	7.83	12.38	90050	7270
	#5	6.29	3.97	7.86	12.37	89480	7240
Specimen Age at Testing: 28 days	Average	6.20	3.98	7.75	12.47	78000	6260

*4 in. x 8 in. compression cylinder test specimens were provided by client and were to have been made in accordance with the provisions of ASTM C31/31M-10

Absorption Units	Specimen	Avg Width	Avg Length	Max Face Dimension	Net** Area	Average Thickness
	No.	in.	in.	in.	ft ²	in.
Date Tested: 3/14/2017	#6	5.19	4.98	5.23	0.18	0.462
	#7	3.51	7.03	7.04	0.17	0.464
	#8	3.33	6.63	6.64	0.15	0.664
	#9	2.74	7.07	7.09	0.13	0.635
	#10	2.50	4.03	4.03	0.07	1.427
	Average	3.45	5.95	6.01	0.14	0.730

**For non-rectangular units, net area is determined by reference paper method outlined in the Annex of ASTM C1670-16.

Date Tested: 3/15/2017 to 3/23/2017	Specimen	Received Weight	Immersed Weight	Saturated Weight	Oven-Dry Weight	Saturated Unit Weight	Absorption	Density	Net Volume
	No.	lb	lb	lb	lb	lb/ft ²	pcf	pcf	ft ³
	#6	1.62	0.74	1.66	1.50	9.3	13.8	112.3	0.0828
	#7	1.47	0.66	1.52	1.36	8.8	14.2	111.1	0.0795
	#8	1.68	0.76	1.73	1.55	11.3	14.2	111.0	0.1019
	#9	1.23	0.55	1.27	1.14	9.4	14.0	110.1	0.0856
	#10	0.75	0.34	0.78	0.70	11.1	14.0	110.9	0.0999
	Average	1.35	0.61	1.39	1.25	10.0	14.0	111.1	0.0899

Comments: 1) These units meet or exceed the compressive strength, unit weight, and dimensional requirements of ASTM C1670-16.



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