

ASTM C666/C666M-15 Test Report
Standard Test Method for Resistance of
Concrete to Rapid Freezing and Thawing

Job No.: 18-286B
Report Date: 7/6/2018

Client: AHI Supply
Address: 2800 N. Gordon St.
Alvin, TX 77511

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

Project Identification: C31552

Unit Specification: ASTM C1364-17

Sampling Party: Cast Stone Institute

Unit Designation/Description:
Architectural Cast Stone

Date Samples Received: 3/2/2018
Date of Casting: 2/19/2018

Mark: ' 5" x 18" x 18" '

Date Testing Began: 4/20/2018

Age of Specimen
at Start of Testing: 60 days

Test Specimen Dimensions: 3 x 4 x 16 in.
Specimen Sample Location: Bottom molded horizontal surface of the test sample

The client delivered one 5 x 18 x 18 inch sample piece of architectural cast stone for testing. (3) - 3 x 4 x 16 inch freeze-thaw durability specimens were extracted for testing. Specimens were tested in accordance with Procedure A, outlined in ASTM C666/C666M-15. Reported values of cumulative percent weight loss are provided as modified by ASTM C1364-17.

Test Media: WATER

Unit No.	Received Weight, (g)	Calculated Oven-Dry Initial Wt. (g)
1c	6539.9	6285.9
2c	6655.1	6391.4
3c	6418.3	6184.9

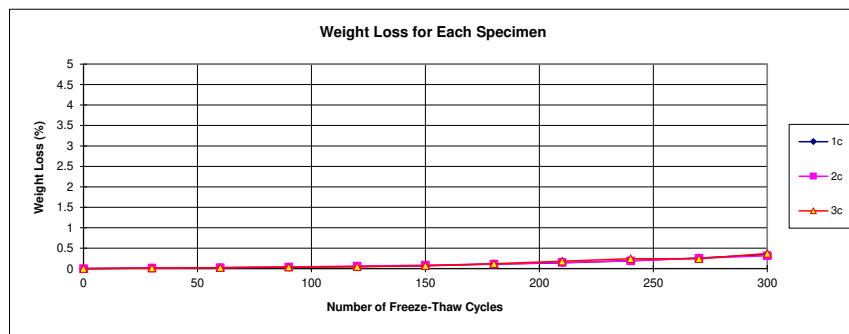
Note: Initial weight calculated as sum of final oven-dry weight of specimen plus oven-dry weight of all collected residue.

Accumulative Residue Weight (g)

Unit No.	Cycle No.:	0	30	60	90	120	150	180	210	240	270	300
1c		0.0	0.9	1.4	2.3	3.1	4.6	6.9	8.9	12.1	16.3	21.6
2c		0.0	0.8	1.6	2.6	3.9	5.3	7.0	9.5	12.1	16.2	20.1
3c		0.0	1.0	1.5	2.1	3.1	4.4	7.5	11.2	14.9	15.1	22.9

Cumulative Percent Mass Loss (%)

Unit No.	Cycle No.:	0	30	60	90	120	150	180	210	240	270	300
1c		0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3
2c		0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3
3c		0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.4



Comments: 1) These units comply with freeze thaw durability requirement of ASTM C1364-17 for architectural cast stone. That criterion requires that the cumulative percent mass loss (CPWL) is less that 5% after 300 cycles of freezing and thawing.



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