

PERFORMANCE TEST REPORT

Rendered to:

ECOLITE CONCRETE USA, INC.

SERIES/MODEL: 2" Standard Ecolite Concrete Panel

**PRODUCT TYPE: Thin-Shelled Cementitious Concrete
with an Expanded Metal Lath on a Steel Frame**

Title	Summary of Results
Air Infiltration: 1.57 psf	<0.01 cfm/ft ²
Water Resistance Test Pressure	10.65 psf
Uniform Load Deflection Test Pressure	± 70.0 psf
Uniform Load Structural Test Pressure	±105.0 psf

Reference should be made to Report No. 66338.02-301-18 for complete test specimen description and data.

PERFORMANCE TEST REPORT

Rendered to:

ECOLITE CONCRETE USA, INC.
2091 Las Palmas Drive, Suite E
Carlsbad, California 92011

Report No.: 66338.02-301-18
Test Dates: 07/06/06
Through: 08/04/06
Report Date: 09/08/06
Expiration Date: 08/04/10

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Ecolite Concrete USA, Inc. to perform testing on a Series/Model: 2" Standard Ecolite Concrete Panels, Thin-Shelled Cementitious Concrete with an Expanded Metal Lath on a Steel Frame. The sample tested met the performance requirements set forth in the protocols for a ± 70.0 psf *Design Pressure* rating. Test specimen description and results are reported herein.

Test Method(s): The test specimen was evaluated in accordance with the following:

ASTM E 283-99, Test Method for Determining Rate of Airflow Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.

ASTM E 330-02, Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.

ASTM E 331-00, Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.

ASTM E 547-00, Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Difference.

Test Specimen Description:

Series/Model: 2" Standard Ecolite Concrete Panel

Product Type: Thin-Shelled Cementitious Concrete with an Expanded Metal Lath on a Steel Frame

Panel Construction: Each panel measured 48" wide by 96" high and consisted of a 20 gauge 3-1/2" deep steel stud frame at the perimeter. The corners of the stud frame were butted and attached with a single #10 x 3/4" Torx head self-drilling screw. A 20 gauge steel stud was attached to the head and sill frame member at mid-span with a single #10 x 3/4" Torx head self-drilling screw at each location. A continuous 18 gauge steel diamond shape lath was attached to the framing and stud with #8 x 1" washer head Phillips screws located 3" from each end and 6" on center. Cellular lightweight concrete approximately 2" thick covered the lath. The panel was sealed with an elastomeric masonry and brick paint.

Test Results:

The results are tabulated as follows:

<u>Test Method</u>	<u>Title of Test</u>	<u>Results</u>
ASTM E 283	Air Infiltration	
	1.57 psf (25 mph)	<0.01 cfm/ft ²
	6.24 psf (50 mph)	<0.01 cfm/ft ²
ASTM E 547 and/331	Water Resistance	
	10.65 psf	No leakage
ASTM E 330	Uniform Load Deflections - Design (Deflections and set readings reported were taken on the metal stud) (Loads were held for 30 seconds)	
	70.0 psf (positive) -Deflection	0.33"
	70.0 psf (positive) - Permanent set	0.01"
ASTM E 330	Uniform Load Deflections - Design (Deflections and set readings reported were taken on the metal stud) (Loads were held for 30 seconds)	
	70.0 psf (negative) -Deflection	0.34"
	70.0 psf (negative) - Permanent set	0.02"

Test Results: (Continued)

<u>Test Method</u>	<u>Title of Test</u>	<u>Results</u>
ASTM E 330	Uniform Load Structural - Overloads (Deflections and sets reported were taken on the metal stud) (Loads were held for 30 seconds)	
	105.0 psf (positive) - Deflection	0.56"
	105.0 psf (positive) - Permanent set	0.09"
ASTM E 330	Uniform Load Structural - Overloads (Deflections and sets reported were taken on the metal stud) (Loads were held for 30 seconds)	
	105.0 psf (negative) – Deflection	0.53"
	105.0 psf (negative) - Permanent set	0.07"

Laboratory Compliance Statements: The following are provided as required by the ASTM E 330 tests methods for the testing reported herein.

No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen are to be drawn from the test.

Tape and film were used to seal against air leakage during the structural testing. In our opinion, the tape and film did not influence the results of the test.

Representative samples of the test specimen and a copy of this report will be retained by ATI for a period of four years from the original test date. This report is the exclusive property of the client so named herein and is applicable to the sample tested. Results obtained are tested values and do not constitute an opinion or endorsement by this laboratory. This report may not be reproduced, except in full, without approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:

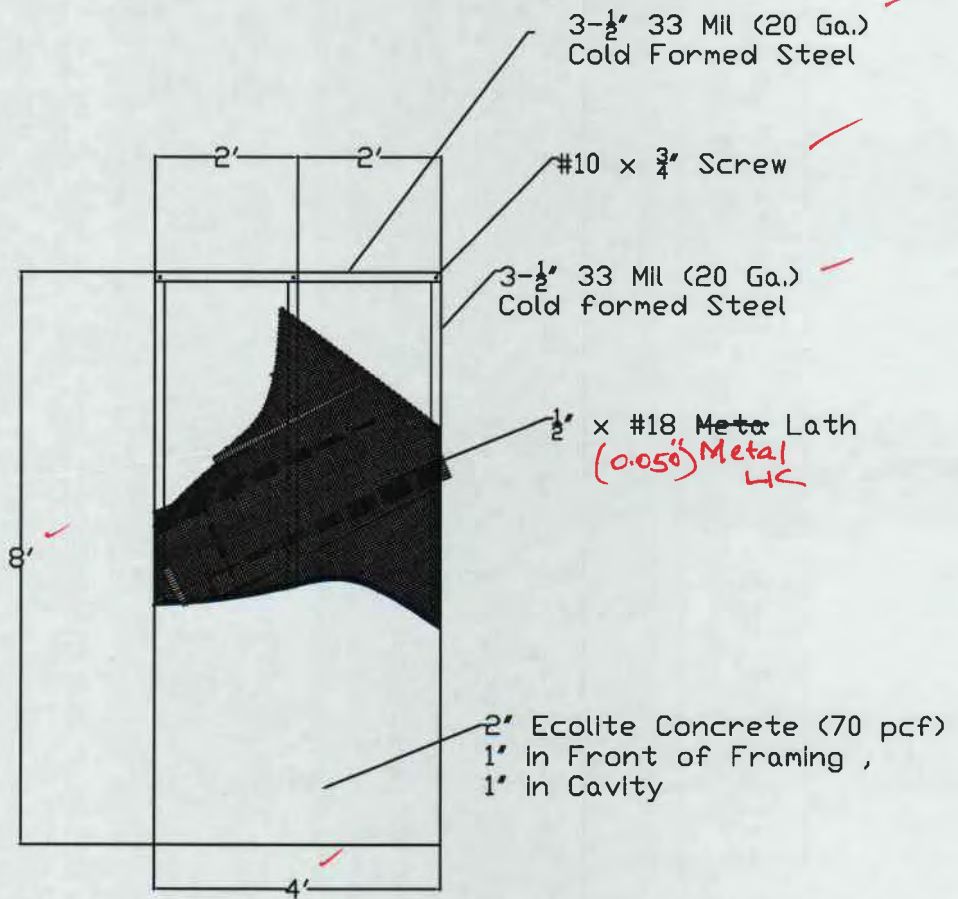
David Douglass
Technician

Leaton Kirk
Director – Regional Operations

DD: sj

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	09/08/06	N/A	Original report issue



Architectural Testing, Inc
Test sample complies with these details
Deviations are noted

6 6 3 3 8

AUG 29 2006

Report#

Date

Tech

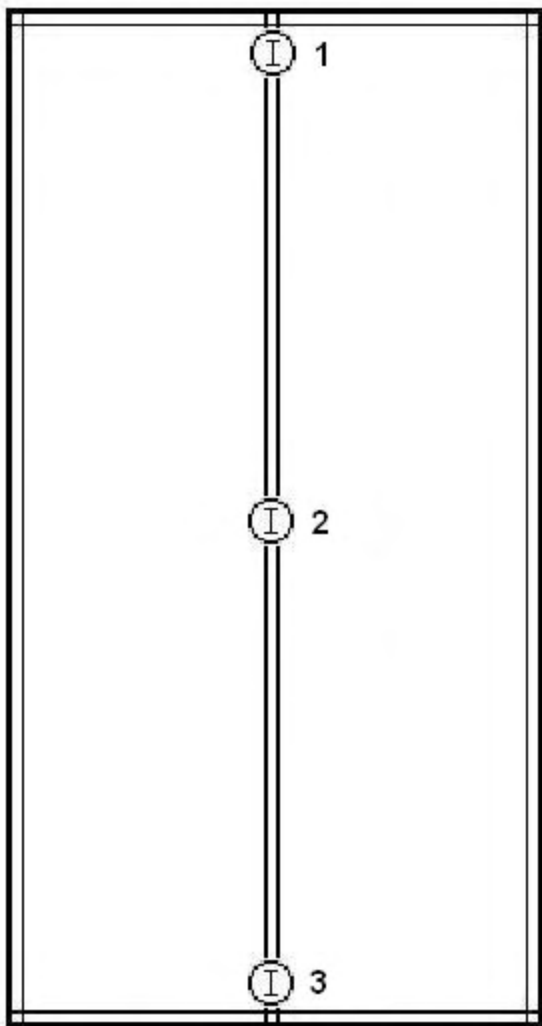
L KIRK

LK
4' x 0" x 8' 0" Panel

TEST UNITS 1, 2, 3, AND 4

ecolite

SKETCH #1



INDICATOR LOCATION