



SMITH-EMERY LABORATORIES

An Independent Commercial Testing Laboratory

781 E. Washington Boulevard - 2nd Floor Los Angeles, California 90021 ♦ (213) 745-5333 ♦ Fax (213) 749-7232

Proj. No.: 40531-1
Lab No.: T-12-003

February 17, 2012

Client: GREG HEYDENREICH
TERRATILE
239 CALLE CAMPESINO
SAN CLEMENTE, CA 92672

Subject: **11-3/4" x 11-3/4" x 7/16" Thick Terratile, Red**
Specification: ASTM C 674 (Adapted Test Method)
Source: Submitted to Smith-Emery Laboratories by Client on January 9, 2012.

MODULUS OF RUPTURE OF CERAMICS (ASTM C 674 * Modified)

Samples were * cut to 5" x 1" x thickness and dried at 300°F for 24 hours. After cooling in an uncharge dessicator at room temperature, samples were tested with results as follows.

REPORT OF TEST

<i>Tile Number</i>	<i>Width Avg. (in.)</i>	<i>Thick Avg. (in.)</i>	<i>Load (lbs.)</i>	<i>Modulus of Rupture (PSI)</i>
1.	0.998	0.414	115	4,034
2.	0.998	0.412	124	4,392
3.	0.994	0.415	136	4,767
4.	0.999	0.407	118	4,278
5.	1.011	0.407	123	4,407
6.	1.030	0.407	125	4,396
7.	0.997	0.415	115	4,018
8.	0.999	0.408	134	4,835
9.	0.996	0.407	123	4,473
10.	0.988	0.407	117	4,289

Average, PSI: 4,376

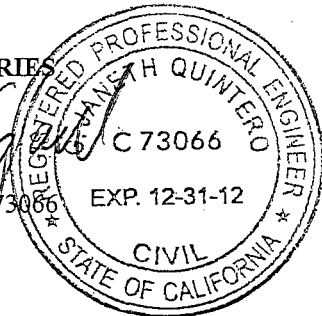
Remarks: No ANSI A 137.1 requirements

(Maximum Span: 4.0 in.)

(*Samples should be 1" x 0.5" x 5" pressed, molded and fired with the rest of the batch.)

Respectfully Submitted,
SMITH-EMERY LABORATORIES

G. Janeth Quintero
Registered Civil Engineer No.: C73066
Registration Expires: 12-31-12
mc



- Materials Tested Comply With Specifications.
- Materials Tested Did Not Comply With Specifications.
- No Established Criteria For Acceptable Limits.
- For Information Only.

Cc: TERRATILE; SMITH-EMERY LABORATORIES

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Subject: 11-3/4" x 11-3/4" x 7/16" Thick Terratile, Red
Specification: ASTM C 648
Source: Submitted to Smith-Emery Laboratories by Client on January 9, 2012.

REPORT OF TEST

BREAKING STRENGTH (ASTM C 648)

The tile samples were placed on a test fixture having three (3) supports located in a circle three and fifteen-thirty-secondths (3-15/32) inches in diameter with the load applied at the center as per specifications. *Results are as follows:*

<u>Sample Number</u>	<u>Breaking Load (Lbs.)</u>
1.	606
2.	551
3.	544
4.	614
5.	569
6.	598
7.	558
8.	588
9.	544
10.	538

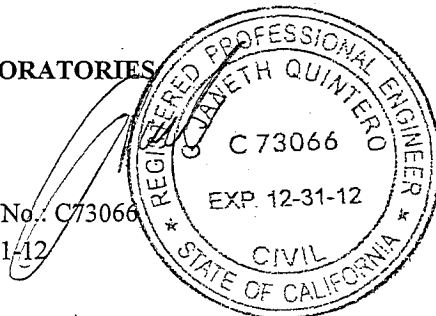
Average: 571

Requirements: ANSI A 137.1 (General) Breaking Strength. When tested as described in ASTM C-648, the average breaking strength shall be 250 pounds or greater.

Respectfully Submitted,
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G. Janeth Quintero
Registered Civil Engineer No. C73066
Registration Expires: 12-31-12

mc



- The materials tested comply with specifications.
- The materials tested did not comply with specifications.
- No established criteria for acceptable limits.
- For Information Only.

Cc: TERRATILE; SMITH-EMERY LABORATORIES

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SAN CLEMENTE, CA 92672

Subject: 11-3/4" x 11-3/4" x 7/16" Thick Terratile, Red
Specification: ASTM C 1028-07
Source: Submitted to Smith-Emery Laboratories by Client on January 9, 2012.

STATIC COEFFICIENT OF FRICTION (ASTM C 1028-06)

A block of wood with a 3" x 3" x 1/8" section of standard neolite sole liner attached, was placed on the surface to be tested; on top of this assembly, a 50 pound (22kg) weight was placed. Using dynamometer, the force in pounds required to cause the test assembly to slip parallel to the test surface was measured. Four measurements were taken on each of three test surfaces, each measurement perpendicular to the previous one. The twelve measurements were averaged to obtain the coefficient of friction for each test condition.

A. As Received:

Test Condition	Tile No.	N	E	S	W	Average	Individual	S.C.O.F
							Coefficient of Friction (fc)	After Neolite Correction Factor
Dry Neolite	1	46	47	46	47	46.33	(0.90)	0.90
	2	47	46	46	46			
	3	46	47	46	46			
Wet Neolite	1	41	40	40	41	40.50	(0.79)	0.71
	2	41	41	40	41			
	3	40	41	40	40			

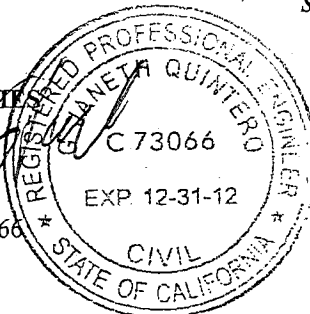
B. After Cleaning with Hilliards Renovator. (ASTM C 1028 Standard Cleaner)

Dry Neolite	1	46	47	46	46	46.00	(0.90)	0.90
	2	46	45	45	47			
	3	46	46	47	45			
Wet Neolite	1	40	41	40	40	40.00	(0.78)	0.70
	2	41	39	40	40			
	3	40	40	39	40			

Specification: Department of Justice ADA Title III Regulation 28 CFR Part 36, Section A4.5.1; Recommends minimum of 0.60 SCOF for horizontal surfaces and 0.80 SCOF on ramps.

Respectfully Submitted,
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G. Janeth Quintero
Registered Civil Engineer No.: C73066
Registration Expires: 12-31-12



- Materials Tested Comply With Specifications.
 - Horizontal; Ramps or Incline
- Materials Tested Did Not Comply With Specifications.
- No Established Criteria for Acceptable Limits.
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