



SMITH-EMERY LABORATORIES

An Independent Commercial Testing Laboratory, Established 1904

781 E. Washington Boulevard Los Angeles, California 90021 ♦ (213) 749-3411 ♦ Fax (213) 741-8626

Project/Job No.: 30102-1
Laboratory No.: T-05-146 F2

September 4, 2005

Client : GREG FILLO
BEDROSIANS
1123 WARNER AVENUE
TUSTIN, CA 92780

Subject: 19-3/4" x 19-3/4" 'TCR-RUS 50B' Rustic Beige Ceramic Tiles (Made in China)
Specification: ASTM C 1028-96
Source: Submitted to Laboratories by Client on August 17, 2005

STATIC COEFFICIENT OF FRICTION (ASTM C 1028-96)

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	45	46	47	45	46.00	(0.90)	0.69
	2	46	46	46	46			
	3	47	46	46	46			
Wet Neolite	1	29	28	27	29	27.92	(0.54)	0.48
	2	27	28	28	28			
	3	27	28	29	27			

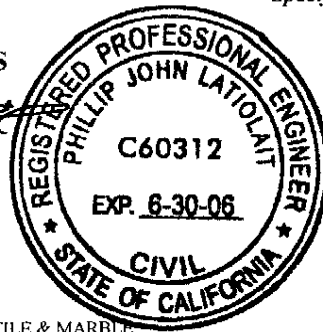
B. After Cleaning with Hillyards Renovator. (ASTM C 1028 Standard Cleaner)

Dry Neolite	1	47	46	45	45	45.75	(0.89)	0.68
	2	46	46	46	45			
	3	46	46	45	46			
Wet Neolite	1	28	28	28	27	27.58	(0.54)	0.48
	2	27	28	28	27			
	3	27	28	27	28			

Respectfully Submitted,
SMITH - EMERY LABORATORIES

P. John Latolait
Registered Civil Engineer No.: C60312
Registration Expires: 06-30-06

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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.

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

Cc: SMITH-EMERY LABORATORIES; BEDROSIAN TILE & MARBLE

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Lab No: T-05-146 C2

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CLIENT: GREG FILLO
BEDROSIANS
1123 WARNER AVENUE
TUSTIN, CA 92780

SUBJECT: 19-3/4" x 19-3/4" 'TCR-RUS SOB' Rustic Beige Ceramic Tiles (Made in China)
Specification: MOHS Hardness Test (MOHS Scale)
Source: Submitted to Laboratories by Client on August 17, 2005

REPORT OF TEST

SCRATCH HARDNESS OF SURFACE (MOHS SCALE)


A sharp angular mineral starting with hardness one (1) on the MOHS Scale is drawn while applying a uniform pressure across the surface of the tile. The highest hardness number with which no scratches visible to the naked eye occur shall be taken as the re

AREA	SAMPLE NUMBER	MOHS SCALE	MINERAL EQUIVALENT
Top Surface Only	1.	8.0	Topaz
	2.	7.5	Quartz / Topaz
	3.	7.5	Quartz / Topaz
	4.	7.5	Quartz / Topaz
	5.	8.0	Topaz

MOHS Table

Mohs #	Mineral	Mohs #	Mineral
1.0	Talc	6.0	Microcline
2.0	Selenite	7.0	Quartz
3.0	Calcite	8.0	Topaz
4.0	Fluorite	9.0	Corundum
5.0	Apatite	10.0	Diamond

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

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Lab No.: T-05-146 B1

September 4, 2005

Client : GREG FILLO
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1123 WARNER AVENUE
TUSTIN, CA 92780

Subject: **19-3/4" x 19-3/4" 'TCR-RUS 50B' Rustic Beige Ceramic Tiles (Made in China)**
Specification: ASTM C 648
Source: Submitted to Laboratories by Client on August 17, 2005

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.	476
2.	485
3.	474
4.	482
5.	504
6.	490
7.	466
8.	492
9.	450
10.	456
<i>Average:</i>	478

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

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TUSTIN, CA 92780

Subject: 19-3/4" x 19-3/4" 'TCR-RUS 50B' Rustic Beige Ceramic Tiles (Made in China)
Specification: CTI Stain Test (CTI-T-72)
Source: Submitted to Laboratories by Client on August 17, 2005


REPORT OF TEST

CERAMIC TILE INSTITUTE STAIN TEST (CTI-T-72)

Procedure: The following stain materials (common household products) were applied to the surface of the tile, with one area covered and a second area uncovered. The stain materials was in contact with the tile surface for 24 hours, then cleaned using Ajax Industrial Cleanser, 3M nylon scrubber and water. Test results are as follows:

<i>Staining Materials</i>	<i>Exposed Time (Hours)</i>	<i>OBSERVATIONS</i>	
		<i>Uncovered</i>	<i>Covered</i>
Coca Cola	24	No Stain	No Stain
Lemon Juice	24	No Stain	No Stain
Mustard	24	No Stain	No Stain
Bacon Grease	24	No Stain	No Stain
Catsup	24	No Stain	No Stain
Wesson Oil	24	No Stain	No Stain

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

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Subject: 19-3/4" x 19-3/4" 'TCR-RUS 50B' Rustic Beige Ceramic Tiles (Made in China)
Specification : ASTM C-650 (Qualitative Observation Only)
Source: Submitted to Laboratories by Client on August 17, 2005

REPORT OF TEST

CHEMICAL RESISTANCE OF CERAMIC TILE (ASTM C 650)

Exposure time : 24 hours


Room temperature : 75.5 °F

<u>Tile Number</u>	<u>Acid 10% HCL</u>	<u>Alkali 10% KOH</u>
1.	Not Affected	Not Affected
2.	Not Affected	Not Affected
3.	Not Affected	Not Affected
4.	Not Affected	Not Affected
5.	Not Affected	Not Affected
6	Not Affected	Not Affected

Requirements : No Requirement

Remarks : Sample Tested Shows no Physical Damage After Test.

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

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Subject: **19-3/4" x 19-3/4" 'TCR-RUS 50B' Rustic Beige Ceramic Tiles (Made in China)**
Specification: ASTM C 373
Source : Submitted to Laboratories by Client on August 17, 2005

REPORT OF TEST

Water Absorption Test (ASTM C 373)

Samples were dried to a constant weight in an oven at 150 °C, then cooled and weighed. Then were immersed in distilled water (boiling vigorously for 5 hours before cooling gradually to a total elapsed time of 29 hours). Samples were removed from water, wi

<i>Sample No.</i>	<i>Dry Wt. (grams)</i>	<i>Wet Wt. (grams)</i>	<i>Percent Water Absorption</i>	<i>Average</i>
1.	281.71	293.57	4.21%	
2.	277.38	288.45	3.99%	
3.	278.44	289.46	3.96%	<u>4.14%</u>
4.	274.73	286.19	4.17%	
5.	275.70	287.70	4.35%	


Requirements :

ANSI A 137.1 (General) - When tested as described in ASTM C 373, the tile in the sample shall be impervious for porcelain paver tile and shall be impervious, vitreous or semi-vitreous for natural clay paver tile.

- Impervious Tile (0.5% or less Wtr. Abs.)
- Vitreous Tile (0.5%-3.0% Wtr. Abs.)
- Semi-Vitreous Tile (3.0%-7.0% Wtr. Abs.)
- Unglazed Quarry Tile (Max. 5.0% Wtr. Abs.)

Remarks : Sample tested comply with the Semi-Vitreous Tile requirement.

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

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