SMITH-EMERY COMPANY

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The Full Service Independent Testing Laboratory, Established 1904

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File No.:

33351

Lab No.: T

T-97-297 (ABR)

December 18, 1997

Client:

CAL-GA-CRETE INDUSTRIES, INC.

803 Miraflores

San Pedro, CA 90731

Attn.: Karl Jakel

Subject: 12

12" x 12" x 3/4" Thick Concrete Paver Tile (Red Clay color) (Smooth, Sealed Surface)

Specification: ASTM C 501 (Adapted for Concrete Tile)

Source: Submitted to Laboratory by Client.

ABRASIVE HARDNESS (ASTM C-501)

Samples were cut to 4" x 4" size and drilled a ¼" hole on center, then were conditioned in a controlled chamber at 70° F and 50 % Relative Humidity for a minimum of 24 hours, then weighed prior to testing. Prepared samples were placed on spindle of a Tabor Abrading Machine equipped with H-22 Calibrade Wheels, with 1000 grams load applied to each wheel. At this condition, it is subjected to 1000 cycles revolution, then immediately reweighed.

Sample	Initial Wt.	Final Wt. After	Abrasive
No.	(grams)	1000 Rev. (grams)	Wear Index
1.	397.074	393.854	27

Requirements: ANSI A 137.1 - When tested as described in ASTM C 501; The porcelain type paver tile in the sample shall have an abrasive hardness index of 100 or greater and the natural clay type paver tile an index of 50 or greater and for Quarry is 35.

Respectfully Submitted.

SMITH - EMERY COMPANY

James E Parker

Registered Civil Engineer No. 41507 Registration Expires : 12-31-99

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