

January 15, 2013

E-Stone USA Attn: Livio Magni 8041 Haywood Taylor Blvd. Sebring, FL 33870

Dear Mr. Magni,

Tile Council of North America has tested the samples you submitted. Test report TCNA-587-12 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Katelyn Simpson Laboratory Manager Enclosures



PRODUCT TESTING SERVICE

Anderson, SC 29625 Tel (864) 646-TILE Fax (864) 646-2821

TCNA TEST REPORT NUMBER: TCNA-587-12

PAGE: 1 **OF** 2

TEST DATE: 11/16/12 –	- 11/19/12
TEST SUBJECT MATERIAL: Identified	by client as: Trend Q 431
TEST REQUESTED BY: E-Stone UAttn: Livid8041 HayvSebring, F	o Magni wood Taylor Blvd

ASTM C627: "A Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester"

Materials:

A thin-set installation over a concrete base was prepared using the following materials:

- 1) A 48" x 48" x 2" concrete base with a steel trowel finish
- 2) Mapei GraniRapid System
- 3) 12"x 12" Trend Q 431 tiles with 5 mm grout joints

Tile and Grout:

Mapei GraniRapid thin-set, mixed with Mapei GraniRapid admix per the manufacturer's instructions, was troweled over the concrete with a 1/4" x 3/8" trowel. The thin-set mortar was first keyed in with the flat side of the trowel and then combed with the notched side to form parallel ridges. The 12"x 12" Trend Q 431 tiles were set in the thin-set by pressing down and sliding the tiles in a direction perpendicular to the combed ridges. A beat-in block and rubber mallet were used to reduce lippage between tiles. After the tiles were installed, the thin-set was allowed to cure for 24 hours before grouting.

Mapei GraniRapid powder thin-set, mixed with Mapei GraniRapid admix, was forced into the 5 mm grout joints with a rubber float per the client's instructions. Excess grout was removed with the edge of the float. The grout was allowed to set up for approximately 20 minutes before the installation was cleaned with a sponge and water. The grouted installation was subsequently allowed to cure for 14 days. At the end of the cure period, the installation was subjected to load cycling as defined in ASTM C627.

Katelyn Simpson Laboratory Manager

<u>1/15/13</u> Date



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TEST RESULTS:

The installation completed all fourteen cycles with no evidence of damage to the tile or grout joints. All evaluation criteria were based on 12 tile and 12 grout joints in the wheel path of the Robinson-Type Floor Tester.

CONCLUSION:

In accordance with the Performance-Level Requirement Guide and Selection Table of the 2012 *TCNA Handbook for Ceramic, Glass, and Stone Tile Installation* (page 31), the installation is classified as "EXTRA HEAVY".

Katelyn Simpson Laboratory Manager <u>1/15/13</u> Date