

100 Clemson Research Blvd.

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

November 4, 2015

Laticrete International Attn: Jay Conrod One Laticrete Park North Bethany, CT 06524-3423

Dear Mr. Conrod,

Tile Council of North America has tested the samples you submitted. Test report TCNA-562-15 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** 



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TCNA TEST REPORT NUMBER: TCNA-562-15 #2 PAGE: 1 OF 4

**TEST REQUESTED BY:** Laticrete International Inc.

TEST SUBJECT MATERIAL: Identified by client as: "Fracture Ban<sup>TM</sup> 40"

**TEST DATE:** October 22-26, 2015

TEST PROCEDURE: ASTM C627: "Standard Test Method for Evaluating Ceramic Floor Tile

**Installation Systems Using the Robinson-Type Floor Tester**"

#### TEST AND MATERIAL DESCRIPTION:

As per the client's request, the following materials were used for the preparation of the testing pad.

Material Description			
Item #	Product name and size	<b>Product Code</b>	Provided By:
1	Concrete base with a smooth finish	N/A	TCNA
	Nominal Size: 48" x 48" x 2" (1219 mm x 1219 mm x 51 mm)		
2	Fracture Ban TM Primer	Item #0178-	Laticrete
		0005-2	International Inc.
3	Fracture Ban TM 40	Item #0178-	Laticrete
		0040-2	International Inc.
4	Laticrete 253 Gold thin-set mortar	7700-015	Laticrete
		0253-0050-21	International Inc.
5	12" x 12" x 0.375" Crossville porcelain tiles	A825	TCNA
6	Laticrete Permacolor grout	02778 05781-001	Laticrete
	- -	2559-0025-2	International Inc

#### TYPE OF INSTALLATION:

All the materials used were specified by the client and the tested assembly was built per the client's instructions.

#### Base and Underlayment:

All underlayment installation was performed by a TCNA representative. The installation procedures are outlined below.

A 48" x 48" x 2" concrete base was prepared and cured for a minimum of 28 days prior to testing. The surface was swept cleaned and thoroughly dried prior to applying the underlayment.

Fracture Ban  $^{TM}$  Primer was applied over the concrete subfloor with a nap roller. The Fracture Ban  $^{TM}$  40 was cut into two pieces (48" x 9" and 48" x 39") and laid into the wet primer with a butted joint (no overlap). The membrane was rolled with an 85 pound roller and a smoothed with a wooden float. The system was allowed to cure for 24 prior to the installation of the tiles.

#### Tile preparation:

The porcelain tiles were nominal size 12" x 12" x 3/8" and were installed in full pieces in the wheel path of the Robinson floor tester.



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#### Tile and Grout:

All tile installation and grouting was performed by a TCNA representative. The installation procedures are outlined below.

Laticrete 253 Gold thin-set mortar, mixed with water per client's instructions (mix ratio 22.9:100 by weight), was troweled over the membrane with a 1/4" x 3/8" square-notched trowel. The thin-set was first keyed in with the flat side of the trowel then combed with the notched side to form parallel ridges. The 12" x 12" Crossville porcelain tiles were set in the thin-set mortar by pressing down and sliding the tiles in a direction perpendicular to the combed ridges. Each tile was back buttered with a skim coat before setting. Once set, the system was allowed to cure for 24 hours before grouting.

Laticrete Permacolor grout, mixed with water per client's instructions (mix ratio 16.7:100 by weight), was forced into the 1/4" grout joints with a rubber float. 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 29 days.

#### **TEST RESULTS:**

The installation completed all fourteen cycles with no evidence of damage to the tiles or grout joints. All evaluation criteria were based on 8 tiles and 8 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 2015 *TCNA Handbook for Ceramic, Glass, and Stone Tile Installation* (page 41), the test pad reached the "EXTRA HEAVY" classification.



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#### **IMAGE OF TESTED SAMPLE:**

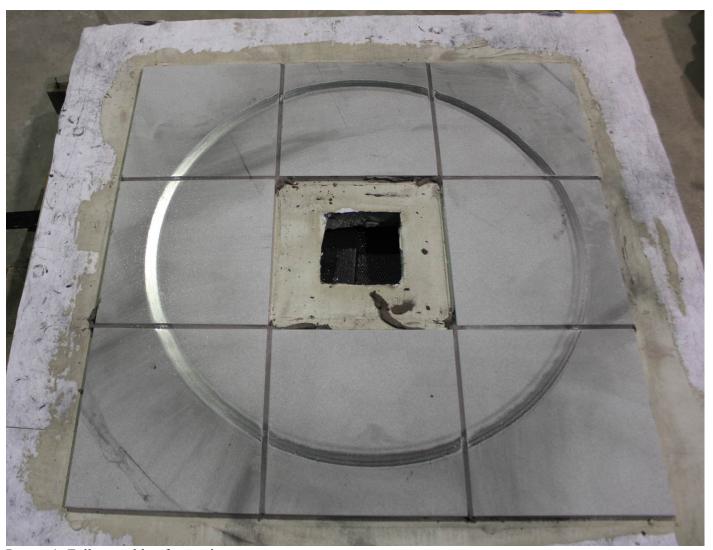


Image 1: Full assembly after testing

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Katelyn Simpson
Laboratory Manager