



PRODUCT PERFORMANCE TESTING LABORATORY

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September 20, 2021

Laticrete International
Attn: Heath Salvati
91 Amity Rd
Bethany, CT 06524
USA

Dear Heath Salvati,

Tile Council of North America has tested the samples you submitted. Test report TCNA-0501-21 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Katelyn Simpson
Director of Laboratory Services
Enclosures



TCNA TEST REPORT NUMBER: TCNA-0501-21

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TEST REQUESTED BY: Laticrete International

TEST PROCEDURE: ASTM C627-18: “A Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester”

Informal Test Method Description: This test method covers the evaluation of ceramic floor tile installation systems, using the Robinson-type floor tester. This test method consists of preparing an installation assembly to simulate the type of installation under consideration, subjecting it to various cycles on a Robinson-type floor tester, and evaluating the results in a prescribed manner. This summary is provided for the reader’s convenience and is not a complete description of the method. See ASTM C627-18 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: “HYDRO BAN XP”

TEST DATE: 9/15/2021 – 9/17/2021

TEST ASSEMBLY SET-UP:

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

Materials:

As per client’s request, the following materials were used for the preparation of the test assembly.

Item #	Product name and size	Product Code	Provided By:
1	Concrete base with a smooth finish Nominal Size: 48" x 48" x 2" (1219 mm x 1219 mm x 51 mm)	N/A	TCNA
2	HYDRO BAN XP	Not Provided	Laticrete
3	Laticrete 254 Platinum Thin-set	0254-0050-22	Laticrete
4	12" x 12" Crossville Porcelain Tile	A825	TCNA
5	Laticrete Permacolor Grout	Not Legible	Laticrete

Tester and Foundation:

TCNA uses bottom-driven testers with a 4x4 ft square and 1ft thick cement slab foundation as outlined in Appendix X1.1 of the method.

Substrate:

Subfloor Type: Concrete, A 48" x 48" x 2" concrete base was prepared and cured for a minimum of 28 days prior to testing.





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Underlayment: The underlayment was installed by a TCNA representative.

Product Name: Laticrete HYDRO BAN XP

Installation Notes: Using a nap roller, the liquid membrane was applied to the surface of the substrate to a thickness of approximately 25 mil (wet). The first coat was allowed to cure until "tack-free" before applying a second coat to approximately the same thickness. The second coat was allowed to cure 24 hours before tiles were installed.

Tile: The tile was installed by a TCNA representative.

Tile Type: 12" x 12" Crossville Porcelain

Setting Material: Laticrete 254 Platinum

Mix Ratio: 22.9:100 by weight

Trowel Size: 1/4" x 1/4" square notched

Installation Notes: 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 tiles were back buttered with a skim coat to ensure proper coverage. The assembly was cured 24 hours before grouting.

Grout: The grout was installed by a TCNA representative.

Grout Type: Laticrete Permacolor

Mix Ratio: 18.8:100 by weight

Grout Joint Size: 1/8"

Installation Notes: A grout float was used to force the grout into the joints. 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.

Cure Time: The grouted installation was allowed to cure for 28 days.





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TEST RESULTS:

Cycle	Wheels	Weight (lb)	Observations
1	Soft Rubber	100	No damage observed.
2		200	No damage observed.
3		300	No damage observed.
4		300	No damage observed.
5	Hard Rubber	100	No damage observed.
6		200	No damage observed.
7		300	No damage observed.
8		300	No damage observed.
9	Steel	50	No damage observed.
10		100	No damage observed.
11		150	No damage observed.
12		200	1 chipped tile
13		250	No additional damage observed
14		300	No additional damage observed

Note: Per ASTM C627, section 9.2, an installation shall be considered to have failed to pass any cycle in which the cumulative total number of damages to tile and grout in any one of the following categories meets or exceeds the amount stated in the following table:

Possible types of damage: chipped tile, broken tile, loose tile, spalled grout joints, cracked grout joints, and powdered grout joints. All are defined in ASTM C627.

Total # of damages to tile and grout required to fail to pass a cycle for X number joints and tiles, where X= (# of joints in the wheel path) + (#of tiles in the wheel path)				
X ≤ 40	40 < X ≤ 60	60 < X ≤ 80	80 < X ≤ 100	>100
2	3	4	5	>5% of tiles and joints in wheel path

HANDBOOK CLASSIFICATIONS*:

Classification	Cycles
Residential	Passes cycles 1-3
Light	Passes cycles 1-6
Moderate	Passes cycles 1-10
Heavy	Passes cycles 1-12
Extra Heavy	Passes cycles 1-14

**For more detailed information, refer to the TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.*



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PHOTOS:

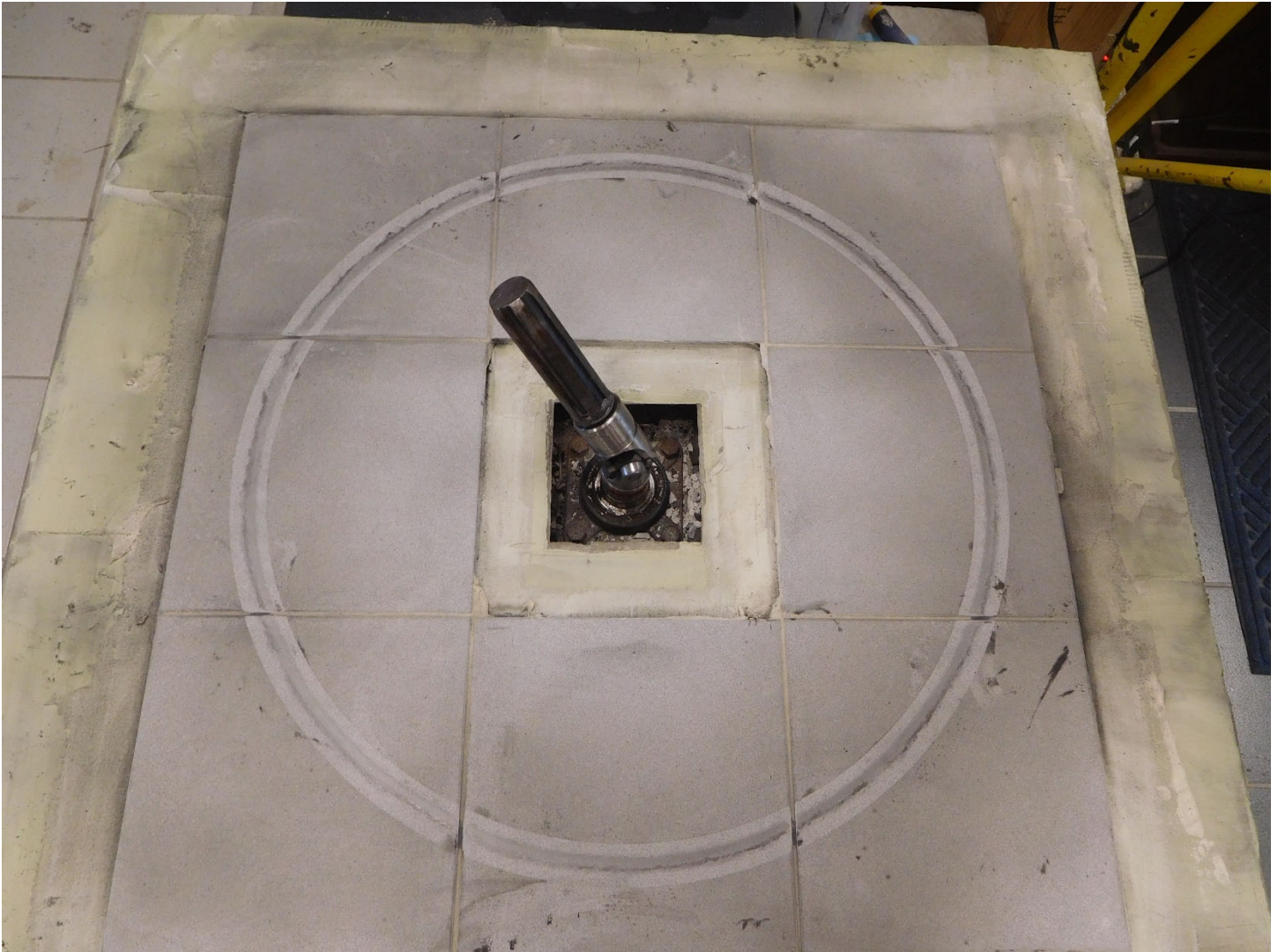


Image 1: Full assembly after testing

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PHOTOS:



Image 2: Chipped tile



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Katelyn Simpson
Director of Laboratory Services

9/20/2021

