CONSTRUCTION MATERIALS

TECHNOLOGIES

LABORATORY TEST REPORT

Report for: Mbrico Tile Decks
P.O. Box 1108
Bettendorf, IA 52722

Attention: Nick McManus

Assembly:	Mbrico Tile	**Manufacturer:**	Mbrico Tile Decks
Project No.:	MBTD-001-02-02	**Source:**	Mbrico Tile Decks
Date Received:	Dec. 6, 2017	**Date Tested:**	Dec. 19, 2017

Purpose: Determine the simulated wind uplift pressure in accordance with the **ANSI/FM Approvals 4474 Appendix B: *Simulated Wind Uplift Pull Test Procedure*.** Testing was modified to determine the passing load of a single MBrico Tile installed into the Mbrico T-Track joists.

Test Methods: Testing was completed as described in the ANSI/FM Approvals 4474 (2004) Appendix B: *Simulated Wind Uplift Pull Test Procedure*.

Sampling: The following materials were received by PRI.

Product	Source	Date
Mbrico Tiles	Moline, IL	Dec. 6, 2017
Mbrico T-Track	Moline, IL	Dec. 6, 2017

All other roofing components were procured by PRI through local distribution.

Conditioning: Specimens were conditioned at 74±4°F for less than 28 days prior to testing.

PRI Construction Materials Technologies LLC 6412 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail: materialstesting@pricmt.com WebSite: http://www.pricmt.com

Results: Testing was performed at standard laboratory conditions. Test pressures were increased by 60 lbf increments and maintained at each interval for 1 minute. Raw test is provided in Appendix B.

Table 1. ANSI/FM 4474(B) & TAS 114(D) Results for Assembly No. 1

Component:	Attachment Detail	Passing Uplift Force (lbf)
Joists:	(2) Mbrico T-Track (6560-T6 extruded aluminum alloy joists; section drawing contained in Appendix A) were secured 23-11/16" o.c.	**1,680**
Tile:	(1) Mbrico Tile (23-11/16" x 23-11/16" x 3/4" porcelain tile bonded to a Mbrico proprietary composite backing with 1/16" tongue along two edges) was set into the joists by engaging the tongue into the T-Track grooves.	

Remarks: Assuming a tributary are of 4-ft^2 per tile, the resultant passing uplift load for the Mbrico Tile to the Mbrico T-Track is 420 psf.

Statement of Compliance:

The laboratory test results presented in this report are representative of the material supplied and test specimens constructed. Testing was conducted in accordance **ANSI/FM Approvals 4474 Appendix B: *Simulated Wind Uplift Pull Test Procedure*** with modifications noted herein.

Signed: _____

Zachary Priest, P.E.
Director

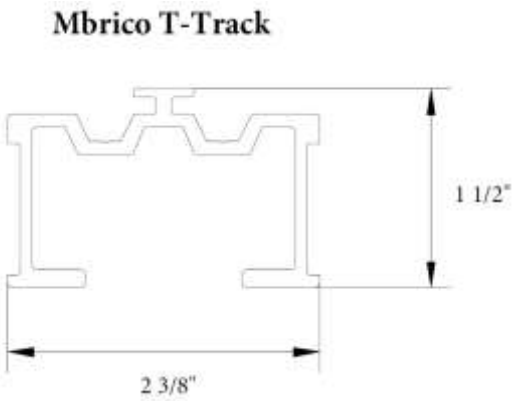
Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	02/23/2018	4	NA

PRI Construction Materials Technologies LLC 6412 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail: materialstesting@pricmt.com WebSite: http://www.pricmt.com

Mbrico Tiles

Mbrico Joists



PRI Construction Materials Technologies LLC 6412 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail: materialstesting@pricmt.com WebSite: http://www.pricmt.com

Test Data for Assembly No. 1

Property	Specimen 1
Max Passing Load, (lbf)	1,680
Failing Load, (lbf)	On rise to 1,740
Failing Time, (sec)	0
Failure Mode	Adhesive failure of composite backing to tile
Max Passing Pressure, (psf)	420[1]

Notes: 1) Pressure is calculated based on 4-ft^2 tributary area for each tile

END OF REPORT

PRI Construction Materials Technologies LLC 6412 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail: materialstesting@pricmt.com WebSite: http://www.pricmt.com