

TCNA TEST REPORT NUMBER:

TCNA-0895-18 (Rev. 2)

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TEST REQUESTED BY:

Betsan Mosaix

TEST METHOD: <u>ASTM C648-04 (2014): "Standard Test Method for Breaking</u> <u>Strength of Ceramic Tile"</u>

Informal Test Method Description: This test method covers the determination of the breaking strength of glazed ceramic wall tile, ceramic mosaic tile, quarry tile, and paver tile. The test method consists of supporting the tile on the ends of three cylindrical rods, or on three ball bearings arranged in an equilateral triangle, and applying force at a definite rate to the center of the tile, until the specimen breaks.

This summary is provided for the reader's convenience and is not a complete description of the method. See ASTM C648 for all method details and information.

TEST SUBJECT MATERIAL:

Identified by client as: "Betsan Mosaix" Approximate Size as Received: 1" x 1" x 0.19" on mosaic sheet

TEST DATE:

10/15/2018

TEST PROCEDURE NOTES:

Sample prep: None

Ten (10) glazed samples were tested

Testing was performed on an Instron Universal Tester, model #3385-H A ball bearing triangular support was used to hold the tiles during

loading The tiles were loaded at a rate of 1000 pounds per minute

	Breaking Strength (lbf)		Breaking Strength (lbf)	
Specimen 1	255 lbf	Specimen 6	317 lbf	
Specimen 2	249 lbf	Specimen 7	356 lbf	
Specimen 3	314 lbf	Specimen 8	277 lbf	
Specimen 4	278 lbf	Specimen 9	302 lbf	
Specimen 5 262 lb	262 lbf	Specimen 10	299 lbf	
		Average	291 lbf	

COMMENTS: None



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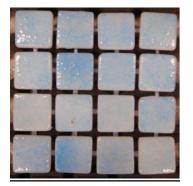
TEST METHOD: ASTM C648-04 (2014): "Standard Test Method for Breaking Strength of Ceramic Tile"

ANSI SPECIFICATIONS*:

ANSI standard	Tile Type	Specification
ANSI A 137.1	Mosaic Tile	The average breaking strength shall be 250 lbf or greater
(Ceramic Tile)		with no individual specimen below 225 lbf
ANSI A 137.1	Quarry Tile	The average breaking strength shall be 275 lbf or greater
(Ceramic Tile)		with no individual specimen below 250 lbf
ANSI A 137.1	Pressed Floor Tile	The average breaking strength shall be 250 lbf or greater
(Ceramic Tile)		with no individual specimen below 225 lbf
ANSI A 137.1	Porcelain Tile	The average breaking strength shall be 275 lbf or greater
(Ceramic Tile)		with no individual specimen below 250 lbf
ANSI A 137.1	Glazed Wall Tile	The average breaking strength shall be 125 lbf or greater
(Ceramic Tile)		with no individual specimen below 100 lbf
ANSI A 137.2	Fused or Low Temperature	The minimum average breaking strength shall be 250 lbf
(Glass Tile)	Mosaic Glass Tile	
ANSI A 137.2	Cast Mosaic Glass Tile	The minimum average breaking strength shall be 350 lbf
(Glass Tile)		

*For more detailed information, refer to ANSI A137.1 Specifications for Ceramic Tile and ANSI A137.2 Specifications for Glass Tile

IMAGE OF PRODUCT TESTED:



Report Revision Log:

Revision #	Date Issued	Pages	Revision
0	11/13/18	3	Original Report Issue
1	7/16/20	3	Revision to add the company name
1	7/17/20	3	Revision to the company name



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7/17/2020



Testing Laboratory

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