# BRILLANTE DATASHEET

FICHA TECNICA · FICHE TECHNIQUE



## BRILLANTE

Series: Brillante available in 48 colors.
Format: 3/4" x 3/4" (2 x 2 cm).
Sheet size: 12 7/16" x 12 7/16" (31.6 x 31.6 cm).
Joint: 2/48" (1 mm).
Weight per sheet: 1.58 lbs.
Vitreo: transparent glass mosaic veined with enamels grits or avventurina.
Manufacturing Technology: Fusion. Brillante is achieved through the fusion of a primary glass that is the one that gives the overall color and a secondary glass (avventurina or enamels) that adds the veining and shading to the primary glass.

Applications: wall and floor, residential and commercial\*, swimming pools and Spas.

\*using mosaic on a commercial floor is not a problem if the installation is done properly, and it is installed with an Epoxy Adhesive and Grout. Only light commercial.

#### ASTM C 484/99 Resistance to Thermal Shock

Test performed with immersion: 5. Number of test specimens with visible defects: 0.

#### ASTM C 373/88 (99) Apparent Porosity, Water Absorption, Apparent Specific Gravity and Bulk Density

Apparent porosity: 0.20%. Water Absorption: 0.08%. Apparent Specific Gravity g/cm<sup>3</sup>: 2.37. Bulk Density g/cm<sup>3</sup>: 2,36.

#### ASTM C 499/78 (99) Standard Method for Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile

Length & Width, actual size: 2 x 2 cm. Average size on 20 samples submitted: 19.98 mm.

Thickness, nominal 4 mm. Average on 20 samples submitted: 3.91 mm.

#### ASTM C 502 - 93A Standard Method for Wedging of Flat, Rectangular Ceramic Wall & Floor Tile

Average on 20 samples submitted: 0.0%.

#### ASTM C 1028 - 96 Friction coefficient

Three samples were considered. Both dry and wet conditions were used. Calibration was performed based on a 4 pulls test on standard tile, as prescribed in the norm.

Samples were subjected to the pull test in the renovated conditions (cleaned samples).

Four pulls perpendicular to the previous were performed on each sample. An actual normal load of 233 N was used for all the pulls.

Friction coefficient in dry conditions: 0.71.

Friction coefficient in wet conditions: 0.61.

Sample were submitted preinstalled on backer-board and grouted with sanded grout.



PRODUCT TESTING SERVICE

100 Clemson Research Blvd. • Anderson, SC 29625 • Tel (864) 646-TILE •

## **TCNA TEST REPORT NUMBER: TCNA-424-12**

PAGE: 1 OF 1

## **TEST REQUESTED BY:**

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

Identified by client as: Brillante 270

### **TEST SUBJECT MATERIAL:**

## **TEST DATE:**

8/20/12-9/17/12

## **TEST PROCEDURE:**

## <u>ANSI A137.2 Section 7.7: "Test Method for Evaluating -</u> <u>Shear Bond Strength of Glass Tile"</u>

-Eight specimens were adhered to 2 x 7 x 15-½-inch concrete blocks according to A137.2 section 7.7. -TCNA thin-set testing mortar was used to bond the tiles to the block. Mapei Kerapoxy was used to grout the tiles. -Four shear specimens were allowed to cure for 28 days at room temperature and four shear specimens were allowed to cure for 21 days at room temperature and were then submerged in water for 7 days.

-All specimens were loaded in shear at a rate of 200 psi/min.

## **TEST RESULTS:**

	28 day dry shear strength (psi)	Failure Mode	21 day dry, 7 day submerged shear strength (psi)	Failure Mode
Specimen 1	120 psi	Cohesive within thin-set	90 psi	Cohesive within thin-set
Specimen 2	108 psi	6677 6677	56 psi	6677 6677
Specimen 3	116 psi	6677 6677	87 psi	6677 6677
Specimen 4	131 psi	6633 6633	94 psi	6699 6699
Average	119 psi		82 psi	

[The ANSI A137.2 Specification for Glass Tile states that the average shear bond strength shall be 150 psi or greater after 28 day dry curing and 100 psi or greater after 21 day dry and 7 day submerged curing.]

Laboratory Manager

Testing Services: testing@tileusa.com 
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**TCNA TEST REPORT NUMBER: TCNA-424-12** 

PAGE: 1 OF 1

• Fax (864

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

Identified by client as: Brillante 270

## **TEST SUBJECT MATERIAL:**

**TEST REQUESTED BY:** 

TEST DATE:

8/27/12-8/28/12

**TEST PROCEDURE:** 

## ANSI A137.2 Section 7.9: "Test Method for **Determining Thermal Shock Resistance of Glass Tile**"

-Five whole tiles were subjected to ten cycles of thermal shock per section 8.2 (immersion test) of ASTM C484 except the high end temperature was set to 160±9°F per ANSI A137.2 section 7.9.

-The tiles were inspected for failure using a solution of methylene blue prior to cycle one and immediately following cycle ten.

### TEST RESULTS:

	Observations
Specimen 1	None
Specimen 2	None
Specimen 3	None
Specimen 4	None
Specimen 5	None

[The ANSI A137.2 Specification for Glass Tile states: "the tile shall show no evidence of degradation, chipping, or cracking."]

Katelyn Simpson Laboratory Manager

Date

Testing Services: testing@tileusa.com 🧕 Literature Orders: literature@tileusa.com 🔹 Web Site: www.tileusa.com

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# PRODUCT TESTING SERVICE

646-282

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Fax (864)

TCNA TEST REPORT NUMBER:	TCNA-424-12	<b>PAGE:</b> 1 <b>OF</b> 1	
TEST REQUESTED BY:	E-Stone Attn: Livio Magni 8041 Haywood Taylor Blvd. Sebring, FL 33870		
TEST SUBJECT MATERIAL:	Identified by client as: Brilliante 270		
TEST DATE:	9/4/12		
TEST PROCEDURE:	ANSI A137.2 Section 7.8: "Test Method for Determining Compressive Strength of Miniature Mosaic Glass Tile" -Ten whole glass tiles were tested. -The tiles were loaded at a rate of 3000 PSI per minute. -Testing was performed on an Instron Universal Tester, model #3385-H		
	The average compressive strength of 228 lbf. The individual results of compressive Specimen 1: 189 lbf Specimen 2: 196 lbf Specimen 3: 297 lbf Specimen 4: 267 lbf Specimen 5: 322 lbf Specimen 6: 237 lbf Specimen 7: 247 lbf Specimen 8: 233 lbf Specimen 9: 155 lbf Specimen 10: 137 lbf [The ANSI A137.2 Specification for average compressive strength shall be fused, low temperature, or cast mosai	Strength are as follows: Glass Tile states that the 2500 PSI or greater for	

Date

Katelyn Simpson / Laboratory Manager

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# PRODUCT TESTING SERVICE

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# TCNA TEST REPORT NUMBER: TCNA-424-12 PAGE: 1 OF 1

## **TEST REQUESTED BY:**

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

Identified by client as: Brillante 270

## **TEST SUBJECT MATERIAL:**

**TEST DATE:** 

9/20/12

**TEST PROCEDURE:** 

## ANSI A137.2 Section 7.6: "Test Method for Mounting Variations"

-Two sheets were evaluated according to section 7.6 of ANSI A137.2.

-The sheets of miniature mosaic glass tile had 364 grout joints. -For standard cast miniature mosaic glass tile the allowable deviation from nominal joint size stated in ANSI A137.2 is "as reported". The nominal joint size for this material is 1.0 mm.

#### **TEST RESULTS:**

	# of Grout Joints Outside of Compliance
Sheet 1	All grout joints were within ±0.50 mm from nominal
Sheet 2	All grout joints were within ±0.50 mm from nominal

Note: There are no specific requirements in ANSI A137.2 for mounting variation of standard miniature mosaic tiles. For more details regarding the allowable deviation from nominal joint size see Tables 5, 6, and 7 of ANSI A137.2.

Katelyn Simpson Laboratory Manager

Date

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SPERIMENTAZIONE PER L'INDUSTRIA CERAMICA

#### SEDE

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CERTI.CER. LABORATORIO DI ZONA Via Valle d'Aosta, 1 - 41049 Sassuolo Tel. e Fax. (0536) 802154

Part. IVA 0094778-0375

Bologna, 15/05/08

Spett. le TREND GROUP S.p.A. Piazzale Fraccon, 8 Vicenza (VI)

## TEST LABORATORY

## **TEST REPORT N° 4480/08**

(traslation of test report Nr. 4479/08 of 15/05/2008)

Requested by:	TREND GROUP S.p.A. Piazzale Fraccon, 8 Vicenza (VI)	
On (date): 06/05/08		
For the sample ma		

The results reported relate only to the samples tested.

No responsability is taken for the accuracy of the sampling unless it is done under our supervision.

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This test report consists of 3 pages this cover included.



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12	D.P.R. 10-4-1978 n. 806	Decreto MINISTERO SANITÀ 10-8-1974	Decreto MINISTERO RICERCA SCIENTIFICA 6-6-1983	American Society for
	(G.U. 20-12-1978 n. 353)	(G.U. 14-9-1974 n. 240)	(G.U. 6-7-1983 n. 183)	Testing and Materials.

CERLABS EUROPEAN NETWORK OF NATIONAL CERAMIC LABORATORIES - ITALIAN MEMBER

#### CENTRO CERAMICO - BOLOGNA

Test report N.	4480/08	Date	15/05/08	Page 2 of 3

Description of the sample: Multilayer panel 50 x 100 x 1.4 cm made by mosaic tesserae 2 x 2 cm assembled on wood support by fixing material, marked "BRILLANTE". Manufacturer: TREND GROUP S.p.A. Sampling details: - Where: - Date: - Date: - How (methods): ------DATE OF RECEIVAL IN LABORATORY: 07/05/08

#### TESTS PERFORMED:

			Date of starting	Date of ending
X	DIN 51097	Slip resistance	09/05/08	09/05/08

#### **CENTRO CERAMICO - BOLOGNA**

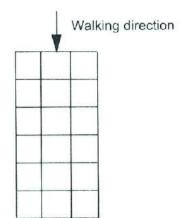
Test report N.	4480/08	Date	15/05/08	Page 3 of 3
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#### DIN 51097 - Slip resistance

#### WORKING CONDITIONS

- Size of the tested surface (m)	0.50 x 1.00
- Joint width (mm):	2.5

Fixing scheme



CLASSIFICATION

- Average slip angle:
- Application range:

>24°	
A+B+C	

Prof. Eng. Giorgio Timellini DIRECTOR the second ()

C (



Sassuolo, 03/31/2004

#### Messrs TREND GROUP S.p.A.

Viale dell' Industria, 42 36100 VICENZA

Confidential Test Report N. 0707/2004 /I

on ceramic tiles

Our ref.num.: 4607 Date of request: 03/23/2004

#### Test Specimen

"Panel of dimensions 50 x 100 cm covered with mosaic formed by glass tesserae of dimension 2 x 2 cm marked: MOSAICO GRIP"

#### Source

Submitted to Laboratory by Client

#### Date Received

03/26/2004

#### Time of test execution

start: 03/26/2004

end: 03/30/2004

#### Test detail / method description / test procedure

" Determination of the anti-slip characteristics -Standard DIN 51130 "

The report relates only to the sample(s) tested. This report must not be reproduced in part without the written permission of Sassuolo Lab, nor used in any way as to lead to misrepresentation of the results or their implications.

Page 1 of 2

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#### Confidential Test Report N. 0707/2004 /1 TREND GROUP S.p.A.

Page 2 of 2

Date 03/31/2004

Test specimen

"Panel of dimensions 50 x 100 cm covered with mosaic formed by glass tesserae of dimension 2 x 2 cm marked: MOSAICO GRIP"

Information booklet concerning the flooring of working environmental and operational with slippery surfaces, Order Nr. BGR 181 (ex ZH 1/571), edition October 2003"

#### Floor test: determination of the anti-slip characteristics: work areas with high slipping risk. Procedure for the stamping test inclined plane (STANDARD DIN 51130)

The test regards the working areas with a high slipping risk: the procedure foresees that a person taking part in the test walks on a an inclined plane, which is floored with the tested material and greased an oil whose viscosity is SAE 10 W 30.

During the execution of the test it is determined if the tested material may be properly laid down in specific work environments.

There is an average inclination which determines the insecurity of the person walking on the inclined plane and causes the classification of the tested material in one of five groups used to determine the sliding resistance.

Inclination angle of the inclined plane: 19,1 \*

Classification: R 11

#### Table with the ratio of the group classification and of the inclination degree

Classification	Inclination angle
n.c. (not classifiable)	lower than 3°
R 9	from 3° to 10°
<b>R</b> 10	over 10° to 19°
R 11	over 19° to 27°
R 12	over 27° to 35°
R 13	over 35°
OPER POORS	SASSUM O TAB S + 1 TAB S + 1 OWNER

TECHNIC