

Bologna, 14/06/18

Messrs

GAMBINI GROUP S.p.A.
Via Radici in Piano, 675
41049 SASSUOLO (MO)

TEST LABORATORY

TEST REPORT No. 5047/18

concerning ceramic tiles according to EN 14411 : 2016

Requested by:	GAMBINI GROUP S.p.A. Via Radici in Piano, 675 41049 SASSUOLO (MO)
On (date):	28/05/18
For the sample marked:	"PULPIS LAPPATO".

The results reported relate only to the samples tested.

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

The reproduction of this test report is only authorized in the form of a complete photographic facsimile.

Our written approval is necessary for any partial reproduction.

This test report consists of 6 pages this cover included.



DESCRIPTION OF THE SAMPLE:	Glazed ceramic tiles 35.5 x 71 x 0.9 cm, marked "PULPIS LAPPATO".
Manufacturer:	-----
Sampling details	
- Where:	-----
- Date:	-----
- By whom:	-----
- How (methods):	-----
Date of receipt in laboratory:	22/05/18

TESTS PERFORMED :

<input checked="" type="checkbox"/>	EN ISO 10545 - 2 :1997	Determination of dimensions and surface quality	Date of starting 14/06/18	Date of ending 14/06/18
-------------------------------------	---------------------------	---	------------------------------	----------------------------

Tests performed in collaboration with: Reverse & Quality Srl Via R. dalla Costa 2/a 41122 Modena

Instrument identifying data - CMM Hexagon Global Advantage			
Instrument	GLOBAL 123010 Numero: GLOD0007461A	Temperature	21°
		Humidity	60%
Primary standard	8505-DK15151-01-00_2015-02 200302S173	Procedures	PQRQ09;PTRQ01
ACCREDIA Calibration Report	GLOD0007461A1503041016	Uncertainty	3 µm/1000mm

**EN ISO 10545 - 2 : 1997 - Determination of dimensions and surface quality****2 - Length and width**
 Work size (W) - mm: Thickness - mm:

	Side A (mm)	Side B (mm)	Side C (mm)	Side D (mm)	Average (A-C) (mm)	Deviat. % from W	Average (B-D) (mm)	Deviat. % from W
1	348.2	699.8	348.2	700.1	348.2	0.1	700.0	0.0
2	348.2	699.9	348.2	700.1	348.2	0.1	700.0	0.0
3	348.2	699.8	348.2	700.1	348.2	0.1	700.0	0.0
4	348.2	699.9	348.2	700.1	348.2	0.1	700.0	0.0
5	348.2	699.8	348.2	700.0	348.2	0.1	699.9	0.0
6	348.2	699.8	348.2	700.1	348.2	0.1	700.0	0.0
7	348.2	699.9	348.2	700.1	348.2	0.1	700.0	0.0
8	348.2	699.8	348.2	700.1	348.2	0.1	700.0	0.0
9	348.2	699.8	348.2	700.1	348.2	0.1	700.0	0.0
10	348.1	699.8	348.2	700.1	348.2	0.1	700.0	0.0

 Average size of the 10 test specimens (A - B x C - D) :

Deviation (%) of the average size of each tile from the average size of the 10 test samples:

	1	2	3	4	5	6	7	8	9	10
A-C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B-D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3 - Thickness

	A (mm)	B (mm)	C (mm)	D (mm)	Average (mm)	Deviat % from thickness.
1	8.9	9.0	8.9	9.0	9.0	0.0
2	9.0	9.0	9.0	9.0	9.0	0.0
3	8.9	9.0	9.0	8.9	9.0	0.0
4	8.9	9.0	8.9	8.9	8.9	0.0
5	9.0	9.0	9.0	9.0	9.0	0.0
6	8.9	9.0	9.0	9.0	9.0	0.0
7	9.0	9.0	9.0	9.0	9.0	0.0
8	9.0	9.0	9.0	9.0	9.0	0.0
9	9.0	9.0	9.0	8.9	9.0	0.0
10	9.0	9.0	9.0	9.0	9.0	0.0

**EN ISO 10545 - 2 : 1997 - Determination of dimensions and surface quality**Work size (W) - mm:

348.0 x 700.0

4 - Straightness of sides

	A (mm)	B (mm)	C (mm)	D (mm)
1	-0.1	0.0	0.3	0.1
2	-0.1	-0.1	0.2	0.1
3	0.0	0.0	0.3	0.1
4	-0.1	-0.1	0.3	0.2
5	0.0	-0.1	0.3	0.2
6	0.0	-0.1	0.2	0.1
7	0.0	-0.1	0.3	0.2
8	0.0	-0.1	0.3	0.1
9	-0.1	0.0	0.3	0.1
10	-0.1	0.0	0.3	0.1

Maximum deviation from straightness (%):

0.1

0.0

5 - Rectangularity

	A (mm)	B (mm)	C (mm)	D (mm)
1	0.6	-1.2	0.9	-1.8
2	0.8	-1.6	1.0	-2.1
3	0.7	-1.4	1.0	-2.1
4	0.6	-1.1	0.8	-1.6
5	0.6	-1.1	0.7	-1.5
6	0.7	-1.3	0.9	-2.0
7	0.5	-0.9	0.7	-1.4
8	0.5	-1.0	0.8	-1.6
9	0.8	-1.5	1.0	-2.1
10	0.4	-0.8	0.6	-1.4

Maximum deviation from rectangularity (%):

0.3

-0.3

**EN ISO 10545 - 2 : 1997 - Determination of dimensions and surface quality**Work size (W) - mm: 348.0 x 700.0**6.1.2 - Surface flatness: centre curvature**

	A (mm)	B (mm)	C (mm)	D (mm)
1	0.6	0.7	0.6	0.7
2	0.1	0.1	0.1	0.1
3	0.8	0.8	0.8	0.8
4	0.7	0.6	0.7	0.6
5	1.0	1.0	1.0	1.0
6	0.6	0.5	0.6	0.5
7	0.3	0.3	0.3	0.3
8	0.5	0.5	0.5	0.5
9	0.4	0.4	0.4	0.4
10	0.5	0.1	0.5	0.1

Maximum centre curvature (%), related to diagonal calculated from the work size (W):

0.1**6.1.3 - Surface flatness: edge curvature**

	A (mm)	B (mm)	C (mm)	D (mm)
1	0.1	0.4	0.2	0.4
2	0.1	0.0	-0.2	0.3
3	0.2	0.4	0.2	0.3
4	0.2	0.6	-0.1	0.5
5	0.5	0.4	0.4	0.4
6	0.2	0.2	0.3	0.3
7	-0.2	0.3	0.0	0.2
8	0.1	0.4	0.1	0.4
9	0.1	0.4	0.1	0.1
10	-0.1	0.5	-0.2	0.5

Maximum edge curvature (%), related to the corresponding work size (W):

0.10.1



EN ISO 10545 - 2 : 1997 - Determination of dimensions and surface quality

Work size (W) - mm: 348.0 x 700.0

6.1.4 - Surface flatness: warpage

	A (mm)	B (mm)	C (mm)	D (mm)
1	0.1	-0.1	0.1	-0.1
2	0.1	-0.1	0.1	-0.1
3	0.0	0.0	0.0	0.0
4	-0.1	0.1	-0.1	0.1
5	0.0	0.0	0.0	0.0
6	-0.1	0.1	-0.1	0.1
7	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0
9	-0.1	0.1	-0.1	0.1
10	0.0	0.0	0.0	0.0

Maximum warpage (%), related to diagonal calculated from the Work size: 0.0

REVERSE & QUALITY

Operatore RQ
Marco Ballarin

Supervisore RQ
Giuseppe Carboni

CENTRO CERAMICO

Giordana Carani
Technical verification

Prof. Maria Chiara Bignozzi
Director

