

Bologna, 14/06/18

Messrs

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

TEST LABORATORY

TEST REPORT No. 5049/18

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:	"PALACE 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.

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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 "PALACE 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
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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	Temperature	21°
	Numero: GLOD0007461A	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	347.9	699.6	348.0	699.6	348.0	0.0	699.6	-0.1
2	348.1	700.0	348.0	699.7	348.1	0.0	699.9	0.0
3	347.9	699.8	348.0	699.8	348.0	0.0	699.8	0.0
4	347.9	699.8	348.0	699.9	348.0	0.0	699.9	0.0
5	348.1	700.0	348.0	699.7	348.1	0.0	699.9	0.0
6	348.1	699.9	348.0	699.7	348.1	0.0	699.8	0.0
7	348.0	699.7	348.0	699.8	348.0	0.0	699.8	0.0
8	348.0	699.5	348.0	699.8	348.0	0.0	699.7	0.0
9	348.0	699.5	348.0	699.9	348.0	0.0	699.7	0.0
10	347.9	699.7	348.0	699.8	348.0	0.0	699.8	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	8.9	8.9	9.0	8.9	-1.1
4	8.9	8.9	8.9	9.0	8.9	-1.1
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	8.9	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	0.0	0.0	0.2	0.1
2	0.3	0.1	0.0	-0.1
3	-0.1	-0.1	0.3	0.1
4	-0.1	0.0	0.2	0.1
5	0.3	0.2	0.0	-0.1
6	0.3	0.1	0.0	-0.1
7	0.0	0.0	0.3	0.1
8	0.0	0.0	0.1	0.1
9	0.0	0.0	0.2	0.1
10	0.0	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	1.0	-2.0	1.0	-2.2
2	0.9	-1.9	0.7	-1.4
3	0.3	-0.5	0.3	-0.7
4	0.6	-1.1	0.7	-1.5
5	1.0	-2.0	0.8	-1.5
6	0.9	-1.9	0.7	-1.4
7	0.5	-1.0	0.6	-1.3
8	0.8	-1.5	1.1	-2.2
9	0.4	-0.7	0.7	-1.5
10	0.9	-1.8	0.9	-2.0

Maximum deviation from rectangularity (%):

0.3

-0.3

EN ISO 10545 - 2 : 1997 - Determination of dimensions and surface qualityWork 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	0.6	0.6	0.6
2	0.3	0.3	0.3	0.3
3	0.2	0.2	0.2	0.2
4	0.1	0.1	0.1	0.1
5	0.0	0.1	0.0	0.1
6	0.5	0.4	0.5	0.4
7	0.4	0.5	0.4	0.5
8	0.1	0.1	0.1	0.1
9	0.6	0.6	0.6	0.6
10	0.3	0.0	0.3	0.0

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	0.3	0.1	0.4	0.2
2	0.0	0.2	0.2	0.1
3	0.0	0.1	0.0	0.3
4	0.3	-0.1	-0.1	0.1
5	-0.2	0.0	0.4	-0.1
6	0.2	0.1	0.2	0.1
7	0.0	0.1	0.2	0.2
8	0.0	0.1	0.0	0.2
9	0.4	0.0	0.3	0.2
10	-0.4	0.4	0.0	0.6

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

0.1

0.1



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	-0.1	0.1	-0.1	0.1
4	0.0	0.0	0.0	0.0
5	0.2	-0.2	0.2	-0.2
6	-0.1	0.1	-0.1	0.1
7	0.1	-0.1	0.1	-0.1
8	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0
10	-0.1	0.1	-0.1	0.1

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

REVERSE & QUALITY

Operatore RQ
Marco Ballarin

Supervisore RQ
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CENTRO CERAMICO

Giordana Carani
Technical verification

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