Modena, 22/02/18

To

FLORIM CERAMICHE SPA
VIA CANALETTO 24
41042 FIORANO MODENESE MO

Attn. sig. Turrini

<table>
<thead>
<tr>
<th>MATERIAL and/or SAMPLE to be tested</th>
<th>Denomination of the Sample</th>
<th>Client Reference – Your delivery</th>
<th>date</th>
</tr>
</thead>
<tbody>
<tr>
<td>porcelain tiles</td>
<td>Serie Artwork articolo Basic 01 Glossy formato 80x80 cm spessore 10 mm marchio Casa Dolce casa</td>
<td>Vs. consegna</td>
<td>08/02/2018</td>
</tr>
</tbody>
</table>

Here attached, you will receive the Test Report of Serial No. 20180966/n, which shows the results of tests required.

MODENA CENTRO PROVE

MODENA CENTRO PROVE

Sedile Unione dr. Giuseppe
TEST REPORT: 20180966/1

Modena, 22/02/18

CUSTOMER
FLORIM CERAMICHE SPA - VIA CANALETTI 24 - 41042 - FIORANO MODENA - MO

MATERIAL and/o SAMPLE to be tested
porcelain tiles;

Denomination
Serie Artwork articolo Basic 01 Glossy formato 80x80 cm spessore 10 mm marchio Casa Dolce casa;

Date of sample reception
08/02/2018;

Kind of test executed
Determination of Chemical Resistance

Referring standards
UNI EN ISO 10545-13:2017

Shifting from standards
No one

Equipment
Forced ventilation stove cod. MCP C43

Calibration
C43: LAT 011 272-SE-17 of 23/05/2017

Subcontracted phases
No one

Sampling made by
Customer

The test results showing in this Report are only referred to the sample taken by our staff or supplied by the Customer. He commits himself to reproduce integrally this document. Partial reproduction is forbidden.
The times of retain of the samples was indicated in the offer related to the test report.
DETERMINATION OF CHEMICAL RESISTANCE

Beginning date : 08/02/2018
Analysis ending date : 12/02/2018

SAMPLE : Ceramic tiles, marked « Serie Artwork articolo Basic 01 Glossy formato 80x80 cm spessore 10 mm marchio Casa Dolce casa »

CLASSIFICATION

Normal classification

HB Pencil test (untreated tile)

Remove? NO → Use alternative classification

YES → Chemical attack

Household chemicals and swimming pool salts

Low concentration acids and alkalis

High concentration acids and alkalis

Visual examination

Visible effect? NO → HB pencil test (treated tile)

Remove? NO → NO → Blurred?

YES → Class C

Class A

Class B

Class C

Alternative visual classification

HB pencil test (untreated tile)

Remove? YES → Use normal classification

NO → Chemical attack

Household chemicals and swimming pool salts

Low concentration acids and alkalis

High concentration acids and alkalis

Visual examination

Visible effect? YES → Class A

NO → Partial or complete loss of original surface?

NO → Class B

YES → Class C
### RESULTS

<table>
<thead>
<tr>
<th>TEST SOLUTIONS</th>
<th>Period of Test</th>
<th>CLASS OF RESISTANCE Sample 1</th>
<th>CLASS OF RESISTANCE Sample 2</th>
<th>CLASS OF RESISTANCE Sample 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium chloride 100 g/l</td>
<td>24 hours</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Sodium hypochlorite solution 20 mg/l</td>
<td>24 hours</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Citric acid solution 100 g/l</td>
<td>24 hours</td>
<td>LA</td>
<td>LA</td>
<td>LA</td>
</tr>
<tr>
<td>Hydrochloric acid solution 3% (V/V)</td>
<td>(96±1) hours</td>
<td>LB</td>
<td>LB</td>
<td>LB</td>
</tr>
<tr>
<td>Potassium hydroxide 30 g/l</td>
<td>(96±1) hours</td>
<td>LA</td>
<td>LA</td>
<td>LA</td>
</tr>
<tr>
<td>Hydrochloric acid solution 18% (V/V)</td>
<td>(96±1) hours</td>
<td>HB</td>
<td>HB</td>
<td>HB</td>
</tr>
<tr>
<td>Lactic acid 5% (V/V)</td>
<td>(96±1) hours</td>
<td>HA</td>
<td>HA</td>
<td>HA</td>
</tr>
<tr>
<td>Potassium hydroxide 100 g/l</td>
<td>(96±1) hours</td>
<td>HA</td>
<td>HA</td>
<td>HA</td>
</tr>
</tbody>
</table>

### REQUIREMENTS UNI EN 14411:2016

**GROUP:** Bla  
**UNI EN 14411:2016 Annex:** G

<table>
<thead>
<tr>
<th>CHEMICAL RESISTANCE</th>
<th>REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing with household chemicals, swimming pool salt</td>
<td>minimum classe B</td>
</tr>
<tr>
<td>Testing with products at low acid and alkalis concentration</td>
<td>declared value</td>
</tr>
<tr>
<td>Testing with products at high acid and alkalis concentration</td>
<td>declared value</td>
</tr>
</tbody>
</table>

**Type of chemical attack:** contact on proper surface

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**Examiner**  
p.i. Bortolai Alberto  
MODENA CENTRO PROVE  
P.I. De Pasquale Roberto  
MODENA CENTRO PROVE  
Sani’Unione dr. Giuseppe

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