



# Main Laboratory Sassuolo

Centro di Ricerca, Sperimentazione, Consulenza e Controllo Qualità

Scandiano, 10/24/2013



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**Confidential Test Report N. 4081/2013 /I**  
on ceramic tiles defined by UNI EN 14411:2012

Our ref.num.: 10652  
Date of request: 10/17/2013

## Test Specimen

"Unglazed paver tile 40x120 cm marked:  
Serie TECH 2 articolo GRAY formato 40x120 spessore 2 cm superficie UGL marchio Floor Gres"

## Source

Submitted to Laboratory by Client

## Date Received

10/18/2013

## Time of test execution

start: 10/21/2013 end: 10/23/2013

## Test detail / method description / test procedure

" Determination of modulus of rupture and breaking strength -  
Standard UNI EN ISO 10545 - 4:2012"

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

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Test specimen

"Unglazed paver tile 40x120 cm marked:

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## DETERMINATION OF MODULUS OF RUPTURE AND BREAKING STRENGTH (Standard UNI EN ISO 10545 - 4:2012)

*Principle:* determination of the breaking load, breaking strength and modulus of rupture of tile by applying a force at a definite rate to centre of the tile, the point of application being in contact with the proper surface of the tile.

### Operative features

d (diameter of rods), mm: 20  
t (thickness of rubber), mm: 5  
l<sub>1</sub> (overlap of tile beyond the edge supports), mm: 10,0  
l<sub>2</sub> (span of the support rods), mm: 1177  
b (width of the test specimen), mm: 397  
Number of tiles in the sample: 7

### **Results**

#### **F<sub>bl</sub> (breaking load), N:**

4409      4557      4395      4090      4452      4006      4454

**F<sub>bl</sub> average (breaking load), N:** 4338

#### **F<sub>bs</sub> (breaking strength), N:**

13072      13510      13030      12126      13199      11877      13205

**F<sub>bs</sub> average (breaking strength), N:** 12860

#### **σ<sub>Fbl</sub> (modulus of rupture), N/mm<sup>2</sup>:**

53,2      56,1      55,9      52,6      56,0      51,5      55,5

**σ<sub>Fbl</sub> average (modulus of rupture), N/mm<sup>2</sup>:** 54,4

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