



TEST REPORT

CERAMIC TILES - DETERMINATION OF RESISTANCE OF MODULUS OF RUPTURE AND BREAKING STRENGTH  
UNI EN ISO 10545-4: 2014

Test report n. 3200/2017 /I

Date of report: 09/05/2017

Customer: GRUPPO ROMANI S.P.A.  
Via Alessandro Volta nr.9, 23/25  
42013 CASALGRANDE (RE)

Requested on: 07/05/2017

Our ref.number: 20615

Execution place of tests: Scandiano (RE)

Description of the sample: "Ceramic tiles glazed 6,5x40 cm  
marked :SERIE ALASKA"

Sampling: carried out by the customer

Receipt date of samples: 08/29/2017

Execution date of tests: start: 09/01/2017 end: 09/04/2017

Test specification: UNI EN ISO 10545-4:2014  
Determination of modulus of rupture and breaking strength

Warnings: *This test report can not be reproduced in part, without our written consent.  
The reported results relate only to the samples tested.  
The information included in quotation marks was provided by the customer.*





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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.

Used method: see principle

N. of samples tested: 7

Experimental conditions: Roller diameter:  $d = 20$  mm  
Thickness of the coating roller:  $T = 5$  mm  
Distance between the support point and the edge:  $l_1 = 10$  mm  
Distance between the points of support:  $l_2 = 379$  mm  
Width of the sample:  $b = 64,4$  mm

Test results: **Breaking load F**

n. sample	F [N]
1	492
2	516
3	545
4	521
5	511
6	539
7	485

Average breaking load:  $F_m[N] = 516$



**Breaking strength S**

n. sample	S[N]
1	2896
2	3037
3	3207
4	3066
5	3008
6	3172
7	2855

Breaking strength average:  $S_m[N] = 3035$



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Test results: **Modulus of rupture R**

n. sample	R[N/mm <sup>2</sup> ]
1	51,3
2	53,8
3	55,6
4	56,8
5	55,7
6	60,1
7	55,3

Average modulus of rupture:  $R_m$ [N/mm<sup>2</sup>]= 55,5



THE DIRECTOR  
M.L. Simioli

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