



**LABORATORIO CERAMICO SEBASTIAN CARPI**  
COLEGIO OFICIAL DE INGENIEROS INDUSTRIALES DE CASTELLON

N.I.F: Q - 4670001 - I

AVENIDA DEL MAR, Nº 46 - 12003 CASTELLON  
TEL: 964 208 583 - FAX: 964 202 594  
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## TEST REPORT

PETITIONER: GRES DE LA MANCHA, S.L.

ADDRESS: Ctra. Consuegra, Km. 1,200

CITY: LOS YEBENES (Toledo)

TEST REPORT Nº: 51.286

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DATE OF TEST REPORT: 01/03/2012

DATE OF RECEIPT OF THE SAMPLE: 27/01/2012

DATE OF TESTS PERFORMANCE: 27/01 - 28/02/2012

NUMBER OF TILES SUPPLIED: 8

### DESCRIPTION OF THE SAMPLE:

Ceramic tiles, single extruded, 400 mm x 400 mm, glazed. Ref.:

-- **BASE 40x40 (Pavimento Elevado)** --

Code lab.: 28-9-12

### TEST PERFORMED:

- UNE-EN-ISO 10545-4 : DETERMINATION OF MODULUS OF RUPTURE AND BREAKING STRENGTH.

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José A. Estibález Catalán  
MANAGER

The samples and his description have been chosen by the petitioner.  
The reported results relate only to the samples tested.  
This report must not be reproduced in part without the written permission of Laboratory.  
The uncertaintys have been evaluated according to recommendations of document ISO/TAG5/WGE : June 95.



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Petitioner: GRES DE LA MANCHA

Date: 01/03/2012

## DETERMINATION OF MODULUS OF RUPTURE AND BREAKING STRENGTH

### DESCRIPTION OF THE SAMPLE.-

Ceramic tiles, single extruded, 400 mm x 400 mm, glazed. Ref.:

-- **BASE 40x40 (Pavimento Elevado)** --

Code lab.: 28-9-12

### RESULTS.- (Test performed after **UNE-EN-ISO 10545 Part 4:1997**)

\* Parameters: L = 375 mm; l = 12 mm ; t = 5 mm ; d = 20 mm

<u>Tile</u>	<u>Breaking load " F "</u> (N)	<u>Breaking strength " S "</u> (N)	<u>Modulus of rupture " R "</u> (N/mm <sup>2</sup> )
1	6335.7	5933.8	22.3
2	6403.3	6009.1	22.5
3	6178.9	5795.6	22.0
4	6444.5	6032.7	22.6
5	6627.7	6202.7	23.3
6	6575.8	6154.0	22.8
7	6762.0	6326.7	23.5
<b>Average</b>	<b>6475</b>	<b>6065</b>	<b>23</b>

\* Measurement uncertainty:  **$U_F = 64.8 \text{ N}$  ;  $U_S = 62.8 \text{ N}$  ;  $U_R = 0.4 \text{ N/mm}^2$  (k=2)**

\* Average value uncertainty:  **$U_F = 161 \text{ N}$  ;  $U_S = 148 \text{ N}$  ;  $U_R = 1 \text{ N/mm}^2$  (k=2)**

\* Note: In calculating the modulus of rupture "R" we have considered the constant thickness in the fracture section, regardless of the holes.