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LAB N°1018  
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC  
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

## TEST REPORT: 20162292/1

Modena, 14/04/16

<b>CUSTOMER</b>	<b>FLORIM CERAMICHE SPA - - VIA CANALETTO 24 - 41042 - FIORANO MODENESE - MO</b>
<b>MATERIAL and/o SAMPLE to be tested</b>	PORCELAIN TILES;
<b>Denomination</b>	Serie BUILDTECH Articolo MUD SA STRUTTURATO UGL 60X60 cm Marchio FLOOR GRES;
<b>Date of sample reception</b>	22/03/2016;
<b>Kind of test executed</b>	Determination of modulus of rupture and breaking strenght
<b>Referring standards</b>	UNI EN ISO 10545-4:2014/EC 1-2015
<b>Shifting from standards</b>	None
<b>Equipment</b>	Flexural test machine cod. MCP C93 - Gauge cod. MCP C95 - Metric band-mill cod. MCP C56
<b>Calibration</b>	C93: LAT 1600029FSE of 07/01/2016 - C95: LAT 1506358DSI of 26/05/2015 - C56: LAT C115163A0 of 18/09/2015
<b>Subcontracted phases</b>	None
<b>Sampling made by</b>	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.*

**Examiner**  
  
P.I. Fili Thomas

MODENA CENTRO PROVE  
  
Ceramic Dept. Responsible  
P.I. De Pasquale Roberto

MODENA CENTRO PROVE  
  
Director  
Sant'Unione dr. Giuseppe



## DETERMINATION OF MODULUS OF RUPTURE AND BREAKING STRENGTH

Beginning date : 03/29/2016

Analysis ending date : 03/30/2016

**SAMPLE** : Ceramic tiles, marked « **Serie BUILDTECH Articolo MUD SA STRUTTURATO UGL 60X60 cm Marchio FLOOR GRES** »

The test has been performed applying a load on three points, with the central load to contact with the centre line of the does superior of the tile.

The test has been performed on entire samples.

### EXPERIMENTAL CONDITIONS

- **d** (switches diameter) mm : 20
- **t** (depth of switches covering) mm : 5
- **l** (distance between bearing surface and the lip of tile) mm : 10
- **L** (distance between bearing surface) mm : 580

### RESULTS

Parametro	Unit of measure	Tile n°						
		1	2	3	4	5	6	7
Breaking load <b>F</b>	N	2988	3097	3160	3362	2785	2886	2700
Breaking strength <b>S</b>	N	2888	2994	3055	3250	2692	2790	2610
Modulus of rupture <b>R</b>	N/mm <sup>2</sup>	53,5	56,7	59,2	60,2	52,1	50,5	49,4

Breaking load **F** average (N) = 2997

Breaking strength **S** average (N) = 2897

Modulus of rupture **R** average (N/mm<sup>2</sup>) = 54,5

### REQUIREMENTS

(Standard EN 14411:2012 Annex G)

- Modulus of rupture **R** average N/mm<sup>2</sup> :  $\geq 35$ , no applicable with breaking strength  $\geq 3000$  N.
- Single value **R** N/mm<sup>2</sup> :  $\geq 32$

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