



## Geoceramic Researches S.r.l.

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Laboratorio Tecnologico e Sperimentale per le Industrie Ceramiche e dei Laterizi

### TEST REPORT

TS N°: 249/16eng

DATE 30/09/2016

Spett.le  
GRUPPO ROMANI S.p.A.

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42013 CASALGRANDE RE

## B.C.R.A. METHOD SLIPPERY

The test has been carried out using measuring instrument TORTUS® of the coefficient of dynamic friction between a sliding element and the surface of test.

#### Operating conditions:

- Speed of advance (mm/s): 17 - Loaded junior clerk to sliding element (g): 200

#### Samples arrived 23/09/2016 (sampling executed by Customer)

DESCRIPTION TILES : 40x40 cm  
TYPE : CIR MAT C CLOUD NAT

Test start 26/09/2016  
Test finished 26/09/2016

Covering material of sliding element	Superficial test of condition	Coefficient of friction ( $\mu$ )
Leather	Dry	<b>0,48</b>
Hard rubber standard	Wet (water + bathing agent)	<b>0,44</b>

Singles test of coefficient of friction					
with leather:	0,49	0,44	0,52	0,49	0,45
with hard rubber standard	0,46	0,43	0,42	0,44	0,44

#### REFERENCE VALUE

$\mu < 0.20$   
 $0.20 < \mu > 0.40$   
 $0.40 < \mu > 0.74$   
 $\mu > 0.74$

#### (B.C.R.A. REP. CEC. 6/81)

Danger slippery  
Excessive slippery  
Satisfaction friction  
Excellent friction

Requirement ("Regulations of performance dell' art.1 of the law 9 January 1989, n.13" - Decree Ministerial 14/06/89, n° 236 Art. 8.2.2)

#### $\mu$ (coefficient of friction) :

- for leather sliding element to dry paving : > 0.40  
- for hard rubber sliding element to wet paving : > 0.40

  
Laboratory Head  
P.I. Riccardo Frabetti