

VALS















gres porcellanato con impasto colorato
porcelain tiles colored body
grès cérame teinté masse
eingefärbtes Feinsteinzeug

caratteristiche tecniche

technical characteristics

caractéristiques techniques

technische Daten

caratteristica tecnica technical characteristic caractéristique technique technische Eigenschaft	norma di riferimento reference standard norme de référence Bezugsnorm	valore richiesto value required valeur requise geforderter Wert	rispondenza alla norma accordance to the norme correspondance à la norme Übereinstimmung mit der Norm
assorbimento d'acqua (E) water absorption (E) absorption d'eau (E) Feuchtigkeitsaufnahme (E)	 ISO 10545-3	$\leq 0,5\%$	conforme according to conformes erfüllt
forza di rottura (S) breaking strength (S) contrainte de rupture (S) Bruchlast (S)	 ISO 10545-4	spessore $\geq 7,5\text{mm}$ $\geq 1300\text{ N}$ spessore $< 7,5\text{mm}$ $\geq 700\text{ N}$	conforme according to conformes erfüllt
resistenza alla flessione (R) bending strength (R) résistance a la flexion (R) Biegefestigkeit (R)	 ISO 10545-4	$\geq 35\text{ N/mm}^2$	conforme according to conformes erfüllt
resistenza all'abrasione superficiale PEI resistance to abrasion PEI résistance à l'abrazion PEI Abriebfestigkeit PEI	 ISO 10545-7	secondo i dati del costruttore according to producer's selon les éléments du constructeur laut Angaben des Herstellers	PEI 4
resistenza agli sbalzi termici thermal shock resistance résistance aux écarts de température Temperaturwechselbeständigkeit	 ISO 10545-9	nessun campione deve presentare difetti visibili no sample must show visible defects aucun échantillon ne doit presenter des défauts visibles Kein Exemplar soll sichtbare Schäden aufweisen	conforme according to conformes erfüllt
resistenza al gelo frost resistance résistance au gel Frostbeständigkeit	 ISO 10545-12	resistenti resistant résistants Widerstandsfähig	resistenti resistant résistants Widerstandsfähig
fattore di resistenza alla scivolosità anty - slip properties gré de résistance à la glissance Rutschfestigkeit	 DIN 51130	secondo i dati del costruttore according to producer's selon les éléments du constructeur laut Angaben des Herstellers	R10
fattore di resistenza alla scivolosità anty - slip properties gré de résistance à la glissance Rutschfestigkeit	 DIN 51097	secondo i dati del costruttore according to producer's selon les éléments du constructeur laut Angaben des Herstellers	B
fattore di resistenza alla scivolosità anty - slip properties gré de résistance à la glissance Rutschfestigkeit	 B.C.R.A.	secondo i dati del costruttore according to producer's selon les éléments du constructeur laut Angaben des Herstellers	DRY: $\mu > 0,40$ WET: $\mu > 0,40$
caratteristiche dimensionali size characteristics caractéristiques dimensionelle Masseigenschaften	 ISO 10545-2	lunghezza e larghezza / length and width / longueur et largeur $\pm 0,6\%$ (max $\pm 2\text{ mm}$) spessore / thickness / épaisseur / Stärke / толщина $\pm 5\%$ (max $\pm 0,5\text{ mm}$) ortogonalità / wedging / orthogonalité $\pm 0,5\%$ (max $\pm 2\text{ mm}$) planarità / flatness / planéité / Ebenflächigkeit / плоскостность $\pm 0,5\%$ (max 2mm)	conforme according to conformes erfüllt
coefficiente di dilatazione termica lineare linear thermal expansion coefficient coefficient de expansion térmica linear Wärmeausdehnungskoeffizient	 ISO 10545-8	metodo di prova disponibile test method available méthode d'essai disponible Verfügbare Prüfmethode	$\alpha \leq 7 \times 10^{-6}/^{\circ}\text{C}$
resistenza ai prodotti chimici resistance to chemicals résistance aux produits chimiques Beständigkeit gegen Chemikalien	 ISO 10545-13	min. B	conforme according to conformes erfüllt
resistenza alle macchie stain resistance résistance aux taches Beständigkeit gegen Flecken	 ISO 10545-14	min. 3	conforme according to conformes erfüllt
durezza superficiale secondo scala Mohs scratch hardness of surface according to Mohs	 EN 101 BS 6431 part 13	≥ 5	

Secondo la norma EN 14411 (ISO 13006) metodi di prova UNI EN ISO 10545 Appendice G per piastrelle ceramiche pressate a secco a basso assorbimento d'acqua E $\leq 0,5\%$ Gruppo BIa.

Following the EN 14411 (ISO 13006) norms and test cases UNI ISO 10545 appendix G for ceramic tiles dry pressed with low water absorption E $\leq 0,5\%$ group BIa.

Selon les normes EN 14411 (ISO 13006) méthodes d'essais UNI EN ISO 10545 Appendice G pour carreaux céramiques pressés à sec, à basse absorption d'eau E $\leq 0,5\%$ groupe BIa.

Nach der Norm EN 14411 (ISO 13006) Prüfmethode UNI EN ISO 10545 Zulage G für trockenengepresste Fliesen mit niedriger Wasseraufnahme E $\leq 0,5\%$ Gruppo BIa.

*GRUPPO CERAMICHE
GRESMALT S.p.A.
Via Mosca 4
41049 Sassuolo (MO)*

TEST LABORATORY

TEST REPORT No. 2641/20

Requested by:	GRUPPO CERAMICHE GRESMALT S.p.A. Via Mosca 4 41049 Sassuolo (MO)
On (date):	11/02/20
For the sample marked:	"VALS 60121 AVORIO - Tono J50A"

The results reported relate only to the samples tested.

No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision.

The reproduction of this test report is only authorized in the form of a complete photographic facsimile.

Our written approval is necessary for any partial reproduction.

The texts in inverted commas are Customer's declarations and fall under his responsibility.

This test report consists of 3 pages this cover included.



Description of the sample:	Ceramic tiles 60,4 x 121 x 0.95 cm marked "VALS 60121 AVORIO - Tono J50A"
Manufacturer:	-----
Sampling details	
- Where:	-----
- Date:	-----
- By whom:	CUSTOMER
- How (methods):	-----
Date of receipt in laboratory:	14/02/20

TESTS PERFORMED :

			Date of starting	Date of ending
<input checked="" type="checkbox"/>	DIN 51097 (92)	Slip resistance	19/02/20	19/02/20

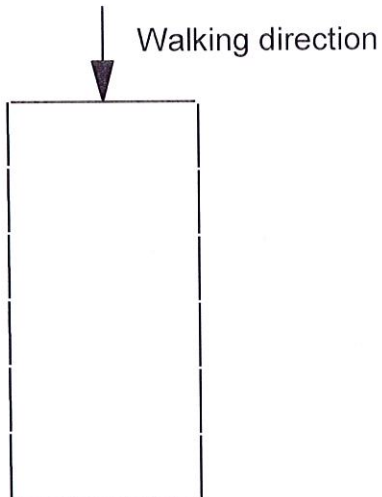


DIN 51097 (92) - Slip resistance

- Size of the tested surface (m) 0.50 x 1.20

OPERATIVE CONDITIONS

Fixing scheme



RESULTS

- Average slip angle:

19°

CLASSIFICATION (DGUV INFORMATION 207-006_JUNI 2015)

- Evaluation group:

A+B


Pietro Bruzzi
Technical verification




Prof. Maria Chiara Bignozzi
Director

-----End of report-----

*GRUPPO CERAMICHE
GRESMALT S.p.A.
Via Mosca 4
41049 Sassuolo (MO)*

TEST LABORATORY
TEST REPORT No. 2640/20

Requested by:	GRUPPO CERAMICHE GRESMALT S.p.A. Via Mosca 4 41049 Sassuolo (MO)
On (date):	11/02/20
For the sample marked:	"VALS 60121 AVORIO - Tono J50A"

The results reported relate only to the samples tested.

No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision.

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This test report consists of 3 pages this cover included.



DESCRIPTION OF THE SAMPLE:

Ceramic tiles 60,4 x 121 x 0.95 cm marked "VALS 60121 AVORIO - Tono J50A"

Manufacturer: -----

Sampling details*

- Where: -----
- Date: -----
- By whom: CUSTOMER
- How (methods): -----

Date of receipt in laboratory: 14/02/20

TESTS PERFORMED :

			Date of starting	Date of ending
<input checked="" type="checkbox"/>	DIN 51130 (06/2004)	Determination of the anti - slip properties – Workrooms and fields of activities with raised slip danger, walking method – ramp test	19/02/20	19/02/20

* The sampling is excluded from accreditation.



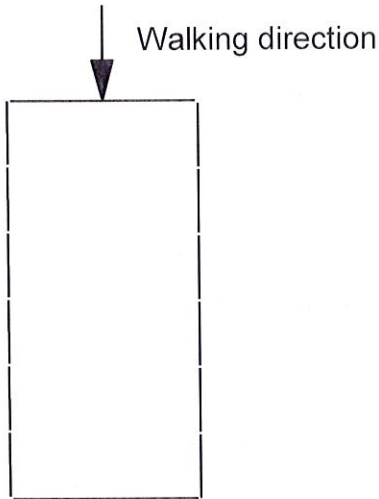
DIN 51130 (06/2004)- Determination of the anti - slip properties – Workrooms and fields of activities with raised slip danger, walking method – ramp test

- Surface characteristics Smooth Structured
 Profiled Rough

OPERATIVE CONDITIONS

Temperature: (23 ± 5)°C

Fixing scheme:



RESULTS:

Average total acceptance angle:

20.1°

Movement area (cm³/dm²):

Not tested

CLASSIFICATION (DGUV REGEL 108-003)

Group of anti - slip properties:

R11

Movement area evaluation group:

Not tested

Pietro Bruzzi
 Technical verification



Prof. Maria Chiara Bignozzi
 Director

End of report