



Quercus


NovaBell[®]
Ceramiche Gruppo Bellei





Olivo - QU71RT

Rovere



QU31RT
200 x 1200mm
7" 7/8 x 47" 1/4

Olmo



QU41RT
200 x 1200mm
7" 7/8 x 47" 1/4

Castagno



QU51RT
200 x 1200mm
7" 7/8 x 47" 1/4

Noce



QU61RT
200 x 1200mm
7" 7/8 x 47" 1/4

Olivo



QU71RT
200 x 1200mm
7" 7/8 x 47" 1/4



Castagno - QU51RT



Olivo - QU71RT



Noce - QU61RT

Technical features

The International reference standards : ANSI - ASTM **NATURALE**

The values of the main technical characteristics measured on our products, compared with international standards, are clearly shown and reproduced on our contractual documents (catalogs, price lists, etc.).
The values given in this document are common to groups of articles or series of our tiles and therefore are to be used as a guide for a first orientation in choosing the product. If required, the specific values for a given product of a determined supply can be provided depending on its intended use, when formally brought to our attention by notice in writing.

Characteristics and Test methods 	Requirements ANSI A 137.1	Our general values
Determination of water absorption - (ASTM C 373)	Average value $E_b \leq 0,5 \%$	Average value $\leq 0,5\%$
Classification	Definition § 3.0	Porcelain tiles
		Physical properties
Breaking strength - (ASTM C 648)	Average ≥ 250 lbf (1.11 kN) Individual ≥ 225 lbf (1.00 kN)	Complies
Visible abrasion - (ASTM C 1027)	As reported	PEI 4 : Cocco PEI V : Orzo-Soia-Canapa-Lino-Avena-Cotone
Thermal shock resistance (ASTM C 428)	Pass	Complies
Crazing resistance (ASTM C 424)	Pass	Complies
Resistance to freeze/thaw cycling (ASTM C 1026)	As reported	Resistant
DCOF Resistance (ANSI A 137.1 Section 9.6)	$\geq 0,42$ ⁽¹⁾	DCOF $\geq 0,42$
Bond strength (ASTM C 482)	≥ 50 psi (0.34 MPa)	> 1 MPa
Color Uniformity (ASTM C 609 and ANSI A 137.1 Section 9.3) ⁽²⁾	V0 – 3 Judds	See the specific section
		Chemical properties
Chemical resistance (ASTM C 650)	As reported	Resistant
Stain resistance (ASTM C 1378)	As reported	Resistant
		Dimensions - Calibrated tiles
Dimensions - (ASTM C 499) - (ASTM C 485) - (ASTM C 502)	See ANSI A 137.1 - Tab.10	Complies
		Dimensions - Rectified tiles
Dimensions - (ASTM C 499) - (ASTM C 485) - (ASTM C 502)	See ANSI A 137.1 - Tab.10	Complies

(1) For level interior spaces expected to be walked upon when wet - (2) For V0 tiles only

Technical features

The International reference standards : ANSI - ASTM **NATURALE**

The international reference standards: ISO - EN

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Characteristics and Test methods 	Requirements EN 14411 ⁽¹⁾ - G / ISO 13006 ⁽²⁾ - G	Our general values
Determination of water absorption - (ISO 10545-3)	Average value $E_b \leq 0,5 \%$ / Individual maximum 0,6%	Average value and individual maximum $< 0,5\%$
Classification	Definition § 3.2 and § 3.7	BI_a – Porcelain tiles
		Physical properties
Modulus of rupture - (ISO 10545-4)	Average ≥ 35 N/mm ²	≥ 35 N/mm ²
Breaking strength - (ISO 10545-4)	Average ≥ 1300 N for thickness $\geq 7,5$ mm Average ≥ 700 N for thickness $< 7,5$ mm	Complies
Abrasion resistance - (ISO 10545-7)	Abrasion class and cycles passed	PEI 4 : Cocco PEI V : Orzo-Soia-Canapa-Lino-Avena-Cotone
Coefficient of linear thermal expansion (ISO 10545-8)	Declared value ⁽¹⁾ / Test method available ⁽²⁾	$< 7,1 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$
Thermal shock resistance (ISO 10545-9)	Pass according to EN ISO 10545-1 ⁽¹⁾ / Test method available ⁽²⁾	Complies
Crazing resistance (ISO 10545-11)	Pass according to EN ISO 10545-1 ⁽¹⁾ / Required ⁽²⁾	Complies
Frost resistance (ISO 10545-12)	Pass according to EN ISO 10545-1 ⁽¹⁾ / Required ⁽²⁾	Complies
Moisture expansion (ISO 10545-10)	Declared value ⁽¹⁾ / Test method available ⁽²⁾	$\leq 0,2$ mm/m
Small colour differences (ISO 10545-16)	$\Delta E_{cmc} < 0,75$ ⁽¹⁾	If agreed
Impact resistance - (ISO 10545-5)	Declared value ⁽¹⁾ / Test method available ⁽²⁾	COR $> 0,75$
Reaction to fire	Class A1 or A1 _{FL} ⁽¹⁾	A1_{FL} Classified Without Testing (CWT) – 96/603
		Chemical properties
Chemical resistance -(GL) (ISO 10545-13)		
Resistance to low and high concentrations of acids and alkalis	Declared value ⁽¹⁾ / Manufacturer is to state classification ⁽²⁾	Resistant (see "Maintenance and care" section)
Resistance to household chemicals and swimming pool salts	Minimum class B	G A
Resistance to staining (ISO 10545-14)	Minimum class 3	5 (see "Maintenance and care" section)
Release of dangerous substances (ISO 10545-15)	Declared value ⁽¹⁾ / Test method available ⁽²⁾	Pb $< 0,1$ / Cd $< 0,01$ mg/dm ²
		Dimensions and surface quality
Dimensions - (ISO 10545-2)	See ANNEX G	Complies
Surface quality - (ISO 10545-2 § 7)	A minimum of 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of tiles	Complies

(1) Requirements according to EN 14411

(2) Requirements according to ISO 13006

Test methods	Requirements and references	Our general values
Determination of anti-slip properties – Workrooms and fields of activities with raised slip danger, walking method- Ramp test (DIN 51130) – Germany	BGR / ASR From R9 to R13	R 10
Determination of anti – slip properties. Wet-loaded barefoot areas – Walking method – Ramp test (DIN 51097) - Germany	GUV-I 8527 A – B – C	A+B
Dynamic Coefficient Friction wet and dry condition (BCR – ex BCRA) Italy	DM n. 236 / 1989 $\mu > 0,40$	$\mu > 0,40$

 La tabella in italiano con i dati tecnici e scaricabile su www.novabell.it

 Si vous le souhaitez, telechargez le tableau contenant les donnees techniques en francais en allant sur www.novabell.it

 The English language technical specification for each collection can be download from www.novabell.it

 Die Tabelle in deutscher Sprache kann auf www.novabell.it heruntergeladen werden

