

OXY

IMPROVED CONCRETE


NovaBell[®]
Ceramiche Gruppo Bellei





Bianco

FRY 80RT

600 x 600mm

23" ⁵/₈ x 23" ⁵/₈



Antracite

FRY 20RT

600 x 600mm

23" ⁵/₈ x 23" ⁵/₈



Wall : Bianco
Floor : Antracite




Bianco



Antracite

Technical features

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

Characteristics and Test methods 	Requirements ANSI A 137.1	Our general values
Determination of water absorption - (ASTM C 373)	Average value E _b ≤ 0,5 %	Average value ≤ 0,06 %
Classification	Definition § 3.0	Porcelain tiles
		Physical properties
Breaking strengtht - (ASTM C 648)	Average ≥ 250 lbf (1.11 kN) Individual ≥ 225 lbf (1.00 kN)	Complies
Visible abrasion - (ASTM C 1027)	As reported	Class 0 - 5
Raccomanded use	Novabell criterion (see Annex N - ISO 13006 / EN 14411)	Class 4
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)	≥ 0.42 ⁽¹⁾	DCOF ≥ 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
Scrath hardenss of surface according to Mohs'	ex BS 6431-13 / ex EN 101	≥ 5

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




OXY NATURALE

-   Utilizzare il **QR CODE** per scaricare le schede tecniche
-   Veuillez utiliser le **QR CODE** pour tlecharger les fiches techniques
-  Usr the **QR CODE** to download data sheets
-  **QR CODE** benutzen um die technische datenblatter runter zu laden

Technical features






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

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 ≤ 0,5 % / Individual maximum 0,6%	≤ 0,06 % Average value and individual maximum
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/mm2
Breaking strength - (ISO 10545-4)	Average ≥ 1300 N for thickness ≥ 7,5 mm Average ≥ 700 N for thickness < 7,5 mm	Complies
Resistance to surface abrasion - (ISO 10545-7)	Abrasion class and cycles passed	Class 0 - 5
Resistance to deep abrasion - (ISO 10545 - 6)	Max volume abraded < 175 / mm3	< 175 / mm3
Raccomanded use	Novabell criterion (see Annex N - ISO 13006 / EN 14411)	Class 4
Coefficient of linear thermal expansion (ISO 10545-8)	Declared value ⁽¹⁾ / Test method available ⁽²⁾	< 7,1 x 10 ⁻⁶ °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⁾	≤ 0,2 mm/m
Small colour differences (ISO 10545-16)	ΔE _{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 μ > 0,40	μ > 0,40
Scrath hardenss of surface according to Mohs'	ex BS 6431-13 / ex EN 101	≥ 5

-   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

