

ALLBLACK

INTENSE SHADE


NovaBell[®]
Ceramiche Gruppo Bellei





Wall : Nero / Bianco



Beige

FRY 40RT

600 x 600mm
23" ⁵/₈ x 23" ⁵/₈



Bianco

FRY 80RT

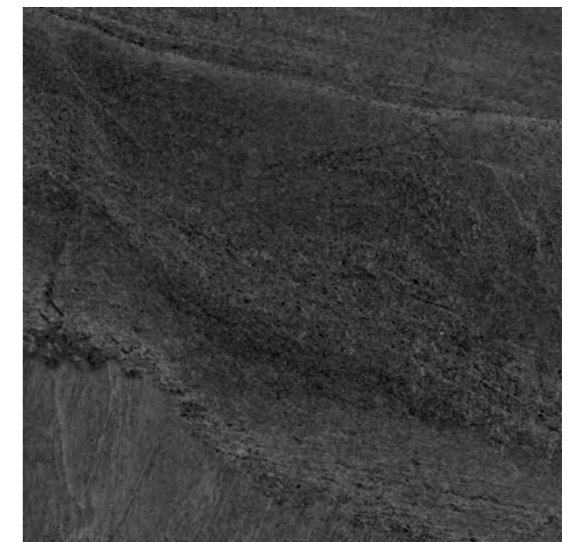
600 x 600mm
23" ⁵/₈ x 23" ⁵/₈



Antracite

FRY 20RT

600 x 600mm
23" ⁵/₈ x 23" ⁵/₈



Nero

FRY 90RT


600 x 600mm
23" ⁵/₈ x 23" ⁵/₈



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 $E_b \leq 0,5 \%$	Average value $\leq 0,06 \%$
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	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




ALL BLACK NATURALE

Use the QR CODE to download data sheets

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 $E_b \leq 0,5 \%$ / Individual maximum 0,6%	$\leq 0,06 \%$ 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/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
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 / mm ³	< 175 / mm ³
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⁾	$< 7,1 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$
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 $\mu > 0,40$	$\mu > 0,40$
Scrath hardenss of surface according to Mohs'	ex BS 6431-13 / ex EN 101	≥ 5

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

