





Ivory NST8ORT

600 x 600mm 23"5/8 x 23"5/8



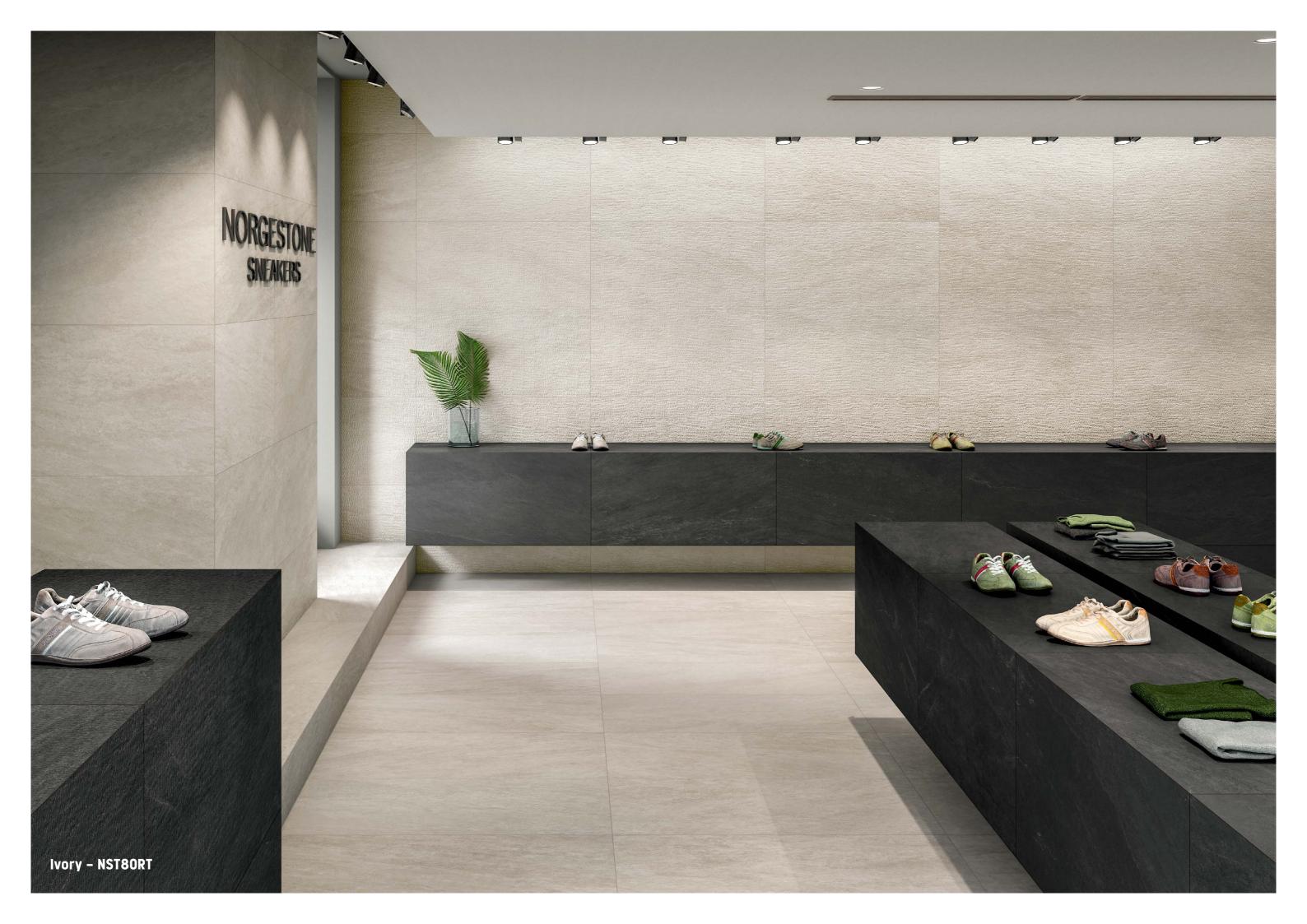
Taupe
NST40RT
600 x 600mm
23"5/8 x 23"5/8



Light Grey

NST10RT

600 x 600mm 23"5/8 x 23"5/8



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NORGESTONE RT







Ceramics of Italy

The international reference standards: ISO - EN

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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.).

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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 ≤ 0,5 % / Individual maximum 0,6%	≤ 0,06 % Average value and individual maximum
Classification	Definition § 3.2 and § 3.7	Bl _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)	$\Delta E_{cmc} < 0.75^{(1)}$	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	μ > 0,40
Scrath hardenss of surface according to Mohs'	ex BS 6431-13 / ex EN 101	≥ 5

PRODUCT INFORMATION - IMPORTANT NOTES FOR THE CONSUMER - CLEANING AND CARE - PROPERTY RIGHTS:

www.novab

Our porcelain stoneware tiles are made from raw materials of great technical potential. This potential is enhanced by means of a production process where the body and surface of the material are treated in exactly the same way, where the tile's shape and appearance are rendered permanent by firing at temperatures which may even exceed 1200°C. This ensures that the surface and body of the tile become one, adding style and beauty to its intrinsic strength. Consequently, tiles' natural surfaces are stable against and unaffected by the chemicals and staining substances specified by the toughest international standards (ISO, EN, ASTM/ANSI), as documented by our product technical data sheets, including the statements of applicability which precede them. Maintenance performed at frequencies and by methods which effectively remove dirt will not only ensure hygiene but also conserve the material's beauty and, above all, its functional and safety characteristics: remember that the antislip properties declared refer to clean, new surfaces, as required by the standards. Inadequately removed dirt can, in itself, cause slipping unrelated to the properties of our coverings. Similarly, failure to remove or prevent abrasive dirt (e.g. by means of devices for cleaning the soles of shoes before coming indoors) may modify the structure of surfaces, reducing antislip properties below the values originally declared. Reference should be made to the ISO 13006/EN 14411 Annex N and ANSI A 137.1 § 6.2.2.1 standards.

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North America reference standards : ANSI - ASTM

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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 strenghth - (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

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