

## RELIC

## North America reference standards: ANSI - ASTM

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 <sub>b</sub> ≤ 0,5 %	Average value ≤ 0,5%
Classification	Definition § 3.0	Porcelain tiles
		Physical properties
Breaking strength - (ASTM C 648)	Average $\ge 250$ lbf (1.11 kN) Individual $\ge 225$ lbf (1.00 kN)	Complies
Thermal shock resistance - (ASTM C 428)	Pass	Complies
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
Mohs hardness scale - (ex EN 101 / BS 6431-13)		≥ 5
		Chemical properties
Chemical resistance - (ASTM C 650)	As reported	Resistant
Stain resistance - (ASTM C 1378)	As reported	Resistant

<sup>(1)</sup> For level interior spaces expected to be walked upon when wet (2) For V0 tiles only

## PRODUCT INFORMATION - IMPORTANT NOTES FOR THE CONSUMER - CLEANING AND CARE

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.