

**NEXION QUALITY STANDARDS – All tests are carried out by Italian laboratories accredited according to ISO/IEC 17025:2017**

Standards according to ISO 13006: Annex G - EN 14411: Annex G. Dry - Pressed Ceramic Tiles.

| QUALITY ITEMS                         | TECHNICAL FEATURE  | STANDARD METHOD ISO | UNIT                            | REQUIREMENTS<br>ISO 13006:2018(E) E <sub>v</sub> ≤0,5%<br>GROUP BIa  | NEXION Values                          |          |                        |          |
|---------------------------------------|--|---------------------|---------------------------------|--|--|----------|------------------------|----------|
|                                       |  |                     |                                 |  | SIZE < 1200 mm                         |          | SIZE ≥ 1200 mm (SLABS) |          |
|                                       |  |                     |                                 |  | %                                      | mm       | %                      | mm       |
| <b>DIMENSIONS AND SURFACE QUALITY</b> | Width  | ISO 10545 - 2       | mm                              | ± 0,3%   | ± 0,1%                                 | ± 0,8 mm | ± 0,1%                 | ± 1,0 mm |
|                                       | Length   | ISO 10545 - 2       | mm                              | ± 0,3%   | ± 0,1%                                 | ± 0,8 mm | ± 0,1%                 | ± 1,2 mm |
|                                       | Thickness  | ISO 10545 - 2       | mm                              | ± 5,0%   | ± 4,0%                                 | ± 0,5 mm | ± 4,0%                 | ± 0,5 mm |
|                                       | Straightness of Side   | ISO 10545 - 2       | mm                              | ± 0,3%   | ± 0,1%                                 | ± 0,8 mm | ± 0,1%                 | ± 1,0 mm |
|                                       | Rectangularity   | ISO 10545 - 2       | mm                              | ± 0,3%   | ± 0,1%                                 | ± 1,3 mm | ± 0,1%                 | ± 1,5 mm |
|                                       | Surface Flatness   | ISO 10545 - 2       | mm                              | ± 0,4%   | ± 0,1%                                 | ± 1,8 mm | ± 0,2%                 | ± 3,0 mm |
|                                       | Surface Quality  | ISO 10545 - 2       | -                               | A minimum of 95% of the tiles are to be free from visible defects which can impair the appearance of a major area of tiles | 95%                                    |          |                        |          |
| <b>PHYSICAL PROPERTIES</b>            | Water Absorption   | ISO 10545 - 3       | %                               | ≤ 0,5%, Individual 0,6%  | Avg. ≤ 0,08%, Individual 0,2%          |          |                        |          |
|                                       | Modulus of Rupture   | ISO 10545 - 4       | N/mm <sup>2</sup>               | Min. 35, Individual Min. 32  | Min. 42                                |          |                        |          |
|                                       | Breaking Strength  | ISO 10545 - 4       | N                               | Not less than 1300   | Min. 1800                              |          |                        |          |
|                                       | Moisture Expansion   | ISO 10545 - 10      | mm/m                            | -  | 0,02                                   |          |                        |          |
|                                       | Surface Abrasion   | ISO 10545 - 7       | Class                           | Minimum Class II<br>Report abrasion class and cycles passed  | CLASS IV (≥ 6000 Cycles)               |          |                        |          |
|                                       | Resistance to surface abrasion of glazed tiles intended for use on floors  |                     |                                 |  |  |          |                        |          |
|                                       | Mohs Hardness of surface   | NA                  | -                               | -  | 8                                      |          |                        |          |
|                                       | Coefficient of linear thermal expansion from ambient temperature to 100 °C | ISO 10545 - 8       | K <sup>-1</sup>                 | As declared by the Manufacturer  | 6x10 <sup>-6</sup> K <sup>-1</sup> max |          |                        |          |
|                                       | Thermal Shock Resistance   | ISO 10545 - 9       | -                               | As declared by the Manufacturer  | No damage                              |          |                        |          |
|                                       | Crazing Resistance: glazed tiles   | ISO 10545 - 11      | -                               | Required   | No damage for Min. 10 Cycles           |          |                        |          |
|                                       | Bulk Density   | ISO 10545 - 3       | g/cc                            | 2,2  | 2,2                                    |          |                        |          |
|                                       | Impact Resistance  | ISO 10545 - 5       | -                               | As declared by the Manufacturer  | 0,55                                   |          |                        |          |
| Frost Resistance                      | ISO 10545 - 12   | -                   | As declared by the Manufacturer | No change  |  |          |                        |          |
|                                       | Small color differences  | ISO 10545 - 16      | -                               | Plain colored tiles only where required<br>GL: ΔE < 0,75<br>UGL: ΔE < 1,0  | No change                              |          |                        |          |
| <b>CHEMICAL PROPERTIES</b>            | Resistance to staining   | ISO 10545 - 14      | Class                           | Minimum Class 3  | Class 4                                |          |                        |          |
|                                       | Resistance to household chemicals and swimming pool salts                  | ISO 10545 - 13      | Class                           | Minimum B  | Minimum A                              |          |                        |          |
|                                       | Resistance to acids & alkalis  | ISO 10545 - 13      | Class                           | As declared by the Manufacturer  | Minimum B                              |          |                        |          |

**Nexion installation suggestions**

Nexion recommends 2 mm joint for optimal aesthetics taking advantage of the tile's caliber in multi-sized applications. Both cement and epoxy grout can be used; grout-design color matching advisable for optimal aesthetics. It is not recommended to use grouting with colored pigments in contrast with the color of the tiles. For detailed installation guidelines log on [www.nexiontiles.com](http://www.nexiontiles.com)