

# facade ceramic NIWALA

## Technical data sheet

Classification according to EN 14411 ISO 13006 annex G standards Bla with  $E \leq 0,5\%$  UGL

### Product description

Frost-resistant facade ceramic, made of dry-pressed, double-fired porcelain stoneware. The product is solid-colored and rectified.

The series is available in various formats and three colors. The product is manufactured in the EU.

### Areas of application

- As facade cladding (EWI system or ventilated facade system) optionally with factory-applied adhesive coating
- As wall or floor covering in interior or exterior areas
- As stair and terrace cladding

The maximum permissible areas/side lengths according to the general building inspectorate approvals (ABZ) of the facade system manufacturers must be observed. The standard joint width is 8 mm.

### Colors & surface texture

Due to its uniform coloration and the fine-grained involvements this series was inspired by sandstone. Against the light the surface shows an exciting switch between dull and shiny plains. The series is available in three earthy colors. "Light" is ivory-colored, the colors "grey" and "dark grey" have a light or mid grey coloring.

### Formats & surfaces

Standard format	
Thickness (mm)	8,5
Format/nominal size (cm)	30x60
Surface area (m <sup>2</sup> )	0,18

Special formats				
Thickness (mm)	8,5			
Format/nominal size (cm)	10x60	15x60	20x60	45x45
Surface area (m <sup>2</sup> )	0,06	0,09	0,12	0,20

### Standards & directives

DIN 18157-1	Execution of ceramic claddings using the thin-bed method
DIN EN 12004	Mortar and adhesive for ceramic tiles and slabs
DIN 18352	Tile and slab work
DIN 18515-1	Exterior wall claddings - Tiles or slabs fixed with mortar
DIN 18540	Sealing of exterior wall joints in building construction with joint sealant
DIN 18202	Dimensional tolerances in building construction
DIN EN 14411	Tolerances for ceramic tiles and slabs
ZDB data sheet	Movement joints in claddings and coverings made of tiles and slabs

### Technical specifications

Determination of dimensional specifications and surface quality	ISO 10545-2	in accordance
Water absorption	ISO 10545-3	≤ 0,5%
Bending strength	ISO 10545-4	in accordance F <sub>Fr</sub> ≥ 1300 N σ <sub>For</sub> ≥ 35 N/mm <sup>2</sup>
Deep scratch resistance	ISO 10545-6	in accordance l ≤ 32 mm / V ≤ 175 mm
Thermal linear expansion coefficient	ISO 10545-8	6 x 10 <sup>-6</sup> /K
Thermal shock resistance	ISO 10545-9	in accordance
Expansion in humidity	ISO 10545-10	in accordance
Frost resistance	ISO 10545-12	in accordance
Resistance to chemicals	ISO 10545-13	in accordance
Stain resistance	ISO 10545-14	in accordance
Building material class	DIN 4102-1	A1 non-flammable
Slip resistance	DIN 51-130 (XP-P05-010) DIN 51-097 (XP-P05-010)	R10 A
Porosity: Pore volume VP Pore radius maximum rP	DIN 66133	38,1 - 38,3 mm <sup>3</sup> /g in accordance 0,4 - 0,5 μm in accordance

### Processing & care

PDF download of our processing and care instructions available at [www.deltaelements.eu](http://www.deltaelements.eu).

### Customer service

Tel. +49 69 8570125-0  
[info@deltaelements.eu](mailto:info@deltaelements.eu)

### Delta Elements GmbH

Bernardstraße 14-16  
 63067 Offenbach/Main  
 Germany  
 Tel. +49 69 8570125-0  
 Fax +49 69 8570125-1  
[info@deltaelements.eu](mailto:info@deltaelements.eu)  
[www.deltaelements.eu](http://www.deltaelements.eu)



This technical data sheet replaces the previous version. It provides information about the product properties and fields of application. Delta Elements has compiled all recommendations with due diligence according to the state of the art. Numeric information may deviate within the general tolerances for production technology reasons. The list of standards and directives merely serves as an overview with no claim of completeness. This technical datasheet does not constitute any guarantee in regards to the recommendations provided. Delta Elements assumes no liability and refers to its general business terms and conditions. No rights can be derived from the contents of the technical datasheet. The respective current version and the general business terms and conditions are available at [www.deltaelements.eu](http://www.deltaelements.eu); printing errors reserved.