

## TECHNICAL CHARACTERISTICS OF PRODUCT

The characteristics of the product specified in this technical report meet the specification and test methods according to norm ISO 10545 and NBR 13818 and ISO 13006 requirements.

### PRODUCT SPECIFICATION

<b>Reference</b>	<b>ESTILO SAND AC 30x30</b>
<b>Product Code</b>	8028133
<b>Nominal Size (N)</b>	30 cm x 30 cm
<b>Work Size (W)</b>	295 mm x 295 mm
<b>Thickness</b>	8,1 mm
<b>Water Absorption</b>	BIIa (3,0% < a ≤ 6,0%)
<b>Shade Variation</b>	V2
<b>Application Joint</b>	3,0 mm
<b>Coverage Area</b>	1,50 m <sup>2</sup> /cx
<b>Number of pieces per box</b>	17
<b>Usage Recommendation</b>	LC

Check if the product is adequate for the planned installation area according to the room application table:

CODE	APPLICATION ROOM
LA	Residencial bathrooms.
LB	Residential areas, bedrooms and kitchens with no access to the street and LA spaces.
LC	Commercial areas without access to the street, garages, porches and residential areas with access to the street, and LB and LA spaces.
LD	Commercial areas with access to the street and LA, LB, and LA spaces.
LE	Sidewalks and outside flat areas and LD, LC, LB and LA spaces.
LP	Pools.
LF	Façades.

### DIMENSIONAL CHARACTERISTICS

Deviation on W in relation to N (%)	± 2,00 (max. ±5,0 mm)
Deviation on r1 in relation to W (%)	± 0,60 (max. ±2,0 mm)
Deviation on e in relation to eW (%)	± 5,00 (max. ±0,5 mm)
Wedging of size - deviation in relation to W (%)	± 0,50 (max. ±1,5 mm)
Rectangularity - deviation in relation to W (%)	± 0,50 (max. ±2,0 mm)
Edge curvature - deviation in relation to W (%)	± 0,50 (max. ±2,0 mm)
Center Curvature - deviation in relation to W (%)	± 0,50 (max. ±2,0 mm)
Warpage - deviation in relation to W (%)	± 0,50 (max. ±2,0 mm)

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**Definition - Dimensional Characteristics**

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Wedging of size: occurs when the sides of the piece show a curvature either concave or convex.

Rectangularity: identifies if the tile is set square or not.

Edge curvature: occurs when one of the sides of the piece presents curvature, compared to the standard piece.

Center curvature: occurs when the center of the piece presents curvature, compared to the standard piece.

Warpage: is the difference of one of the four sides (end) related to the three sides leaned on the equipment, compared to the standard piece.

N - Nominal size (cm).

W - Work size (mm).

r - Average size of one piece (average of two sides if rectangular format and four sides when square format).

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**PHYSICAL PROPERTIES**

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Flexion resistance (N/mm <sup>2</sup> )	≥ 22
Breaking strength (N)	≥ 1000
Moisture expansion (mm/m)	≤ 0,60
Resistance to surface abrasion (PEI)	3
Crazing resistance	Guaranteed

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**DYNAMIC COEFFICIENT OF FRICTION**

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Dynamic coefficient of friction: Class I

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**Definition - Dynamic coefficient of friction**

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Class	Dynamic Coefficient of Friction - Wet	Recommended indication
I	< 0,40	Suitable for normal installations
II	≥ 0,40	Recommended where slip resistance is required

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### CHEMICAL PROPERTIES

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Resistance to household chemicals and swimming pool salts - Ammonium Chloride 100g/L	≥GB
Resistance to household chemicals and swimming pool water - Sodium Hypochlorite 20mg	≥GB
Acid - low concentration - chloridric acid 3%	≥GLB
Acid - low concentration - citric acid 100g/L	≥GLB
Alkalis - low concentration - potassium hydroxide 30g/L	≥GLB
Resistance to staining - Green Chrome (40% in oil)	≥Class 3
Resistance to staining - Olive Oil	≥Class 3
Resistance to staining - Alcohol iodine (13g / L)	≥Class 3

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*Definition - Chemical Resistance*

Codes of classification: XYZ (Ex: GHA)

X – One letter: G or U, glazed or unglazed  
Y – One letter: H or L, high or low concentration  
Z – One letter: Chemical resistance class:  
                  A = High  
                  B = Medium  
                  C = Low

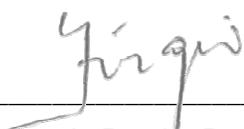
*Definition - Resistance to Stain*

Class 5 - The stain can be removed easily.  
Class 4 - The stain can be removed with a light chemical product.  
Class 3 - The stain can be removed with a strong chemical product.  
Class 2 - The stain can be removed with solvent.  
Class 1 - The stain can not be removed.

**Attention:**

- Sand may produce scratches on any type of surface covering (stone, wood, vinyl or ceramic tiles). Therefore, ceramic tiles are not warranted against scratches, especially concerning glossy surface products.
- Special care is recommended during the application and its use
- In residential areas, we recommend to protect the base of furniture and appliances.
- Product manufactured by the wet process.

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Cocal do Sul – SC – Brazil



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