Eliane S/A Revestimentos Cerâmicos

Rua Maximiliano Gaidzinski 245
88845-000  Cocal do Sul - SC - Brasil
Tel + 55 48 3447 7981  Fax + 55 48 3447 7706
www.eliane.com

**eliane**

# *TECHNICAL CHARACTERISTICS OF PRODUCT*
**The characteristics of the product specified in this technical report meet the specification and test methods according to norm NBR 13818 and ISO 13006 requirements.**

## PRODUCT SPECIFICATION

| | |
|---|---|
| *Reference* | **PATCHWORK LADRILHO MA 20X20** |
| *Product Code* | 8035384 |
| *Nomimal Size (N)* | 20 cm x 20 cm |
| *Work Size (W)* | 200,0 mm x 200,0 mm |
| *Thickness* | 6,0 mm |
| *Water Absorption* | BIII    (> 10,0%) |
| *Shade Variation* | V3 |
| *Application Joint* | 2,0 mm |
| *Coverage Area* | 1,72 m²/cx |
| *Number of pieces per box* | 43 |

## DIMENSIONAL CHARACTERISTICS

| | | |
|---|---|---|
| Deviation on W in relation to N (%) | ± 2,00 | (max. ±5,0 mm) |
| Deviation on r1 in relation to W (%) | ± 0,50 | (max. ±2,0 mm) |
| Deviation on e in relation to eW  (%) | ± 10,0 | (max. ±0,5 mm) |
| Wedging of size - deviation in relation to W (%) | ± 0,30 | (max. ±1,5 mm) |
| Rectangularity - deviation in relation to W (%) | ± 0,50 | (max. ±2,0 mm) |
| Edge curvature - deviation in relation to W (%) | -0,30 / +0,50 | (max. -1,50 / +2,00mm) |
| Center Curvature - deviation in relation to W(%) | -0,30 / +0,50 | (max. -1,50 / +2,00mm) |
| Warpage - deviation in relation to W (%) | ± 0,50 | (max. ±2,0 mm) |

*Definition* - Dimensional Characteristics

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).

R - Average size of 10 pieces (average of two sides if rectangular format and four sides when square format).

**eliane**

## PHYSICAL PROPERTIES

| | |
|---|---|
| Flexion resistance (N/mm²) | ≥ 15 |
| Breaking strength (N) | ≥ 200 |
| Moisture expansion (mm/m) | ≤ 0,60 |
| Crazing resistance | Guaranteed |

## CHEMICAL PROPERTIES

| | |
|---|---|
| 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 |

*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.
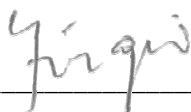Class 3 - The stain can be removed with a strong chemical product.
Class 2 - The stain can be removed with solvent.
Class 1 - The stain can not be removed.

**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.

- Product with Class I combustibility, according to NBR 15575.

August 22, 2017
Cocal do Sul – SC – Brazil

_____
Sergio Pereira Ruzza
Gerente de Tecnologia Cerâmica

_____
Angela Waterkemper Vieira
Analista Desenvolvimento de Processos