



| TECHNICAL FEATURES |                   |                |       |
|--------------------|-------------------|----------------|-------|
| Collecion          | Woodspirit indoor | Brand          | Ragno |
| Size (cm)          | 20x120            | Thickness (mm) | 10,5  |

Compliant with standard EN 14411:2012 annex G group Bla - UGL

Compliant with standard ISO 13006:2012 annex G group Bla - UGL

| Technical Features                                | Testing Method  | Meas. unit               | Average Typical Values      | Established limits  |
|---|-----------------|--------------------------|-----------------------------|---|
| <b>DIMENSIONAL PROPERTIES AND SURFACE QUALITY</b> |                 |                          |                             |   |
| Dimensions  |                 |                          |                             | Nominal Length of edge N (cm) $7 \leq N < 15$ Nominal Length of edge N (cm) $N \geq 15$ |
| Length and width (*)                              | ISO 10545-2     | (mm)<br>(%)              | Complies with the standards | $\pm 2\%$ (max 5mm) $\pm 2\%$ (max 5mm) $\pm 2\%$ (max 5mm)                             |
| Length and width (**)                             |                 |                          | Complies with the standards | $\pm 0,9$ mm $\pm 0,6\%$ $\pm 2,0$ mm   |
| Thickness   |                 |                          | Complies with the standards | $\pm 0,5$ mm $\pm 5\%$ $\pm 0,5$ mm   |
| Straightness of sides                             |                 |                          | Complies with the standards | $\pm 0,75$ mm $\pm 0,5\%$ $\pm 1,5$ mm  |
| Rectangularity                                    |                 |                          | Complies with the standards | $\pm 0,75$ mm $\pm 0,5\%$ $\pm 2,0$ mm  |
| Surface Flatness c.c - e.c. - w.                  |                 |                          | Complies with the standards | $\pm 0,75$ mm $\pm 0,5\%$ $\pm 2,0$ mm  |
| Surface Quality                                   |                 |                          | (%)                         | Complies with the standards   |
| <b>PHISICAL PROPERTIES</b>                        |                 |                          |                             |   |
| Water absorption                                  | ISO 10545-3     | (%)                      | $\leq 0,5$                  | $E_b \leq 0,5$ (Individual maximum value 0,6%)  |
| Modulus of rupture                                | ISO 10545-4     | (N/mm <sup>2</sup> )     | $\geq 35$                   | $R \geq 35$ (Individual minimum value 32 N/mm <sup>2</sup> )                            |
| Breaking strenght                                 | ISO 10545-4     | (N)                      | $\geq 1300$                 | $\geq 1300$ (Thickness $\geq 7,5$ mm) $\geq 700$ (Thickness $< 7,5$ mm)                 |
| Resistance to deep abrasion                       | ISO 10545-6     | (mm <sup>3</sup> )       | $\leq 175$                  | $\leq 175$  |
| Resistance to surface abrasion                    | Internal Method |                          | Intended use - Class H      |   |
| Linear thermal expansion coefficient              | ISO 10545-8     | ( $\times 10^{-6}$ / °C) | $\leq 9$                    | Declared value (EN 14411:2012)<br>Testing Method available (ISO 13006:2012)             |
| Thermal shock resistance                          | ISO 10545-9     |                          | Complies with the standards | Declared value (EN 14411:2012) ****<br>Test Method available (secondo ISO 13006:2012)   |
| Frost resistance                                  | ISO 10545-12    |                          | Complies with the standards | Pass according to EN ISO 10545-1 (EN 14411:2012)<br>Required (ISO 13006:2012)           |
| Recation to fire                                  | -               | -                        | Floor/Wall Class A1 FL / A1 | Class A1 or Class A1 FL (EN 14411:2012)   |
| Colour resistance to light exposure               | DIN 51094       |                          | Complies with the standards | No sample must show noticeable colour modifications.                                    |



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|---|----------------|------------|------------------------|---|
| CHEMICAL PROPERTIES   |                |            |                        |   |
| Resistance to chemicals for household use and swimming pool salts | ISO 10545-13   |            | UA                     | UB Minimum (EN 14411:2012) UB Minimum (ISO 13006:2012)                      |
| Resistance to low concentrations of acids and alkalis             | ISO 10545-13   |            | ULA-ULB                | Declared value (EN 14411:2012)<br>Testing Method available (ISO 13006:2012) |
| Resistance to high concentrations of acids and alkalis            | ISO 10545-13   |            | UHA-UHB                | Declared value (EN 14411:2012)<br>Testing Method available (ISO 13006:2012) |
| Stain resistance  | ISO 10545-14   |            | Class 5                | Declared value (EN 14411:2012)<br>Testing Method available (ISO 13006:2012) |

| ANTISLIPPERY PROPERTIES                |                                     |  |              |   |
|--|-------------------------------------|--|--------------|---|
| Slipperiness Resistance: Ramp Method   | DIN 51130<br>B.G.R. 181             |  | R9           | from R9 to R13  |
| Slipperiness Resistance: B.C.R.        | D.M. N.236<br>14/6/89               |  | $\mu > 0,40$ | $\mu > 0,40$  |
| Slipperiness Resistance: Pendulum      | ENV 12633 BOE<br>N.74 del 2006      |  | Class 2      | from Class 0 to Class 3   |
| Slipperiness Resistance: Pendulum      | BS7976-2:2002 /<br>BSEN13036-4:2011 |  | >36          | 0 - 24 Slippery; 25 - 35 Moderately slippery; 36+ Low slipping risk |
| Dynamic coefficient of friction (DCOF) | ANSI A137.1:2012                    |  | >0,42        | $\geq 0,42$   |

\* The work size shall be chose, for non-modular tiles, so that the difference between the work size and the nominal size is:

\*\* The deviation, in percent, of the average size for each tile (2 or 4 sides) from the work size..

\*\*\*\* See Table 2 for uses where it is applicable

c.c. Centre curvature, related to diagonal calculated from the work sizes

e.c. Edge curvature, related to the corresponding work sizes.

w. Warpage, related to diagonal calculated from the work sizes.