



| TECHNICAL FEATURES | |
|--------------------|--------------------|
| Collection: Eterna | Brand: Ragno |
| Size (cm): 30x90 | Thickness (mm): 10 |

Compliant with standard EN 14411:2016 annex L group BIII - GL

Compliant with standard ISO 13006:2018 annex L group BIII - GL

| Technical Features | Testing Method | Meas. unit | Average Typical Values | Established limits | |
|---|----------------|----------------------|-----------------------------|---|----------------------------------|
| DIMENSIONAL PROPERTIES AND SURFACE QUALITY | | | | | |
| Dimensions | | | | Nominal Length of edge N (cm) 7≤N<15 Nominal Length of edge N (cm) N≥15 | |
| Length and width (*) | ISO 10545-2 | (mm) (%) | Complies with the standards | ±2% (max 5mm) ±2% (max 5mm) ±2% (max 5mm) | |
| Length and width (**) | | | | | |
| Not Rectified | | | Complies with the standards | ± 0,75 mm | ±0,5 % ±2,0 mm |
| Rectified | | | | ± 0,4 mm | ±0,3 % ±1,0 mm |
| Thickness | | | | | |
| Not Rectified | | | Complies with the standards | ±0,5 mm | ±10 % ±0,5 mm |
| Rectified | | | | ±0,5 mm | ±10 % ±0,5 mm |
| Straightness of sides | | | | | |
| Not Rectified | | | Complies with the standards | ±0,5 mm | ±0,3 % ±1,5 mm |
| Rectified | | | | ±0,4 mm | ±0,3 % ±0,8 mm |
| Rectangularity | | | | | |
| Not Rectified | | | Complies with the standards | ±0,75 mm | ±0,5% ±2,0 mm |
| Rectified | | | | ±0,4 mm | ±0,3% ±1,5 mm |
| Surface Flatness c.c - e.c. | | | | | |
| Not Rectified | | | Complies with the standards | +0,75 mm -0,50 mm | +0,5 % -0,3 % +2,0 mm -1,5 mm |
| Rectified | | | | ±0,6 mm | ±0,4% ±1,8 mm |
| Surface Flatness w. | | | | | |
| Not Rectified | | | Complies with the standards | ±0,75 mm | ±0,5 % ±2,0 mm |
| Rectified | | | | ±0,6 mm | ±0,4% ±1,8 mm |
| Surface Quality | | | | | Complies with the standards |
| PHYSICAL PROPERTIES | | | | | |
| Water absorption | ISO 10545-3 | (%) | > 10 | Eb>10 (Individual minimum value 9%) | |
| Modulus of rupture | ISO 10545-4 | (N/mm ²) | ≥ 15 | R ≥15 (Thickness < 7,5 mm) R ≥12 (Thickness ≥7,5 mm) | |
| Breaking Strength | ISO 10545-4 | (N) | ≥ 600 | ≥600 (Thickness ≥7,5 mm) ≥200 (Thickness < 7,5 mm) | |
| Linear thermal expansion coefficient | ISO 10545-8 | (x(10)-6/°C) | ≤ 9 | Declared value (EN 14411:2016) Test Method available (ISO 13006:2018) | |
| Thermal shock resistance | ISO 10545-9 | | Complies with the standards | Declared value (EN 14411:2016) **** Test Method available (ISO 13006:2018) | |
| Crazing Resistance | ISO 10545-11 | | Complies with the standards | Pass according to EN ISO 10545-1 (EN 14411:2016) Required (ISO 13006:2018) | |
| Reaction to fire | - | - | Wall Class A1 | Class A1 or Class A1 FL (EN 14411:2016) | |
| Colour resistance to light exposure | DIN 51094 | | Complies with the standards | No sample must show noticeable colour modifications. | |


TECHNICAL FEATURES

| | |
|--------------------|--------------------|
| Collection: Eterna | Brand: Ragno |
| Size (cm): 30x90 | Thickness (mm): 10 |

CHEMICAL PROPERTIES

| | | | | |
|---|---------------------------|---|-------------|--|
| Resistance to chemicals for household use and swimming pool salts | ISO 10545-13 | | A | GB Minimum (EN 14411:2016) GB Minimum (ISO 13006:2018) |
| Resistance to low concentrations of acids and alkalis | ISO 10545-13 | | LA-LB | Declared value (EN 14411:2016) Test Method available (ISO 13006:2018) |
| Resistance to high concentrations of acids and alkalis | ISO 10545-13 | | HA-HB | Declared value (EN 14411:2016) Test Method available (ISO 13006:2018) |
| Stain resistance | ISO 10545-14 | | Class 5 | Minimum class 3 (EN 14411:2016) Minimum class 3 (ISO 13006:2018) |
| Reduction of bacterial colonies (a) | ISO 22196 (JIS Z 2801) | % | Up to 99,9% | |

* 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.

a. Antibacterial activity is measured by quantifying the survival of bacterial cells which have been held in intimate contact for 24 hours at 35°C with a surface that contains an antibacterial agent. The antibacterial effect is measured by comparing the survival of bacteria on a treated material with that achieved on an untreated material.



TECHNICAL FEATURES

Collection: Eterna

Brand: Ragno

Size (cm): 30x90

Thickness (mm): 10

[PAGINA VOLUTAMENTE LASCIATA IN BIANCO]
[PAGE INTENTIONALLY LEFT BLANK]
[PAGINA DEJADA EN BLANCO INTENCIONADAMENTE]
[CETTE PAGE A ETE LAISSEE DELIBEREMENT BLANCHE]
[SEITE WURDE ABSICHTLICH LEER GELASSEN]