

Technical Data Sheet

SILESTONE®
FAMILIES A - B - C - D

Family A

Alpina White 08, Blanco Maple 14, Desert Silver, Sienna Ridge 12.

Family B

Arden Blue, Blanco City, Blanco Norte 14, Calypso, Cemento Spa, Charcoal Soapstone, Copper Mist, Coral Clay Colour, Et. Marfil, Et. Marquina*, Et. Noir*, Et. Serena, Gris Expo, Helix, Kensho, Lagoon, Lyra, Marengo, Niebla, Night Tebas 18, Noka, Ocean Jasper F, Ocean Storm, Pietra, Rougui, Royal Reef, White Storm 14, Yukon.

Family C

Arcilla Red, Ariel, Bianco Calacatta, Blanco Orion, Blanco Zeus, Bohemian Flame, Brass Relish, Cala Blue, Camden, Cincel Grey, Cinder Craze, Classic Calacatta, Concrete Pulse, Corktown, Eclectic Pearl, Et. Bella, Et. Calacatta Gold, Et. D'Or, Et. Statuario, Ethereal Cloud, Ethereal Dusk, Ethereal Glow, Ethereal Haze, Ethereal Indigo, Ethereal Noctis, Faro White, Halcyon, Iconic White*, Lime Delight, Lusso, Miami Vena, Miami White 17, Nolita, Parisien Bleu, Pearl Jasmine, Poblenu, Posidonia Green, Romantic Ash, Seaport, Snowy Ibiza, Toscana Cream, Versailles Ivory, Victorian Silver, White Arabesque.

Family D

Stellar Night, Stellar Snow 13.

→ (*) With N-Boost technology.

According to EN 15285, EN 15286, ASTM, ANSI

All the data collected in this document are based on the results of periodic tests on representative products of each Technical Family carried out in accredited external laboratories.

Name and address of manufacturer

Company: Cosentino Industrial, S.A.U.

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**TECHNICAL
CONTENT**

REV. 28 - 01/2024

Silestone® Technical Data Sheet

According to EN 15285, EN 15286, ASTM, ANSI standards

| | Thickness | Unit | Family A | Family B | Family C | Family D |
|--------|-----------|--|------------|------------|------------|------------|
| Weight | 12 mm | Kg/m ² [lb/ft ²] | 30 [6.20] | 28 [5.80] | 26 [5.40] | 29 [6.00] |
| | 20 mm | | 49 [10.10] | 46 [9.50] | 43 [8.80] | 48 [9.80] |
| | 30 mm | | 74 [15.20] | 69 [14.20] | 64 [13.20] | 71 [14.60] |

| Test Standard | Determination | Unit | Family A | Family B | Family C | Family D |
|--|--------------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Adherence for cementitious adhesives EN 1348 | Initial adhesion | N/mm ² | 3.5 | 3.5 | 3.5 | 3.5 |
| | Standard deviation | | 0.20 | 0.20 | 0.20 | 0.20 |
| Thermal conductivity EN 10456 | Thermal conductivity | W/m · K | 1.3 | 1.3 | 1.3 | 1.3 |
| Water absorption, densities EN 14617-1 | Apparent density | Kg/m ³ | 2,453 | 2,287 | 2,133 | 2,364 |
| | Water absorption | % | ≤ 0.05 W ₄ | ≤ 0.05 W ₄ | ≤ 0.05 W ₄ | ≤ 0.05 W ₄ |
| Flexural strength EN 14617-2 | Flexural strength | MPa | ≥ 25 F ₃ | ≥ 40 F ₄ | ≥ 40 F ₄ | ≥ 25 F ₃ |
| Resistance to abrasion EN 14617-4 | Resistance to abrasion | mm | ≤ 33 A ₃ | ≤ 29 A ₄ | ≤ 33 A ₃ | ≤ 33 A ₃ |
| Thermal shock resistance EN 14617-6 | Change in dynamic elastic mod. | % | 13 | 2 | - 3.1 | - 2.3 |
| | Change in mass | | - 0.01 | 0.0 | 0.0 | 0.0 |
| Resistance to impact EN 14617-9 | Resistance to impact | cm / J | 28.5 / 2.8 | 66 / 6.5 | 151 / ≥ 14.8 | 25 / 2.4 |
| Thermal expansion coefficient EN 14617-11 | Thermal expansion coefficient | 10 ⁻⁶ · °C ⁻¹ | 29 | 34 | 45 | 27 |
| Electric resistivity EN 14617-13 | Volume | TΩ · m (1,000V) | 9.3 | 19.7 | 400 | 0.93 |
| | Surface | | 18.7 | 670 | 790 | 183 |
| Slip resistance (Polished) EN 14231 | PTV wet | - | 8 | 8 | 5 | 11 |
| | PTV dry | | 46 | 43 | 37 | 64 |
| Slip resistance (Suede) EN 14231 | PTV wet | - | 10 | 9 | 10 | NA |
| | PTV dry | | 44 | 40 | 40 | NA |
| Absorption and bulk gravity ASTM C97 | Water absorption | % | 0.01 | 0.02 | 0.04 | 0.03 |
| | Bulk specific gravity | lb/ft ³ | 154.1 | 149.8 | 136.4 | 148.9 |
| Modulus of rupture ASTM C99 | Dry conditions (d/thickness) | psi | 3,757 | 7,478 | 9,570 | 5,155 |
| | Wet conditions (d/thickness) | | 3,887 | 7,549 | 12,889 | 4,802 |
| Compressive strength ASTM C170 | Compressive strength | psi | 27,321 | 33,961 | 36,300 | 28,354 |

→ (A) Affected.

(NA) Not affected.

(*) Ongoing test.

Silestone® Technical Data Sheet

According to EN 15285, EN 15286, ASTM, ANSI standards

| Test Standard | Determination | Unit | Family A | Family B | Family C | Family D |
|--|-----------------------------------|------|--------------------------|--------------------------|--------------------------|--------------------------|
| Density ASTM C373 | Average water absorption | - | * | * | * | * |
| Thermal shock resistance ASTM C484 | Defects | - | No defects | No defects | No defects | No defects |
| Breaking strength ASTM C648 | Average breaking strength | lbf | 10,681 | 12,716 | 15,426 | 8,973 |
| Resistance to common household and cleaning chemicals ASTM C650-04 | Acetic acid, 3% (v/v) | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Acetic acid, 10% (v/v) | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Ammonium chloride, 100 g/L | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Citric acid solution, 30 g/L | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Citric acid solution, 100 g/L | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: A Pencil: NA | Visual: NA Pencil: NA |
| | Lactic acid, 5% (v/v) | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: A Pencil: NA | Visual: NA Pencil: NA |
| | Phosphoric acid, 3% (v/v) | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Phosphoric acid, 10% (v/v) | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Sulfamic acid, 30 g/L | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Sulfamic acid, 100 g/L | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| Resistance to chemicals: acids and bases ASTM C650-04 | Hydrochloric acid sol., 3% (v/v) | | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Hydrochloric acid sol., 18% (v/v) | | Visual: NA Pencil: NA | Visual: A Pencil: NA | Visual: NA Pencil: NA | Visual: NA Pencil: NA |
| | Potassium hydroxide, 30 g/L | | Visual: NA Pencil: NA | Visual: A Pencil: NA | Visual: A Pencil: NA | Visual: A Pencil: NA |
| | Potassium hydroxide, 100 g/L | | Visual: NA Pencil: NA | Visual: A Pencil: NA | Visual: A Pencil: NA | Visual: A Pencil: NA |
| Flexural properties white ceramic materials ASTM C674 | - | psi | 4,522 | 7,805 | 10,986 | 5,493 |
| Flexural strength ASTM C880 | Dry conditions | | 4,039 | 5,857 | 7,570 | 4,120 |
| | Wet conditions | | 4,526 | 7,887 | 11,815 | 5,060 |
| Resistance to abrasion ASTM C1353 | Average index of abrasion, lw | - | 260 | 179 | 111,8 | 273 |

→ (A) Affected.

(NA) Not affected.

(*) Ongoing test.

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| Test Standard | Determination | Unit | Family A | Family B | Family C | Family D |
|---|---------------------------------------|------|----------------------|----------------------|----------------------|----------------------|
| Resistance to staining ASTM C1378-04 | Contrasting grout | | Not affected | Not affected | Not affected | Not affected |
| | Black carbon lamp | | Not affected | Not affected | Not affected | Not affected |
| | Waterproof black ink | | Not affected | Not affected | Not affected | Not affected |
| | Washable ink | - | Not affected | Not affected | Not affected | Not affected |
| | Potassium permanganate sol., 1% (v/v) | | Not affected | Not affected | Not affected | Not affected |
| | Methylene blue sol., 1% (v/v) | | Not affected | Not affected | Not affected | Not affected |
| Lineal thermal expansion ISO 10545-8 | - | - | $2.92 \cdot 10^{-5}$ | $2.73 \cdot 10^{-5}$ | $3.48 \cdot 10^{-5}$ | $2.35 \cdot 10^{-5}$ |
| Dynamic coefficient of friction ANSI A326.3 | - | DCOF | 0.49 | 0.51 | 0.46 | 0.32 |

→ (A) Affected. (NA) Not affected. (*) Ongoing test.

Silestone® Fire Reaction

According to EN 13501-1 standard

| Test Standard | Determination | Applicable colors |
|------------------------------------|---------------|--|
| Fire reaction EN 13501-1 | Class | A2 Alpina White 08, Blanco Maple 14, Sienna Ridge 12, Arden Blue, Blanco City, Cemento Spa, Copper Mist, Gris Expo, Negro Tebas 18, Niebla, Noka, Stellar Blanco 13, Stellar Grey, Stellar Negro |
| | | B Arcilla Red, Ariel, Bianco Calacatta, Bianco River, Blanco Norte 14, Blanco Orion, Blanco Zeus, Bohemian Flame, Brass Relish, Cala Blue, Calypso, Camden, Charcoal Soapstone, Cincel Grey, Cinder Craze, Classic Calacatta, Concrete Pulse, Coral Clay Colour, Corktown, Desert Silver, Eclectic Pearl, Et. Bella, Et. Calacatta Gold, Et. D'Or, Et. Marfil, Et. Marquina, Et. Noir, Et. Serena, Et. Statuario, Ethereal Cloud, Ethereal Dusk, Ethereal Glow, Ethereal Haze, Ethereal Indigo, Ethereal Noctis, Faro White, Halcyon, Helix, Iconic White, Kensho, Lagoon, Lime Delight, Lusso, Lyra, Marengo, Miami Vena, Miami White 17, Nolita, Ocean Jasper F, Ocean Storm, Parisien Bleu, Pearl Jasmine, Pietra, Poblenu, Posidonia Green, Romantic Ash, Rougui, Royal Reef, Seaport, Snowy Ibiza, Toscana Cream, Versailles Ivory, Victorian Silver, White Arabesque, White Storm 14, Yukon |