



# PEGOLAND® PROFESIONAL MAX S1



## DESCRIPTION

Single-component, lightweight, high-performance, cementitious adhesive with mixed binders and excellent workability, low dust emission, low VOC emission, endowed with flexibility and high adhesion, with reduced slip and extended open time, for the installation of interior and exterior floors and walls. This adhesive is particularly recommended for the installation of façades, large surface floors and radiant heating floors. Suitable for gypsum or anhydrite substrates.

## TECHNICAL CHARACTERISTICS

- High-strength cement-based product, with selected aggregates, additives and synthetic resins that guarantee high bond strength, excellent workability and resistance to ageing.
- The use of local raw materials in the production of this product, coupled with a short distribution circuit, actively contributes to a lower emission of greenhouse gases, promoting environmental care.
- The product incorporates recycled raw materials and requires a reduced amount of water per square meter in its consumption, making it a product that contributes to a more sustainable and environmentally friendly economy.



# PEGOLAND PROFESIONAL RANGE

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### ADVANTAGES AND USES

- High-performance adhesive, approximately 60% more efficient than conventional adhesives.
- Specifically formulated for quick and easy spreading due to its smooth texture, making it the easiest adhesive to apply in the market.
- Creamy aspect with excellent consistence which makes it easy to apply.
- Excellent workability, rheologically improved with high stability and outstanding performance. Technologically advanced, compatible with a broad spectrum of substrates.
- Stable across a wide mixing range.
- High thixotropic efficiency, providing greater convenience and requiring less effort.
- The 15 kg bags are easier to handle than traditional 25 kg bags, resulting in a significant advantage for safer and healthier working conditions, as well as transportation cost savings.
- A product that significantly reduces the dust generated during the mixing process, especially suitable for indoor environments.
- Due to its water retention power, there is no need to moisten the substrate.
- Low emission of VOC's.
- Reduced slip, excellent initial adhesion.
- Extended open time, it allows the rectification of pieces. Deformable. S1 Type Classification according to EN 12002.
- High moistening capacity.
- Application thicknesses up to 15 mm without loss.
- Adhesion of all types of ceramic pieces (double-fired, single-fired, clinker, etc.), porcelain stoneware, marble, granite and natural stone.
- Suitable for interior and exterior areas. Façades.
- Adhesion of large-format pieces, bonding of extensive surfaces with heavy traffic.
- Swimming pools renderings.
- Refrigeration chambers renderings.

### SUITABLE SUBSTRATES

- Conventional substrates based on cement, gypsum or anhydrite in which primers are not required.
- Ceramic installation on interior floors and walls with radiant heating floors.
- Installation of ceramics on cementitious waterproofing from the MORCEM DRY range.
- All types of plasterboard partitions (PYL type), large-format ceramic brick, concrete, cellular concrete, fibre-cement, gypsum board, self-levelling mortars and pastes.
- Overlay on marble, granite, terrazzo, natural stone and all types of ceramic substrates for interior and exterior flooring and interior walls.
- Do not apply on top of paints.
- Substrates must be resistant enough, stable, sound and clean. Free of dust, release agents, organic products, etc.
- All substrates must have the appropriate flatness (maximum tolerance deviation of  $\pm 3$  mm measured under a 2-meter straight edge). If this is not the case, make screeds of up to 5 mm with the same product 48 hours before gluing. For a greater thickness apply:
  - On screeds: NIVELAND 10R o PAVILAND RECRECIDO AUTONIVELANTE levelling paste, according to substrate and need.
  - On flooring: Use regularization mortars with adequate tensile strength and with a curing shrinkage already completed. In case of heavy heat, wind or very absorbent substrates, it is advisable to moisten the substrate and wait until the water film is totally absorbed.
- In case of heavy heat, wind or very absorbent substrates, it is advisable to moisten the substrate and wait until the water film is totally absorbed.
- In exterior floors, the substrate must have a slope equal or greater than 1%.
- Do not apply in areas in contact with water or high sulphate content moisture.
- All substrates must comply with the specifications outlined in section 6.4 of UNE 138002 standard.

### APPLICATION PROCEDURE

- Add between 32-40% of water (approx. 4.8 - 6.0 litres per each 15 kg sack) and mix manually or mechanically until getting a homogeneous and workable consistency.
- Let the paste rest around 5 min. then mix again.
- Spread the kneaded product on the substrate with the help of a trowel on a maximum extension of 2 m<sup>2</sup>.
- Comb the area with a notched trowel to level the thickness (Check table).
- Install the tiles on the fresh adhesive, pressing and moving them until getting a complete smashing of the grooves and the proper adhesion of all the ceramic surface. Periodically check the stickiness of the adhesive by lifting a previously laid tile, if the appearance of a film without transfer on the surface of the adhesive or dehydration of the adhesive is observed, proceed to remove the material and apply a new

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### NOTCHED-TROWEL PANEL

product.

- Installation of tiles by back buttering method outdoors, for tiles with more than 45 cm sides, on floors for commercial or industrial use. If there is underfloor heating, in the laying of ceramic tiles, if levelling systems are used or if the tiles have a relief that may interfere the gluing process.
- Respect the placement joints between tiles as indicated in section 7.7 of UNE 138002 standard. For interior and pool areas, the joint width should be  $\geq (1.5 - 3)$  mm, and for exterior areas, the joint width should be  $\geq (3 - 5)$  mm. This depends on the type of installation and the larger side of the tile being installed.
- Joints should be refilled after 24 hours in vertical parameters and 48 hours after in floors.
- Use a suitable MORCEMCOLOR range mortar taking into account the type of joint.

NOTE: The shorter the time between combing and laying the tile, the better results will be obtained.

Maximum tiles weight in vertical parameters: 50 kg/m<sup>2</sup>

| Type of tile                                                                                                                                                                          | Longer side cm | Trowel used for the application of the adhesive to the substrate | Trowel used for the application of the adhesive On the back side of the tile |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------|------------------------------------------------------------------------------|
| Mosaic                                                                                                                                                                                | $\leq 10$ cm   | V 3                                                              | -                                                                            |
|                                                                                                                                                                                       | $\leq 20$ cm   | U 6                                                              | -                                                                            |
|                                                                                                                                                                                       | $\leq 30$ cm   | U 6                                                              | -                                                                            |
|                                                                                                                                                                                       | $\leq 45$ cm   | U 8                                                              | -                                                                            |
| Ceramic tile                                                                                                                                                                          | $\geq 45$ cm   | U 8                                                              | Smooth                                                                       |
|                                                                                                                                                                                       | $\leq 120$ cm  | U 10 - R 10                                                      | Smooth                                                                       |
|                                                                                                                                                                                       | $\geq 120$ cm  | U 12 - R 12                                                      | Smooth / V 3 / U 3                                                           |
| Ceramic sheet                                                                                                                                                                         | $\leq 90$ cm   | U 6                                                              | Smooth                                                                       |
| >3 mm - $\leq 6$ mm                                                                                                                                                                   | $\leq 260$ cm  | U 8                                                              | Smooth / V 3 / U 3                                                           |
| Ceramic sheet                                                                                                                                                                         | $\leq 360$ cm  | U 10                                                             | Smooth / V 3 / U 3                                                           |
| NOTE 1: In the case of extruded tiles or those with a pronounced back, a back buttering method is always required using the smooth side of the trowel, regardless of the tile format. |                |                                                                  |                                                                              |

### RECOMMENDATIONS

- The successful installation of ceramic tiles can only be ensured through careful planning. Therefore, we recommend consulting the current national standards in each country, such as the UNE 138002 standard in Spain, which provides specifications for material selection, proper planning, use, and installation to achieve the required levels of quality, performance, and durability.
- Do not apply below 5°C or above 35°C, and avoid application in conditions at risk of frost, rain, strong winds, or direct sunlight. Under extreme weather conditions (high wind or high temperatures) drying occurs faster.
- Temperatures, ventilation, absorption of the substrate and coating materials can vary the workability and setting times of the adhesive.
- Never apply with the "by dots" technique.
- Respect the movement joints (structural, contraction, expansion, and perimeter joints) as indicated in section 7.8 of UNE 138002 standard. These joints can be addressed by using prefabricated joints or filling them with an elastic sealant from the PUMALASTIC range.

### Expansion joint sizing

| Scope of application                                                                                                  | Location and dimensions                                                                                                                                                                       | Joint width mm |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Exterior walls                                                                                                        | <ul style="list-style-type: none"> <li>- Below each floor slab</li> <li>- Separation length 3 m - 4 m linear</li> <li>- Maximum regular area 16 m<sup>2</sup></li> </ul>                      | ≥ 8 mm         |
| Interior floors                                                                                                       | <ul style="list-style-type: none"> <li>- Respect open contraction joints.</li> <li>- Otherwise: linear separation lengths ≤ 8 m.</li> <li>- Maximum regular area. 40 m<sup>2</sup></li> </ul> | ≥ 5 mm         |
| Exterior floors                                                                                                       | <ul style="list-style-type: none"> <li>- Separation length 2.5 m - 5 m linear</li> <li>- Maximum regular area. 16 m<sup>2</sup></li> </ul>                                                    | ≥ 8 mm         |
| Singular points                                                                                                       | <ul style="list-style-type: none"> <li>- Door steps</li> <li>- Changes of floor</li> </ul>                                                                                                    | ≥ 8 mm         |
| NOTE: When these joints affect all layers of the ceramic system, they must meet the conditions of contraction joints. |                                                                                                                                                                                               |                |

### Sizing of perimeter joints

| Scope of application                                                               | Location and dimensions                                                                                                          | Joint width mm |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------|
| Interior walls                                                                     | <ul style="list-style-type: none"> <li>- Perimeter joints</li> <li>- Wall /ceiling joint</li> </ul>                              | ≥ 8 mm         |
|                                                                                    | <ul style="list-style-type: none"> <li>- Wall / wall joint</li> </ul>                                                            | ≥ 5 mm         |
| Exterior walls                                                                     | <ul style="list-style-type: none"> <li>- Interior corners of the building</li> <li>- Exterior corners of the building</li> </ul> | ≥ 8 mm         |
| Interior floors                                                                    | <ul style="list-style-type: none"> <li>- Perimeter joints and joints with other elements or devices</li> </ul>                   | ≥ 8 mm         |
| <ul style="list-style-type: none"> <li>- Monolithic</li> <li>- Floating</li> </ul> |                                                                                                                                  |                |
| Exterior floors                                                                    | <ul style="list-style-type: none"> <li>- Perimeter joints and joints with other elements or devices</li> </ul>                   | ≥ 8 mm         |
| Singular points                                                                    | <ul style="list-style-type: none"> <li>- Joints at encounters with carpentry</li> </ul>                                          | ≥ 5 mm         |

- On façades and exterior walls, the material will always be placed with anchoring or mechanical fixing when any of the following conditions are met: format greater than 2400 cm<sup>2</sup>, one side of the piece measures more than 60 cm, weight greater than 40 kg/m<sup>2</sup> or height greater than 3 meters.
- For façades, when placing the upper row of tiles on the crown, it is advisable to apply the adhesive with grooves horizontally to prevent water that may eventually enter the system from descending through vertical grooves, affecting a larger area.
- Anhydrite screeds must be perfectly dry (maximum residual moisture 0.5%), hard enough and free of dust or superficial grout, in the latter case, it must be removed by sanding.
- On floors with radiant heating, apply when the substrate is at room temperature (between 5°C and 30°C). In floors with underfloor heating, it must be turned off at least 48 hours in advance and it must be turned on gradually after at least 7 days from the installation of the flooring and the grouting operation.
- In applications on plasterboard partitions, make sure the substrate is well fixed to prevent movement.
- Remove any spare or bad adhered pieces in ceramic floors and fill the gaps with mortar one day before the actual application of the product. Make sure the old ceramic is free from greases or waxes, if necessary, mill the surface until the old pottery loses its shine. In case of doubt, carry out a preliminary test to establish the suitability of the solution provided.
- In cold rooms, these must be kept off until the correct curing of the adhesive occurs for, at least 7 days, depending on environmental conditions.
- Swimming pools can be refilled 7 days after applying the adhesive. The water tightness of the pool must be ensured by the construction of the pool itself.
- For pieces with fibreglass mesh reinforcement glued on the back, consult technical department. Use PEGOLAND® PROFESIONAL ELITE C2 TE S2 or PEGOLAND FLEX RECORD for slate.
- Pieces that can get stained due to their high-water absorption must be placed with fast-setting adhesives.

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### PACKAGING AND STORAGE

### TECHNICAL DATA

Use PEGOLAND FAST FLEX C2FTE S1.

25Kg of laminated paper sacks.

Store up to 1 year in its original closed packaging, away from extreme weather conditions and humidity.

(Statistic results obtained under standard conditions)

|                                                |                                                                                             |
|------------------------------------------------|---------------------------------------------------------------------------------------------|
| Aspect                                         | WHITE dust                                                                                  |
| Adjusting time                                 | Approximately. 30 minutes (according to environmental conditions)                           |
| Life time of the paste                         | Approximately. 4 hours (according to environmental conditions)                              |
| Initial adhesion                               | $\geq 1.0 \text{ N/mm}^2$                                                                   |
| Adhesion after water immersion                 | $\geq 1.0 \text{ N/mm}^2$                                                                   |
| Adhesion after ageing caused by heat           | $\geq 1.0 \text{ N/mm}^2$                                                                   |
| Adhesion after ice / thaw cycles               | $\geq 1.0 \text{ N/mm}^2$                                                                   |
| Time for grouting of floors and light traffic. | 48 h.                                                                                       |
| Time for grouting of walls.                    | 24 h.                                                                                       |
| Time for pools filling.                        | 7 days                                                                                      |
| Service temperature                            | -30°C a 90°C                                                                                |
| Classification according to EN 12004           | C2 TE                                                                                       |
| Classification according to EN 12002           | S1                                                                                          |
| Approximate performance                        | Traditional application $\pm 1.8 \text{ kg/m}^2$<br>Back buttering $\pm 3.0 \text{ kg/m}^2$ |

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### CE MARK

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|                                                                                                                                                                                                                                                             |                           |
| 1377                                                                                                                                                                                                                                                                                                                                          |                           |
| GRUPO PUMA ESPAÑA SL<br>Av. Agrupación Córdoba, 17. 14014 Córdoba (Córdoba)                                                                                                                                                                                                                                                                   |                           |
| 24                                                                                                                                                                                                                                                                                                                                            |                           |
| PEGOLAND PROFESIONAL MAX S1 BLANCO                                                                                                                                                                                                                                                                                                            |                           |
| No.: 105309<br>EN-12004:2007+A1:2012                                                                                                                                                                                                                                                                                                          |                           |
| Improved deformable cementitious adhesive with reduced slip and extended open time, for the installation of interior and exterior floors, interior and exterior walls, façades, radiant heating floors systems, refrigeration chambers, large area floors and overlays, pool walls, and installation over cementitious waterproofing systems. |                           |
| Reaction to fire:                                                                                                                                                                                                                                                                                                                             | Class E                   |
| Adhesion:                                                                                                                                                                                                                                                                                                                                     |                           |
| - Initial adhesion to traction                                                                                                                                                                                                                                                                                                                | $\geq 1.0 \text{ N/mm}^2$ |
| Durability:                                                                                                                                                                                                                                                                                                                                   |                           |
| - Adhesion to traction after water immersion:                                                                                                                                                                                                                                                                                                 | $\geq 1.0 \text{ N/mm}^2$ |
| - Adhesion to traction after thermal ageing:                                                                                                                                                                                                                                                                                                  | $\geq 1.0 \text{ N/mm}^2$ |
| - Adhesion to traction after ice / thaw cycles:                                                                                                                                                                                                                                                                                               | $\geq 1.0 \text{ N/mm}^2$ |

### LEGAL DISCLAIMER

Instructions given on how to use the product are given based on our tests and knowledge and do not imply any commitment from GRUPO PUMA and do not exempt the user from checking and verifying the products before using them. Claims must be presented with the original packaging to allow an adequate traceability.

GRUPO PUMA is not responsible, under any circumstances, for the application of its products or constructive solutions by the applicator company or other subjects involved in the application and / or execution of the work in question, limiting the responsibility of GRUPO PUMA exclusively to possible damages attributable directly and exclusively to the products supplied, individual or integrated into systems, due to failures in their manufacture.

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