



# Ard f.lli raccanello s.p.a.

## Industria vernici e smalti

TECHNICAL SHEET **151**

CODE 0.559.

### **silrest bianco**

Silicate based paint for exteriors

#### **GENERAL PROPERTIES**

**SILREST** is a paint based on potassium silicate in aqueous solution, formulated in compliance with the VOB/C DIN 18363 2.4.6. regulation.

After application the soluble silicates react with the carbon dioxide in the air originating colloidal silicic hydrate which offers remarkable fixative powers. The silicic hydrate, reacts with the plaster's calcium salts producing silicate calcium.

The film free mineral nature offers good breathability & excellent bond on lime, cement mortar renders & civil plastering without flaking or detachment. **SILREST** is not thermoplastic so a low-dirt pick is guaranteed together with a mould and bacterial resistance thanks to its inorganic nature. **Silrest** features specific siloxanic additives resulting in a hydrophobic product which repels rain water whilst offering an optimum water vapour permeability.

These features in symbiosis with the aesthetical appealing effects offer an optimum product for the refurbishing of listed buildings & buildings of architectural interest.

#### **INSTRUCTIONS**

##### **Substrate preparation:**

- Bare walls: ensure the substrate has weathered for at least 28 days in order to avoid an excessive superficial calcic alkalinity: which would impede the silicate from penetrating in depth therefore forming a crust destined to detach.  
Remove dust, filth and any unsound parts. Ensure the wall is perfectly dry apply **Silrest** diluted 3 x 2 with **ISOREST**.  
Allow 24 hrs; apply the second layer of **SILREST** diluted with 30-40% of **ISOREST**.
- Chalky walls: apply a layer of **ISOREST** 0.076. thinned at 100-200% in water volume according to the absorption. Allow at least 24 hrs & apply a layer of **SILREST** mixed 3 x 2 in volume with **ISOREST**. After 24 hrs apply the last layer of **SILREST** diluted 30-40 % by volume with **ISOREST**.
- Walls with old lime paintwork: remove any unsound paintwork & efflorescence. Clean thoroughly & proceed as per bare surfaces.
- Walls with latex paintwork, non mineral paints & textured coatings: as the potassium silicate present in the product must react with the plaster, the same must be absolutely bare.  
Any traces of previous finishes must be removed using the most appropriate means (sanding, scraping etc.) Clean thoroughly & proceed as per bare surfaces.

However, said process can be avoided by using the intermediate filler SILREST INTERMEDIO 095.1010.

- Apply SILIARD PRIMER S 0.078. instead of ISOREST on surfaces exposed to driving rain in order to reduce water absorption.

**Application:**

- Roller application: dilute at 20-30% in volume with ISOREST.
- Do not apply under direct sunlight or at ambient or substrate temperature below + 8°C or above + 35°C.
- After application, exterior walls must be protected against rain until perfectly dry (usually after 48 hours at 20°C).
- Wash equipment immediately after use with water.
- Walls with efflorescence or subject to rising damp must be restored before application in order to guarantee adherence.
- Mask any parts (windows, ceramic pavements, casings etc.) which are not to be treated.
- Use protective eye wear during application.
- When different batches are used, it is advisable to mix the same in order to avoid differences in shades.
- The product has a 24 month stability if stored in the original packaging at a temperature between + 8°C & + 30°C.
- Use products in compliance with current Hygiene & Safety Regulations. Dispose of spent material/containers according to the same.
- Refer to the PSDS for further details.
- SILREST is compatible with the 16COLOURS tinting system.

**TECHNICAL DATA**

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| SPECIFIC WEIGHT                            | <b>1470 ± 50 g/l</b>                       |
| VISCOSITY AT 20°C                          | <b>15.000 ± 2000 cP</b>                    |
| DRYING AT 20°C                             | TOUCH DRY                                  |
|  | THROUGH DRYING                             |
|  | <b>2 hrs</b>                               |
|  | <b>24 hrs</b>                              |
| ASPECT                                     | <b>Matt</b>                                |
| CAPILLARY WATER ABSORPTION (DIN 52617) (1) | <b>W = 0,10 kg/m<sup>2</sup> x h0,5 √t</b> |
| PRODUCT                                    | <b>W. Sd = 0,0039 kg/√t</b>                |
| WATER VAPOUR PERMEABILITY (DIN 52615) (1)  | <b>WDD = 548,1 g/m<sup>2</sup> 24 hrs</b>  |
| THICKNESS OF THE EQUIVALENT AIR LAYER (1)  | <b>Sd = 0,039 m</b>                        |

**YIELD**

A 2 layer painting cycle (on smooth substrates with mean absorbance) implies a yield of 4 m<sup>2</sup>/l. We recommend testing on the specific substrate.

## SPECIFICATIONS

## SILICATE BASED PAINT FOR EXTERIORS

2 layer application on pretreated surfaces of protective paint based on potassium silicate in aqueous solution and light-fast outdoor resistant pigments in compliance with the Din 52617  $W \leq 0,5 \text{ kg/m}^2 \text{ h } 0,5$  & water vapour permeability in compliance with Din 52615  $Sd \leq 2 \text{ m}$  type SILREST with a minimum consumption of  $0,25 \text{ l/m}^2$ .

€/m<sup>2</sup>.

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This data herein were correct at the time of Quality Control & refer to standardized environmental conditions. The same are to be considered as a guide.  
Revision 2013/12



**ard · f.lli raccanello s.p.a. · industria vernici e smalti**

35129 PADOVA – Zona Ind.le Nord 1<sup>a</sup> Strada, 13 – Tel. 049.8060000 (5 linee)

Fax 049.773749 – [www.ard-raccanello.it](http://www.ard-raccanello.it) - E-mail: [ardspa@ard-raccanello.it](mailto:ardspa@ard-raccanello.it)