



## S 650

## DATA SHEET

Bio white undercoat for the restoration of damp masonry, for interiors and exteriors



Interior/Exterior



Sack



By hand



Spray

### Composition

S 650 is a white dry mortar made from natural lime, sulphate-resistant hydraulic binder and graded limestone sands.

### Supply

- special sacks with protection against moisture, approx. 25 kg

### Use

S 650 is used as a renovation undercoat for damp walls to promote the adhesion of the renovation plaster S 639 to the wall, by enhancing the anti-saline action of the latter.

### Substrate preparation

The masonry must be prepared by completely removing the existing plaster in the area where the work is being performed. The surface must be free of dust, dirt, salt efflorescence, etc. Any traces of oil, grease, wax, etc. as well as loose material must be removed before application.

### Mixing

S 650 is applied by hand or using plaster sprayers, such as FASSA, PFT, PUTZKNECHT, PUTZMEISTER, TURBOSOL and the like. For application by hand, add the product to the corresponding amount of clean water (as specified in the Technical Data) and mix by hand or using a mechanical stirrer until obtaining a mixture of the desired consistency. After mixing with water, the mortar must be applied within 2 hours. S 650 is applied in a single layer to thicknesses of 4-5 mm, so as to completely cover the substrate.

### Warnings

- Product for professional use.
  - Always consult the safety data sheet before use.
  - Avoid freezing and quick drying of the fresh grout. A temperature of +8°C is suggested as a minimum value for application and to obtain proper hardening of the plaster. Below this value, setting would be delayed excessively and below 0°C the fresh or partially hardened mortar could be broken up by frost.
  - After the S 650 undercoat, the damp masonry renovation cycle involves the application of the macro-porous plaster S 639 and renovation plaster S 605, both made from natural hydraulic lime.
  - For special situations, our Technical Service can evaluate the use of the product with partial coverage of the substrate.
- S 650 it must be used in its original state without the addition of foreign materials.**



### Storage

Keep dry for a period not exceeding 12 months. Once the product has expired, it must be disposed of in accordance with the current legislation.

### Quality

S 650 is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

### Technical Data

Thickness	4-5 mm
Granulometry	< 3 mm
Mixing water	26-28%
Yield	approx. 3-5 kg/m <sup>2</sup>
Density of the hardened mortar (EN 1015-10)	approx. 1,800 kg/m <sup>3</sup>
Flexural strength after 28 days (EN 1015-11)	approx. 4 N/mm <sup>2</sup>
Compressive strength after 28 days (EN 1015-11)	11 N/mm <sup>2</sup> (CSIV: > 6 N/mm <sup>2</sup> )
Water vapour diffusion resistance factor (EN 1015-19)	$\mu \leq 15$ (measured value)
Capillary water absorption coefficient (EN 1015-18)	W1 c $\leq 0.40$ kg/m <sup>2</sup> ·min <sup>0.5</sup>
Thermal conductivity coefficient (EN 1745)	$\lambda = 0.83$ W/m·K (tabulated value)
Resistance to sulphates	proved integral after 1 month's immersion in a sulphate environment
Modulus of elasticity after 28 days	approx. 13,000 N/mm <sup>2</sup>
Radioactivity index (UNI 10797/1999)	I = 0.44 ± 0.05
Compliant with standard EN 998-1	GP-CSIV-W1

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must check that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: [area.tecnica@fassabortolo.com](mailto:area.tecnica@fassabortolo.com), ES: [asistencia.tecnica@fassabortolo.com](mailto:asistencia.tecnica@fassabortolo.com), PT: [assistencia.tecnica@fassabortolo.com](mailto:assistencia.tecnica@fassabortolo.com), FR: [bureau.technique@fassabortolo.fr](mailto:bureau.technique@fassabortolo.fr), UK: [technical.assistance@fassabortolo.com](mailto:technical.assistance@fassabortolo.com)).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.