



## S 639

## DATA SHEET

Bio white plaster for the restoration of damp masonry, with marmorino effect, for interiors and exteriors



Interior/Exterior



Sack



By hand



Spray

### Composition

S 639 is a dry white plaster made from natural lime, sulphate-resistant hydraulic binder, marble powder, graded sands, water-repellent material and specific additives designed to improve workability, adhesion and breathability.

### Supply

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

### Use

S 639 is used as a base coat plaster with application by hand or machine for the restoration of damp masonry.

### Substrate preparation

The wall must be prepared by completely removing the existing plaster to at least one metre above the part where humidity is visible.

The surface must be free of dust, dirt, salt efflorescence, etc. Any traces of oil, grease, wax etc. as well as any crumbling parts must be removed beforehand. After washing a first time with water, using a pressure cleaner if necessary, the substrate must be left to dry in the air and allow any remaining salts to crystallise; these are then removed by dry brushing.

Apply S 650 restoration undercoat to the prepared surface.

### Mixing

S 639 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 for no more than 3 minutes, until obtaining a mixture of the desired consistency. After mixing with water, the mortar must be applied within 2 hours.

The plaster is applied from the bottom upwards and then levelled using an H-shaped or blade screed with horizontal and vertical movements so as to ensure a flat surface. Apply S 639 to a minimum thickness of 20 mm (minimum recommended thickness 30-40 mm).

For thicknesses exceeding 20 mm, the plaster must be applied in a series of layers. Apply subsequent layers once the previous layer has hardened. The underlying layers must be left rough, and therefore must be levelled by screed without compressing the product.



## Warnings

- Product for professional use.
- Always consult the safety data sheet before use.
- The fresh render must be protected against frost and quick drying. 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 considerably, and below 0°C the fresh or partially hardened plaster may be broken up by frost.
- Aerate the rooms thoroughly after application until the mortar is completely dry, avoiding excessive changes in temperature in the rooms.
- During the summer, on surfaces exposed to the sun, the plaster should be wetted for a few days after application.
- To ensure the maximum dehumidifying effect of the plaster it is most important to use finishing products with excellent breathability.
- All renovating plasters perform their function until the air pores are completely saturated with salt. Since the saturation speed varies according to the specific situation, the life of the renovating plaster cannot be specified in advance.

**S 639 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 639 is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

## Technical Data

Minimum thickness	20 mm
Granulometry	< 3 mm
Mixing water	17-19%
Yield	approx. 11.5 kg/m <sup>2</sup> with 10 mm thickness
Density of hardened mortar (EN 1015-10)	approx. 1,500 kg/m <sup>3</sup>
Compressive strength after 28 days (EN 1015-11)	approx. 3.5 N/mm <sup>2</sup>
Modulus of elasticity after 28 days	approx. 6,000 N/mm <sup>2</sup>
Water vapour diffusion resistance factor (EN 1015-19)	$\mu \leq 11$ (measured value)
Capillary water absorption coefficient (EN 1015-18)	$c \geq 0.3$ kg/m <sup>2</sup> after 24 h
Water penetration following the capillary absorption test (EN 1015-18)	$\leq 5$ mm
Thermal conductivity coefficient (EN 1745)	$\lambda = 0.53$ W/m·K (tabulated value)
Incorporated Air	approx. 25%
Radioactivity index (UNI 10797/1999)	$I = 0.40 \pm 0.05$
Class	R-CSII according to EN 998-1
Recycled/recovered/by-product content	The product contains some recycled/recovered/by-product. The relevant declaration is available on request.

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.