



Cementitious masonry mortar and plaster/ render for interiors and exteriors



Interior/Exterior



Sack



By hand



By machine

Composition

MS 20 is a dry premixed mortar composed of hydrated lime, Portland cement, graded sands and specific additives to improve workability and adhesion.

Supply

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

Use

MS 20 is used as a mortar for brick, concrete block walls, etc. and as a base coat to be applied by hand and machine on brick, concrete block, rough concrete walls, etc.

Application by plaster sprayer is recommended for smaller surfaces, evaluated according to environmental conditions, and taking into account the faster drying speed compared to a premixed plaster or render, such as KC 1.

Substrate preparation

For use as a plaster or render, the surface should be free from dust, dirt and salt efflorescence. Any traces of oil, grease, wax etc. must be removed beforehand. Smooth concrete surfaces must be dry and treated beforehand with primers, such as SP 22.

Joints between different elements must be reinforced using special alkali resistant fibreglass mesh; the mesh must not be attached directly to the masonry, rather must be embedded in the surface of the plaster or render. In order to obtain good quality plasters and renders and avoid excessive consumption of material, it is recommended to pay special attention to the construction of the walls; the joints between the bricks must be carefully filled, any holes or cracks in the wall must be closed beforehand, door and window frames must only protrude by a few millimetres. To ensure the walls are plumb, use corner guards or screeds on the corners and vertical guides on the walls.

Mixing

MS 20 is mixed and applied by hand, or using plaster sprayers such FASSA, PFT or the like.

For application by hand, add 19-21% clean water and mix in a cement mixer or, for small quantities, by hand or mechanical stirrer, for no more than 3 minutes. The mixed mortar must be applied within 2 hours.

Used as a plaster or render, MS 20 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. The product is applied in one single layer, to a thickness of 10 mm, and in two layers for greater thicknesses, up to 20 mm. Apply the second layer before the previous layer has hardened.

The surface of the plaster or render can be floated, in order to obtain a uniform and compact surface and close any cracks due to plastic shrinkage of the product. This is to be done between 45 minutes and 2 hours after application, depending on the environmental conditions and the type of surface. In interior rooms, the walls are finished by applying materials such as float finishes, smooth coats, mineral wall coatings, etc.



Warnings

- Product for professional use.
- The fresh mortar must be protected against frost and quick drying. As the hardening of the mortar depends on the hydraulic setting of the cement and the air setting of the lime, a temperature of +5°C is suggested as a minimum value for application and for obtaining proper hardening of the mortar. Below this value, setting would be delayed excessively and below 0°C the fresh or partially hardened mortar could be broken up by frost.
- In summer, on surfaces exposed to sunlight, the substrate should be moistened for a few days before plastering, continuing to moisten the plaster or render for several days after application.
- Application in strong winds can cause the formation of cracks and "burning" of the render. Precautions need to be taken in such conditions (protection of interiors, application of the plaster in two layers and smoothing the top layer carefully with a float etc.).
- The use of rough exterior finishes (such as wall coatings or IP 10) makes any hairline cracks less evident than with smooth finishes.
- For application on particular substrates (wood-cement panels, mesh, certain types of insulating walls etc.) we cannot guarantee results with no cracks. Please contact our Technical Department for advice on how to limit such problems. Nevertheless, it is advisable to consult the instructions of the supplier of the substrate.
- For renovation works on different kinds of substrates and with different plaster thicknesses, please contact our Technical Department to choose the most suitable product cycle.
- Paint, coverings and wallpaper etc. must only be applied after the plaster has completely dried and cured.
- Aerate the rooms thoroughly after application until the mortar is completely dry, avoiding excessive changes in temperature in the rooms.

MS 20 must only be used in its original state without the addition of other materials.

Storage

Store in a dry place for no longer than 12 months.

Quality

MS 20 is subjected to careful and constant testing in our laboratories. The raw materials used are rigorously selected and checked.

Technical Data

Specific weight of the powder	approx. 1,400 kg/m ³
Grading	< 1.5 mm
Mixing water	19-21%
Fresh mortar density	approx. 1,800 kg/m ³
Yield	approx. 15 kg/m ² with 10 mm thickness
Minimum thickness	10 mm
Compressive strength after 28 days (EN 1015-11)	> 2.5 N/mm ²
Density of hardened mortar (EN 1015-10)	approx. 1,650 kg/m ³
Water vapour diffusion resistance factor (EN 1015-19)	$\mu < 15$ (measured value)
Thermal conductivity coefficient (EN 1745)	$\lambda = 0.72$ W/m·K (tabulated value, P = 50%)
Compliant with standard EN 998-1	GP-CSII-W0
Compliant with standard EN 998-2	M 2,5
The performance values listed above are obtained by mixing the product with 20% water in a controlled temperature and humidity environment (20±1°C and 60±5% RH).	

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.