

MineralSanoPro[®]

THE UNIQUE, LONG-TIME APPROVED

SYSTEM FOR THE REHABILITATION OF MASONRY

AFFECTED BY MOISTURE AND SALT

- › rehabilitated rooms
for a **better living**



epasit[®]
Systems provide protection

THE ANNOYANCE <

The walls are moistened, the plaster crumbles away. In technical terminology this is called wall corrosion. The quality of living is reduced.

THE PROBLEM <

Moisture and salts destroy masonry and plaster.

This is no flaw, but a serious danger for the structure itself. Moist masonry does not have any thermal insulation. Thus, energy is lost.

THE CAUSE <

Water transports salts into the masonry. If the water evaporates, the salts crystallize and cause wall corrosion.

THE SOLUTION <

The perfect solution is a subsequent vertical and horizontal sealing in combination with the epasit system of renovation mortar MineralSanoPro®. Therefore, it is necessary to tune the various products and measures with respect to one another.

The sealings prevent the penetration and rising of further moisture into the masonry.

The epasit system of renovation mortar MineralSanoPro allows the natural dehydration of the masonry. The moisture does not reach the surface of the plaster, the salts will be absorbed within the epasit lpf-WTA white.

Thereby, the surface of the plaster remains dry and free from efflorescences. At the same time, the masonry is protected from further destruction in the long term.



> THE FEATURES

The subsequent horizontal sealing is applied by means of a chemical injection and causes that the moisture can no longer be sucked upwards inside the masonry. epasit lpf-WTA white possesses a high porosity and water vapour permeability. At the same time it is only slightly absorptive.



01 Salts which destroy a plaster



02 Salts which grow into the pores of epasit lpf-WTA white without causing damages

> FIELDS OF APPLICATION

Everywhere, where buildings or building components have to be dehumidified and protected against wall corrosion, such as in cellars and in the base area of dwelling houses and office buildings, of fortresses and castles, of churches and monasteries, in private and public buildings and above all in the

→ PERMANENT REHABILITATION

Moist masonry of old buildings is always affected by salts, which damage the building materials. If such a masonry is plastered with a conventional mortar damages will soon appear.

The reason for this are salts, which crystallize at the surface of the plaster or inside it. A complete sealing of the masonry with sealing plasters is also not useful, because thereby the vaporization zone of the water is shifted upwards. Thus the damage penetrates into areas where it has not been before.

For a permanent rehabilitation a material is necessary, which neither seals the water nor lets it through in a liquid form. Besides, it has to be resistant to salts, which damage the building material. Such a material is the *epasit* lpf-WTA white, which shows the following three main features: slight absorptive capacity, good water vapour permeability and a high pore volume.

IT IS VERY IMPORTANT THAT A COMPLETE SYSTEM OF MATERIALS TUNED WITH RESPECT TO ONE ANOTHER IS AVAILABLE.

The *epasit* system of renovation mortar * MineralSanoPro consists of a semiopaque coarse plaster, if necessary a base plaster, the *epasit* lpf-WTA white, and a finishing coat or colouring matching with the system. The minimum layer thickness of *epasit* lpf-WTA white is 20 mm.



- 01 Wall
- 02 Coarse plaster - *epasit* hb
- 03 *epasit* lpf-WTA white
- 04 Colouring - *epasit* spf

THE FUNCTIONALITY CAN BE EXPLAINED AS FOLLOWS:

epasit lpf-WTA white sucks the moisture out of the masonry for a few millimetres. The water evaporates inside the *epasit* lpf-WTA white. Because water vapour cannot transport dissolved salts, they crystallize and are absorbed in the porous structure of the *epasit* lpf-WTA white. Thereby, the surface of the plaster remains dry and free from efflorescences. In addition, the masonry is protected from further destruction by moisture and salts.

It still has to be kept in mind that *epasit* lpf-WTA white alone cannot solve all problems. It has to be a system of various products and measures tuned with respect to one another. Only then a sufficient protection can be guaranteed for many years.

epasit lpf-WTA white is used for more than 30 years now. Because of experiences and by means of tests the functions could be recognized and understood. The *epasit* systems of renovation mortar MineralSanoPro, to which has been awarded the WTA certificate, meet all technical requirements.

At present, many examples show that *epasit* lpf-WTA white resists a long time to moisture and salts and is thus working. A condition for it is a meticulous planning including preliminary examinations and the consideration of the limits of application, the selection of materials with a WTA certificate and their long-term proof test as well as the right processing by experienced or especially trained companies.

> living space
for a **better living**



01



02



03



04



05

- 01 **Horizontal sealing**
Grouting mortar / Injection
- 02 **Preparation of the substrate**
Knocking off of the plaster
- 03 **Bonding to the substrate**
Coarse plaster
- 04 **epasit Ipf-WTA white**
Manual / machine processing
- 05 **Preparation of the surface**
Levelling / colouring

> **BASIC FACTORS:**

The *epasit* system of renovation mortar * MineralSanoPro is applied on moist and saliferous masonry. Thus, moisture does not get to the surface of the plaster and the salts will be absorbed inside the plaster. However, it has to be considered that plaster alone cannot always solve all problems.

It has to be a system of various products and measures tuned with respect to one another. Only then a sufficient protection can be guaranteed. With MineralSanoPRO the *epasit* GmbH offers all components of such a system.

In order to be able to help the building, preliminary examinations are inevitable. The result will be included into a proposal for rehabilitation and into the further planning.

→ LONG-TERM PROOF TEST

The *epasit* system of renovation mortar * MineralSanoPro has been developed at the beginning of the seventies and did not have to be changed significantly since then. This means, the today's requests have already been met at that time. Thus, it is not surprising that objects, at which we applied the *epasit* system of renovation mortar MineralSanoPro decades ago, are still in a perfect condition today.

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parallel in a former stable with a high salination grade as well as on a very moist external masonry. In this connection clear differences appeared in the functionality and permanency of the single plasters. Concerning this comparison, the *epasit* GmbH did outstandingly well, what prove tests carried out after more than ten years.

EURONORM UND WTA-ZERTIFIKAT

In the beginning, planners and building owners viewed the renovation mortar plasters with scepticism. Today people know what is important. The WTA code of practice 'Systems of Protective Renderings' is regarded as an acknowledged set of rules. The *epasit* GmbH has been the first manufacturer, to whom was awarded the WTA certificate! (WTA = Wissenschaftlich-Technische Arbeitsgemeinschaft für Bauwerkserhaltung und Denkmalpflege, which means: International Association for Science and Technology of Building Maintenance and the Preservation of Monuments) The *epasit* system of renovation mortar MineralSanoPro also meets the requests of the European Standard DIN-EN 998-1. It is subject to a constant company-owned production control and to the external control of the Association for Control of Building Materials and for Certification in Baden-Württemberg.

01 Renovation Church



02 Facade Dwelling houses



03 Renovation Cellarage



SUBSEQUENT HORIZONTAL SEALING

- > **Einpressmörtel *epasit* epm**
Sulphate resisting, free-flowing mortar for the pointing of cavities in the masonry.
- > **Mauersanit flüssig *epasit* msf**
Solvent-free grout for a subsequent horizontal sealing with the help of a chemical injection.
- > **Mikroemulsion *epasit* meh**
Silicon microemulsion (concentrate) for a subsequent horizontal sealing with the help of a chemical injection.
- > **Mauersanit Schlämme *epasit* msp**
Free-flowing mortar for pointing the drilled holes.

RENOVATION MORTAR SYSTEM MineralSanoPro®

- > **Gwickbond *epasit* gb**
Mixing liquid for an improvement and speed-up of the bonding coarse mortar.
- > **Haftspritzbewurf *epasit* hb**
Mortar as a bonding bridge for *epasit* ap and *epasit* lpf-WTA white.
- > **Ausgleichsputz-WTA *epasit* ap**
Mortar for pointing bigger unevennesses and cavities. WTA certificated.
- > ***epasit* lpf-WTA white**
White mortar for the production of a plaster with a high porosity and water vapour permeability as well as a reduced absorptive capacity. WTA certificated.
- > **Sanierglätte *epasit* sg**
A very small-grained, white mortar for a smooth surface on the *epasit* lpf-WTA white.
- > **Sanierschlämme *epasit* sef (fine) und *epasit* seg (coarse)**
White mortar for a thin-layered touch-up of *epasit* lpf-WTA white, for a matching to the existing plaster structure.
- > **Sanier-Edelputze *epasit* ep**
White mortar for matching up to the existing plaster structure. As rough-cast and textured plaster with various grain sizes.
- > **Sanierputzfarbe *epasit* spf**
Diffusible, water-repellent colour for overcoating the *epasit* system of renovation mortar MineralSanoPro.
- > **Kalkfarbe *epasit* kfi (inside), *epasit* kfa (outside) und *epasit* kfg (coarse)**
Pure lime paint for overcoating the *epasit* system of renovation mortar MineralSanoPro.