

What do you want to get done?

Preservation of historic buildings

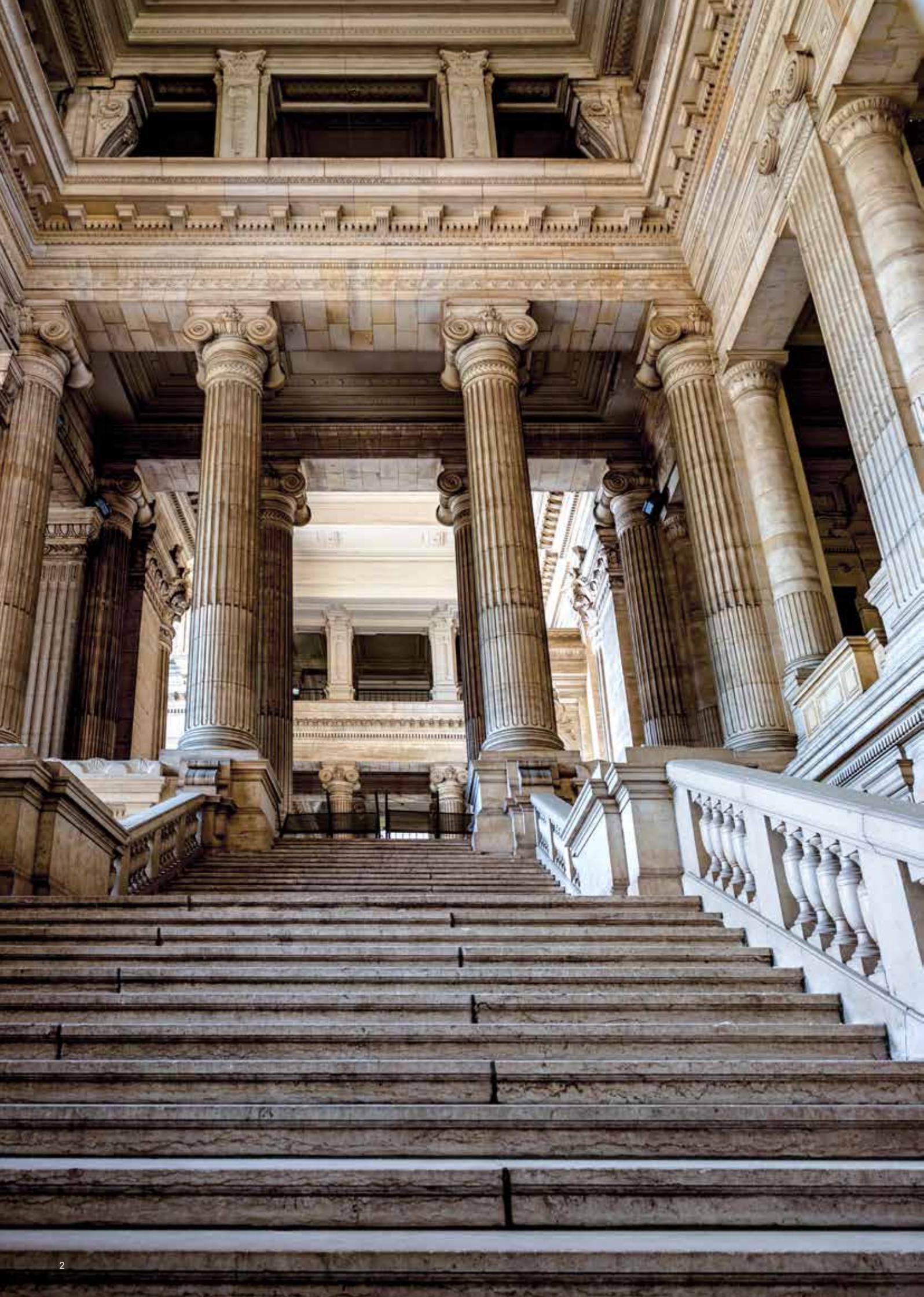
Long-lasting protection for precious cultural assets

All-round solutions



Digital brochures





The art of conservation

Preservation of historic buildings

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Subject to amendments and errors.

The stated values are based on our laboratory values, and individual variations are possible (e.g. shape, colour, size and weight). All information is therefore non-binding and subject to change. Only the product values/information in our Technical Data Sheets are binding (these can be obtained from our specialist advisors or at www.remmers.com).



Monument conservation

Remmers – the number 1 in Europe

Cultural identification and quality of life

The aim of monument conservation is to preserve cultural monuments for the long term. Cultural heritage is an extremely important way for societies to identify with their history through tangible historical evidence, which in turn enables them to create a cultural identity.

This is true for small regions just as it is for Europe as a whole. Monument conservation contributes to quality of life.

The art of conservation

Monument conservation is unarguably the crowning discipline in the field of building preservation and repair. Solving the difficult tasks of monument conservation, not only in terms of technical feasibility, but also in the sense of preserving the substance to the greatest degree possible, also makes it possible in turn to find elegant solutions for the tricky “normal” cases – for all substrates: from repairing façades to installing durable waterproofing systems, all the way through to wood preservation.

Bernhard Remmers Prize

Every two years, the Bernhard Remmers Academy awards the Bernhard Remmers Prize for exceptional craftsmanship in the field of monument conservation. The underlying aim is to demonstrate the high level of commitment to the preservation of historic buildings and monuments for the future. Particular emphasis is placed on the appreciation of the craftsmanship involved.

At "denkmal", the European trade fair for restoration, monument conservation and urban renewal in Leipzig, this award is presented to craftspeople, planners, architects, monument conservation specialists and developers for outstanding achievements in monument conservation. Particular recognition is given to expert technical execution.



Individual solutions

for preserving historic buildings

Individual solutions

Quite rightly, monument preservation ranks among our most critical “customers”. Mistakes can easily result in the loss of irreplaceable cultural assets. Therefore, in addition to the constant search for ways to preserve our historical heritage, the utmost care and conscientiousness in the design and selection of products are absolutely essential.

This also includes understanding the sometimes diverging concepts pursued in heritage conservation: restoration or conservation of the authentic condition.

Exceptional expertise

Over more than 75 years, Remmers has accumulated an unparalleled level of expertise from its work on many of the most important buildings in Europe and in collaboration with internationally recognised experts. Remmers’ expertise and products have proven themselves in many outstanding reference projects.

These include Europe’s highest church tower, the Ulm Cathedral (161 m), Cologne Cathedral, the Viennese “Steffel”, St Basil’s Cathedral in front of the Kremlin on Red Square in Moscow, the legendary temple complexes of Angkor in the tropical climate of Cambodia and the fairytale castle of Neuschwanstein.

Remmers has been involved in the following research projects:

- Clemenswerth Hunting Lodge, investigations to quantify environmentally relevant damage and to plan conservation measures for natural stone sculptures, 1993 – 1998
- Dinklage, model project: Resource-conserving substance preservation of timber building elements in the Benedictine abbey of Burg Dinklage, 1996 – 1997
- Model conservation of environmentally damaged sandstone reliefs of the Stone Album in Groß-Jena, 1996 – 1999
- Research project: Protection of stone surfaces by application of elasticised silicic acid esters, 1996 – 2000
- Use of lime spar mortar as a backing render and render substitution mortar at Heydau Monastery, 1996 – 2001
- Insect hormone analogues as non-neurotoxic insecticides for use in wood preservation, 1997 – 2001
- Model conservation with in situ consolidation of environmentally damaged structural timbers at Dinklage Castle, 1998 – 2002
- Limestone conservation at Halberstadt Cathedral, 1998 – 2004
- Elimination of environmental damage to the water basin in the Belvedere on the Pfingstberg in Potsdam, 1999 – 2000
- Development and implementation of conservation measures on the environmentally damaged Renaissance façade of Lübeck City Hall (UNESCO World Heritage Site), 1999 – 2003
- Restoration of the stonework of St. Benno’s Church, Meissen, using innovative modified silicic acid esters and silicone resin slurries, 2000 – 2003
- Development of a technology to combat alveolar weathering using the example of the church in Leuba, 2001 – 2002
- Sustainably effective repair technology for the Leipzig Monument to the Battle of the Nations, 2001 – 2004
- Conservation of environmentally damaged nationally significant grave monuments at the Old Catholic Cemetery in Dresden (German-Polish joint project), 2001 – 2004
- Novel conservation concepts for historic tuff surfaces, 2001 – 2005
- Preservation of monuments made of trachyte, 2003 – 2006
- EU project Rocem – Roman Cement to Restore Built Heritage Effectively, 2003 – 2006
- Preservation of a half-timbered house in Großschönau, 2005 – 2009
- Potsdam, Development of substance-preserving and economical techniques for the surface treatment of extremely environmentally damaged architectural elements made of sandstone, using the example of the colonnade at the New Palace in the park, Sanssouci (UNESCO World Heritage Site), 2006 – 2009
- EU project: Assessment of Desalination Mortars and Poultrices for Historic Masonry, 2006 – 2009
- EU project: ROCARE, Roman Cements for Architectural Restoration to New High Standards, 2009 – 2012
- EU project: 3Encult-Efficient Energy for EU Cultural Heritage, Passive and active energy retrofit solutions, 2010 – 2014

Planning for success

No ready-made formulas – room for discussion and cooperation

Remmers Professional Planning, established in 1974, is built on a philosophy that combines analysis, consulting and the creation of concepts for repair. The completely unique interlinking of modern analytical techniques and product expertise enables project-specific solutions of the highest quality. We empower owners, investors, planners, restorers and conservation specialists alike.



Our experts, supported by a network of specialists throughout Europe, give their full commitment to projects that cover a wide range of problems. These range from the crowning discipline of monument preservation to engineering, structural, administrative, commercial and park buildings, as well as special fields such as wastewater and sewer construction. We advise engineering offices, architects and tendering authorities with detailed structural condition analyses and develop the measures that are actually required for repair.

Building is more than just a word

Performing construction work on existing valuable cultural assets is not comparable to creating a new building on a greenfield site. New construction may offer the opportunity for comprehensive reorientation and technical optimisation – but conversions and extensions, and even more so conservation measures, take the existing building as their starting point. This results in a whole series of specific factors that need to be taken into account in order to make such a measure successful.





Expert planning means project management

Analyse. Reflect. Act.

Tests and investigations on the building structure or in the laboratory are used to find the best and most efficient materials and methods for achieving the restoration or repair goals. Ideally, this will include specific information on material formulations, as well as application types, times and cycles.

This information is included in the bill of quantities and represents a concrete specification for the parties carrying out the work. In this context, not only technical but also historical, architectural and monument preservation aspects are taken into account: Interventions are to be minimised and the appearance of the façades is to be preserved. For this purpose, a detailed structural investigation is usually unavoidable and ongoing structural monitoring is desirable.

Individual solutions for preserving historic buildings

Architectural monuments require tailor-made solutions. Mistakes can even result in the loss of irreplaceable cultural assets. Therefore, the utmost care and conscientiousness are absolutely essential in both the design and selection of products. The foundation is understanding the different approaches to monument preservation: to restore or to conserve?

Expertise from a single source

Professional consulting for
repair concepts

Natural stone façades

Cleaning, salt removal, swelling reduction, strengthening and stone substitution, joint renewal and repair with special joint mortars

Brickwork

Cleaning, substitution, joint renewal and repair with special joint mortars and hydrophobic treatment if necessary

Crack repair

Restoration of old bonds in the masonry without stone substitution through the use of spiral anchors

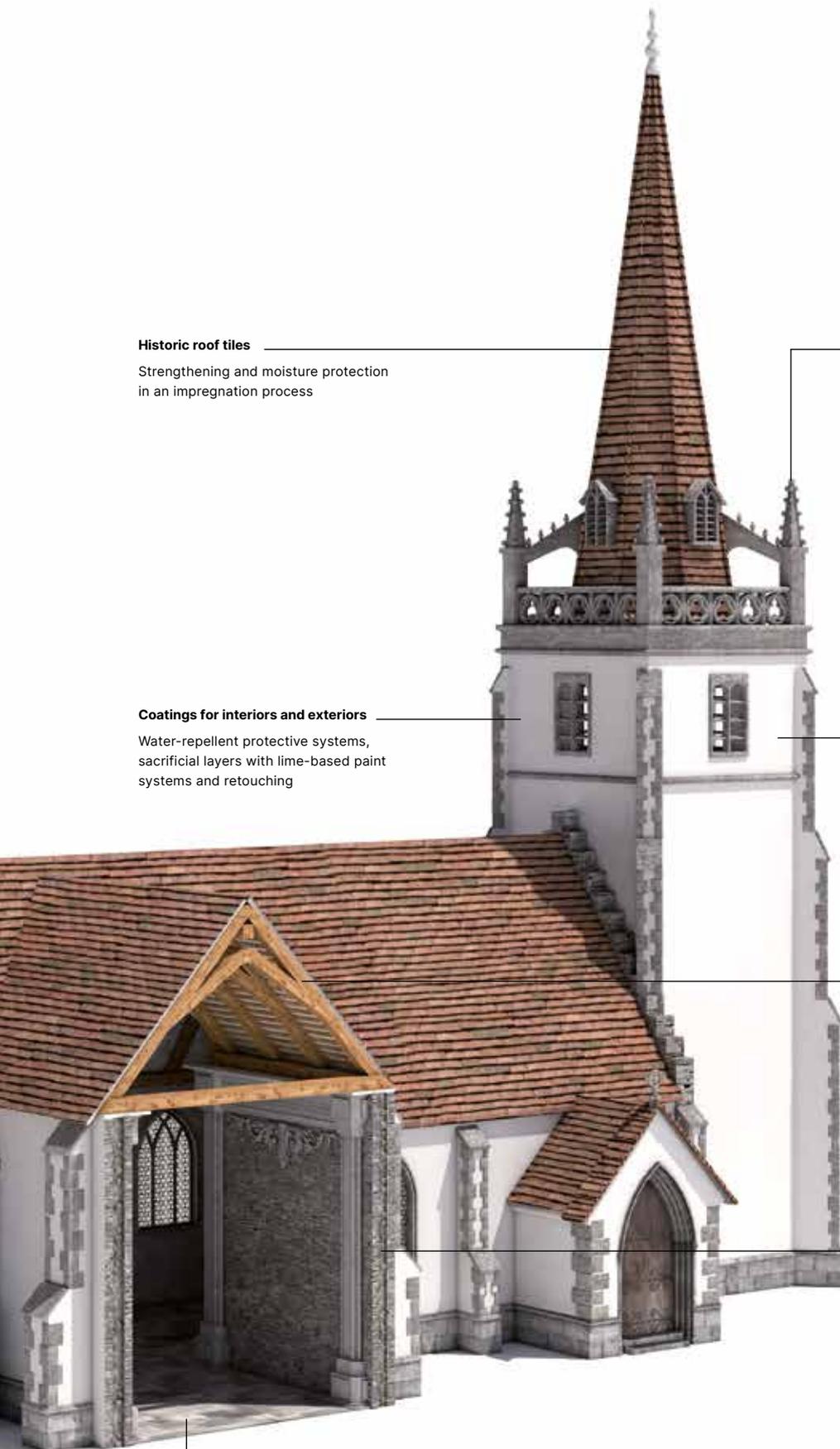
Plinth waterproofing and repair

Mineral protection systems for the most exposed areas of historical façades

Waterproofing and drainage

Mineral, possibly reversible building waterproofing and protective layers for waterproofing and foundations with ground contact





Historic roof tiles

Strengthening and moisture protection in an impregnation process

Natural stone or stucco building ornaments

Casting compounds, pourable stone substitution mortar, stucco/pourable/ fine mortar

Coatings for interiors and exteriors

Water-repellent protective systems, sacrificial layers with lime-based paint systems and retouching

Plastering and rendering

Repair or renewal with modern or historically appropriate materials

Historic timber constructions

Wood preservation, wood stains and paints, wood substitution compounds

Restabilisation and load-bearing capacity enhancement

Void filling with special grouting and injection mortars, strengthening of destabilised arches

Interior cleaning

Water-free and dust-free cleaning without the need to restrict visitor footfall



Salt removal and cleaning

Substrate preparation: the key to success

Remmers salt removal compress

Salt reduction in mineral building materials

In order to provide successful and long-term protection for buildings that are heavily contaminated with salt, measures to combat or reduce the salts that are harmful to the building must be implemented in addition to preventing the ingress of moisture. As a physical salt removal method, the application of salt removal compresses has proven to be effective.

Here, “salt removal” means significantly reducing the content of salts in porous building materials that are harmful to the building. In addition to the application of sacrificial, compress or restoration plasters, the application of salt removal compresses is a method that has been known for many years in the field of monument preservation and has proven its worth in practice.

When a moist compress is applied to the surface of a component, salts that are harmful to the building dissociate into their components: anions and cations. Next, two processes are set in motion:

- A diffusion movement of the salts from the building material into the compress starts.
- The evaporation zone of the moisture located in the component is shifted to the outside, into the compress.



In both cases, salts dissolved in the water are transported out of the wall building material into the compress, so that salt accumulation occurs in the new evaporation zone outside the component cross-section.

The compresses have no function in terms of surface design and protection of the masonry. The application is temporary, non-destructive and reversible. In the course of various real-world projects, the Remmers salt removal compress was optimised with regard to its adsorption capacity for the harmful salts typically found in building materials. Of particular importance here is the replacement of quartz sand with highly absorbent lightweight aggregates.

Remmers solution	Range of use	Properties	Page
Salt removal compress	Non-destructive reduction of the salt content using the compress method	<ul style="list-style-type: none"> ■ Cement-free, lime-free ■ Optimised moisture and salt transport ■ Easy to remove, leaves no residue 	64

Careful cleaning

Removing dirt reliably

The dangers of dirt

Thanks to its large interior surface, a dirt layer is an excellent absorber of moisture, as well as pollutants in gas and particulate form. These usually react on the underside of the encrusted dirt and accelerate the destruction process, even if this remains hidden under the dirt at first. Below are some of the technical and aesthetic reasons why cleaning is necessary.

- ✓ Elimination of risk factors such as salt accumulation and delayed drying speed
- ✓ Preparation of the substrate for further conservation measures by restoring the capillary absorbency
- ✓ Removal of visually displeasing dirt

Mechanical cleaning

With the tried-and-tested Remmers rotec vortex technology, the blasting particles do not hit the building material surface perpendicularly due to the rotation of the mixture of air, water and blasting material, but rather at a much flatter angle. They glide over the surface and are not “fired” onto it. As a result, dirt is removed extraordinarily gently, and the degree and intensity of cleaning can be freely selected.

From “just like new” to “preserve the patina”, virtually anything is possible. The rotec technology from Remmers is a logical refinement of the so-called “Jos” process; with the same cleaning effectiveness, nozzle wear is significantly reduced. The rotec glass powders are tailored to this technique with regard to their physical characteristics such as degree of hardness, grain shape, size and fraction and play an important role in achieving optimum results.

Remmers solution	Range of use	Properties	Page
rotec turbine	Patented swirl unit Gentle cleaning of all kinds of dirt and grime	<ul style="list-style-type: none"> ▪ Cleaning intensity can be adjusted to amount of dirt ▪ Gentle on the building substance 	69
rotec spacer	Accessories for pressure blasting equipment from Schmidt Sandstrahltechnik	<ul style="list-style-type: none"> ▪ Excellent resistance to heat, water and steam ▪ Excellent sealing technology 	68
rotec glass powder	rotec soft jet granules, no risk of silicosis	<ul style="list-style-type: none"> ▪ Gentle on the building substance ▪ Optimum performance with minimum removal of surface material ▪ Environmentally friendly blasting material 	69



Chemical cleaning

The mode of action of acid cleaners is essentially always the same: The active component penetrates or migrates behind the encrusted dirt and causes it to dissolve. Surfactants enable the surface to be wetted, encapsulate the dirt and thus enable it to be washed off. Remmers BFA has a different active mechanism and is also very easy to handle. It can be used to remove all kinds of biological contamination, as well as offering preventive protection against new biological growth. For every cleaning operation, the mantra is the same: “As intensively as necessary but as gently as possible”. Since an extremely wide range of substrates as well as types and intensity of contamination are possible, it is often tricky to make product recommendations. We recommend setting up representative sample areas.



Remmers solution	Range of use	Properties	Page
Clean WR	Removes lime and mortar skin	<ul style="list-style-type: none"> ■ Acidic cleaner ■ pH value approx. 1.0 ■ Ready to use 	64
Clean AC [basic]	Loosens mortar residue, lime and scale	<ul style="list-style-type: none"> ■ Acidic cleaner ■ pH value 0.8 (10% solution) ■ Powder concentrate 	65
Clean SL	Removes dirt, encrusted dirt, dust, oil and grease deposits	<ul style="list-style-type: none"> ■ Surfactant solution ■ Surfactant content approx. 10% ■ pH value approx. 11.5 	65
AGE	Paint stripper and graffiti remover	<ul style="list-style-type: none"> ■ Biodegradable paint stripper ■ Highly effective ■ Long open working time 	66
Green Growth Remover*	Removes green growth	<ul style="list-style-type: none"> ■ Independent and deep action ■ No washing required after application ■ Apply pure or diluted with water ■ pH value approx. 7.6 	67

* Use biocides safely. Always read the label and product information before using.

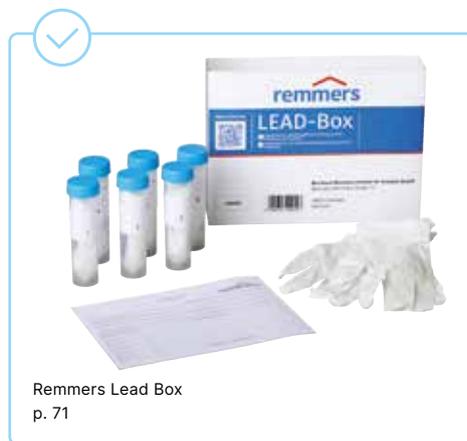
Quantifying lead contamination

Giving a new lease of life to façades contaminated with industrial dirt

The typical urban dirt that needs removing from natural stone façades is generally made up of deposits of particles suspended in the atmosphere, such as dust, diesel soot, tyre and brake wear particles, iron dust from railways, and so on. These particles often contain heavy metals, and can react with the stone and destroy the original surface. Another problem with many types of natural stone is that the dirt particles are bound in gypsum, which is a secondary product that forms on the stone surface.

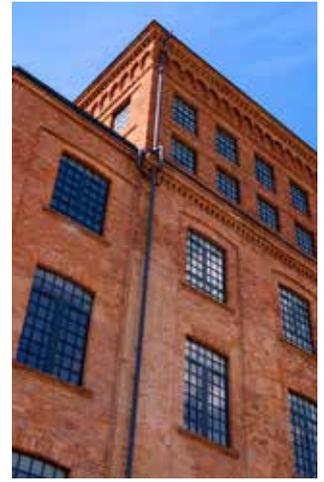
Whatever the situation, carefully planned cleaning is essential. The processes used must reduce or even completely remove the dirt, release as few harmful substances as possible, and protect the original substance of the buildings' surface. It's a challenging task – but Clean Galena is the solution. Whether and to

what extent a façade is contaminated with lead, which is highly dangerous to humans and the environment, can be easily checked with the Remmers Lead Box.



Remmers Lead Box
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The Remmers Lead Box

Non-destructive testing for lead contamination on the surface by means of wiping

For the determination of lead contamination of façades, which is particularly harmful to the environment, water and health, and also for checking the effectiveness of Clean Galena, we recommend the Lead Box for quick and easy quantitative analysis.

The test is non-destructive and the samples are very easy to handle. Detailed instructions for use are printed on the packaging. This method can generally be used to determine the levels of lead contamination on a wide variety of surfaces. The Lead Box contains 6 analysis tubes (5 for use on the building, 1 as reference sample). We recommend taking samples by wiping approx. 1 m and 3 m above ground level on exposed building sides, continuously every 5 to 10 m.

The samples are then sent via pre-addressed mailer bag to the accredited Bernhard Remmers Institute for Analytics, where the lead contamination is determined by means of atomic absorption spectroscopy.

Environmental toxin lead [Pb] profile

Possible sources:

- Particulate and gaseous emissions from combustion and production processes
- Fuel use in the energy sector
- Leaded petrol
- Brake and tyre abrasion

Health risks:

- Mutagenic/teratogenic and can affect fertility
- Carcinogenic
- Toxic
- Bioaccumulating
- Damages nerve and blood formation systems, etc.



Emission-free cleaning with no dust or noise

Cleaning compress Clean Galena for historic natural stone surfaces

In recent years, there has been a growing awareness of the emissions that can occur during façade cleaning. One particularly important question is whether cleaning can cause heavy metals to enter the environment in any form.

A cleaning agent in paste form, Clean Galena can be used to clean urban dirt such as tar, rust, gypsum, grease and metals from valuable natural stone substrates without releasing the impurities, as is common in conventional cleaning methods such as sandblasting.

Clean Galena binds and complexes impurities and pollutants into the compress itself, resulting in zero emissions while also enabling controlled disposal of residues.

What emissions and releases are we talking about exactly?

Experience has shown that contamination on natural stone façades is urban in nature and therefore heavily contaminated with heavy metals and, in particular, lead. This lead comes, for example, from leaded petrol, abrasion from brakes and tyres from public transport. It is important to know that lead has already been classified as toxic to reproduction since 2018, which means that it can impair sexual function and fertility in both men and women. We can safely say that it does not belong in our environment under any circumstances. Often, these heavy metal compounds are inseparable from other dirt particles.

On the one hand, this encrusted dirt is an aesthetic problem, while on the other hand it damages the building structure. Façades should therefore be cleaned gently on a regular basis without releasing the heavy metal load into the environment. Remmers recommends Clean Galena for this purpose:

Clean. Reliable. Emission-free.



Create closed loops. Avoid emissions.

From emission-free cleaning of façades contaminated with heavy metals to the disposal of cleaning agent residues, the application of Clean Galena represents a contemporary and holistic solution for the entire lifecycle. In the Clean Galena cleaning process, pollutants are bound in the cleaning agent via complexing and are not emitted back into the environment.

Application:

After the successful application of Clean Galena, the compress starts to crack and detach from the façade in sections independently. Dried compress residues can easily be removed by hand from the cleaned substrate and are returned directly to the container.

If desired or necessary, Clean Galena can be applied several times. If a less efficient cleaning result or a longer reaction time is desired or required, we



Clean Galena
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recommend using Clean Galena neutral, with a minimal amount of active cleaning substances.

To tailor the cleaning effect and drying time to the individual application, we recommend combining the two product variants Clean Galena neutral and Clean Galena max (with a maximum proportion of active cleaning substances). It is recommended to wash the cleaned surfaces with clear water.

Responsible use of resources

The Clean Galena material itself is completely harmless in its composition. It consists of natural clay minerals, various readily biodegradable complexing agents used in the food industry, fruit acid derivatives and cellulose – it does not contain ammonium carbonate or EDTA. Therefore, Clean Galena – if it did not contain trapped dirt, as is intended – could be disposed of with household waste after drying and a weight

reduction of approx. 80%. However, because the natural stone contaminants to be removed often contain heavy metals, the dried residue in the container should be collected and tested for lead. Depending on the contamination and coordination with the local authorities, these are finally sent for disposal.



Awarded the BAKA Prize

In 2019, Clean Galena won a prize at the BAKA award ceremony for product innovation. For more interesting information on the areas of application and the use of Clean Galena, click on the QR code to launch the product video and visit our YouTube channel "Remmers UK".



More information about Arte Mundit

If you want to find out more about Arte Mundit, its areas of use and its simple application process, visit us online at remmers.com or simply scan the QR code to download the brochure.



Arte Mundit peel-off paste

**For all interior surfaces.
With no dust or water**

When cleaning interior areas, avoiding dust and the water usually required for final washing are the biggest challenges. Preparatory and construction site measures for the protection of the building substance and surrounding as well as adjacent construction sections often come up against practical limits of feasibility and economic efficiency. With the development of Arte Mundit, these limitations are a thing of the past. Arte Mundit is a solvent-free peel-off paste for water-free removal of dust, soot and other contaminants from natural stone, marble, concrete, brick, plaster, gypsum plastics, stucco, polished wood or synthetic building materials.

The basis of these removable pastes is a specially formulated natural latex dispersion. Depending on the requirements and the task, there are different types, which differ in their increasing proportion of active complexing agent.

While the water in the peel-off paste evaporates, the polymer crosslinks to form a dirt-binding, elastic film that clings to the surface being cleaned. This film is easy to remove mechanically, without the need for any water. The cleaning effect is based on two different principles that act in very distinct ways depending on the type of dirt present and the product formulation.

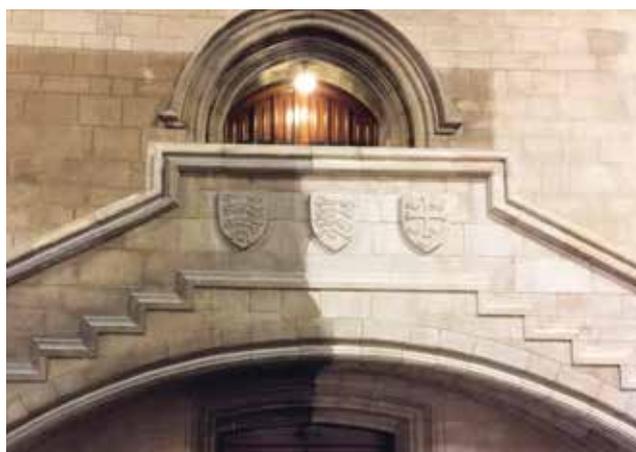
Firstly, dirt on the surface clings to the film that is produced, and secondly, special components dissolve and complex very specific compounds on the surface being cleaned, which are then in turn trapped in the latex film too. When the product is peeled off, a cleaned surface remains.

The different types of Arte Mundit

The causes of contamination can vary significantly: sometimes soot deposits, sometimes industrial dust or even residues from former use or production emissions. The causes are manifold and sometimes difficult to identify. This makes a gentle, analytical approach to removing the contamination all the more important. The basic product of the Arte Mundit family, Type I, is a specially formulated aqueous dispersion based on natural rubber. If the dirt present is more stubborn than just adhering dust particles, meaning that chemical removal is required, the basic material is mixed with low quantities of different complexing agents.

Since adding these components affects the viscosity of the latex dispersion, the end product must be re-adjusted to achieve the desired working properties. Different types of Arte Mundit are therefore available depending on the type and amount of active cleaning substances present.

The cleaning success of Arte Mundit depends on the substrate as well as on the type and intensity of dirt present; it is very difficult to make predictions about its performance. We therefore recommend setting up sample surfaces and favouring the product with the lowest proportion of active cleaning agents that still delivers a satisfactory cleaning result.



Remmers solution	Range of use	Properties	Page
Arte Mundit Type I	Interior Removes loosely adhering dirt of all kinds	<ul style="list-style-type: none"> ■ Solvent-free ■ One component ■ Natural latex dispersion without active cleaning additives ■ No EDTA 	70
Arte Mundit Type II	Interior Specially for marble Removes dirt of all kinds: Soot residues and metal impurities Fe^{2+} Fe^{3+} Cu^{2+} Zn^{2+}	<ul style="list-style-type: none"> ■ Solvent-free ■ Two components ■ Natural latex dispersion ■ Contains active cleaning additives < 5% 	70
Arte Mundit Type III	Interior Removes dirt of all kinds: Soot residues and metal impurities Fe^{2+} Fe^{3+} Cu^{2+} Zn^{2+}	<ul style="list-style-type: none"> ■ Solvent-free ■ Two components ■ Natural latex dispersion ■ Contains active cleaning additives 5 – 15% 	70
Arte Mundit Type IV	Interior In particular removes fire and soot residues Soot residues and metal impurities Fe^{2+} Fe^{3+} Cu^{2+} Zn^{2+}	<ul style="list-style-type: none"> ■ Solvent-free ■ Two components ■ Natural latex dispersion ■ Contains active cleaning additives 5 – 15% 	70
Arte Mundit Type Eco	Interiors and exteriors Removes dirt of all kinds: Soot residues and metal impurities Fe^{2+} Fe^{3+} Cu^{2+} Zn^{2+}	<ul style="list-style-type: none"> ■ Solvent-free ■ One component ■ Natural latex dispersion ■ No EDTA ■ No inorganic salts ■ No surfactants ■ No volatile neutralising agents 	71



Natural stone preservation

Do justice to the stone

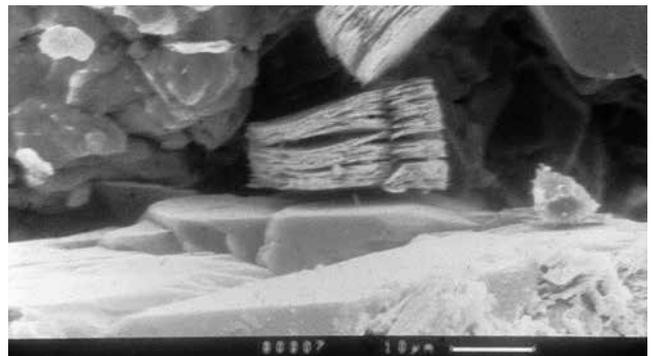
Remmers Antihygro

Slow down weathering with unique swelling inhibitors

Many natural stones contain swellable clay minerals. In most cases, these are layered silicates, which resemble the structure of a book. Due to an electrochemical “magnetic effect”, they are able to accumulate and release water between the “book pages”, i.e. in their intermediate layers, even at low moisture levels. During this process, the layer stacks are pressed apart in an accordion-like manner and contract again when moisture is released. Destructive stresses develop within the stone structure. This damage process is referred to as hygric swelling and shrinkage.

The mode of action of the swelling inhibitor Antihygro is based on the “deactivation” of clay minerals. The positively charged metal ions in the interlayers responsible for the “magnetic effect” are “blocked” when treated with Antihygro. The result is a significant reduction in hygric swelling, with all other typical stone parameters remaining unchanged.

Water-repellent after-treatment with Remmers impregnating agents or silicone resin coatings increases the effectiveness even further. In particular, the absorption of liquid water is reduced by up to 95% thanks to this water-repellent finish on the substrate. As a result, this water is then no longer available as a trigger for hygric swelling.



Swellable clay mineral



Remmers Antihygro
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Remmers stone strengthening

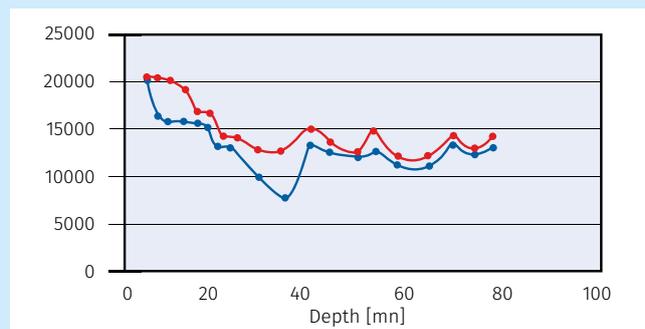
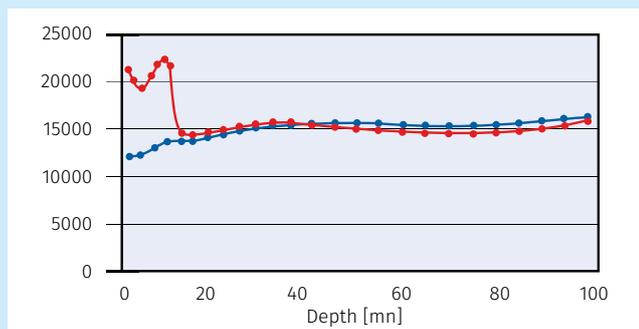
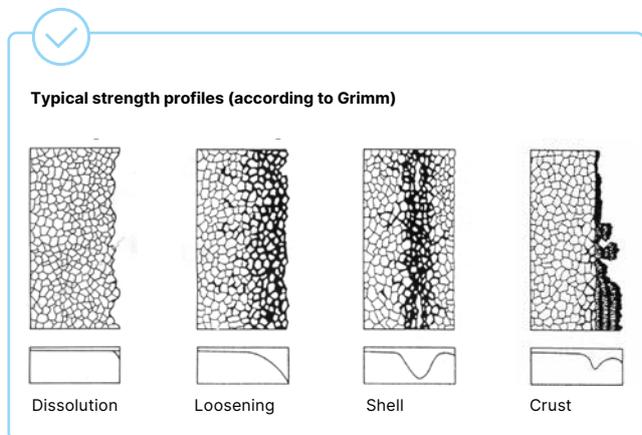
Targeted rejuvenation for mineral substrates

The weathering of a mineral building material is always accompanied by a weakening of its microstructure. This weakening is usually caused by a widening of the original pore structure, and rarely by a true loss of binder. The central task of a strengthening measure is the targeted filling of the new pore space created by weathering. This is achieved by adding an additional binder that is identical in nature. In a "new" material, e.g. freshly cleft rock, the strength profile is usually homogeneous, meaning that strength and elasticity are the same at the surface of the building material as at any point of the cross-section. This condition, which has been lost through weathering, is to be restored by strengthening without affecting other characteristic building material parameters besides strength and elasticity.

Just as great as the variety of façade construction materials – from different varieties of natural stone, to brick, plaster and even concrete – and the different weathering influences, is the variety of possible weathering profiles. Here it becomes clear that to achieve balanced strength profiles, different types of strengtheners are necessary.

Accordingly, Remmers offers strengtheners that differ with regard to the following criteria:

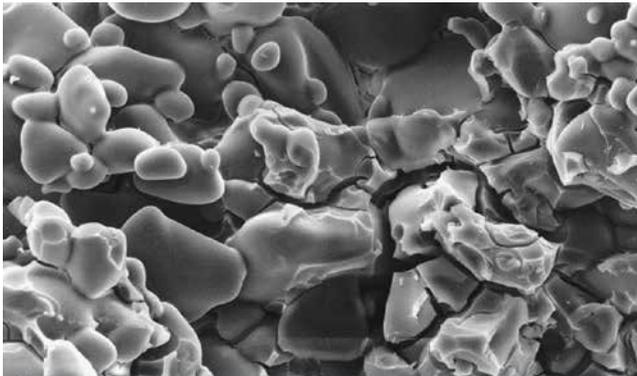
- Their binder content – the so-called gel deposition rate
- Their gel structure – with or without elasticising structural components
- The nature of their bond with the substrate



Silicic acid esters

Reaction mechanism and setting the course for modifications

When they react with water, all silicic acid ester-based ($\text{Si}(\text{OR})_4$) stone strengtheners precipitate strengthening silica gel (SiO_2aq):



The silicic acid ester itself is a liquid, so in principle it can be introduced into a pore structure without the addition of solvents. By varying the mixing ratios of large and small molecules, the properties of a solidifier, in particular its gel deposition rate, i.e. the amount of silica gel formed in the pore structure, can be specifically varied.

In addition to the gel deposition rate, further variations are possible in terms of penetration behaviour, reaction rate, etc. by changing the type and quantity of catalyst and the use of solvents. The targeted combination and variation of these parameters has resulted in a range

of stone strengtheners that offers excellent diversity in terms of the options available and the possibilities for adapting solutions to the substrate to be strengthened. All silicic acid ester-based stone strengtheners have a decisive characteristic property that sets them apart from other strengtheners:

The resulting solidifying silica gel has an inherent porosity. This so-called secondary porosity ensures the preservation of capillarity and water vapour permeability of the consolidated material.



Absorbency	Strength	Stone type	1st application	2nd application	Poss. 3rd application
Moderate to high	Somewhat firm	Sandstone, sand-lime brick	KSE 100	KSE 300	
Moderate to high	Somewhat soft	Sandstone, sand-lime brick	KSE 100	KSE 300 E	
Moderate to high	Soft to firm	Limestone	KSE 100	KSE 300 HV	
Somewhat low	Soft to firm	Sandstone, limestone, sand-lime brick	KSE 100		

Remmers KSE 100/300/OH/510

Stone strengthening based on “classic” stone strengtheners

Commercially available stone strengtheners are, as already described under “Remmers stone strengthening”, tailor-made products whose properties result from the targeted use of different sized CFE molecules, various catalysts and, if necessary, special solvents.

Through a targeted combination of these “classic” stone strengtheners, a large number of substrates requiring different types of consolidation can be successfully rehabilitated. Some exemplary consolidation options/case studies are presented below. However, the recommendations described here do not replace an exact preliminary examination of a valuable building substance.



Remmers KSE 300 HV

Stone strengthening with modified strengtheners

Stone strengtheners based on silicic acid esters exhibit two coordinated mechanisms of action on siliceous substrates. On the one hand, the silicic acid ester binds chemically to the quartz of the substrate, and on the other hand, it forms a three-dimensional silica gel framework in the pore space of the substrate, which leads to stabilisation of the substrate even without direct chemical bonding. On purely calcitic substrates, only the second mechanism comes into play.

Specially developed adhesion promoters can be used to achieve chemical bonding of the silicic acid ester to calcitic substrates as well. These substances “mediate” between the covalent bond of quartz and the polar bond of limestone by combining both mechanisms.

Special strengtheners for limestone

Remmers KSE 300 HV is an adhesion promoter and

is the first stone strengthener to follow this principle of action. The effectiveness of the product has already been proven in a pilot project for limestone conservation at Halberstadt Cathedral commissioned by the Deutsche Bundesstiftung Umwelt (DBU), Osnabrück.



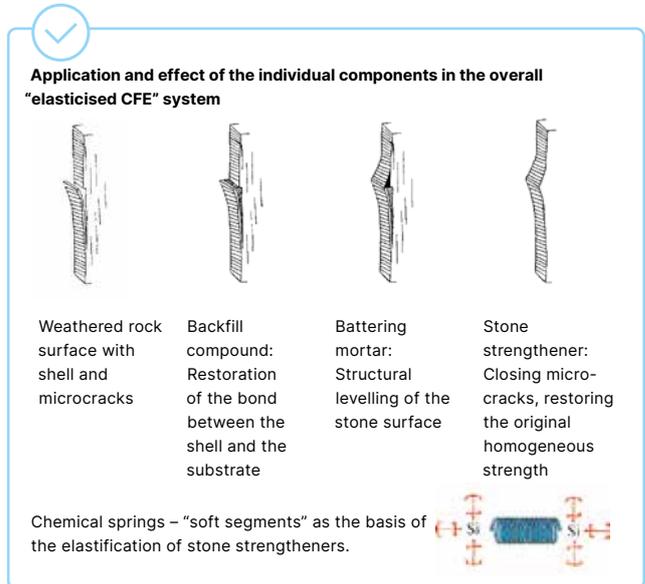
Remmers KSE 300 E/500 E

Stone strengthening based on “elasticised” stone strengtheners

Limits in the use of “classic” stone strengtheners

The sometimes very small size of the gel particles of the “classic” stone strengtheners limits their range of application to substrates with “normal” pore or cavity radii. For the strengthening of building materials with larger, natural cavities or cavities caused by weathering, the conventional strengthening agents are therefore only suitable to a limited extent.

These “problem building materials” include, for example, tuff, plaster or even swellable natural stones such as Schilf sandstone. The causes are either the natural pore radius distribution of the natural stone (e.g. tuff) or the formation of microcrack zones resulting from weathering (e.g. in the case of swellable natural stones such as Schilf sandstone).



Remmers KSE modular system

Next-level challenges – building blocks for restoration experts

The tasks involved in natural stone consolidation are usually not limited to structural strengthening, but go far beyond this, depending on the type and intensity of weathering.

Due to the high affinity of the silicic acid ester to most natural stones and the layer problems that often arise from the use of different materials, the desire to solve all the problems that arise with the same material is all too understandable. Remmers meets this requirement with the KSE modular system.

The Remmers KSE modular system was developed in order to be able to handle not only structural reinforcement but also substance losses with injection compounds, battering mortars and stain coatings. Starting from an elasticised stone strengthener as a binder similar to natural stone, injection compounds, battering mortars and also stain coatings can be



produced on site with various additives.

And for customised solutions, the resulting materials can be adapted to the substrate in terms of their physico-mechanical, moisture and optical properties. By avoiding different or non-harmonising physical properties at layer transitions, even the most difficult tasks can be solved in a meaningful way.

Remmers KSE stone strengthener systems

Remmers solution	Range of use	Properties	Page
KSE 100	Stone strengthener with low gel deposition rate Weak surface weathering Low gel deposition rate to avoid overstrengthening and to create balanced strength profiles	<ul style="list-style-type: none"> ▪ Gel deposition rate: approx. 10% ▪ Solvent-based ▪ Not water repelling ▪ High penetration depth 	73
KSE 300	Stone strengthener with moderate gel deposition rate Significantly weathered and loosened surfaces For relatively solid rocks in the original state and mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100	<ul style="list-style-type: none"> ▪ Gel deposition rate: approx. 30% ▪ Solvent-free ▪ Not water repelling ▪ High penetration depth 	74
KSE OH	Stone strengthener with moderate gel deposition rate Significantly weathered and loosened surfaces For relatively solid rocks in the original state and mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100	<ul style="list-style-type: none"> ▪ Gel deposition rate: approx. 30% ▪ Solvent-free ▪ Not water repelling ▪ High penetration depth 	74
KSE H	Stone strengthener with moderate gel deposition rate and simultaneous hydrophobic effect Significantly weathered and loosened surfaces For relatively solid rocks in the original state and mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100	<ul style="list-style-type: none"> ▪ Water-repelling ▪ Gel deposition rate: approx. 30% ▪ Solvent-free ▪ High penetration depth 	75
KSE 510	Stone strengthener with high gel deposition rate Heavily weathered and loosened surfaces For relatively solid rocks in the original state and mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100 and/or KSE 300 E	<ul style="list-style-type: none"> ▪ Gel deposition rate: approx. 45% ▪ Solvent-free ▪ Not water repelling ▪ High penetration depth 	75
KSE 300 HV	Special strengtheners for limestone Significantly weathered and loosened surfaces Achievement of particularly balanced strength profiles in combination with KSE 100	<ul style="list-style-type: none"> ▪ Contains special adhesion promoters ▪ Gel deposition rate: approx. 30% ▪ Solvent-free ▪ Not water repelling ▪ High penetration depth 	76
KSE 300 E	Elastified stone strengthener with moderate gel deposition rate Highly porous as well as strongly weathered microstructures Fine- to coarse-pored sandstones, certain vulcanites as well as weathered bricks, historical plasters and joints Achievement of particularly balanced strength profiles in combination with KSE 100	<ul style="list-style-type: none"> ▪ Contains soft segments ▪ Good stress-strain behaviour ▪ Gel deposition rate: approx. 30% ▪ Not water repelling ▪ High penetration depth 	76
KSE 500 E	Elastified stone strengthener with high gel deposition rate Highly porous as well as strongly weathered microstructures Coarse-pored sandstones, certain vulcanites as well as weathered bricks, historical plasters and joints Achievement of particularly balanced strength profiles in combination with KSE 100 and/or KSE 300 E	<ul style="list-style-type: none"> ▪ Contains soft segments ▪ Good stress-strain behaviour ▪ Gel deposition rate: approx. 50% ▪ Not water repelling ▪ High penetration depth 	77

Remmers solution	Range of use	Properties	Page
KSE 500 STE	Binder in the KSE modular system Elastified stone strengthener with high gel deposition rate with purely mineral suspended particles Preparation of backfilling compounds, cementing and battering mortars, glazes and slurries	<ul style="list-style-type: none"> ▪ Contains soft segments ▪ Good stress-strain behaviour ▪ Gel deposition rate: approx. 50% ▪ Not water repelling 	77
KSE Filler A	Filler for the Remmers KSE modular system Production of mineral powder slurries, backfilling compounds and cementing and battering mortars	<ul style="list-style-type: none"> ▪ Contains solid glass spheres < 50 µm ▪ Reduces susceptibility to shrinkage cracking ▪ Fine mineral powder consisting of quartz/mica 	78
KSE Filler B	Filler for the Remmers KSE modular system Production of mineral powder slurries, backfilling compounds and cementing and battering mortars	<ul style="list-style-type: none"> ▪ Contains solid glass spheres < 50 µm ▪ Reduces susceptibility to shrinkage cracking of backfilling compounds ▪ Quartz sand powder with approx. 98 mass %SiO₂ 	78
KSE Sand F 36	Filler for the Remmers KSE modular system Production of KSE-bonded quartz sand slurries Backfilling compounds and battering mortar	<ul style="list-style-type: none"> ▪ Contains 99 mass % quartz 	79
V KSE	Thinner for stone strengtheners Setting optimum strength levels via targeted control of the gel deposition rate Cleaning of tools and surfaces	<ul style="list-style-type: none"> ▪ Optimal solubility of silicic acid esters ▪ Low volatility solvent ▪ Clear ▪ Free of aromatic compounds ▪ Low odour 	79





Void filling & improving load-bearing capacity

Selected reinforcement measures

Static improvements

Void filling and improvement of load bearing capacity in historic constructions

Mortars for the reinforcement of loose fillings or hollow masonry differ in terms of their physico-mechanical properties. Depending on the condition, the masonry can be strengthened with the cement-based borehole suspension BSP 3 and BSP 6 or with low-strength materials such as BSP Historic.

Remmers Injection Paste ICS 2K is recommended for injection into masonry subject to higher static loads, as it can also absorb tensile stresses to a certain extent.



Remmers solution	Range of use	Properties	Page
BSP 3	Reinforces loose masonry and masonry with voids Filling joints and boreholes Preliminary injection of boreholes in multi-stage injection	<ul style="list-style-type: none"> ▪ Strength: M 2.5 / normal ▪ Low viscosity (highly flowable) ▪ Low shrinkage ▪ High sulphate resistance 	80
BSP 6	Reinforces loose masonry and masonry with voids Filling joints and boreholes Preliminary injection of boreholes in multi-stage injection	<ul style="list-style-type: none"> ▪ Strength: M 5 / solid ▪ Low viscosity (highly flowable) ▪ Low shrinkage ▪ High sulphate resistance 	80
BSP Historic	Filling and injecting joints, small voids, cracks of 2 – 10 mm Strengthening loose mortar filling in masonry	<ul style="list-style-type: none"> ▪ Strength: M 2.5 / normal ▪ Good flow properties 	81
ICS 2K	Frictionally coupled filling of cracks and voids Subsoil strengthening Dry, wet, damp, underwater and underground areas	<ul style="list-style-type: none"> ▪ Strength: M 20 ▪ Low viscosity (highly flowable) ▪ Low shrinkage ▪ High sulphate resistance ▪ High early strength 	81

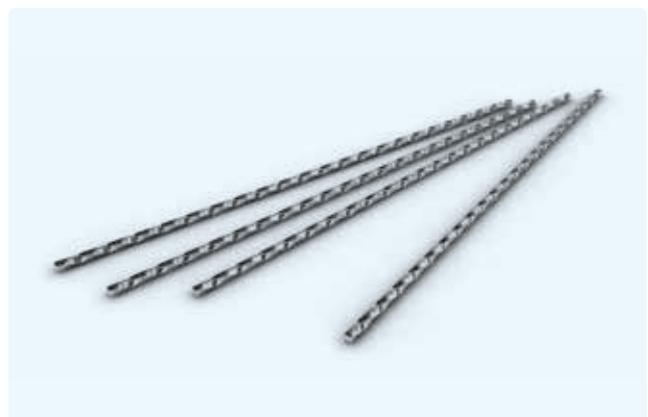


Remmers spiral anchor system

Simple and durable crack repair

Cracks can occur in brickwork for many reasons: temperature stress, foundation subsidence and vibrations, to name but a few. Whatever the cause behind each individual case, the result is the same: a crack in brickwork is always a significant disruption to the structural system and must be repaired. With the Remmers spiral anchor system, masonry sections are reconnected to each other in a simple yet highly efficient way, so that the bond is re-established.

The spiral anchors only require minimal intervention in the masonry to be repaired, as they are laid in the joints. This means that even cracked stones can be reused. This is also one of the reasons why spiral anchors enjoy high acceptance in the field of monument conservation. In this way, cracks in façades and around lintels, openings or arches can be repaired successfully and cost-effectively.





① Removing grout

Scrape out the horizontal joints of the masonry at a few previously defined points to the same distance right and left of the crack. Clearing depth approx. 6 cm.



② Cleaning joints

Carefully clean loose particles or any constituents that may impair adhesion out of the joint, and pre-wet.



③ First mortar layer

Apply first layer of anchor mortar in the joints. Press in the mortar using the mortar gun along the back wall of the joint.



④ Inserting the spiral anchors

Press spiral anchors into the mortar using a jointing iron.



⑤ Second mortar layer

Apply second layer of anchor mortar. Press in using the mortar gun, use a jointing iron to press again if necessary.



⑥ Plugging cracks

Fill the crack to consolidate the structure. To do this, first plug the crack on the surface with a suitable round cord.



⑦ Filling cracks

Fill the crack from bottom to top under low pressure with borehole suspension using a hand press.



⑧ Filling in cracks in the stone

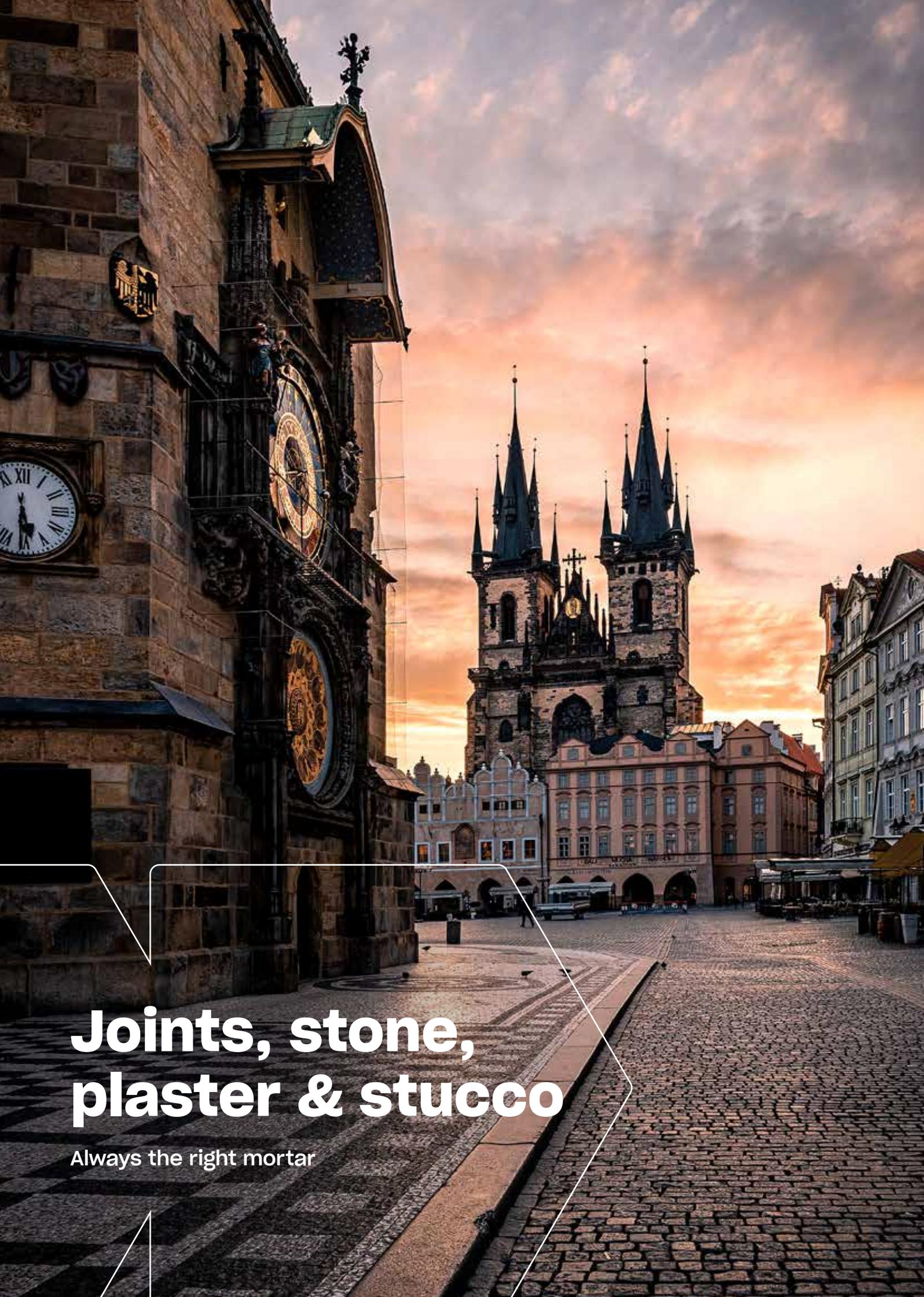
Seal or grout cracks in the area of the stone with RM/Restoration Mortar.



⑨ Repointing

Repoint open joints properly and professionally with colour-matched FM/grout.

Remmers solution	Range of use	Properties	Page
Spiral anchor mortar M20	Machine-workable grout with high sulphate resistance for embedding spiral anchors	<ul style="list-style-type: none"> Good flank adhesion Suitability test MPA BS Compressive strength M 20 Maximum grain size: approx. 1 mm 	82
Spiral anchor mortar M30	Machine-workable grout with high sulphate resistance for embedding spiral anchors	<ul style="list-style-type: none"> Compressive strength M 30 Maximum grain size: approx. 1 mm 	82
Spiral anchors	Rolled, twisted spiral anchors with two threads made of austenitic stainless steel for masonry renovation	<ul style="list-style-type: none"> Uniform, even introduction of force and high tensile load-bearing strength Elastic behaviour like a strong spring Excellent composite characteristics Rust-free 	82



Joints, stone, plaster & stucco

Always the right mortar

Remmers grouts

The right joints for fair-faced masonry

Joints perform different functions on the structure and therefore need highly varied properties that meet the respective requirements. This applies not just to their visual appearance, but also to their physical and mechanical properties, and above all their response to moisture. An intact joint network is essential to ensuring that a façade can withstand driving rain. Penetrating moisture increases susceptibility to frost attacks and reduces the thermal protection – both of these

outcomes need to be prevented in a careful manner that is adapted to the building substance. Remmers joint mortar comprises a wide spectrum of binder systems, grain sizes and strength classes, as well as an array of options when it comes to colour and capillary moisture inhibiting properties. This means that they can be adapted to the individual areas of use, conditions and requirements in any situation.

Remmers solution	Range of use	Properties	Page
FM SAN	Cement-lime jointing mortar for restorations	<ul style="list-style-type: none"> ▪ Good flank adhesion ▪ Can be made doubly hydrophobic ▪ Various special colours available 	84
FM TK	Trass-lime cement jointing mortar for masonry contaminated with sulphate	<ul style="list-style-type: none"> ▪ High sulphate resistance ▪ Very low efflorescence ▪ Good flank adhesion ▪ Various special colours available ▪ Can be made doubly hydrophobic 	85
FM TK PH	Trass-lime cement jointing mortar for masonry contaminated with sulphate, pore hydrophobic	<ul style="list-style-type: none"> ▪ High sulphate resistance ▪ Very low efflorescence ▪ Good flank adhesion ▪ Pore hydrophobic 	86
FM ZF	Cement-free grout for low-strength masonry	<ul style="list-style-type: none"> ▪ Cement-free ▪ High adhesive pull strength ▪ Low inherent stress ▪ Various special colours available 	87
FM Historic	Joint renewal on historic masonry Grout with a project-specific formulation	<ul style="list-style-type: none"> ▪ Original condition restored according to the principles of monument preservation ▪ Specially adapted binder ▪ Specially adapted grain size distribution ▪ Can be made hydrophobic 	88
Historic lime mortar	Basic mixture ("dry-slaked", cement-free sand-lime mortar) for the production of mortars and plasters according to historical formulations with the addition of local aggregates	<ul style="list-style-type: none"> ▪ Free from cement, trass, hydraulic limes ▪ Forms small lime lumps ▪ Has a "self-healing" effect on cracks and flank tears 	104
FM AC*	Dispersion-bound grout for pressed joints and joints in large-format natural stone ashlar masonry	<ul style="list-style-type: none"> ▪ Very good flank adhesion ▪ Particularly good stress/elongation behaviour 	88

* For more information on acrylate-bonded mortars, see p. 38 ff.

Mineral-bonded restoration mortar systems

Stone substitution and reproduction

The Remmers restoration mortar system was specially developed for restoration or replacement of mineral building materials. Since mineral building materials differ greatly in their composition (structure, pore space, colour, grain size, etc.) and it is in the interest of a long-term resistant measure to match the replacement mortar to the substrate, Remmers offers a wide range of customisation options that take into account the multitude of application cases. The structured design enables users and planners to select the most suitable restoration mortar.

- Two strength levels are available for all cementitious restoration mortars
- All restoration mortars are available in three grain sizes for the perfect finish



Binder

Only quality-controlled and high-quality raw materials are used to produce Remmers restoration mortars. As a rule, the binder is composed of several raw materials. These include different cements and different limes. Dispersion additives are used to adjust certain properties. This applies in particular to Remmers RM pro, which can be feathered out to “zero thickness”.

Binder compound

To recreate the physico-mechanical properties of original materials, the original natural stone sands can be mixed with the special binder compound RM BC to form an individual stone substitution compound. Processing and workability are optimally adjusted to the natural conditions and the suitability for the construction site is guaranteed. The high-quality, low-alkali binder can even be tinted to match the desired shade.

Priming & restoration mortar

In the case of deeper defective or missing areas, it is recommended to construct the core with “priming mortars” specially designed for this task. In particular, a balanced strength gradient from the inside to the outside must be ensured. For this reason, perfectly matched priming mortars are available for use with the restoration mortars RM GM. The Remmers priming mortar RM GM 10 also has salt storing properties.





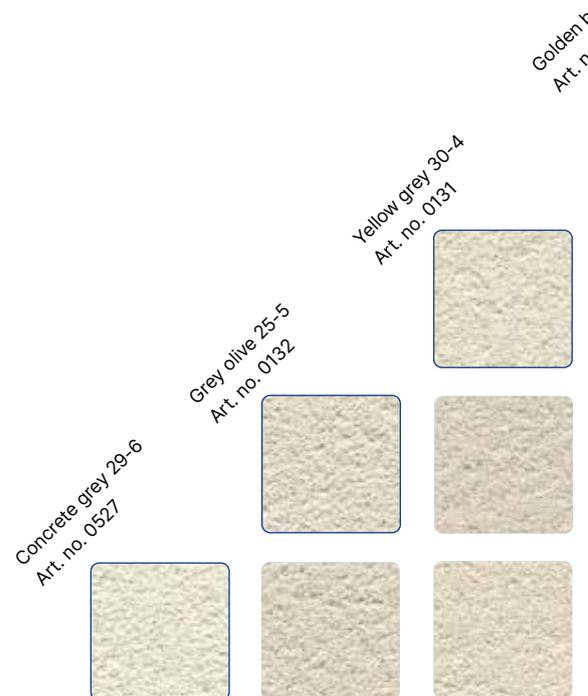
Remmers solution	Range of use	Properties	Page
RM GM M10 / RM GM M20	Mineral stone substitution mortar for filling deep defects	<ul style="list-style-type: none"> ▪ Strength: M 10 / M 20 ▪ Good flank adhesion ▪ Low inherent stress 	89/90
RM	Mineral stone substitution mortar for restoration, substitution and reprofiling Reproduction of ornamental building elements by tamping	<ul style="list-style-type: none"> ▪ Good flank adhesion ▪ Low inherent stress ▪ Configurable strength and maximum grain size ▪ Various standard and special colours and special configurations possible ▪ Can be made hydrophobic 	91
RM pro	Mineral stone substitution mortar (can be feathered out to zero)	<ul style="list-style-type: none"> ▪ Can be feathered out to zero ▪ Can be applied as a slurry 	92
RM BC	Binder compound for restoration mortar Repair of natural stone	<ul style="list-style-type: none"> ▪ Strength: M 5 ▪ Factory-made premix of mineral binders ▪ Hydraulic setting ▪ By adding aggregates and, if necessary, mineral pigments, individually optically adapted stone substitution mortars/ restoration mortars can be produced 	94
RM GF	Mineral stone substitution mortar, pourable Moulding of sculptures Pouring out from open and closed moulds	<ul style="list-style-type: none"> ▪ Strength: M 15 ▪ Pourable ▪ Low inherent stress ▪ Can be made hydrophobic 	93

RM Restoration Mortar colour matrix

Remmers RM Restoration Mortar is available in twelve standard colours that are based on the shades of typical brick and natural stone types used in construction. They are included in the Remmers colour card, a selection of warm, earthy colour shades that are found in many historical buildings.

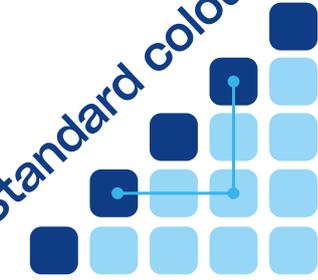
Nowadays, many stone restorers work with just a few standard shades, mixing them on site in order to achieve a lively colour scheme that is in keeping with the historic building stock.

To illustrate the possibilities created by mixing different colour tones, a mixing matrix for the RM standard colours is shown below. In each case, mixtures of two dry mortars were produced in a ratio of 1 to 1, in parts by weight. The diagonal shows the unmixed standard colours.



Note: colours are not binding.

Standard colours



Blended colours

Brown 04-5
Art. no. 0136

Olive ochre 14-3
Art. no. 0134

Yellow green 15-3
Art. no. 0133

Earth brown 12-3
Art. no. 0135

Concrete grey 29-0
Art. no. 0142

Clay red 05-1
Art. no. 0139

Clay red 05-0
Art. no. 0140

Sepia brown 09-2
Art. no. 0137

English red 06-0
Art. no. 0138



Acrylate-bonded substitution mortar

Texture and colour matching to the original natural stone substance

Mortar systems based on aqueous acrylate dispersions have been systematically investigated and evaluated since 1995 at the Materials Research and Testing Institute of the Bauhaus University Weimar (MFPA Weimar). Based on the knowledge gained in this process, it was possible to develop special mortars that are superior to classic lime-cement mortars, especially for the restoration of limestone, but also for some special tasks in the context of brick restoration and the re-pointing of press joints. This is based on a number of special properties of these mortars.

Due to the high flank adhesion of acrylic mortars, it is not necessary to work back or point out defects before application in order to maintain a minimum layer thickness in natural stone or brick. The mortars can be feathered out to zero, which also makes for good application at shell edges. Even bonding is possible.

There is no need for post-treatment of substitutions with acrylic mortar, since the material does not require moisture to react, but rather releases the moisture present in the system during curing. Consequently, mixed mortar does not have to be used immediately, but can be stored temporarily in the sealed container.

In addition, a reaction with any harmful salts that may be present in the substrate is ruled out, as these mortars do not contain any mineral binders. Acrylate-bonded mortars have a very favourable stress/strain ratio, which makes them ideal grouting mortars for narrow, so-called compression joints beyond stone substitution.

And finally, the binder has another decisive advantage in the long term: the application of purely acrylate-bonded mortar can be fully reversed by treating with special solvents.



Advantages of acrylate-bonded substitution mortars

- ✓ Texture and colour matching to original substance
- ✓ Reproduction of the physico-mechanical properties of the original substance by specific formulation of the dry mortar, e.g. pore volume
- ✓ No reworking of defects required
- ✓ High flank adhesion
- ✓ Can be feathered out to zero
- ✓ Reversible
- ✓ No mineral binders





Remmers solution	Range of use	Properties	Page
RM AC MARBLE	Dispersion-bound bedding mortar for limestone, especially marble	<ul style="list-style-type: none"> ■ No mineral binders ■ Can be feathered out to zero ■ Crushed limestone filler 	94
RM AC MARBLE FILL	Dispersion-bound finishing mortar for limestone, especially marble	<ul style="list-style-type: none"> ■ No mineral binders ■ Can be feathered out to zero ■ Crushed limestone filler 	94
RM AC MARBLE POLISHING FILL	Dispersion-bound, polishable finishing mortar for marble	<ul style="list-style-type: none"> ■ No mineral binders ■ Can be feathered out to zero ■ Polishable ■ Crushed limestone filler 	94
RM AC BRICK YELLOW	Dispersion-bound repair mortar for bricks	<ul style="list-style-type: none"> ■ No mineral binders ■ Can be feathered out to zero ■ Crushed yellow brick filler 	94
RM AC BRICK RED	Dispersion-bound repair mortar for bricks	<ul style="list-style-type: none"> ■ No mineral binders ■ Can be feathered out to zero ■ Crushed red brick filler 	94
FM AC	Dispersion-bound grout for pressed joints and joints in large-format natural stone ashlar masonry	<ul style="list-style-type: none"> ■ Very good flank adhesion ■ Particularly good stress/elongation behaviour 	88
AC LQ	Binder for the production of mortars in the Remmers acrylic mortar system	<ul style="list-style-type: none"> ■ Liquid pure acrylate dispersion ■ Resistant to reactions with harmful salts ■ No plasticisers ■ Low odour 	88/94



Lithos Arte

Single-layer and shrinkage-free stone replacement in high layer thicknesses

Special requirements call for special solutions.

When high layer thicknesses are to be realised in just one work step, conventional restoration mortars reach their limits. For such extreme requirements, such as those demanded for repair work on profiles, ornaments, sculptures or replicas, a stone substitution material with special properties is needed.

Lithos Arte has been specially developed for this challenging task. The 2-component material consists of natural stone sands and a mineral binder. The special formulation enables unusually fast, stress- and shrinkage-free curing with excellent substrate adhesion at the same time. High layer thicknesses can be built up in one work step.

Unlike alternative stone substitutes, Lithos Arte does not require additional moisture, nor does direct sunlight interfere during setting. Surface shaping,



e.g. embossing, scoring or chiselling, can be started just a few minutes after application. Lithos Arte is not susceptible to greying or yellowing with ageing after application. If required or desired, a final water-repellent or colour finish can be applied in combination after complete curing.

Remmers solution	Range of use	Properties	Page
Lithos Arte	Mineral mortar for natural stone restoration, consisting of natural stone and a mineral binder	<ul style="list-style-type: none">▪ Single-layer application possible in any layer thickness▪ Fast setting without shrinkage▪ Good flank adhesion▪ Low inherent stress	95

New plastering of stressed substrates

Durable special plasters for the benefit of the building structure

Buildings change constantly. Over time, dirt and air pollutants accumulate on the façades. Moisture penetrates. When it is time for refurbishment, the façades are usually cleaned, but this is generally not enough. Salts have built up over the years that resist cleaning. If the render is renewed in such cases, the undercoat and topcoat should be formulated in such a way that they can withstand this potential for damage for as long as possible. The tried-and-tested Remmers restoration render systems are ideally suited to this application.

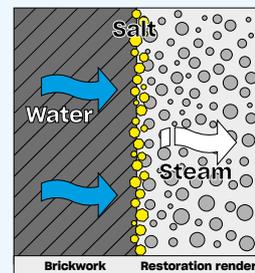
The permanently water-repellent and yet highly diffusible restoration render allows the masonry to dry out, but retains the salts so that efflorescence does not occur. If there are a lot of salts, the substrate can be levelled with (pore) undercoat render, which allows the salts to crystallise without causing any damage. Alternatively, Remmers compress render can be applied for a true dehumidifying render that is open to diffusion and capillary active. It ensures permanent moisture regulation and, with a pore volume of over 60%, offers ample space for the storage of salts.



Restoration render systems have two key tasks:

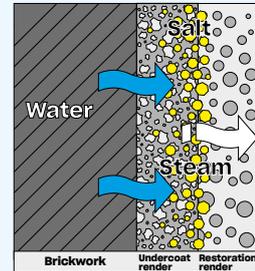
Mode of action of restoration render: one layer (restoration)

Shifting of the evaporation level for moisture present in the masonry from the render surface into the render layer. Restoration renders are water-repellent and at the same time highly diffusible.



Mode of action of restoration render system: two layers (undercoat and restoration)

Storage of salts migrating from the masonry without damage to the render. The undercoat render is not water-repellent so that the salts can migrate in and, with over 50% pore volume, offers sufficient space to store the salts harmlessly.



Remmers solution	Range of use	Properties	Page
SP Prep	WTA-compliant preparatory mortar	<ul style="list-style-type: none"> High adhesion to the substrate High sulphate resistance Evens out differences in absorption 	97
SP Levell	WTA-compliant, salt-accumulating pore undercoat render in renovation render systems for masonry with water and salt loads Condensate buffer and protective layer on interior water-proofing	<ul style="list-style-type: none"> High salt storage capacity Porosity > 45 vol.% High sulphate resistance Machine-workable 	98
SP Top white	WTA-compliant renovation render for masonry with water and salt loads	<ul style="list-style-type: none"> High salt storage capacity Porosity: > 50 vol.% High sulphate resistance Pore hydrophobic Machine-workable Promotes drying 	99



WTA-compliant sacrificial render

Removal of moisture and salt for the benefit of the building substance

If extremely high levels of salt are present, it is recommended to work with sacrificial renders, also known as compress renders, as an alternative to permanent one- or two-layer restoration render systems to reduce the salt content in areas near the surface. Depending on the type and amount of salts, the lifespan of such a render can be many years. Sacrificial renders are true dehumidifying renders, diffusion-open and capillary-active. With a pore volume of over 60%, Remmers Compress Render has a significantly higher pore volume than salt storage renders in general.

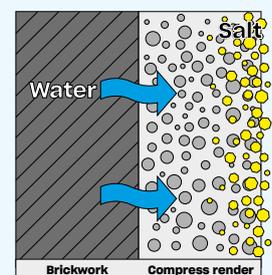
Unlike restoration render, a water-repellent configuration is dispensed with here in favour of moisture and salt removal. The compress render thus has ample space for the storage of salts or the transport of moisture. In this way, the time of “sacrifice” can be delayed as long as possible. Remmers Compress Render is also suitable for repairing wall paintings damaged by moisture and salt.



Dehumidifying and compress renders work differently:

How compress render works

Unlike restoration render, a water-repellent configuration is dispensed with here in favour of moisture and salt removal. The render is given an even larger pore volume in order to store or let through as much salt and moisture as possible and release them quickly and efficiently into the air.



Remmers solution	Range of use	Properties	Page
Compress render	WTA-compliant salt-bonding render/sacrificial render Buffer layer under renders mixed according to historical formulations	<ul style="list-style-type: none"> High salt storage capacity Open porosity approx. 60 vol.% Capillary-active Reversible 	100



Historic rendered and plastered façades

Preserving valuable building substance

The use of traditional materials and application techniques is one of the basic premises in the restoration of listed buildings. As long as no excessive salt and moisture influences are to be expected, the use of traditional materials, up to and including project-specific recreation of the historic formulations, is the primary restoration goal.

With the Remmers Historic Mortar system, old mortar compositions can be recovered. This is true for almost all types of historical formulations, from dry-slaked lime mortar to natural cement mortar, classic stone plasters

to mid-20th century brick chippings. We create our formulations on the basis of analyses carried out in each individual case and our many years of experience from 75 years of active involvement in monument preservation.

In this way, we make our knowledge available to all who want to counteract the loss of historic plaster textures and formulations and the accompanying loss of historic mortars.

Remmers solution	Range of use	Properties	Page
CL Levell Historic	Specially formulated render undercoat	<ul style="list-style-type: none"> ▪ Original condition restored according to the principles of monument preservation ▪ Specially adapted binder ▪ Specially adapted grain size distribution 	100
CL Top Historic	Specially formulated render finishing coat	<ul style="list-style-type: none"> ▪ Original condition restored according to the principles of monument preservation ▪ Specially adapted binder ▪ Specially adapted grain size distribution 	101
CL Grout Historic	Lime-based façade slurry	<ul style="list-style-type: none"> ▪ Manual application ▪ Based on hydraulic lime ▪ Low strength 	102
CL Fill Q3 Historic	High-quality, ready-to-use filler based on “dispersed white hydrated lime” Interiors on clay, lime, lime-cement, etc. Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary active and diffusion open ▪ Allergy-friendly, naturally antiseptic ▪ Grain size approx. 0.5 mm ▪ Can be feathered out to zero 	110
CL Fill Q4 Historic	High-quality, ready-to-use filler based on “dispersed white hydrated lime” Interiors on clay, lime, lime-cement, etc. Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary active and diffusion open ▪ Allergy-friendly, naturally antiseptic ▪ Grain size approx. 0.15 mm ▪ Can be feathered out to zero 	111
NHL Levell Historic	Undercoat based on NHL 5	<ul style="list-style-type: none"> ▪ Cement-free ▪ Low-stress hardening process ▪ Moisture and climate regulating 	103
NHL Top Historic	Finishing coat based on NHL 5	<ul style="list-style-type: none"> ▪ Formulated according to conservation principles ▪ Cement-free ▪ Low-stress hardening process ▪ Moisture and climate regulating 	104
Historic lime mortar	Basic mixture (“dry-slaked”, cement-free sand-lime mortar) for the production of mortars and plasters according to historical formulations with the addition of local aggregates	<ul style="list-style-type: none"> ▪ Free from cement, trass, hydraulic limes ▪ Forms small lime lumps ▪ Has a “self-healing” effect on cracks and flank tears 	104

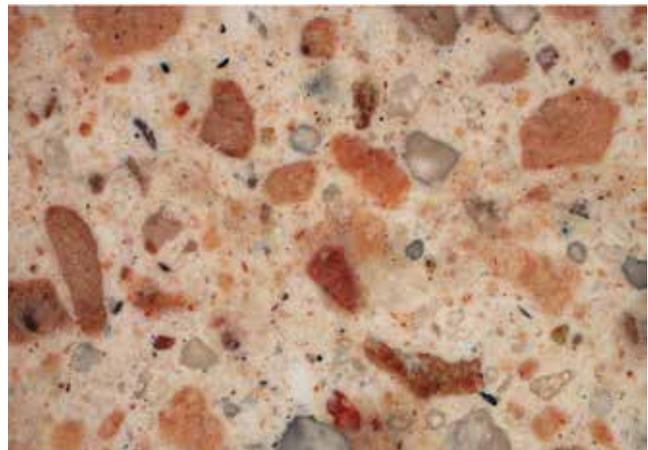


Natural cement

Preservation of historical plaster formulations

Natural cement (also called “Roman cement”) was first used in 1774 in the construction of the lighthouse at Eddystone, England by John Smeaton. He had previously found that the addition of pozzolanic (volcanic) additives to a lime to increase its strength, which had been common until then, could be dispensed with if either brick dust was added during the burning process or if limes contaminated with clays were used. This knowledge quickly spread from England to other countries, so that from 1800 to 1850 natural cement became the binder of choice in Europe. In the following decades, it faced strong competition from Portland cement, which also originated in England, until its use was discontinued with the outbreak of the First World War.

Natural cements were often used as a thin mortar layer with a relatively high cement content. The nevertheless low diffusion resistance and the comparatively high porosity ensured high durability. In order to meet the requirement of repairing historical natural cement mortars in a way that is suitable for the material, Remmers uses either of the two available sources of raw materials in Poland and France to formulate the corresponding products. Due to the large number and



importance of the buildings on which natural cements played an essential role in the 19th and early 20th centuries for plastering and façade ornamentation, and the highly interesting properties of these binders in terms of building physics, the European Union has funded two successive projects to revive natural cement technology: ROCEM (2003 – 2006) and ROCARE (2009 – 2013), in which Remmers was a partner.

Remmers solution	Range of use	Properties	Page
RM RZ Historic	Fast-setting substitution mortar based on natural cement for joint and plaster restoration	<ul style="list-style-type: none"> ▪ Quick-setting ▪ Slow strength development ▪ Good flank adhesion ▪ Not hydrophobic ▪ Natural cement, unchanged for over 150 years 	105
Fill RZ Historic	Mineral surface filler and fine render based on natural cement	<ul style="list-style-type: none"> ▪ Slow strength development ▪ Can be felted ▪ Natural cement, unchanged for over 150 years 	106



33

31

Stucco replacement and repair

Individual handicraft to this day



Stucco elements give façades a special touch. They stand for noble and traditional handicraft. Building façades decorated with stucco characterise many historic cityscapes. However, stucco is not only understood to mean the opulent sculptural flourishes of the Baroque and Rococo periods, but also, for example, simple cornices, window jambs, pilaster strips and the like. In the production of stucco, a distinction is made between traditional on-site mouldings and pre-fabricated stucco profiles and ornaments.

Remmers has solutions for both manufacturing processes that optimally meet modern requirements for workability, speed and durability.

Remmers solution	Range of use	Properties	Page
Stucco GZ	Coarse mortar for shaping stucco cores, profiles and cornices	<ul style="list-style-type: none"> ■ Fast setting ■ Single layer thickness 10 - 40 mm 	107
Stucco FZ	Fine mortar for fine-textured surface design of new and old stucco Creating smooth, sharp-edged profiles	<ul style="list-style-type: none"> ■ Fast setting ■ Repels water ■ Single layer thickness 1 - 5 mm 	107
Stucco GF	Stucco mortar for factory production of stucco elements in the casting process	<ul style="list-style-type: none"> ■ Fast setting ■ Grain size: < 1.5 mm ■ Compressive strength: approx. 5.0 N/mm² 	108





Reproducing originals

Silicone moulding compounds with excellent reproduction accuracy

There are many good and legitimate reasons to make impressions of valuable originals. From the restorer to the archaeologist, the museum curator to the artist who wants to reproduce their designs: all of them work with silicone moulding compounds.

Remmers Silicone AFM is a highly elastic, condensation-curing silicone impression material with high penetration resistance and was specially developed for the production of universally usable casting moulds. It has excellent reproduction accuracy and is suitable for impressions of all levels of difficulty. Thanks to its high elasticity and good release properties, the material can be easily detached from the model and is thus designed for the highest possible

impression frequency and accuracy. To increase the stability, the flowability of the silicone impression material AFM can be reduced by adding thickening additive AFM. This means that skin moulds can also be created on non-flat or vertical mould surfaces using the brush technique, without the impression material running off or sagging. It is possible to pour out from the mould with different materials: pourable mortars/ stucco mortars are usually used for replication.

Other materials such as plaster, clay, wax and casting resins such as polyester and polyurethane can also be used to fill the silicone moulding compounds. However, casting resins limit the impression frequency.

Remmers solution	Range of use	Properties	Page
Silicone AFM / Hardener AFM	Pourable, room temperature curing 2K silicone impression compound True-to-detail moulding of valuable originals Production of solid and skin moulds Moulds with strong undercuts	<ul style="list-style-type: none"> ■ High reproduction accuracy and sharp delineation ■ Excellent resilience ■ Very good elasticity and notch strength ■ Good flow properties ■ Easy demoulding 	109
Thickener AFM	Additive for modifying the flowability of Silicone AFM Reduction in flowability or increase in stability of Silicone AFM Production of skin moulds by brushing on uneven or perpendicular mould surfaces without run-off or sinking	<ul style="list-style-type: none"> ■ Cross-linking, increases viscosity ■ Colour-neutral 	110



Coatings, varnishes & hydrophobic treatment

Decoration and surface protection

Remmers Historic lime paint system

Rediscovering tradition with dispersed white hydrated lime

In the late 1990s, a new preparation technique for lime was developed at Cologne University of Applied Sciences in the department for “Restoration and preservation of artistic and cultural assets”. By “dispersing” the material, the tried-and-tested properties of the binder lime could be combined with the possibilities of modern technology to eliminate its characteristic disadvantages.

Benefits of the Historic lime paint system

- ✓ Accelerated carbonation (hardening)
- ✓ Greater binding capacity for pigments
- ✓ Improved adhesion to the substrate
- ✓ Smudge-proof
- ✓ Greater resistance to weathering
- ✓ Improved workability
- ✓ All system components can be mixed together
- ✓ No synthetic additives



System components

Thanks to the symbiosis between tried-and-tested tradition and modern technology, the Remmers Historic lime paint system is the perfect tool for restoring historic buildings to their former glory.

Remmers solution	Range of use	Properties	Page
Color CL Historic	Lime paint without organic binders Porous, mineral building materials in interiors Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary-active and highly water diffusible ▪ Good covering power ▪ Solvent-free and plasticiser-free ▪ Free from preservatives ▪ Allergy-friendly, naturally antiseptic ▪ Low-stress 	112
Color CL Fill Historic	Filling lime paint without organic binders Porous, mineral building materials in interiors Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary-active and highly water diffusible ▪ Good covering power ▪ Solvent-free and plasticiser-free ▪ Free from preservatives ▪ Allergy-friendly, naturally antiseptic ▪ Low-stress 	113
CL Fill Q3 Historic	High-quality, ready-to-use filler based on “dispersed white hydrated lime” Interiors on clay, lime, lime-cement, etc. Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary active and diffusion open ▪ Allergy-friendly, naturally antiseptic ▪ Grain size approx. 0.5 mm ▪ Low-stress ▪ Can be feathered out to zero 	110
CL Fill Q4 Historic	High-quality, ready-to-use filler based on “dispersed white hydrated lime” Interiors on clay, lime, lime-cement, etc. Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary active and diffusion open ▪ Allergy-friendly, naturally antiseptic ▪ Grain size approx. 0.15 mm ▪ Low-stress ▪ Can be feathered out to zero 	111



Remmers silicate paints

Mineral coating with fine-grained quartzite structure

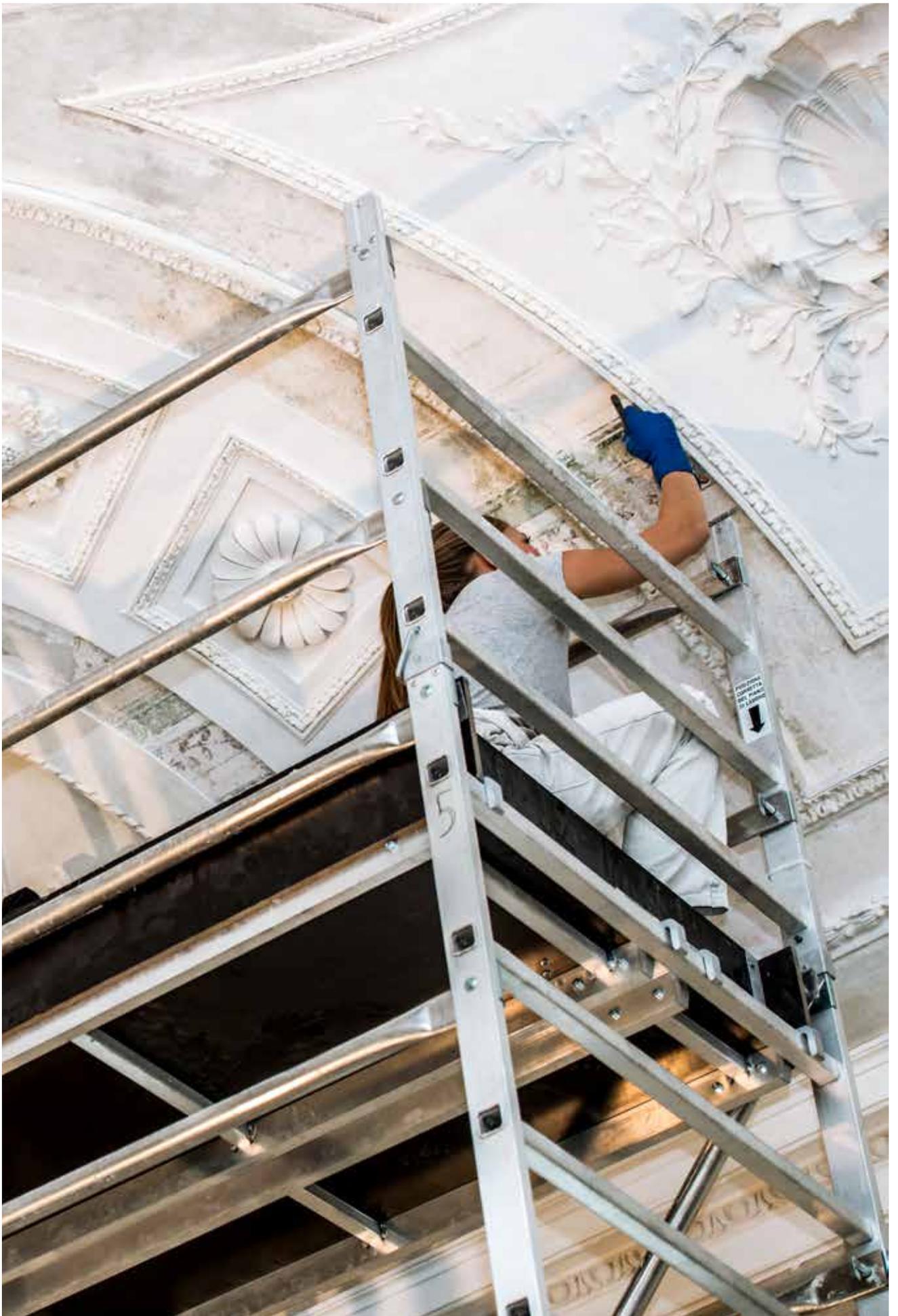
Classic silicate and mineral paints impart a sense of high-quality design and resilience. This is down to the use of water glass as a mineral binder, as well as the wide array of impressive architectural monuments on which these paints have been used, in particular those of the early modern period. Towards the end of the 19th century, painting and coating systems based on water glass hailed a new era of colour chemistry and technology. In both qualitative and quantitative terms, it was the perfect material for durable, weather-resistant and attractive façade designs.

In principle, water glass is glass dissolved in water. There are two distinct types: potassium water glass and sodium silicate. Only the former has the right properties for creating colour (pigmented water glass). Silicate paints dry as the water evaporates and carbon dioxide is absorbed from the air. This process "silicifies" the

water glass and binds the pigments to the substrate. In order to ensure that surfaces coated in this manner do not become overly solidified, only somewhat firm render substrates should be coated with silicate paints.

The natural, mineral coloured pigments are fully light-fast and weatherproof. Silicate paints appear matt, but the use of water glass as a binder gives them a unique vivid appearance. Because the pigments used have to be inorganic and resistant to water glass, the range of colours available is limited and therefore falls in line with the colours found on historic architecture. Different colour shades may occur as a result of uneven drying conditions and are not a defect. Silicate paints are governed by DIN 18363. They are among the most diffusion-open of all paints. They are usually made hydrophobic for application to façades.

Remmers solution	Range of use	Properties	Page
Primer Hydro S HF	Mineral primer with hydrophobic and strengthening effect	<ul style="list-style-type: none"> ▪ Evens out differences in absorption ▪ Strengthening ▪ Silicifies the substrate ▪ Mineral ▪ Aqueous 	114
Color SH	Mineral paint with fine-grained structure	<ul style="list-style-type: none"> ▪ Fine-grained surface texture ▪ Water vapour diffusion open ▪ Repels water 	115



Remmers silicone resin paint system

The reversible alternative for moisture protection

The opaque or translucent Remmers silicone resin paint system is an alternative to the use of hydrophobising impregnations as a structural water-repelling measure. The outstanding performance of silicone resin paints is all thanks to its microporous structure.

These can be seen in their characteristic values. They achieve a diffusion resistance coefficient of around 150. This corresponds to an sd value of well below 0.10 m. As a result, they can be said to be equivalent to conventional single-component silicate paints. The capillary water uptake of the normal paint layer achieves a low value of $0.035 \text{ kg}/(\text{m}^2\text{h}^{0.5})$. This corresponds to optimum protection against driving rain, which is exceeded by all silicate paints and most dispersion paints.

Advantages of Remmers silicone resin paints & varnishes

- ✓ Maximum water vapour permeability and minimum capillary water uptake
- ✓ Also suitable for use on render surfaces of mortar class Plc (mortar with hydraulic lime)

- ✓ Colours that blend in on historic monuments, thanks to colour-fast, inorganic pigments
- ✓ Easy to apply by brush; stains can be applied in a wide variety of ways
- ✓ Matt, chalk-like coating
- ✓ No silicification and therefore no risk of narrowing, densification or clogging of the pore space
- ✓ No interference with the carbonation reaction
- ✓ Reversible
- ✓ Contains film preservative to protect surfaces at risk of algae growth and fungal attack
- ✓ Self-cleaning (low tendency to accumulate dirt)
- ✓ Durable

Adjusting the varnish level for greater transparency:
The varnish level of Remmers silicone resin systems can be adjusted according to the requirements of historic preservation or the wishes of the building owner. Like genuine silicone resin emulsion paints, the binder base of Color LA Add transparent is a combination of silicone resin emulsion and pure acrylic dispersion.





Remmers solution	Range of use	Properties	Page
Primer Hydro HF	Aqueous deep primer with strengthening and hydrophobising properties	<ul style="list-style-type: none"> ▪ Strengthening ▪ Evens out differences in absorption ▪ Water-repelling ▪ Aqueous 	114
Color LA	“True” silicone resin paint with film preserver for protection against algae and fungus	<ul style="list-style-type: none"> ▪ Water repelling and highly water diffusible ▪ No interference with the carbonation reaction ▪ Low-stress; matt, mineral character ▪ Does not attract dirt 	115
Color LA Fill	Silicone resin filler paint Filling, “true” silicone resin paint	<ul style="list-style-type: none"> ▪ Fibre-reinforced ▪ Water repelling and highly water diffusible ▪ No interference with the carbonation reaction ▪ Low-stress; matt, mineral character ▪ Fine-sandy, rough texture 	116
Color LA Historic	Semi-translucent, “true” silicone resin paint	<ul style="list-style-type: none"> ▪ Semi-translucent ▪ Highly water vapour permeable and highly water repellent ▪ Reversible ▪ Low-stress ▪ Matt, mineral character ▪ Lime paint effect 	117
Color LA Fill Historic	Filling “true” silicone resin paint	<ul style="list-style-type: none"> ▪ Semi-translucent ▪ Highly water vapour permeable and highly water repellent ▪ Reversible ▪ Low-stress ▪ Matt, mineral character ▪ Lime paint effect 	118
Color LA ADD Transparent	Transparent thinner additive for silicone resin paint systems for adjusting the varnish level	<ul style="list-style-type: none"> ▪ Clear ▪ Repels water 	119

Funcosil impregnation agent

Reliable protection for dry brickwork

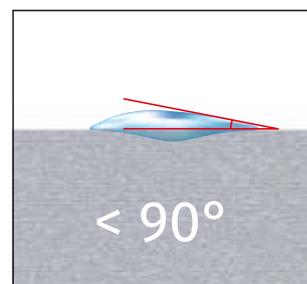
Water plays a central role in the weathering of mineral building materials. The aim of a hydrophobic impregnation is to significantly reduce capillary water absorption, as occurs, for example, during rainfall or exposure to splash water. It is a sensible, damage-preventing (prophylactic) measure if the capillary absorption of rainwater or splash water has the potential to trigger or accelerate a damage process, or if corresponding damage can already be observed.

In addition, reducing the moisture content can improve the heat insulation of the façade brickwork. Hydrophobic treatment with Funcosil protects your bricks from damage and saves valuable energy. Regardless of the composition of the active ingredient, the effect of a hydrophobic impregnation is based on reducing the adhesive forces between the pore wall and penetrating water molecules. By diminishing the interaction in this way, the capillary suction that normally prevails is transformed into capillary depression. The range of variations and properties of organosilicon-based hydrophobic agents is very broad. The agent used should therefore be chosen according to the requirements of the substrate. In the

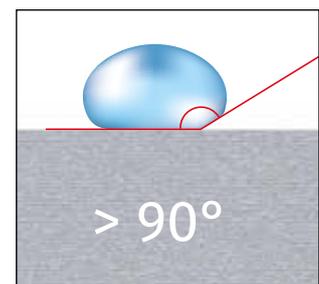
past, hydrophobic agents were always liquid and thus only of limited suitability for weakly absorbent bricks. Now, Remmers has solved this problem with its Funcosil FC cream technology, which gives all substrates the time to absorb the required quantity of protective substances.

What is the surface wetting angle?

The contact or surface wetting angle describes the angle formed by a liquid on the surface of a solid. If the contact angle is $> 90^\circ$, then the surface is classed as hydrophobic.



Hydrophilic material (affinity for water)



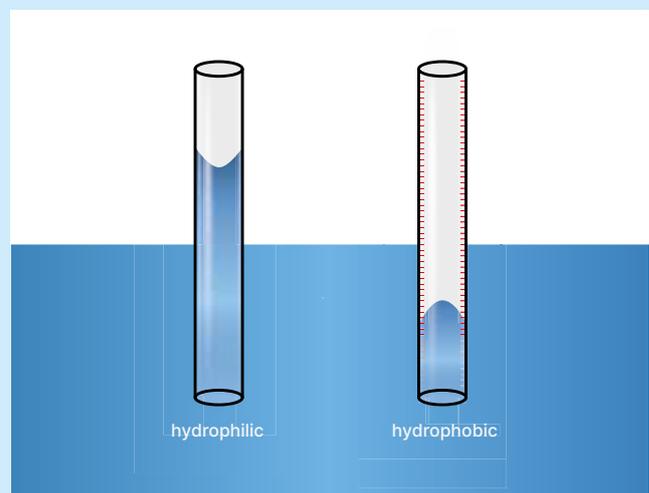
Hydrophobic material (water repelling)

Remmers solution	Range of use	Properties	Page
Funcosil FC Historic	Limited capillary retarding impregnating cream Reduction of capillary water absorption while maintaining residual capillarity	<ul style="list-style-type: none"> ▪ Cream form: lightweight, can be applied with pinpoint accuracy and without losses ▪ Solvent-based ▪ No water repelling effect 	120
Funcosil FC	Hydrophobic impregnation in cream form For subsequent cavity insulation and interior insulation	<ul style="list-style-type: none"> ▪ Cream form: lightweight, can be applied with pinpoint accuracy and without losses ▪ Early resistance to rain, approx. 60 minutes after application 	121
Funcosil FC PLUS	Colour-intensifying impregnating cream based on silane/siloxane	<ul style="list-style-type: none"> ▪ Colour intensifying ▪ Cream form: lightweight, can be applied with pinpoint accuracy and without losses ▪ Solvent-based 	122
Funcosil FC pro	Silane-based impregnating cream for substrate-specific adapted hydrophobising Complementary measure for energetic refurbishments	<ul style="list-style-type: none"> ▪ Slows down capillary transport ▪ Cream form: lightweight, can be applied with pinpoint accuracy and without losses ▪ Solvent-based 	123
Funcosil SNL	Clear, hydrophobic, solvent-based impregnation	<ul style="list-style-type: none"> ▪ Applied as a liquid ▪ Solvent-based 	124
Funcosil SN	Clear, hydrophobic impregnation, especially for solvent-sensitive building materials and connection areas	<ul style="list-style-type: none"> ▪ Applied as a liquid ▪ Compatible with solvent-sensitive building materials such as polystyrene or bitumen ▪ Reduces energy losses ▪ Contains isopropyl alcohol 	127
Funcosil SL	Clear, hydrophobic impregnation for limestone	<ul style="list-style-type: none"> ▪ Applied as a liquid ▪ Solvent-based 	126
Funcosil WS	Hydrophobic impregnation based on silane/siloxane in aqueous emulsion form, especially for elements with or adjacent to those containing solvent-sensitive components	<ul style="list-style-type: none"> ▪ Applied as a liquid ▪ Compatible with solvent-sensitive building materials such as polystyrene or bitumen ▪ Solvent-free ▪ Applied as a liquid 	128

What happens exactly when a surface is made hydrophobic?

A thin glass tube is immersed in a water basin. Due to the capillary forces acting, the water in the glass tube will rise to the top. If the glass tube is now made hydrophobic, the effect is reversed; water is no longer "sucked in" but rather forced out.

Since this is the result of only a single-molecule, nanoscale layer of Funcosil impregnation on the pore walls, vapour transport is virtually unrestricted. There is no impairment to diffusibility.





Repairing timber framework

Methods and recommendations

Preservation of historic timber constructions

For interiors and exteriors

Wood has been an important building material in Europe at virtually all times in its history. With the exception of the northern and eastern regions, the wood-saving but complicated half-timbered construction method was mainly used. Here, all the forces are absorbed by the bars of the wooden skeleton, while the so-called compartments – in the space between the wooden beams – usually “only” have the function of closing the wall surface. As a result of external forces such as wind loads, but especially due to moisture and temperature-related changes in length, the load-bearing timber structure of such half-timbered buildings becomes deformed over time. These building elements are therefore described as not being dimensionally stable.

Since the mostly solid infill panels have very limited ability to cope with these deformations, cracks inevitably develop in the connection areas between the wood and the infill panel over time. Because there were no viable materials that could be used to permanently eliminate this weak point, all the framework materials used had to be adapted to this situation.



In addition to the greatest possible flexibility – in order to keep the cracks small – one of the most crucial characteristics is the capillary absorbency of the materials used. This ensures that the moisture absorbed in the crack area is transported as quickly as possible – away from the wood – into the interlocking building materials and from there released into the environment. At the same time, however, the water absorption of the compartments when exposed to rain must be limited. Therefore, a particularly finely balanced system is required with regard to water transport.

Based on the many years of experience of Prof. Manfred Gerner, the distinguished timber framework specialist, an overall system for the repair of timber framework constructions has been developed in recent years. In addition to meeting the above-mentioned technical requirements, emphasis was placed on using historic building materials to the greatest extent possible.

Repairing timber framework

An integrated approach makes all the difference

The building stock of Germany includes a large number of historic half-timbered buildings with high economic and cultural value. This stock is endangered due to inadequate maintenance and inappropriate renovation measures. The care and maintenance of half-timbered buildings used to be a problem-free and self-evident task for users and owners as well as craftspeople. All stakeholders were familiar with the properties of the materials used, even if they were unusual or difficult to get hold of. Nowadays, the situation is different.

The requirements for living comfort have increased significantly, while there has been even more dramatic growth in the types and number of building materials offered. On the other hand, the wealth of experience and knowledge about half-timbered or timber framework buildings has dropped to almost zero within the last two generations. The consequences are drastic. By far the greatest part of the damage observed today in half-timbered buildings stems

from inadequate measures taken in past decades. The federal government, as well as numerous other institutions, have helped to address the knowledge deficits for all but minor issues. The results are now available in a wide variety of forms, but have not yet become sufficiently established among the planning offices and contractors and thus ultimately the construction sites.

With the Remmers timber framework renovation system, it is now possible for the first time to completely eliminate this deficit. The system ranges from wood preservatives and wood coatings to mortars and paints for wood frames. For the first time, a holistically coordinated product range is available that will help to sustainably care for, structurally maintain and thus permanently protect valuable cultural assets.

Remmers solution	Range of use	Properties	Page
RM pro	Mineral stone substitution mortar (can be feathered out to zero)	<ul style="list-style-type: none"> ▪ Can be feathered out to zero ▪ Can be applied as a slurry 	92
Primer Hydro S F	Mineral primer with a strong strengthening effect	<ul style="list-style-type: none"> ▪ Strengthening ▪ Silicifies the substrate ▪ Aqueous ▪ Mineral 	96
Color CL Historic	Lime paint without organic binders Porous, mineral building materials in interiors Monument preservation and eco-friendly construction	<ul style="list-style-type: none"> ▪ Capillary-active and highly water diffusible ▪ Good covering power ▪ Solvent-free and plasticiser-free ▪ Free from preservatives ▪ Allergy-friendly, naturally antiseptic ▪ Low-stress 	112
Framework mortar	Mineral infiller mortar, undercoat and finishing coat render for framework constructions	<ul style="list-style-type: none"> ▪ Promotes drying ▪ As infiller mortar in a single layer, application thickness 30 – 80 mm ▪ As plaster in a single layer, application thickness 10 – 30 mm 	132
FM ZF	Cement-free grout for low-strength masonry	<ul style="list-style-type: none"> ▪ Cement-free ▪ High adhesive pull strength ▪ Low inherent stress ▪ Various special colours available 	87

Plaster/clay infill



① Remove the old infill



② Apply framework mortar



③ Prime with Primer Hydro SF and then coat with Color CL Historic

Brick framework



① Clear out the old joints



② Replace or supplement damaged bricks with RM pro



③ Re-point with FM ZF

Remmers solution	Range of use	Properties	Page
Aqua OWF-68/tm Weather Protection Oil Finish [eco]	Durable, cloth matt, texture-emphasising opaque paint with sealing properties made from renewable raw materials for interior and exterior wood in sensitive areas	<ul style="list-style-type: none"> ▪ Water-based, very low solvent content ▪ Block resistant ▪ Cloth matt ▪ Tested bee-friendly formula 	133
Aqua OML-48/tm Medium Build Oil Stain [eco]	Durable, cloth matt stain made from renewable raw materials for interior and exterior wood in sensitive areas	<ul style="list-style-type: none"> ▪ Water-based, very low solvent content ▪ Block resistant ▪ Tested bee-friendly formula 	134
Aqua OVL-49/tm Grey Stain Oil [eco]	Durable grey stain made from renewable raw materials for interior and exterior wood in sensitive areas	<ul style="list-style-type: none"> ▪ Natural grey tones for wood ▪ Tested bee-friendly formula ▪ Water-based, very low solvent content 	135
Aqua HSL-36/m Professional grade, 3-in-1 wood preservative stain	Water-based, quick-drying premium wood preservative stain for professional use	<ul style="list-style-type: none"> ▪ Low-build stain ▪ 3in1: impregnation, primer and stain ▪ Water-based 	136

OUR PRODUCT RANGE

System products and accessories

Proven solutions for building protection and monument conservation



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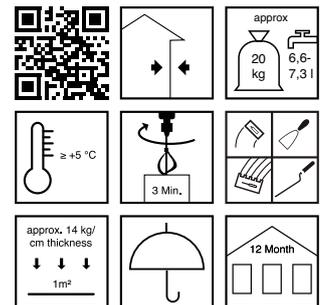
SALT REMOVAL COMPRESS

Salt removal compress

Dry mortar for the reduction of salts close to the surface

Range of use	<ul style="list-style-type: none"> Non-destructive reduction of the salt content in the compress process acc. to WTA Leaflet 3-13-01
Property profile	<ul style="list-style-type: none"> Effective compress with active mineral components & cellulose Cement-free, lime-free Optimised moisture and salt transport with capillary-active lightweight aggregate Easy to remove, leaves no residue "Drying compress" mode of action
Application rate	<ul style="list-style-type: none"> Approx. 14 kg/m²/cm layer thickness depending on substrate conditions

Quantity per pallet	42
Packaging unit	20 kg PE bag
Container code	20
Art. no.	
grey-beige	1070



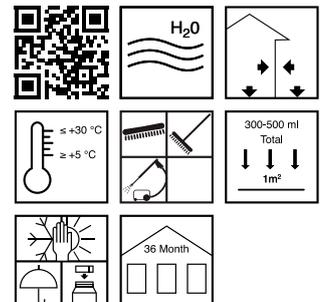
CLEANING AGENTS

Clean WR

Acidic cleaner

Range of use	<ul style="list-style-type: none"> Mineral substrates Tiles and slabs
Property profile	<ul style="list-style-type: none"> Surfactant-free Ready to use pH value approx. 1.0
Application rate	<ul style="list-style-type: none"> Approx. 0.3 - 0.5 l/m² depending on the dirt level

Quantity per pallet	84	24
Packaging unit	5 kg Plastic canister	30 kg Plastic canister
Container code	05	30
Art. no.		
0675		



System products	Art. no.
Funcosil FC	(0711)
Funcosil SN	(0604)
Funcosil SNL	(0602)

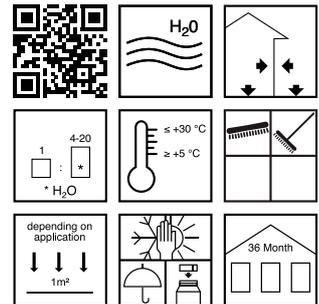
Clean AC [basic]

Acidic cleaner

Range of use	<ul style="list-style-type: none"> ■ Clinker and fired brick fair-faced masonry ■ Removal of mortar residues, lime and cement residues ■ Removal of limescale
Property profile	<ul style="list-style-type: none"> ■ High-yielding powder concentrate ■ Readily soluble in warm water ■ pH value 0.8 (10% solution)
Application rate	<ul style="list-style-type: none"> ■ Approx. 0.05 - 0.1 kg/m² depending on dirt level when used 1:10 in water



Quantity per pallet	240	90	44
Packaging unit	1 kg	5 kg	10 kg
	Plastic bucket	Plastic bucket	Plastic bucket
Container code	01	05	10
Art. no.			
0672	■	■	■



System products	Art. no.
Funcosil WS	(0614)
Funcosil SNL	(0602)
Funcosil FC	(0711)

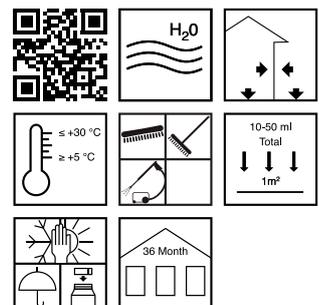
Clean SL

Surfactant solution for removing dirt, encrusted dirt, dust, oil and grease deposits

Range of use	<ul style="list-style-type: none"> ■ Removing dirt, encrusted dirt, dust, oil and grease deposits ■ Mineral surfaces ■ Floors and walls
Property profile	<ul style="list-style-type: none"> ■ High washing activity ■ High-yielding concentrate ■ Low-foaming ■ Can be processed manually and by machine ■ Biodegradable
Application rate	<ul style="list-style-type: none"> ■ Approx. 0.01 - 0.05 l/m² depending on the dirt level



Quantity per pallet	84
Packaging unit	5 kg
	Plastic canister
Container code	05
Art. no.	
0671	■



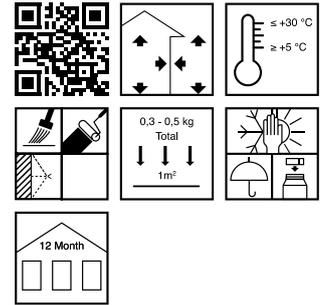
System products	Art. no.
Funcosil FC	(0711)
Funcosil SNL	(0602)
Funcosil SN	(0604)

AGE

Paint stripper and graffiti remover

Range of use	<ul style="list-style-type: none"> ▪ Dissolving dispersion and pure acrylate varnishes, synthetic resin, nitro and spirit varnishes, matting, polishes and graffiti ▪ Wood surfaces, metal and mineral substrates
Property profile	<ul style="list-style-type: none"> ▪ Paste-like ▪ Highly effective ▪ Long open working time ▪ No N-methyl pyrrolidone or chlorinated hydrocarbons, alkali-free ▪ Biodegradable
Application rate	<ul style="list-style-type: none"> ▪ Approx. 0.3 – 0.5 l/m² per coat

Quantity per pallet	432	66	12
Packaging unit	12 × 0.75 l	5 l	25 l
	Tin bucket	Tin bucket	Tin bucket
Container code	01	05	25
Art. no.			
1368	■	■	■

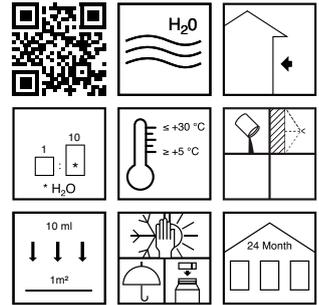


System products	Art. no.
Funcosil SNL	(0602)
Funcosil SN	(0604)
Funcosil FC	(0711)
Graffiti Protection	(0685)

Green Growth Remover

Special cleaner for removing green growth from terraces, stone floors and walls

Range of use	<ul style="list-style-type: none"> Building material surfaces made of concrete, natural stone, sand-lime brick, ceramics, glass, wood, plastic & WPC
Property profile	<ul style="list-style-type: none"> Removes organic dirt, independent and deep-acting No washing required after application, 24 hrs action time Apply pure or diluted with water Long-term effect with undiluted application Contains no active chlorine Gentle on materials
Application rate	<ul style="list-style-type: none"> Apply pure or diluted up to 1:10 with water
Quantity per pallet	200
Packaging unit	4 × 2.5 l Plastic canister
Container code	03
Art. no.	
0676	■



rotec spacer

Range of use	<ul style="list-style-type: none"> Accessories for pressure blasting equipment from Schmidt Sandstrahltechnik GmbH (www.schmidt-sandstrahltechnik.de) VARIO PRIMUS KE 25 or 45 litre and other jet blasting equipment
Property profile	<ul style="list-style-type: none"> Material: EPDM Inner diameter: approx. 17 mm Outer diameter: approx. 27 mm Length: approx. 27 mm Temperature range: approx. -40 to +100 °C Hardness (Shore A) DIN ISO 7619-1: approx. 50 ° +/- 5 Shore A Tear strength DIN 53504: approx. 8 MPa Tear strength DIN 53504: approx. 500%



Quantity per pallet	5555
Packaging unit	5 pcs Pack
Container code	01
Art. no.	
5265	■

System products	Art. no.
rotec turbine	(5243)

rotec turbine

Patented swirl unit

Range of use	<ul style="list-style-type: none"> rotec soft jet method Can be used for dry, damp and wet cleaning
Property profile	<ul style="list-style-type: none"> Tangential abrasion effect – jet particles glide on the surface Cleaning intensity can be adjusted to the degree of soiling Gentle on the building substance Patented swirl unit with special lamella technology made from low-wear hard ceramic



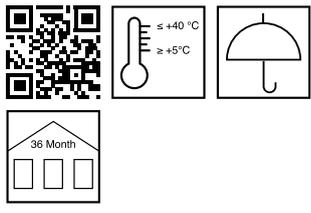
Packaging unit	1 pc
	Can
Container code	02
Art. no.	
5243	■

System products	Art. no.
rotec soft blasting unit 25 l	(5235)

rotec glass powder

rotec soft jet granules, no risk of silicosis

Range of use	<ul style="list-style-type: none"> rotec soft jet blasting
Property profile	<ul style="list-style-type: none"> Synthetic soft jet granules Gentle on the building substance Optimum performance with minimum removal of surface material No risk of silicosis from blasting material Can be used according to BGR 500 Section 2.24 Environmentally friendly blasting material as per ISO 11126-4 N/CS/G
Application rate	<ul style="list-style-type: none"> 40 - 100 kg/h



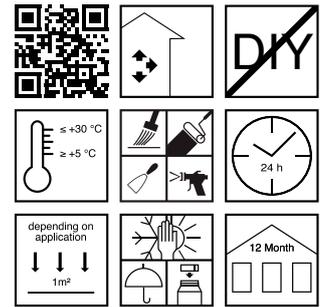
		Quantity per pallet	42
		Packaging unit	25 kg
			Paper bag
		Container code	25
		Art. no.	
A0	0.04 - 0.09 mm	5280	■
A2	0.09 - 0.25 mm	5278	■

System products	Art. no.
rotec turbine	(5243)
rotec spacer	(5265)

Arte Mundit

Solvent-free, film-forming peel-off paste for water-free removal of dust, soot and other impurities

Range of use	<ul style="list-style-type: none"> ▪ Sensitive and highly valuable interiors ▪ Surface soiling on stucco, natural stone, marble, concrete, brick, plaster, plaster sculptures, polished wood and synthetic building materials ▪ Type 1 Physical cleaning for lightly adhering soiling ▪ Type 2 Special cleaner for marble ▪ Type 3 Physical and chemical cleaning for general soiling ▪ Type 5 Especially for cleaning fire residues ▪ For professional users
Property profile	<ul style="list-style-type: none"> ▪ Independent and deep-acting cleaning ▪ Film-forming and dirt-binding ▪ Dust-free cleaning without additional water ▪ Solvent-free ▪ With complex-forming additive, can be adapted to substrate and soiling
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.0 kg/m² on a level surface ▪ Approx. 1.0 - 3.0 kg/m² on a highly textured surface

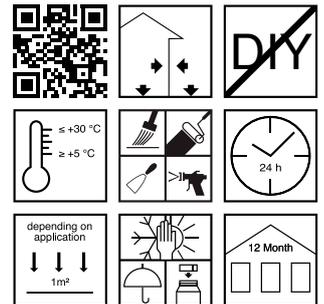


Quantity per pallet		22				
Packaging unit	0.2 kg	approx. 0.25 kg	15 kg	15 kg	15 kg	15 kg
	Sample tin	Sample tin	Tin bucket	Tin bucket + 1.01 kg additive	Tin bucket + 2.86 kg additive	Tin bucket + 3.84 kg additive
Container code	83	81	16	16	18	19
	Art. no.					
Type 1: Pure natural latex dispersion	222020	■	■			
Type 2: Natural latex dispersion + additive	222023			■		
Type 3: Natural latex dispersion + additive	222025				■	
Type 5: Natural latex dispersion + additive	222028					■

Arte Mundit ECO

Solvent-free, film-forming peel-off paste for water-free removal of dust, soot and other impurities

Range of use	<ul style="list-style-type: none"> ▪ Sensitive and high-value interiors and exteriors ▪ Surface soiling on stucco, natural stone, marble, concrete, brick, plaster, plaster sculptures, polished wood and synthetic building materials ▪ Especially for cleaning fire residues ▪ For professional users
Property profile	<ul style="list-style-type: none"> ▪ Independent and deep-acting cleaning ▪ Film-forming and dirt-binding ▪ Dust-free cleaning without additional water ▪ Solvent-free ▪ EDTA and surfactant free
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.0 kg/m² on a level surface ▪ Approx. 1.0 - 3.0 kg/m² on a highly textured surface

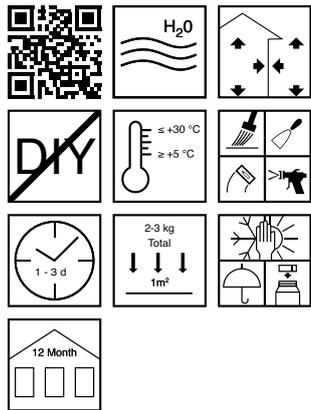


Quantity per pallet		22
Packaging unit	0.2 kg	15 kg
	Sample tin	Tin bucket
Container code	83	15
Art. no.		
222030	■	■

Clean Galena neutral / max / individual

Cleaner for emission-free cleaning of mineral surfaces

Range of use	<ul style="list-style-type: none"> Mineral surfaces, especially limestone Reduction of heavy metals, especially lead Reduction of encrusted dirt Removal of iron and copper impurities For professional users
Property profile	<ul style="list-style-type: none"> Low content of active cleaning ingredients Substrate-friendly cleaning Emission-free Dries to form an easily removable skin Binds surface impurities Complexing of heavy metals
Application rate	<ul style="list-style-type: none"> Approx. 2 - 3 kg/m² on a level surface Usual wet film thickness 2.5 mm



Quantity per pallet	288	12
Packaging unit	1 kg	25 kg
	Plastic bucket	Plastic bucket
Container code	01	25
Art. no.		
Clean Galena neutral	0662	■
Clean Galena max	0661	■
Special formulation		
Clean Galena individual	0664	■
Upon consultation only, min. 2 weeks lead time, minimum order quantity approx. 1000 kg		

System products	Art. no.
LEAD Box	(4969)

EQUIPMENT FOR NON-DESTRUCTIVE TESTING OF LEAD CONTAMINATION

LEAD Box

Equipment for non-destructive testing of lead contamination of façades

Range of use	<ul style="list-style-type: none"> For quantitative investigation of lead contamination of building material surfaces
Property profile	<ul style="list-style-type: none"> LEAD Box contents: 5 × 50 ml PE test tubes (sealable) including special fluid for sampling 1 × 50 ml PE reference sample (No. 6) for use as a reference sample, or reference quantity in the atomic absorption spectroscopy measurement procedure. Sample is sealed! Do not use! 1 pair disposable gloves Order form for analyses / documentation & sample description



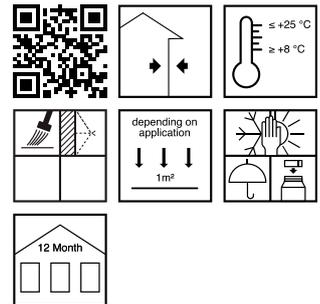
Packaging unit	1 pc
	Carton
Container code	01
Art. no.	
4969	■

SWELLING INHIBITORS

Antihygro

Swelling inhibitor for natural stone with clay mineral structure

Range of use	<ul style="list-style-type: none"> Natural stone with clay, mineral structure Decreases weathering processes induced by clay minerals 	
Property profile	<ul style="list-style-type: none"> Reduction of hygric swelling Reduction of the swelling speed Not water repelling No increase in strength 	
Application rate	<ul style="list-style-type: none"> Schilf sandstone: 1.0 - 4.5 l/m² Red sandstone: 0.3 - 2.5 l/m² Tuff: 1.0 - 6.0 l/m² Brick: 0.2 - 3.0 l/m² 	
Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Plastic canister	Plastic canister
Container code	05	30
Art. no.		
0616	■	■

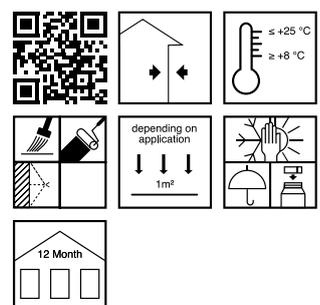


STONE STRENGTHENER

KSE 100

Silicic acid ester based stone strengthener with low gel deposition rate (10%) to avoid over-consolidation and to create balanced strength profiles

Range of use	<ul style="list-style-type: none"> Strengthening surfaces weakened by weathering Fine-pored rocks and mineral building materials with relatively low absorption capacity Combination with strengtheners with higher gel deposition rate to achieve balanced strength profiles and to avoid overstrengthening and spalling 	
Property profile	<ul style="list-style-type: none"> Gel deposition rate: Approx. 10% Contains special solvents to avoid unwanted remigration effects during the reaction time Not water repelling High penetration depth Clear to slightly turbid, possibly slightly yellowish Powdered quartz, white 	
Application rate	<ul style="list-style-type: none"> Dependent on the substrate 	
Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0719	■	■



System products	Art. no.
KSE 300	(0720)
KSE 300 HV	(0654)
KSE 300 E	(0714)

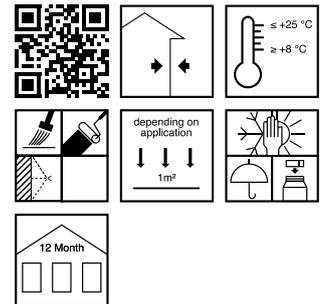
STONE STRENGTHENER

KSE 300

Solvent-free stone strengthener based on silicic acid ester

Range of use	<ul style="list-style-type: none"> Strengthening of heavily weathered and loosened surfaces Relatively solid rocks in the original state and mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100 Alternative product to KSE OH with significantly improved properties
Property profile	<ul style="list-style-type: none"> Gel deposition rate: Approx. 30% Solvent-free Not water repelling High penetration depth Active ingredient content: Approx. 99 M% Clear to slightly turbid, possibly slightly yellowish
Application rate	<ul style="list-style-type: none"> Depending on degree and depth of weathering Determine needs and efficiency on a sample area

Quantity per pallet	84	24	2
Packaging unit	5 l	30 l	200 l
	Tin canister	Tin canister	Drum
Container code	05	30	69
Art. no.			
0720	■	■	■



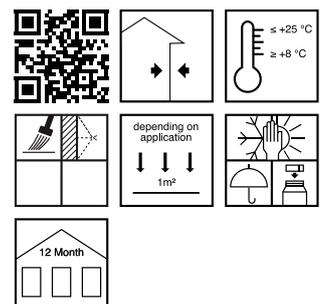
System products	Art. no.
V KSE	(0657)
KSE 100	(0719)

KSE OH

Solvent-free stone strengthener based on silicic acid ester

Range of use	<ul style="list-style-type: none"> Strengthening of heavily weathered and loosened surfaces Relatively solid rocks in the original state & mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100
Property profile	<ul style="list-style-type: none"> Gel deposition rate: Approx. 30% Solvent-free Not water repelling High penetration depth Active ingredient content: Approx. 99 M% Clear to slightly turbid, possibly slightly yellowish
Application rate	<ul style="list-style-type: none"> Dependent on the substrate

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0645	■	■



System products	Art. no.
V KSE	(0657)
KSE 100	(0719)

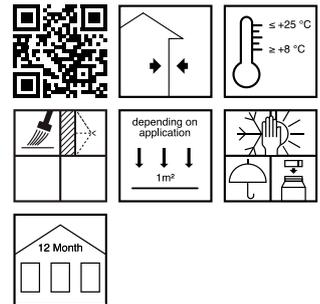
STONE STRENGTHENER

KSE H

Solvent-free stone strengthener based on silicic acid ester with hydrophobic effect

Range of use	<ul style="list-style-type: none"> Strengthening of heavily weathered and loosened surfaces with simultaneous hydrophobising Relatively solid rocks in the original state & mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100
Property profile	<ul style="list-style-type: none"> Water-repelling Gel deposition rate: Approx. 30% Solvent-free High penetration depth Active ingredient content: Approx. 99 M% Clear to slightly turbid, possibly slightly yellowish
Application rate	<ul style="list-style-type: none"> Dependent on the substrate

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0646	■	■

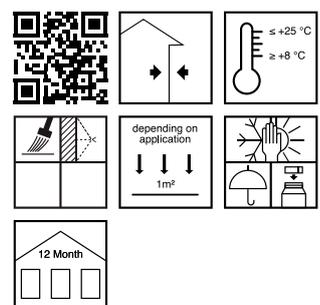


KSE 510

Solvent-free stone strengthener based on silicic acid ester with high gel deposition rate for the consolidation of highly softened mineral building materials

Range of use	<ul style="list-style-type: none"> Strengthening of heavily weathered and loosened surfaces Relatively solid rocks in the original state & mineral building materials Achievement of particularly balanced strength profiles in combination with KSE 100 and/or KSE 300 E
Property profile	<ul style="list-style-type: none"> Gel deposition rate: Approx. 45% Solvent-free Not water repelling High penetration depth Active ingredient content: Approx. 99 M% Clear to slightly turbid, possibly slightly yellowish
Application rate	<ul style="list-style-type: none"> Dependent on the substrate

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0625	■	■



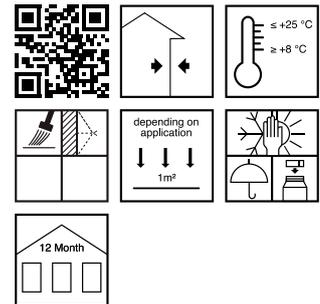
System products	Art. no.
V KSE	(0657)
KSE 100	(0719)
KSE 300 E	(0714)

KSE 300 HV

Solvent-free special solidifier for limestone based on silicic acid ester with special adhesion promoters

Range of use	<ul style="list-style-type: none"> Strengthening of predominantly calcitic substrates Strengthening of heavily weathered and loosened surfaces Achievement of particularly balanced strength profiles in combination with KSE 100
Property profile	<ul style="list-style-type: none"> Additional polar bonding mechanism Gel deposition rate: Approx. 30% Solvent-free Not water repelling High penetration depth Active ingredient content: Approx. 95 M% Clear to slightly turbid, possibly slightly yellowish
Application rate	<ul style="list-style-type: none"> Dependent on the substrate

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0654	■	■



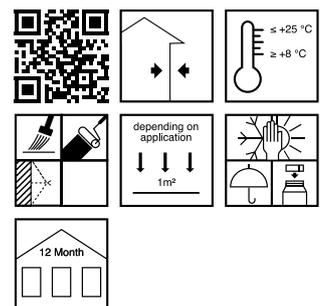
System products	Art. no.
V KSE	(0657)
KSE 100	(0719)

KSE 300 E

Elasticised stone strengthener based on silicic acid ester

Range of use	<ul style="list-style-type: none"> Strengthening of highly porous & strongly weathered microstructures Fine- to coarse-pored sandstones, certain vulcanites as well as weathered bricks, historical plasters and joints Achievement of particularly balanced strength profiles in combination with KSE 100
Property profile	<ul style="list-style-type: none"> Contains soft segments for a more flexible silica gel Favourable stress-strain behaviour due to larger, lower-stress silica gel bridges Gel deposition rate: Approx. 30% Not water repelling High penetration depth Active ingredient content: Approx. 95 M% Clear to slightly turbid, possibly slightly yellowish
Application rate	<ul style="list-style-type: none"> Dependent on the substrate

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0714	■	■



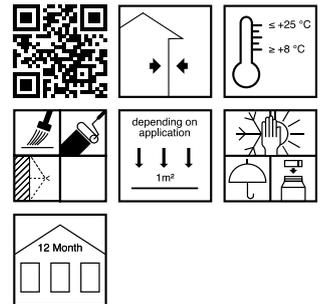
System products	Art. no.
KSE 100	(0719)
V KSE	(0657)

STONE STRENGTHENER

KSE 500 E

Elasticised stone strengthener based on silicic acid ester with high gel deposition rate for the consolidation of highly softened mineral building materials

Range of use	<ul style="list-style-type: none"> Strengthening of highly porous & strongly weathered microstructures Coarse-pored sandstones, certain vulcanites as well as weathered bricks, historical plasters and joints Achievement of particularly balanced strength profiles in combination with KSE 100 and/or KSE 300 E 	
Property profile	<ul style="list-style-type: none"> Contains soft segments for a more flexible silica gel Favourable stress-strain behaviour due to larger, lower-stress silica gel bridges Gel deposition rate: Approx. 50% Not water repelling High penetration depth Active ingredient content: Approx. 85 M% Clear to slightly turbid, possibly slightly yellowish 	
Application rate	<ul style="list-style-type: none"> Dependent on the substrate 	
Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Can	Can
Container code	05	30
Art. no.		
0715	■	■

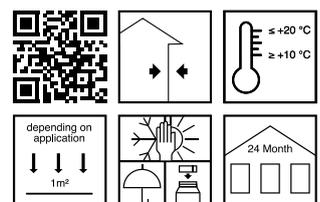


System products	Art. no.
V KSE	(0657)
KSE 100	(0719)
KSE 300 E	(0714)

KSE 500 STE

Binder in the KSE Module System Elastified silicic acid ester based stone strengthener with high gel deposition rate with purely mineral suspended solids

Range of use	<ul style="list-style-type: none"> Backfill compounds Cementing and battering mortar Glazes and slurries 	
Property profile	<ul style="list-style-type: none"> Contains soft segments for a more flexible silica gel Favourable stress-strain behaviour due to larger, lower-stress silica gel bridges Gel deposition rate: Approx. 50% Not water repelling Active ingredient content: Approx. 75 M% Turbid, possibly slightly yellowish 	
Application rate	<ul style="list-style-type: none"> Dependent on task 	
Quantity per pallet	360	240
Packaging unit	1 l	2.5 l
	Tin canister	Tin canister
Container code	01	03
Art. no.		
0713	■	■



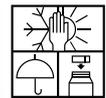
System products	Art. no.
V KSE	(0657)
KSE Filler A	(0571)
KSE Filler B	(0572)
KSE 300	(0720)
KSE 100	(0719)

KSE Filler A

Filler for the Remmers KSE modular system

Range of use	<ul style="list-style-type: none"> Production of KSE-bonded mineral powder slurries Backfill compounds Cementing and battering mortar
Property profile	<ul style="list-style-type: none"> Chlorite-mica-quartz intergrowth Mineral powder, light grey Bulk density: Approx. 0.7 kg/l Tamped density: Approx. 0.9 kg/l
Application rate	<ul style="list-style-type: none"> Dependent on task

Quantity per pallet	90
Packaging unit	3 kg Paper bag
Container code	03
	Art. no.
light grey (inherent colour)	0571 ■



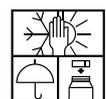
System products	Art. no.
KSE 500 STE	(0713)
KSE Filler B	(0572)

KSE Filler B

Filler for the Remmers KSE modular system

Range of use	<ul style="list-style-type: none"> Production of KSE-bonded quartz sand slurries Backfill compounds Cementing and battering mortar
Property profile	<ul style="list-style-type: none"> Powdered quartz, white Bulk density: Approx. 0.8 kg/l Tamped density: Approx. 0.8 kg/l
Application rate	<ul style="list-style-type: none"> Dependent on task

Quantity per pallet	100
Packaging unit	2 kg Paper bag
Container code	02
	Art. no.
white (inherent colour)	0572 ■



System products	Art. no.
KSE 500 STE	(0713)
KSE Filler A	(0571)

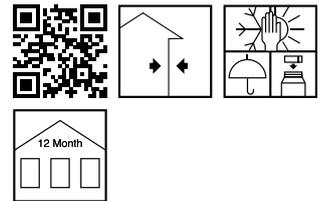
STONE STRENGTHENER

KSE Sand F36

Filler for the Remmers KSE modular system

Range of use	<ul style="list-style-type: none"> Production of KSE-bonded quartz sand slurries Backfill compounds Battering mortar
Property profile	<ul style="list-style-type: none"> Fire-dried Mean particle size: 0.16 mm
Application rate	<ul style="list-style-type: none"> Dependent on task

Quantity per pallet	80
Packaging unit	4 kg Paper bag
Container code	04
	Art. no.
beige (inherent colour)	0570 ■



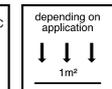
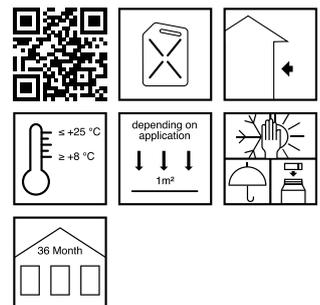
System products	Art. no.
KSE 500 STE	(0713)
KSE Filler A	(0571)
KSE Filler B	(0572)

V KSE

Thinner for stone strengtheners

Range of use	<ul style="list-style-type: none"> Dilution of stone strengtheners Setting optimum strength levels via targeted control of the gel deposition rate Cleaning of tools and surfaces
Property profile	<ul style="list-style-type: none"> Optimal solubility of silicic acid esters Low volatility solvent to avoid undesirable remigration effects during the reaction time of the silicic acid ester Clear Free of aromatic compounds Low odour
Application rate	<ul style="list-style-type: none"> Dependent on task

Quantity per pallet	84	24
Packaging unit	5 l Tin canister	30 l Tin canister
Container code	05	30
	Art. no.	
0657	■	■



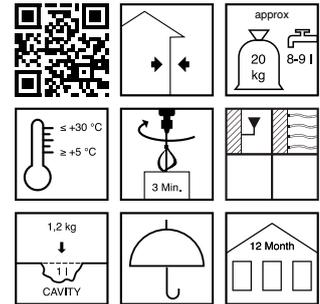
BSP 3/6

Flowable mineral filler and injection mortar

Range of use	<ul style="list-style-type: none"> Strengthening hollow and loose masonry (according to WTA Code of Practice 4-3) Filling joints and boreholes Preliminary injection of boreholes in multi-stage injection
Property profile	<ul style="list-style-type: none"> Low viscosity (highly flowable) Low shrinkage High sulphate resistance and low effective alkali content (SR/NA)
Application rate	<ul style="list-style-type: none"> Approx. 1.2 kg/l cavity volume



		Quantity per pallet	30
		Packaging unit	20 kg
			PE bag
		Container code	20
		Art. no.	
BSP 3 grey M 2.5 (normal)	0312	■	■
BSP 6 grey M 5 (solid)	0309	■	



System products	Art. no.
WP RH rapid	(1010)
Kiesol iK	(1813)
Kiesol	(1810)

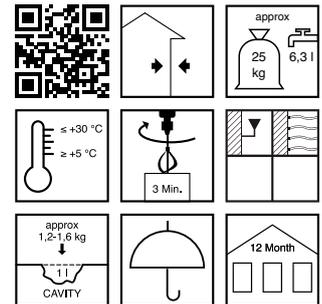
FILLER AND INJECTION MORTAR

BSP Historic

Flowable, mineral filler and injection mortar

Range of use	<ul style="list-style-type: none"> Filling and injecting joints, small voids, cracks of 2 – 10 mm Strengthening loose mortar filling in masonry
Property profile	<ul style="list-style-type: none"> Good flow properties
Application rate	<ul style="list-style-type: none"> Approx. 1.2 - 1.6 kg/l void

Quantity per pallet	42
Packaging unit	25 kg PE bag
Container code	25
	Art. no.
grey (inherent colour)	0548 ■



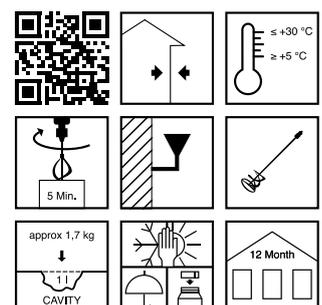
MINERAL INJECTION & VOID FILLING

ICS 2K

Super-fine two-component injection paste

Range of use	<ul style="list-style-type: none"> Dry, wet, damp, underwater and underground areas Frictionally coupled grouting of cracks in concrete Filling cracks and voids Subsoil strengthening
Property profile	<ul style="list-style-type: none"> Low viscosity (highly flowable) Low shrinkage High sulphate resistance and low effective alkali content (SR/NA) High early strength Water impermeable Resistant to frost/de-icing salts
Application rate	<ul style="list-style-type: none"> Approx. 1.7 kg/l void

Quantity per pallet	42
Packaging unit	10 kg Plastic bucket
Container code	11
	Art. no.
grey	0476 ■



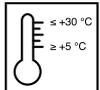
Spiral anchor mortar M20/M30

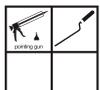
Machine-workable grout with high sulphate resistance for embedding spiral anchors

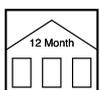
Range of use	<ul style="list-style-type: none"> ▪ Embedding of spiral anchors for reinforcement of cracked masonry
Property profile	<ul style="list-style-type: none"> ▪ Single-component ▪ Machine-workable ▪ Good flank adhesion ▪ High sulphate resistance and low effective alkali content (SR/NA) ▪ Polymer-modified
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.7 kg/l void

Quantity per pallet	42
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
1028 M20 1 mm grey	■
1030 M30 1 mm grey	■







System products	Art. no.
Spiral anchors	(4331)

Spiral anchors

Rolled, twisted spiral anchors with two threads made of austenitic stainless steel for masonry renovation

Range of use	<ul style="list-style-type: none"> ▪ Subsequent masonry reinforcement and anchoring ▪ Crack repair ▪ Integration into brickwork and natural stone masonry
Property profile	<ul style="list-style-type: none"> ▪ Even distribution of force ▪ High tensile strength ▪ Elastic behaviour like a strong spring ▪ Excellent composite characteristics ▪ Low cross sectional area ▪ Rust-free

Quantity per pallet	1500
Packaging unit	1 pc Roll
Container code	01
Art. no.	
4331 Spiral anchor 6/1000	■
4334 Spiral anchor 8/1000	■
4325 Spiral anchor 6/10000	■
4326 Spiral anchor 8/10000	■



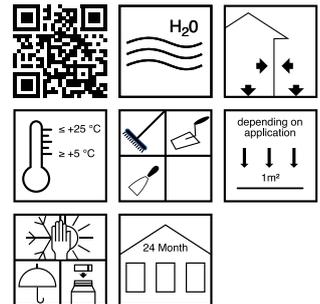
System products	Art. no.
Spiral anchor mortar M30	(1030)
Spiral anchor mortar M20	(1028)

ZM HF [basic]

Mortar improver based on an aqueous polymer dispersion

Range of use	<ul style="list-style-type: none"> Production of bonding slurries, bonding, patch-up & repair mortars Improving screeds, renders and patch-up layers Primer for concrete, cement and anhydrite screeds
Property profile	<ul style="list-style-type: none"> Improves adhesive bonding Increases compressive strength Increases flexural strength Resistant to saponification
Application rate	<ul style="list-style-type: none"> For bonding layers, slurries: Approx. 0.1 - 0.2 kg/m² For bonding mortar: Approx. 1.0 kg on 1 - 2 m² depending on layer thickness

Quantity per pallet	360	126	50
Packaging unit	1 kg	5 kg	10 kg
	Tin canister	Tin canister	Tin canister
Container code	01	05	10
Art. no.			
0220	■	■	■



FM SAN

Cement-lime jointing mortar for restorations

Range of use	<ul style="list-style-type: none"> Initial pointing and joint repair Brick and natural stone masonry Mortar joints of 5 - 30 mm
Property profile	<ul style="list-style-type: none"> Good flank adhesion Can be made hydrophobic Special colours (UV-resistant pigments) possible Can be made doubly hydrophobic
Application rate	<ul style="list-style-type: none"> Approx. 1.6 kg/l joint space

Quantity per pallet	42
Packaging unit	25 kg PE bag

Container code	25
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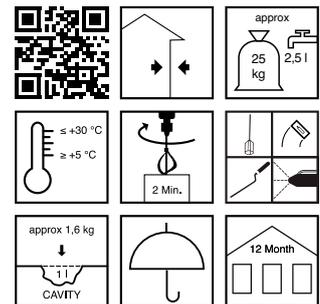
Art. no.

FM SAN, not hydrophobic

Art. no.	M5	Grain size	Colour	Hydrophobic
1065	M5	≤ 1.0 mm	antique white	■
1066	M5	≤ 1.0 mm	grey	■
1067	M5	≤ 1.0 mm	anthracite	■
1069	M5	≤ 1.0 mm	beige	■
1061	M5	≤ 1.0 mm	special colours*	■

Adjustable according to provided sample (stone, existing mortar), colour shade no., colour card, NCS etc. Different grain sizes of the same product can lead to slight deviations in the colour shade. Samples (3 kg) of the article can be ordered under article number 9990003 stating the colour shade or specifications via muster@remmers.de.

*Pore hydrophobic formulation possible



System products

ZM HF [basic] (0220)

Clean AC [basic] (0672)

Remmers cleaning products

Funcosil hydrophobic coatings

FM TK

Trass-lime cement jointing mortar

Range of use	<ul style="list-style-type: none"> Initial pointing and joint repair Brick and natural stone masonry Mortar joints of 8 - 30 mm
Property profile	<ul style="list-style-type: none"> High sulphate resistance and low effective alkali content (SR/NA) Very low efflorescence Good flank adhesion Special colours (UV-resistant pigments) possible Can be made doubly hydrophobic
Application rate	<ul style="list-style-type: none"> Approx. 1.7 kg/l joint space

Quantity per pallet	42
Packaging unit	25 kg
	PE bag
Container code	25

Art. no.

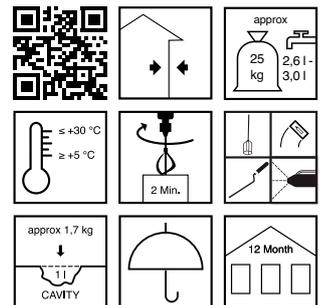
FM TK, not hydrophobic

1026	M5	≤ 1.0 mm	lime grey (inherent colour)	■
1022	M5	≤ 1.0 mm	Special colours (dark colours only)	■
1023	M5	≤ 2.0 mm	Special colours (dark colours only)	■

Adjustable according to provided sample (stone, existing mortar) or colour shade no. (MF no., colour card, NCS etc.) (Light colours only possible to a limited extent and only in consultation with the laboratory.)

Different grain sizes of the same product can lead to slight deviations in the colour shade.

Samples (3 kg) of the product can be ordered under article no. 9990003 from muster@remmers.de, stating the colour and/or specifications.



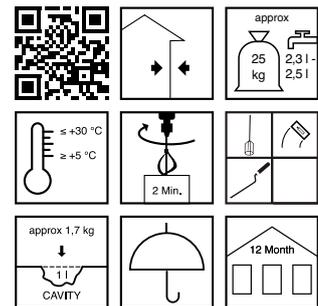
System products	Art. no.
Clean AC [basic]	(0672)
ZM HF [basic]	(0220)

FM TK PH

Trass-lime cement jointing mortar, pore hydrophobic

Range of use	<ul style="list-style-type: none"> Initial pointing and joint repair Brick and natural stone masonry Mortar joints of 8 - 30 mm
Property profile	<ul style="list-style-type: none"> High sulphate resistance and low effective alkali content (SR/NA) Very low efflorescence Good flank adhesion Pore hydrophobic
Application rate	<ul style="list-style-type: none"> Approx. 1.7 kg/l joint space

Quantity per pallet	42			
Packaging unit	25 kg			
	PE bag			
Container code	25			
	Art. no.			
Special colours (dark colours only)	M5	≤ 1.0 mm	1018	■
Adjustable according to provided sample (stone, existing mortar) or colour shade no. (MF no., colour card, NCS, etc.) (Light colours only possible to a limited extent and only in consultation with the laboratory.) Different grain sizes of the same product can lead to slight deviations in the colour shade. Samples (3 kg) of the article can be ordered under article number 9990003 stating the colour shade or specifications via muster@remmers.de .				



System products	Art. no.
ZM HF	(0220)
Clean AC	(0672)
Funcosil hydrophobic coatings	

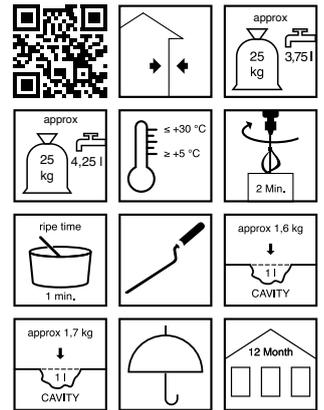
FM ZF

Cement-free jointing mortar

Range of use	<ul style="list-style-type: none"> Initial pointing and joint repair Low-strength brick and natural stone masonry Mortar joints of 10 - 30 mm
Property profile	<ul style="list-style-type: none"> Cement-free High adhesive pull strength Low inherent stress Special colours (UV-resistant pigments) possible
Application rate	<ul style="list-style-type: none"> Max. grain size 1 mm approx. 1.6 kg/l joint space Max. grain size 2 mm approx 1.7 kg/l joint space

Quantity per pallet				42
Packaging unit				25 kg
				PE bag
Container code				25
	Art. no.			
Special colour	M1	≤ 1.0 mm	1045	■
Special colour	M1	≤ 2.0 mm	1046	■

Adjustable according to provided sample (stone, existing mortar) or colour shade no. (MF no., colour card, NCS etc.). Different grain sizes of the same product can lead to slight deviations in the colour shade. Samples (3 kg) of the article can be ordered under article number 9990003 stating the colour shade or specifications via muster@remmers.de.



System products	Art. no.
ZM HF	(0220)
Clean AC	(0672)

FM Historic

Specially formulated jointing mortar

Range of use	<ul style="list-style-type: none"> Joint renewal on historic masonry
Property profile	<ul style="list-style-type: none"> Original condition restored according to the principles of monument preservation Specially adapted binder Specially adapted grain size distribution Can be made hydrophobic
Application rate	<ul style="list-style-type: none"> Project- and formulation-specific

Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
0573	■
Special formulations	
Upon consultation only, 6 weeks lead time, minimum order quantity approx. 1000 kg Samples (3 kg) of the product can be ordered under article no. 9990003 from muster@remmers.de, stating the colour and/or specifications.	



FM AC

Powder component for acrylate-bonded grouts

Range of use	<ul style="list-style-type: none"> Joints that do not allow expansion Joints in natural stone ashlar masonry Joint widths from 3 - 20 mm
Property profile	<ul style="list-style-type: none"> Free from cement, lime and other mineral binders Very good flank adhesion Particularly good stress/elongation behaviour Diffusion open and capillary active Can be feathered out to zero (restricted by maximum particle size)
Application rate	<ul style="list-style-type: none"> Approx. 1.8 kg/l joint space

Quantity per pallet	240	180
Packaging unit	1 kg Plastic bucket	1l Dispensing bottle
Container code	01	
Art. no.		
marble	0836	■
AC LQ (liquid component)	0837	■

System products	Art. no.
AC LQ	(0837)

RESTORATION MORTAR

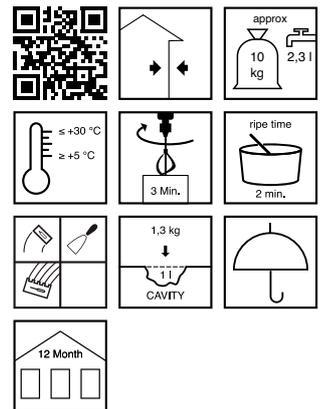
RM GM M10

Mineral stone substitution mortar for filling deep defects

Range of use	<ul style="list-style-type: none"> Core construction under restoration mortars, for deep defects
Property profile	<ul style="list-style-type: none"> Low content of free alkalis Good flank adhesion Low inherent stress
Application rate	<ul style="list-style-type: none"> Approx. 1.3 kg/l void



Quantity per pallet	32
Packaging unit	10 kg Plastic bucket
Container code	10
Art. no.	
M10	0638 ■
<p>Different grain sizes of the same product can lead to slight deviations in the colour shade. Samples (1 kg) of the article can be ordered under article number 9990101 stating the colour shade or specifications via muster@remmers.de.</p>	



System products	Art. no.
RM pro	(0596)
Color LA Fill Historic	(6471)
RM	(0131)
Color LA Add transparent	6410
Color LA Historic	(6476)

RM GM M20

Mineral stone substitution mortar for filling deep defects

Range of use	<ul style="list-style-type: none"> Core construction under restoration mortars, for deep defects
Property profile	<ul style="list-style-type: none"> Low content of free alkalis Good flank adhesion Low inherent stress
Application rate	<ul style="list-style-type: none"> Approx. 1.8 kg/l void

Quantity per pallet	64	32
Packaging unit	5 kg	15 kg
	Plastic bucket	Plastic bucket
Container code	05	15
Art. no.		
Standard article, non-hydrophobic		
M20	0643	
Different grain sizes of the same product can lead to slight deviations in the colour shade.		



System products	Art. no.
RM pro	(0596)
RM	(0131)
Antihygro	(0616)

RESTORATION MORTAR

RM

Mineral stone substitution mortar

Range of use	<ul style="list-style-type: none"> Restoration, substitution and reprofiling of mineral substrates such as natural stone, brick, concrete and artificial stone Reproduction of ornamental building elements by tamping
Property profile	<ul style="list-style-type: none"> Low content of free alkalis Good flank adhesion Low inherent stress UV-resistant pigments Can be made hydrophobic
Application rate	<ul style="list-style-type: none"> Approx. 1.6 kg/l void



Quantity per pallet	64	32	42
Packaging unit	5 kg	15 kg	25 kg
	Plastic bucket	Plastic bucket	PE bag

Container code	05	15	25
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Art. no.

Standard colours, medium grain, non-hydrophobic

0131	normal	≤ 0.5 mm	concrete grey 29-6	■	■
0132	normal	≤ 0.5 mm	grey olive 25-5	■	■
0133	normal	≤ 0.5 mm	yellow green 15-3	■	■
0134	normal	≤ 0.5 mm	olive ochre 14-3	■	■
0135	normal	≤ 0.5 mm	earth brown 12-3	■	■
0136	normal	≤ 0.5 mm	golden brown 04-5	■	■
0137	normal	≤ 0.5 mm	sepia brown 09-2	■	■
0138	normal	≤ 0.5 mm	english red 06-0	■	■
0139	normal	≤ 0.5 mm	clay red 05-1	■	■
0140	normal	≤ 0.5 mm	clay red 05-0	■	■
0142	normal	≤ 0.5 mm	concrete grey 29-0	■	■

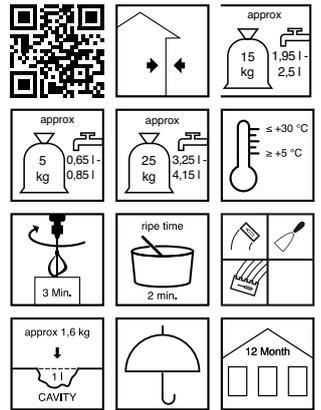
Special colours, can be made hydrophobic

0742	normal	fine ≤ 0.2 mm	0742	■	■
0746	normal	medium ≤ 0.5 mm	0746	■	■
0749	normal	coarse ≤ 2.0 mm	0749	■	■
0786	soft	fine ≤ 0.2 mm	0786	■	■
0787	soft	medium ≤ 0.5 mm	0787	■	■

Adjustable according to provided sample (stone, existing mortar) or colour shade no. (MF no., colour card, NCS etc.). Different grain sizes of the same product can lead to slight deviations in the colour shade.

Samples (1 kg) of the article can be ordered under article number 9990101 stating the colour shade or specifications via muster@remmers.de.

Minimum order quantity for special colours: 30kg Minimum order quantity for 25 kg PE bags: 600 kg

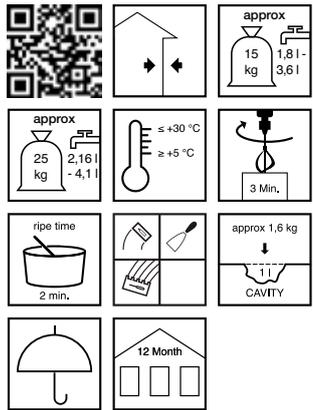


System products	Art. no.
Color LA Fill Historic	(6471)
ZM HF [basic]	(0220)
Antihydro	(0616)
Color LA Historic	(6476)
RM GM M10	(0638)

RM pro

Mineral stone substitution mortar - can be feathered out to zero, can be applied as a slurry

Range of use	<ul style="list-style-type: none"> Restoration, substitution and reprofiling of mineral substrates such as natural stone, brick, concrete and artificial stone Reproduction of ornamental building elements by tamping
Property profile	<ul style="list-style-type: none"> Low content of free alkalis Can be feathered out to zero Can be applied as a slurry Good flank adhesion Low inherent stress UV-resistant pigments Can be made hydrophobic
Application rate	<ul style="list-style-type: none"> Approx. 1.6 kg/l void



Quantity per pallet	32	30
Packaging unit	15 kg	25 kg
	Plastic bucket	PE bag
Container code	15	25

Art. no.				
Special colours, can be made hydrophobic				
0597	fine ≤ 0.2 mm	normal	■	■
0598	medium ≤ 0.5 mm	normal	■	■
0599	coarse ≤ 2.0 mm	normal	■	■
0591	fine ≤ 0.2 mm	soft	■	■
0592	medium ≤ 0.5 mm	soft	■	■
0593	coarse ≤ 2.0 mm	soft	■	■

Special formulation in terms of composition and characteristic values				
0596	individual	individual	■	

Adjustable according to provided sample (stone, existing mortar) or colour shade no. (MF no., colour card, NCS etc.). Different grain sizes of the same product can lead to slight deviations in the colour shade.

Samples (1 kg) of the article can be ordered under article number 9990101 stating the colour shade or specifications via muster@remmers.de.

Minimum order quantity for special colours: 30 kg
Minimum order quantity 25 kg PE bags: 600 kg

System products	Art. no.
Color LA Fill Historic	(6471)
ZM HF [basic]	(0220)
Antihydro	(0616)
Color LA Historic	(6476)
RM GM M10	(0638)

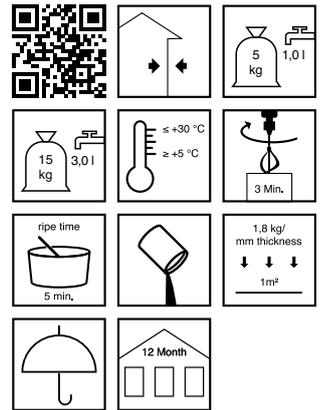
RM GF

Mineral stone substitution mortar, pourable

Range of use	<ul style="list-style-type: none"> ▪ Moulding of sculptures by casting ▪ Pouring out from open and closed moulds
Property profile	<ul style="list-style-type: none"> ▪ Pourable ▪ Low content of free alkalis ▪ Low inherent stress ▪ UV-resistant pigments ▪ Can be made hydrophobic
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.8 kg/l void



Quantity per pallet	64		32		
Packaging unit	5 kg	Plastic bucket		15 kg	Plastic bucket
Container code	05		15		
Art. no.					
Standard article: Not hydrophobic					
grey (inherent colour)	M15	medium ≤ 0.5 mm	0588	■	■
antique white	M15	medium ≤ 0.5 mm	0589	■	■
Special colours: Can be made hydrophobic					
special colours	M15	medium ≤ 0.5 mm	0590		■
Different grain sizes of the same product can lead to slight deviations in the colour shade.					



System products	Art. no.
Silicone AFM / Hardener AFM	(0736)
Color LA Historic	(6476)
Color LA Fill Historic	(6471)
ZM HF	(0220)

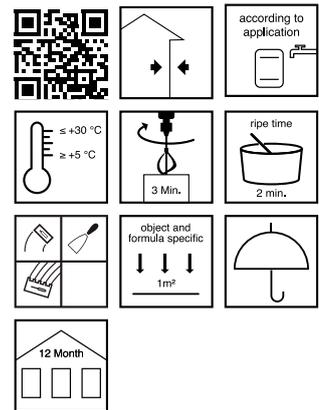
RESTORATION MORTAR

RM BC

Binder compound for restoration mortar

Range of use	<ul style="list-style-type: none"> Repair of natural stone Not suitable for repairing stair treads or other surfaces subject to foot traffic!
Property profile	<ul style="list-style-type: none"> Factory-made premix of mineral binders Hydraulic setting By adding aggregates and, if necessary, mineral pigments, individually optically adapted stone substitution mortars/restoration mortars can be produced
Application rate	<ul style="list-style-type: none"> Project- and formulation-specific Must be determined by preliminary tests as strongly dependent on aggregate used.

Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
beige	0747 ■

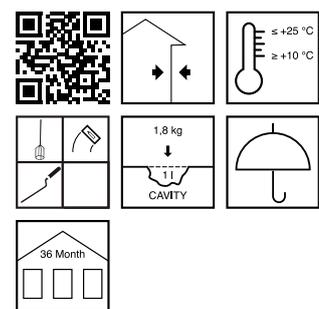


RM AC

Powder component for acrylate-bonded restoration mortars

Range of use	<ul style="list-style-type: none"> Application and priming mortar for limestone, especially marble (RM AC MARBLE, RM AC MARBLE FILL, RM AC MARBLE POLISHING FILL) Application mortar for brick (RM AC BRICK YELLOW, RM AC BRICK RED)
Property profile	<ul style="list-style-type: none"> Free from cement, lime and other mineral binders Can be feathered out to zero (restricted by maximum particle size) Crushed limestone filler Very good flank adhesion Particularly good stress/elongation behaviour Capillary active and diffusion open
Application rate	<ul style="list-style-type: none"> Approx. 1.8 kg/l joint space

Quantity per pallet	288	180
Packaging unit	1 kg Plastic bucket	1l Dispensing bottle
Container code	01	01
Art. no.		
RM AC MARBLE	0831	■
RM AC MARBLE FILL	0832	■
RM AC MARBLE POLISHING FILL	0833	■
RM AC BRICK YELLOW	0834	■
RM AC BRICK RED	0835	■
AC LQ (liquid component)	0837	■

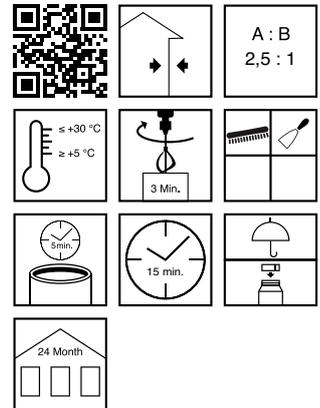


System products	Art. no.
AC LQ	(0837)

Lithos Arte®

Mineral mortar for natural stone restoration, consisting of natural stone and a mineral binder

Range of use	<ul style="list-style-type: none"> Single-layer application possible in any layer thickness Restoration, substitution and reprofiling of mineral substrates such as natural stone, brick, concrete and artificial stone Reproduction of ornamental building elements
Property profile	<ul style="list-style-type: none"> Made from natural stone The binder (liquid) is a purely inorganic complex, which is formed during mixing with the powder substance Low inherent stress Good flank adhesion Fast setting without shrinkage
Application rate	<ul style="list-style-type: none"> Approx. 2.20 kg/dm³



Quantity per pallet	60	50
Packaging unit	14 kg	20 kg
	Plastic canister	Paper bag
Container code	14	20
	Art. no.	
A3 GOBERTANGE DONKER	5570	■
A4 GOBERTANGE	5571	■
A5 MERGEL LICHT	5572	■
A6 MERGEL	5573	■
A7 MERGEL DONKER	5574	■
A8 MASSANGIS	5575	■
A21 EUVILLE	5576	■
A22 EUVILLE DONKER	5577	■
A30 SAVONIERE LICHT	5578	■
A31 SAVONIERE DONKER	5579	■
A50 BALEGEM	5580	■
A51 BALEGEM GRIJS	5581	■
A52 BALEGEM GEEL	5582	■
A70 BLAUWE STEEN LICHT	5583	■
A71 BLAUWE STEEN DONKER	5584	■
CRAIE BLANCHE WEISS	5585	■
SPECIAL COLOUR	5586	■
LIQUID	5587	■

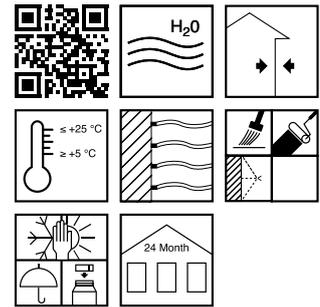
System products	Art. no.
Funcosil FC	(0711)

Primer Hydro S F

Mineral primer with a strong strengthening effect

Range of use	<ul style="list-style-type: none"> Structural strengthening of mineral building materials under subsequent plaster layers
Property profile	<ul style="list-style-type: none"> Strengthening Silicifies the substrate Aqueous Alkali resistant Mineral
Application rate	<ul style="list-style-type: none"> Surface strengthening: Approx. 0.5 – 1.0 kg/m² Grouting: Approx. 30 – 50 kg/m³ masonry

Quantity per pallet	90	24
Packaging unit	5 kg	30 kg
	Plastic canister	Plastic canister
Container code	05	30
Art. no.		
1072	■	■

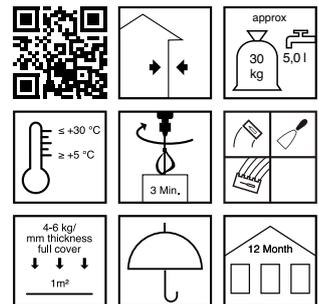


SP Prep

WTA-compliant preparatory mortar

Range of use	<ul style="list-style-type: none"> Substrate preparation prior to applying mineral plasters Equalising different absorption characteristics of the substrate
Property profile	<ul style="list-style-type: none"> High adhesion to the substrate High sulphate resistance and low effective alkali content (SR/NA) Compressive strength: CS IV
Application rate	<ul style="list-style-type: none"> Full coverage approx. 4 - 6 kg/m²

Quantity per pallet	30
Packaging unit	30 kg Paper bag
Container code	30
Art. no.	
0400	grey (inherent colour) ■



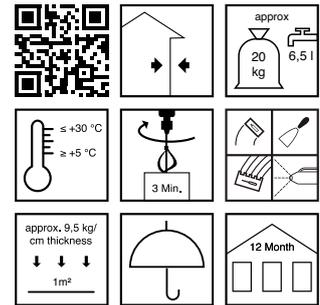
System products	Art. no.
ZM HF [basic]	(0220)
Kiesol	(1810)
SP Top SL [basic]	(1050)
Remmers renovation plasters	

SP Levell

WTA-compliant, salt-accumulating pore undercoat render in renovation render systems for masonry with water and salt loads

Range of use	<ul style="list-style-type: none"> Walls and masonry attacked by moisture and salt Old buildings, basements and façades Salt removal and moisture reduction Condensate buffer and protective layer on interior waterproofing
Property profile	<ul style="list-style-type: none"> High salt storage capacity Porosity > 45 vol.% High sulphate resistance and low effective alkali content (SR/NA) Water vapour diffusion open Capillary-active Single-layer application thickness 10 to 40 mm Machine-workable Compressive strength: CS III
Application rate	<ul style="list-style-type: none"> Approx. 9.5 kg/m²/cm layer thickness

Quantity per pallet	42
Packaging unit	20 kg Paper bag
Container code	20
Art. no.	
0401	grey (inherent colour) ■
Silo on request.	

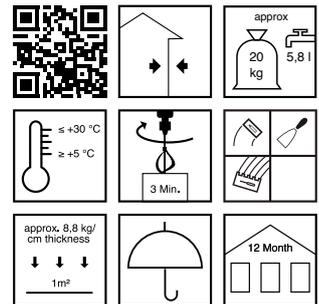


System products	Art. no.
SP Prep	(0400)
Kiesol	(1810)
Remmers renovation plasters	
Remmers waterproofing slurries	

SP Top White

WTA-compliant renovation render for masonry with water and salt loads

Range of use	<ul style="list-style-type: none"> Repair, renovation and restoration of damp walls and masonry containing damaging salts Interior walls of basements, old buildings and façades Use in combination with SP Levell to combat high salt levels Single layer can be used as undercoat and finishing coat
Property profile	<ul style="list-style-type: none"> High sulphate resistance and low effective alkali content (SR/NA) Water vapour diffusion open Single-layer application thickness up to 30 mm Machine-workable Compressive strength: CS II
Application rate	<ul style="list-style-type: none"> Approx. 8.8 kg/m²/cm layer thickness
Quantity per pallet	42
Packaging unit	20 kg Paper bag
Container code	20
Art. no.	
0402 white	■



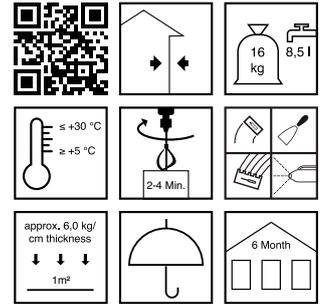
System products	Art. no.
SP Prep	(0400)
Kiesol	(1810)
SP Levell	(0401)
Remmers waterproofing slurries	

Compress render

WTA-compliant salt-bonding render/sacrificial render WTA

Range of use	<ul style="list-style-type: none"> ▪ Salt removal and moisture reduction ▪ Sacrificial render on salt-containing substrates ▪ Buffer layer under renders mixed according to historical formulations ▪ Old buildings, basements and façades
Property profile	<ul style="list-style-type: none"> ▪ High salt storage capacity ▪ Capillary-active ▪ Reversible ▪ Compressive strength: CS II
Application rate	<ul style="list-style-type: none"> ▪ Approx. 6.0 kg/m²/cm layer thickness

Quantity per pallet	42
Packaging unit	16 kg PE bag
Container code	16
Art. no.	
1077	grey ■
1073	special colours ■



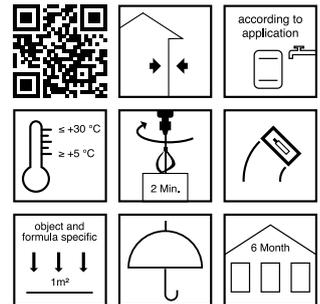
System products	Art. no.
CL Top Historic	(0576)
CL Levell Historic	(0575)

CL Levell Historic

Specially formulated render undercoat

Range of use	<ul style="list-style-type: none"> ▪ Undercoat render for reconstructing texture and reproducing the original condition ▪ Levelling substrates
Property profile	<ul style="list-style-type: none"> ▪ Original condition restored according to the principles of monument preservation ▪ Specially adapted binder ▪ Specially adapted grain size distribution
Application rate	<ul style="list-style-type: none"> ▪ Project- and formulation-specific

Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
0575	■
Special formulations	upon consultation only, 6 weeks lead time, minimum order quantity approx. 1000 kg



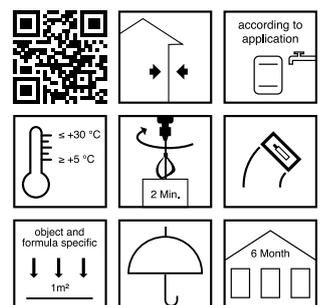
System products	Art. no.
CL Top Historic	(0576)

CL Top Historic

Specially formulated render finishing coat

Range of use	<ul style="list-style-type: none"> ▪ For project-specific repair, renovation and restoration of old building façades, historical buildings and architectural monuments
Property profile	<ul style="list-style-type: none"> ▪ Original condition restored according to the principles of monument preservation ▪ Specially adapted binder ▪ Specially adapted grain size distribution
Application rate	<ul style="list-style-type: none"> ▪ Project- and formulation-specific

Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
0576	■
Special formulations	upon consultation only, 6 weeks lead time, minimum order quantity approx. 1000 kg

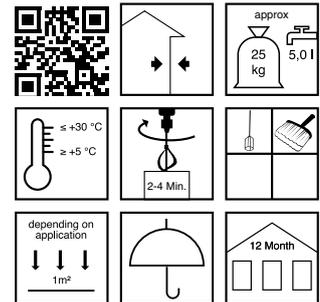


CL Grout Historic

Lime-based façade slurry

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials in exterior areas ▪ Interiors and exteriors ▪ Heritage
Property profile	<ul style="list-style-type: none"> ▪ Manual application ▪ Based on hydraulic lime ▪ Low strength
Application rate	▪ Approx. 4 kg/m ² for a 3 mm layer thickness

Quantity per pallet	42
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
beige- brown	0510 ■



System products	Art. no.
Color CL Historic	(6569)
Funcosil WS	(0614)
Color SL	(0237)
FM Historic	(0573)
Color LA Historic	(6476)
CL Levell Historic	(0575)
Funcosil SNL	(0602)
CL Top Historic	(0576)
Color LA	(6400)
KSE products	

NHL Level Historic

Undercoat based on NHL 5

Range of use	<ul style="list-style-type: none"> ▪ Undercoat render for repair, renovation and restoration of old building façades, historical buildings and architectural monuments ▪ Levelling substrates
Property profile	<ul style="list-style-type: none"> ▪ Cement-free ▪ Low-stress hardening process ▪ Low modulus of elasticity ▪ Moisture and climate regulating
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.9 kg/m²/mm

Quantity per pallet	42
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
grey	0491 ■



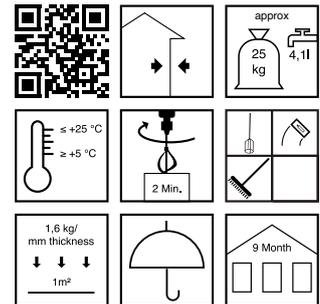
System products	Art. no.
NHL Top Historic	(0490)

NHL Top Historic

Finishing coat based on NHL 5

Range of use	<ul style="list-style-type: none"> Finishing render for repair, renovation and restoration of old building façades, historic buildings and monuments
Property profile	<ul style="list-style-type: none"> Formulated according to conservation principles Cement-free Low-stress hardening process Low modulus of elasticity Moisture and climate regulating
Application rate	<ul style="list-style-type: none"> Approx. 1.6 kg/m²/mm

Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
grey	0490 ■



System products	Art. no.
NHL Levell Historic	(0491)

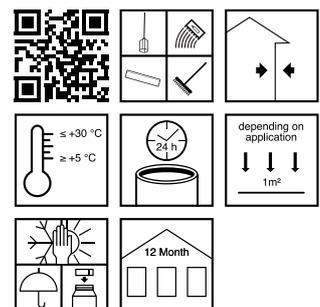
SPECIAL MORTARS

Historic lime mortar

Basic mixture ("dry-slaked", cement-free sand-lime mortar) for the production of mortars and plasters according to historical formulations with the addition of local aggregates

Range of use	<ul style="list-style-type: none"> Plastering mix Repair and restoration of historical substrates Jointing mortar
Property profile	<ul style="list-style-type: none"> Free from cement, trass, hydraulic limes and similar "non-historic" binders Forms characteristic lime nodules during the "drying" of quicklime Has a "self-healing" effect on cracks and flank tears thanks to the lime nodules Basic mixture with a high binder content for the production of mortars and plasters according to historical formulations with the addition of local aggregates
Application rate	<ul style="list-style-type: none"> Dependent on application

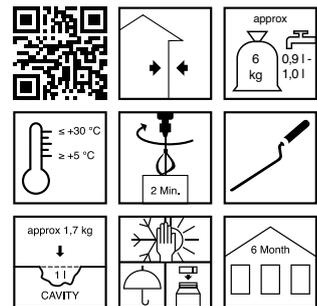
Quantity per pallet	18
Packaging unit	35 kg 2-component packaging
Container code	35
Art. no.	
Basic colour KSM 001-beige	0543 ■



RM RZ Historic

Fast-setting substitution mortar based on natural cement for joint and plaster restoration

Range of use	<ul style="list-style-type: none"> ▪ Joint repair in the preservation of historical monuments ▪ Brick and natural stone masonry ▪ Substitution and repair mortar ▪ For all old natural cement mortars
Property profile	<ul style="list-style-type: none"> ▪ Quick-setting ▪ Slow strength development ▪ Good flank adhesion ▪ Not hydrophobic ▪ Natural cement, unchanged for over 150 years, also known as Roman cement or Roman lime. Cretaceous lime marl traditionally fired in a shaft kiln at low temperature.
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.7 kg/l void



Quantity per pallet				130
Packaging unit				6 kg
				PE bag
Container code				06
	Art. no.			
beige-hazelnut brown (inherent colour)	coarse ≤ 2.0 mm	0563	■	
Different grain sizes of the same product can lead to slight deviations in the colour shade.				

System products	Art. no.
BSP RZ Historic	(0568)
Fill RZ Historic	(0564)
RM GM M10	(0638)

Fill RZ Historic

Mineral surface filler and fine render based on natural cement

Range of use	<ul style="list-style-type: none"> ▪ Patching up historical façades ▪ Mineral surface filler for use in interior and exterior areas
Property profile	<ul style="list-style-type: none"> ▪ Slow strength development ▪ Can be felted ▪ Single layer thickness 1 - 5 mm ▪ Natural cement, unchanged for over 150 years, also known as Roman cement or Roman lime. Cretaceous lime marl traditionally fired in a shaft kiln at low temperature. ▪ Compressive strength: CS IV
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.5 kg/m²/mm layer thickness

Quantity per pallet	130
Packaging unit	5 kg PE bag
Container code	05
	Art. no.
grey-beige (inherent colour)	0564 ■



System products	Art. no.
BSP RZ Historic	(0568)

Stucco GZ

Fast-setting mortar for sculpting stucco cores

Range of use	<ul style="list-style-type: none"> ▪ Creating and shaping stucco cores, profiles and cornices ▪ Repair and restoration of façades/stucco façades
Property profile	<ul style="list-style-type: none"> ▪ Fast setting ▪ Single layer thickness 10 - 40 mm ▪ Grain size: < 1.5 mm ▪ μ-value: < 18 ▪ Compressive strength: > 5.0 N/mm² (M5)
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.1 kg/m²/mm layer thickness
Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
0511	light grey ■












System products	Art. no.
ZM HF [basic]	(0220)
Stucco GF	(0521)
SP Prep	(0400)
Stucco FZ	(0512)

Stucco FZ

Fast-setting mortar for fine-textured surface design of new and old stucco

Range of use	<ul style="list-style-type: none"> ▪ Coating stucco cores made from coarse mortar ▪ Patching up old, cement-bound stucco parts ▪ Creating smooth, sharp-edged profiles
Property profile	<ul style="list-style-type: none"> ▪ Fast setting ▪ Repels water ▪ Single layer thickness 1 - 5 mm ▪ Grain size: < 0.5 mm ▪ μ-value: < 18 ▪ Compressive strength: > 5.0 N/mm² (M5)
Application rate	<ul style="list-style-type: none"> ▪ Approx. 1.3 kg/m²/mm layer thickness
Quantity per pallet	42
Packaging unit	25 kg Paper bag
Container code	25
Art. no.	
0512	antique white ■











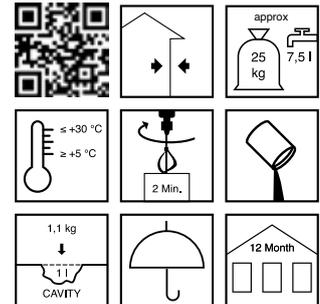

System products	Art. no.
Stucco GF	(0521)
Color SH	(0630)
Stucco GZ	(0511)
Color LA	(6400)

Stucco GF

Fast-setting casting mortar for the production of stucco elements

Range of use	<ul style="list-style-type: none"> Factory production of stucco elements in the casting process
Property profile	<ul style="list-style-type: none"> Fast setting Grain size: < 1.5 mm μ-value: < 18 Compressive strength: ~ 5.0 N/mm²
Application rate	<ul style="list-style-type: none"> Approx. 1.1 kg/l void

Quantity per pallet	30
Packaging unit	25 kg PE bag
Container code	25
Art. no.	
0521	light grey ■



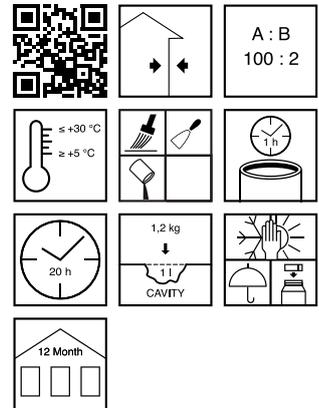
System products	Art. no.
Stucco GZ	(0511)
Stucco FZ	(0512)
Silicone AFM / Hardener AFM	(0736)

Silicone AFM / Hardener AFM

Pourable, room temperature curing 2K silicone impression compound

Range of use	<ul style="list-style-type: none"> True-to-detail moulding of valuable originals Production of solid and skin moulds Moulds with strong undercuts
Property profile	<ul style="list-style-type: none"> High reproduction accuracy and sharp delineation Excellent resilience Very good elasticity and notch strength Good flow properties Easy demoulding
Application rate	<ul style="list-style-type: none"> Approx. 1.2 kg/m²/mm layer thickness

Quantity per pallet	500	90	500	200
Packaging unit	1 kg	5 kg	22 g	110 g
	Plastic bucket	Plastic bucket	Tin bottle	Tin bottle
Container code	01	05	80	81
	Art. no.			
Component A	0736	■	■	
Component B	0737		■	■



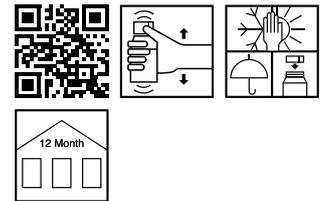
System products	Art. no.
RM GF	(0588)
Thickening additive AFM	(0738)
Demoulding paste	(1121)

Thickening additive AFM

Additive for modifying the flowability of Silicone AFM

Range of use	<ul style="list-style-type: none"> Reduction in flowability or increase in stability of Silicone AFM Production of skin moulds by brushing on uneven or perpendicular mould surfaces without run-off or sinking
Property profile	<ul style="list-style-type: none"> Cross-linking, increases viscosity Colour-neutral
Application rate	<ul style="list-style-type: none"> 0.1 to 1.5% of the quantity of Silicone AFM used

Quantity per pallet	500
Packaging unit	100 g PE bottle
Container code	81
Art. no.	
0738	■



System products	Art. no.
Silicone AFM / Hardener AFM	(0736)

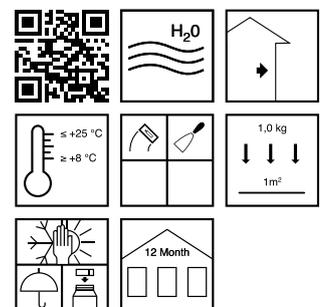
LIME PAINT SYSTEM

CL Fill Q3 Historic

High-quality, ready-to-use filler based on “dispersed white hydrated lime”

Range of use	<ul style="list-style-type: none"> Interior areas on loam, lime, lime cement and other mineral renders, as well as natural stone, concrete and other absorbent mineral substrates Monument preservation and eco-friendly construction
Property profile	<ul style="list-style-type: none"> Capillary-active Diffusion open $s_d < 0.03$ m Low-allergy Naturally antiseptic Grain size approx. 0.5 mm Low-stress High adhesion capability Can be feathered out to zero
Application rate	<ul style="list-style-type: none"> Approx. 1.0 kg/m²/mm layer thickness per coat, maximum layer thickness 5 mm

Quantity per pallet	32
Packaging unit	10 kg Plastic bucket
Container code	10
Art. no.	
white	6562



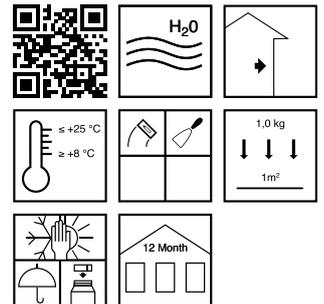
System products	Art. no.
Color CL Fill Historic	(6566)
Color CL Historic	(6569)
CL Fill Q4 Historic	(6564)

CL Fill Q4 Historic

High-quality, ready-to-use filler based on “dispersed white hydrated lime”

Range of use	<ul style="list-style-type: none"> Interior areas on loam, lime, lime cement and other mineral renders, as well as natural stone, concrete and other absorbent mineral substrates Monument preservation and eco-friendly construction
Property profile	<ul style="list-style-type: none"> Capillary-active Diffusion open $s_d < 0.03$ m Low-allergy Naturally antiseptic Grain size approx. 0.15 mm Low-stress High adhesion capability Can be feathered out to zero
Application rate	<ul style="list-style-type: none"> Approx. 1.0 kg/m²/mm layer thickness per coat, maximum layer thickness 3 mm

Quantity per pallet	32
Packaging unit	10 kg Plastic bucket
Container code	10
Art. no.	
white	6564 ■



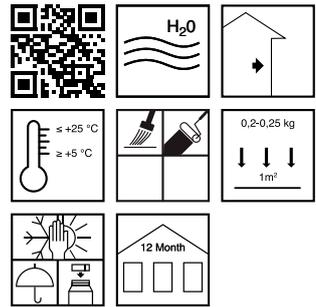
System products	Art. no.
CL Fill Q3 Historic	(6562)
Color CL Fill Historic	(6566)
Color CL Historic	(6569)

Color CL Historic

Lime paint without organic binders

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials in interiors ▪ Preservation of historic buildings ▪ Eco-friendly construction
Property profile	<ul style="list-style-type: none"> ▪ Capillary-active ▪ Highly water vapour diffusible ▪ Good covering power ▪ No organic binder additives ▪ Solvent-free and plasticiser-free ▪ Free from preservatives ▪ Mineral water-based ▪ Free from titanium dioxide
Application rate	<ul style="list-style-type: none"> ▪ Approx. 0.2 - 0.25 kg/m² per coat

Quantity per pallet	32
Packaging unit	10 kg Plastic bucket
Container code	10
Art. no.	
white	6569 ■



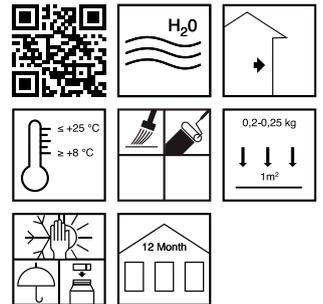
System products	Art. no.
Color CL Fill Historic	(6566)
CL Fill Q4 Historic	(6564)
CL Fill Q3 Historic	(6562)

Color CL Fill Historic

Filling lime paint without organic binders

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials in interiors ▪ Preservation of historic buildings ▪ Eco-friendly construction ▪ Levelling, crack-grouting intermediate coat
Property profile	<ul style="list-style-type: none"> ▪ Capillary-active ▪ Highly water vapour diffusible ▪ Good covering power ▪ No organic binder additives ▪ Solvent-free and plasticiser-free ▪ Free from preservatives ▪ Mineral water-based
Application rate	▪ Approx. 0.2 - 0.25 kg/m ² per coat on a smooth substrate

Quantity per pallet	32
Packaging unit	10 kg Plastic bucket
Container code	10
Art. no.	
white	6566



System products	Art. no.
CL Fill Q3 Historic	(6562)
Color CL Historic	(6569)
CL Fill Q4 Historic	(6564)

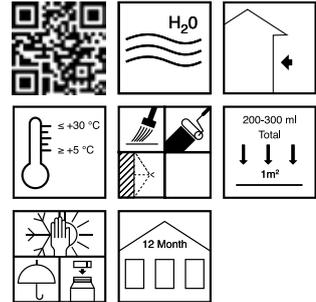
SILICATE PAINTS

Primer Hydro S HF

Mineral primer with waterproofing and consolidating effect

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials such as brick, sand-lime brick, mineral renders ▪ Chalking mineral coatings
Property profile	<ul style="list-style-type: none"> ▪ Evens out differences in absorption ▪ Strengthening ▪ Silicifies the substrate ▪ Alkali resistant ▪ Mineral-based ▪ Aqueous
Application rate	▪ Approx. 0.2 - 0.3 l/m ² depending on the substrate

Quantity per pallet	84
Packaging unit	5 l Plastic canister
Container code	05
Art. no.	
0624	■



System products	Art. no.
Color SH	(0630)

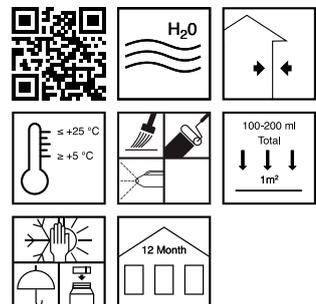
SILICONE RESIN PAINTS

Primer Hydro HF

Aqueous deep primer with strengthening and hydrophobising properties

Range of use	<ul style="list-style-type: none"> ▪ Sanding and absorbent mineral substrates ▪ Weathered old coatings capable of supporting a load
Property profile	<ul style="list-style-type: none"> ▪ Strengthening ▪ Evens out differences in absorption ▪ Aqueous
Application rate	▪ Approx. 100 - 200 ml/m ² depending on the substrate

Quantity per pallet	90	24
Packaging unit	5 l Plastic canister	30 l Plastic canister
Container code	05	30
Art. no.		
0725	■	■



System products	Art. no.
Color LA Fill	(0560)
Color SF [basic]	(6415)
Color LA	(6400)
Color PA	(6500)
WP Flow	(0431)

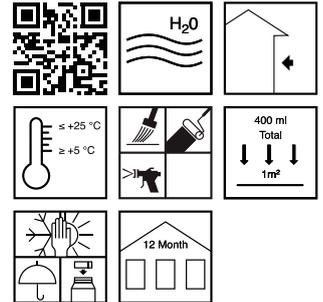
SILICATE PAINTS

Color SH

Mineral paint with fine-grained structure

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials such as brick, sand-lime brick, mineral renders ▪ Renovation coating on load-bearing mineral and silicate substrates
Property profile	<ul style="list-style-type: none"> ▪ Fine-grained surface texture ▪ Optimum adhesion to the substrate ▪ Good resistance to weathering ▪ Water vapour diffusion open ▪ Repels water ▪ Mineral water-based
Application rate	▪ Approx. 200 ml/m ² per coat depending on the substrate properties

Quantity per pallet	32
Packaging unit	12.5 l Plastic bucket
Container code	13
Art. no.	
0630	white ■
0634	special colour ■



System products	Art. no.
Primer Hydro S HF	(0624)

SILICONE RESIN PAINTS

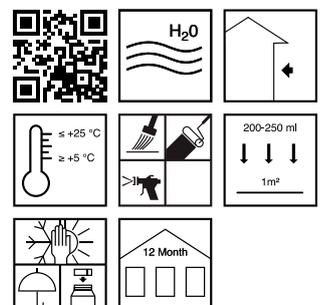
Color LA

"True" silicone resin paint with film preservative to protect surfaces at risk of algae growth and fungal attack

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials in exterior areas ▪ Load-bearing silicate, silicone & matt dispersion coatings ▪ Synthetic resin renders
Property profile	<ul style="list-style-type: none"> ▪ Water repellent $w \leq 0.1 \text{ kg}/(\text{m}^2 \text{ h}^{0.5})$ ▪ Highly water vapour diffusive $s_d \leq 0.05 \text{ m}$ ▪ No interference with the carbonation reaction ▪ Low-stress ▪ Matt, mineral character ▪ Does not attract dirt
Application rate	▪ Approx. 0.2 - 0.25 l/m ² per coat

Quantity per pallet	48	32
Packaging unit	5 l Plastic bucket	12.5 l Plastic bucket
Container code	05	13
Art. no.		
6400	white ■	■
6430	colour collection ■	■
6429	special colours* ■	■

*Only available upon consultation - intense colours not possible

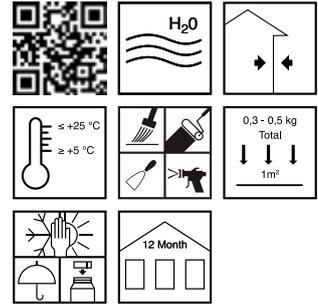


System products	Art. no.
Primer H	(0642)
Color LA Fill	(0560)
Primer HF	(6438)
Primer Hydro HF	(0725)

Color LA Fill

Filling "true" silicone resin paint

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials ▪ Load-bearing silicate, silicone & matt dispersion coatings ▪ Synthetic resin renders ▪ Surfaces with different roughnesses and hairline cracks ▪ Intermediate coat under Silicone Resin Paint LA
Property profile	<ul style="list-style-type: none"> ▪ Fibre-reinforced ▪ Water repellent $w \leq 0.1 \text{ kg}/(\text{m}^2 \text{ h}^{0.5})$ ▪ Highly water vapour diffusible $s_d \leq 0.05 \text{ m}$ ▪ No interference with the carbonation reaction ▪ Low-stress ▪ Matt, mineral character ▪ Fine-sandy, rough texture
Application rate	<ul style="list-style-type: none"> ▪ Approx. $0.3 - 0.5 \text{ kg}/\text{m}^2$
Quantity per pallet	32
Packaging unit	10 kg Plastic bucket
Container code	10
Art. no.	
0560	white ■
0561	special colours ■
Only adjustable following consultation - intense colours not possible	



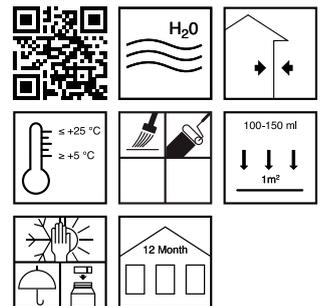
System products	Art. no.
Primer H	(0642)
Color LA	(6400)
Primer HF	(6438)
Primer Hydro HF	(0725)

Color LA Historic

Semi-translucent, "true" silicone resin paint

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials ▪ Listed buildings
Property profile	<ul style="list-style-type: none"> ▪ Semi-translucent ▪ Highly water vapour permeable $s_d \leq 0.1 \text{ m}$ ▪ Highly water-repellent $w \leq 0.1 \text{ kg}/(\text{m}^2 \text{ h}^{0.5})$ ▪ Reversible ▪ Low-stress ▪ Matt, mineral character ▪ Lime paint effect
Application rate	<ul style="list-style-type: none"> ▪ Approx. 0.1 - 0.15 l/m² per coat

Quantity per pallet	48	32
Packaging unit	5 l Plastic bucket	12.5 l Plastic bucket
Container code	05	13
Art. no.		
special colours	6476	■
Only adjustable following consultation - intense colours not possible		



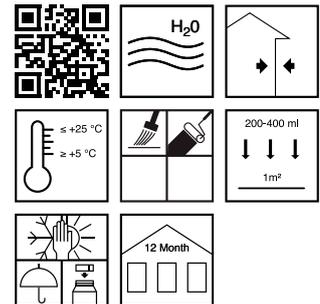
System products	Art. no.
Primer Hydro HF	(0725)
Antihygro	(0616)
Primer HF	(6438)
Color LA Fill Historic	(6471)

Color LA Fill Historic

Filling "true" silicone resin paint

Range of use	<ul style="list-style-type: none"> ▪ Porous, mineral building materials ▪ Surfaces with different roughnesses and hairline cracks ▪ Listed buildings
Property profile	<ul style="list-style-type: none"> ▪ Semi-translucent ▪ Fine-sandy, rough texture ▪ Water vapour permeable $s_d < 0.25 \text{ m}$ ▪ Highly water-repellent $w \leq 0.1 \text{ kg}/(\text{m}^2 \text{ h}^{0.5})$ ▪ Reversible ▪ Low-stress ▪ Matt, mineral character ▪ Lime paint effect
Application rate	<ul style="list-style-type: none"> ▪ Approx. 0.2 - 0.4 l/m² per coat

Quantity per pallet	48	32
Packaging unit	5 l	12.5 l
	Plastic bucket	Plastic bucket
Container code	05	13
	Art. no.	
special colours	6471	■
Only adjustable following consultation - intense colours not possible		



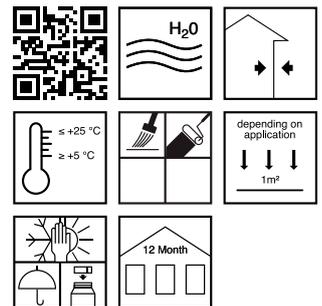
System products	Art. no.
Color LA Historic	(6476)
Primer Hydro HF	(0725)
Antihygro	(0616)
Primer HF	(6438)

Color LA Add transparent

Transparent thinner additive for silicone resin paint systems for adjusting the glaze level

Range of use	▪ Adjusting the glaze level of Remmers silicone resin paint systems
Property profile	▪ Clear ▪ Repels water
Application rate	▪ Dependent on the desired glaze level

Quantity per pallet	48	32
Packaging unit	5 l	12.5 l
	Plastic bucket	Plastic bucket
Container code	05	13
	Art. no.	
clear	6410	



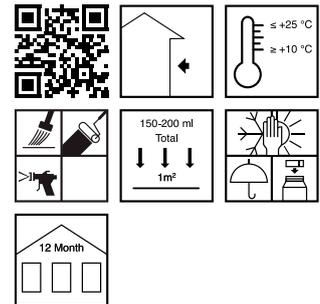
System products	Art. no.
Color LA Historic	(6476)
Color LA Fill	(0560)
Color LA Fill Historic	(6471)
Color LA	(6400)

Funcosil FC Historic

Limited capillary-inhibiting impregnation in cream form on a silane base

Range of use	<ul style="list-style-type: none"> Driving rain protection for listed buildings Mineral building materials such as render, brick and natural stone Reduces capillary water absorption while maintaining residual capillarity
Property profile	<ul style="list-style-type: none"> Reduces the w value Water vapour diffusion open No water repelling effect Excellent penetration UV-resistant Alkali resistant Mineral water-based Lightweight, can be applied with pinpoint accuracy and no losses
Application rate	<ul style="list-style-type: none"> Depending on the porosity, in one coat: approx. 0.15 - 0.20 l/m²

Quantity per pallet	32
Packaging unit	12.5 l Plastic bucket
Container code	13
Art. no.	
0611	■



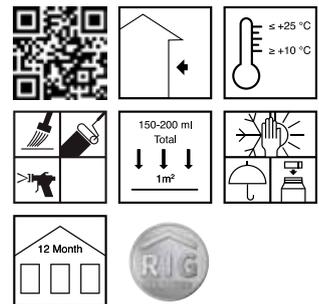
System products	Art. no.
FM Historic	(0573)
BFA*	(0673)
Remmers cleaning products	
*Use biocides safely. Always read the label and product information before use.	

Funcosil FC

Hydrophobic impregnation in cream form based on silane

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduction of susceptibility to dirt and green discolouration Porous, mineral building materials in exterior areas Driving rain protection for subsequent cavity insulation and interior insulation
Property profile	<ul style="list-style-type: none"> Highly water repellent Water vapour diffusion open Improves resistance to freeze/thaw stresses Excellent penetration UV-resistant Alkali resistant Excellent long-term effect Easy to apply accurately with no material loss Early resistance to rain, approx. 60 minutes after application
Application rate	<ul style="list-style-type: none"> Depending on the porosity, in one coat: approx. 0.15 - 0.20 l/m²

Quantity per pallet	288	64	32
Packaging unit	0.75 l	5 l	12.5 l
	Plastic bucket	Plastic bucket	Plastic bucket
Container code	01	05	13
Art. no.			
0711	■	■	■

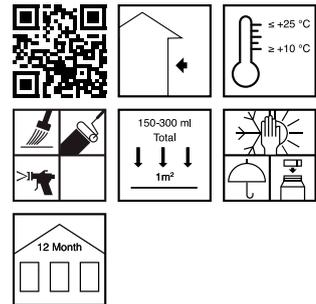


System products	Art. no.
BFA*	(0673)
FM FS	(0435)
Remmers cleaning products	
*Use biocides safely. Always read the label and product information before use.	

Funcosil FC PLUS

Hydrophobic impregnation in cream form based on silane/siloxane with colour intensification

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduction of susceptibility to dirt and green discolouration Porous, mineral materials e.g. brick, clinker, sand-lime brick, render Complementary measure for energetic refurbishments, in particular for subsequent cavity and interior insulation
Property profile	<ul style="list-style-type: none"> Repels water Water vapour diffusion open Colour intensifying Excellent penetration UV-resistant Alkali resistant Excellent long-term effect Easy to apply accurately with no material loss Early resistance to rain, approx. 60 minutes after application
Application rate	<ul style="list-style-type: none"> Depending on the porosity, in one coat: approx. 0.15 - 0.30 l/m²



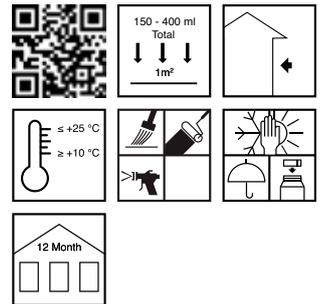
Quantity per pallet	288	64	32
Packaging unit	0.75 l	5 l	12.5 l
	Plastic bucket	Plastic bucket	Plastic bucket
Container code	01	05	13
Art. no.			
0712	■	■	■

System products	Art. no.
BFA*	(0673)
*Use biocides safely. Always read the label and product information before use.	

Funcosil FC pro

Silane-based impregnating cream for substrate-specific adapted hydrophobising

Range of use	<ul style="list-style-type: none"> Adaptive driving rain protection for façades Reduction of susceptibility to dirt and green discolouration Porous, mineral materials e.g. brick, clinker, sand-lime brick, render Complementary measure for energetic refurbishments, in particular for capillary-active interior wall insulation Project-specific (adaptive) reduction of capillary water absorption to ensure high re-drying potential (preliminary investigation required)
Property profile	<ul style="list-style-type: none"> Slows down capillary transport Water vapour diffusion open Excellent penetration capacity UV-resistant Alkali resistant Excellent long-term effect Easy to apply accurately with no material loss
Application rate	<ul style="list-style-type: none"> Depending on the porosity, in one coat: approx. 0.15 - 0.40 l/m²



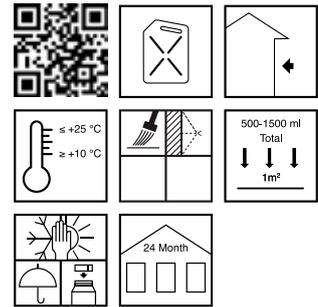
Quantity per pallet	32
Packaging unit	12.5 l
	Plastic bucket
Container code	13
Art. no.	
0703	■
Minimum order quantity: 4 × 12.5 l	
Delivery time: Approx. 8 working days	

System products	Art. no.
BFA*	(0673)
Remmers cleaning products	
*Use biocides safely. Always read the label and product information before use.	

Funcosil SNL

Clear, hydrophobic, solvent-based impregnation based on silane/siloxane

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduces susceptibility to dirt and green discolouration After-treatment/touch-up of hydrophobic surfaces Subsequent impregnation of mineral paint coatings Porous, mineral building materials such as brick, sand-lime brick, aerated concrete and mineral renders
Property profile	<ul style="list-style-type: none"> Improves resistance to freeze/thaw stresses Highly water repellent Water vapour diffusion open Excellent penetration capacity UV-resistant Alkali resistant Excellent long-term effect Reduces energy losses
Application rate	<ul style="list-style-type: none"> Brick masonry, fine-pored: min. 0.8 l/m² Brick masonry, coarse-pored: min. 1.0 l/m² Sand-lime brick, smooth: min. 0.5 l/m² Cleft sand-lime brick, embossed: min. 0.7 l/m² Plaster: min. 0.5 l/m² Aerated concrete: min. 1.0 l/m² Fibre cement: min. 0.3 l/m² Modular concrete block: min. 1.2 l/m² Natural stone, fine-pored: min. 0.6 l/m² Natural stone, coarse-pored: min. 1.5 l/m²



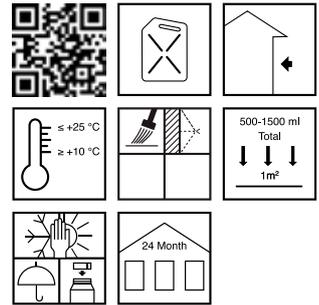
Quantity per pallet	360	84	50	24	2	1
Packaging unit	1 l	5 l	10 l	30 l	200 l*	1000 l*
	Tin canister	Tin canister	Tin canister	Tin canister	Drum	Container
Container code	01	05	10	30	69	61
Art. no.						
0602	■	■	■	■	■	■
* on request						

System products	Art. no.
BFA*	(0673)
FM FS	(0435)
*Use biocides safely. Always read the label and product information before use.	

Funcosil SNL odourless

Clear, hydrophobic impregnation based on silane/siloxane with odourless solvent

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduces susceptibility to dirt and green discolouration After-treatment/touch-up of hydrophobic surfaces Subsequent impregnation of mineral paint coatings Porous, mineral building materials such as brick, sand-lime brick, aerated concrete and mineral renders
Property profile	<ul style="list-style-type: none"> Improves resistance to freeze/thaw stresses Highly water repellent Water vapour diffusion open Excellent penetration capacity UV-resistant Alkali resistant Excellent long-term effect Odourless Reduces energy losses
Application rate	<ul style="list-style-type: none"> Brick masonry, fine-pored: min. 0.8 l/m² Brick masonry, coarse-pored: min. 1.0 l/m² Sand-lime brick, smooth: min. 0.5 l/m² Cleft sand-lime brick, embossed: min. 0.7 l/m² Plaster: min. 0.5 l/m² Aerated concrete: min. 1.0 l/m² Fibre cement: min. 0.3 l/m² Modular concrete block: min. 1.2 l/m² Natural stone, fine-pored: min. 0.6 l/m² Natural stone, coarse-pored: min. 1.5 l/m²



System products	Art. no.
BFA*	(0673)

*Use biocides safely. Always read the label and product information before use.

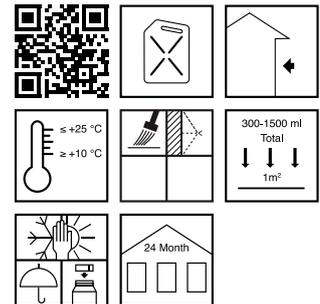
Quantity per pallet	84	24	2	1
Packaging unit	5 l Tin canister	30 l Tin canister	200 l* Drum	1000 l* Container
Container code	05	30	69	61
Art. no.				
0641	■	■	■	■
* on request				

Funcosil SL

Clear, hydrophobic impregnation for limestone, based on silane/siloxane

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduction of susceptibility to dirt and green discolouration Mineral building materials, in particular for lime-based natural stone
Property profile	<ul style="list-style-type: none"> Improves resistance to freeze/thaw stresses Repels water Water vapour diffusion open Good penetration capacity UV-resistant Alkali resistant Excellent long-term effect
Application rate	<ul style="list-style-type: none"> Natural stone (fine-pored): 0.2 - 0.5 l/m² Natural stone (coarse-pored): 0.4 - 1.5 l/m²

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0608	■	■



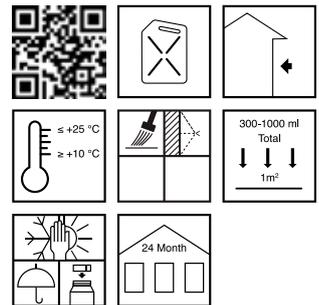
System products	Art. no.
BFA*	(0673)

*Use biocides safely. Always read the label and product information before use.

Funcosil SN

Clear, hydrophobic impregnation based on silane/siloxane, especially for solvent-sensitive building materials and connection areas

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduction of susceptibility to dirt and green discoloration Porous, mineral building materials such as brick, sand-lime brick, mineral renders For elements with or adjacent to those containing solvent-sensitive components such as polystyrene (core insulation or full thermal insulation systems) or bitumen
Property profile	<ul style="list-style-type: none"> Improves resistance to freeze/thaw stresses Highly water repellent Water vapour diffusion open Good penetration capacity UV-resistant Alkali resistant Excellent long-term effect Compatible with solvent-sensitive building materials such as polystyrene or bitumen Reduces energy losses
Application rate	<ul style="list-style-type: none"> Sand-lime brick, smooth: min. 0.5 l/m² Sand-lime brick, rough: min. 0.7 l/m² Fibre cement: min. 0.3 l/m² Concrete: min. 0.5 l/m² Brickwork, fine-pored: min. 0.8 l/m² Plaster: min. 0.5 l/m² Thermal insulation plaster: min. 0.6 l/m² Aerated concrete: min. 1.0 l/m² Lightweight concrete: min. 1.0 l/m²



System products	Art. no.
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BFA*	(0673)
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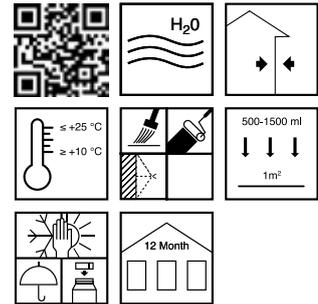
*Use biocides safely. Always read the label and product information before use.

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0604	■	■

Funcosil WS

Hydrophobic impregnation based on silane/siloxane in aqueous emulsion form

Range of use	<ul style="list-style-type: none"> Driving rain protection for façades Reduction of susceptibility to dirt and green discoloration Touching up old hydrophobic coatings after exposure to weather Porous, mineral building materials e.g. sand-lime brick, natural stone, exposed brickwork, mineral plasters, porous & lightweight concrete Subsequent impregnation of mineral paint coatings For elements with or adjacent to those containing solvent-sensitive components such as polystyrene (core insulation or full thermal insulation systems) or bitumen
Property profile	<ul style="list-style-type: none"> Repels water Water vapour diffusion open Solvent-free UV-resistant Alkali resistant Excellent long-term effect
Application rate	<ul style="list-style-type: none"> Sand-lime brick, smooth: min. 0.5 l/m² Sand-lime brick, rough: min. 0.7 l/m² Fair-faced brickwork: min. 0.8 l/m² Brick, coarse-pored: min. 1.5 l/m² Aerated concrete: min. 1.3 l/m² Lightweight concrete: min. 1.0 l/m² Natural stone, fine-pored: min. 0.8 l/m² Natural stone, coarse-pored: min. 1.5 l/m²



System products	Art. no.
BFA*	(0673)

*Use biocides safely. Always read the label and product information before use.

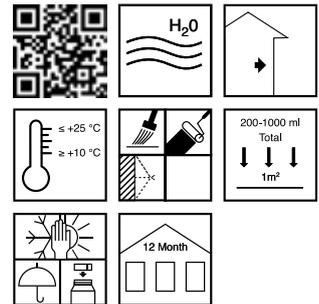
Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Plastic canister	Plastic canister
Container code	05	30
Art. no.		
0614	■	■

Funcosil OFS

Oleo- and hydrophobic, water-based protective impregnation and easy-care finish

Range of use	<ul style="list-style-type: none"> ▪ Easy-to-clean finish ▪ Natural stone kitchen worktops (less dirt) ▪ Maintenance product for surfaces impregnated with Funcosil OFS ▪ Mineral building materials ▪ Floors and walls
Property profile	<ul style="list-style-type: none"> ▪ Repels oil, grease, dirt ▪ Repels water ▪ Water vapour diffusion open ▪ Alkali resistant ▪ Solvent-free
Application rate	<ul style="list-style-type: none"> ▪ Brick: approx. 0.2 - 0.5 l/m² ▪ Sand-lime brick: approx. 0.2 - 0.6 l/m² ▪ Natural stone: approx. 0.5 - 1.0 l/m² ▪ Terracotta: approx. 0.3 - 0.8 l/m² ▪ Concrete slabs: approx. 0.2 - 0.5 l/m²

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Plastic canister	Plastic canister
Container code	05	30
Art. no.		
0617	■	■



System products Art. no.

BFA* (0673)

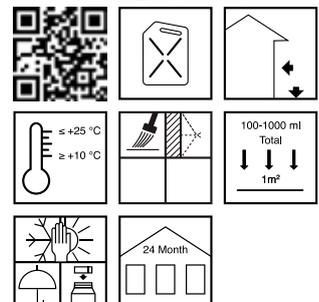
*Use biocides safely. Always read the label and product information before use.

Funcosil AG

Oleo- and hydrophobic protective impregnation

Range of use	<ul style="list-style-type: none"> ▪ Easy-to-clean finish ▪ Reduction of susceptibility to dirt and green discolouration ▪ Mineral building materials
Property profile	<ul style="list-style-type: none"> ▪ Repels oil, grease, dirt ▪ Repels water ▪ Water vapour diffusion open ▪ Alkali resistant ▪ Anti-poster effect ▪ Solvent-based
Application rate	<ul style="list-style-type: none"> ▪ Clinker: 0.1 - 0.3 l/m² ▪ Brick: 0.2 - 0.4 l/m² ▪ Sand-lime brick: 0.3 - 0.5 l/m² ▪ Granite: 0.1 - 0.2 l/m² ▪ Natural stone: 0.3 - 0.8 l/m² ▪ Terracotta: 0.8 - 1.0 l/m²

Quantity per pallet	84	24
Packaging unit	5 l	30 l
	Tin canister	Tin canister
Container code	05	30
Art. no.		
0655	■	■



System products Art. no.

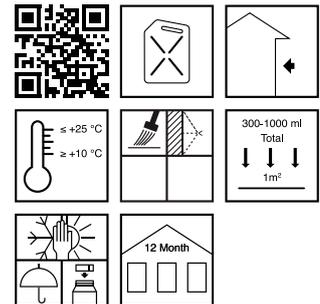
BFA* (0673)

*Use biocides safely. Always read the label and product information before use.

Funcosil AW

Silicone-free, hydrophobic impregnation agent

Range of use	<ul style="list-style-type: none"> Production facilities where painting or coating is carried out and where adhesion problems caused by conventional organosilicon compounds are to be expected Driving rain protection for façades Reduction of susceptibility to dirt and green discolouration Porous, mineral building materials in exterior areas
Property profile	<ul style="list-style-type: none"> Silicone-free Repels water Water vapour diffusion open Good penetration capacity Alkali resistant UV-resistant Excellent long-term effect
Application rate	<ul style="list-style-type: none"> Fibre cement: mind. 0.3 l/m² Fair-faced brickwork, fine-pored: min. 0.8 l/m² Fair-faced brickwork, coarse-pored: min. 1.0 l/m² Plaster: min. 0.5 l/m² Thermal insulation plasters (without polystyrene): min. 0.6 l/m²
Quantity per pallet	24
Packaging unit	30 l Tin bucket
Container code	30
Art. no.	
0660	■



System products	Art. no.
BFA*	(0673)
FM FS	(0435)
Remmers cleaning products	
*Use biocides safely. Always read the label and product information before use.	

Funcosil Test Kit

Equipment for non-destructive testing of water uptake and effectiveness check of hydrophobic impregnations

Range of use	<ul style="list-style-type: none"> ▪ Non-destructive testing of water uptake per unit time ▪ Effectiveness control of hydrophobic coatings ▪ Water absorption coefficient can be estimated according to DIN EN 772-11
Property profile	<ul style="list-style-type: none"> ▪ Contents: 6 x Funcosil test tubes 1 x digital stopwatch 1 x spray bottle (polyethylene) 1 x scraper (width 30 mm) 1 x butyl rubber (fastening)



Quantity per pallet	
Packaging unit	1 pc
Container code	01
Art. no.	
4954	■

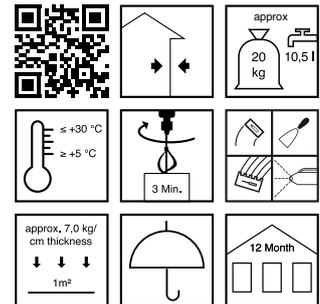
System products	Art. no.
Funcosil test tube	(4928)

Framework mortar

Infiller mortar

Range of use	<ul style="list-style-type: none"> Mineral infiller mortar, undercoat and finishing coat render for framework constructions
Property profile	<ul style="list-style-type: none"> Promotes drying As infiller mortar in a single layer, application thickness 30 – 80 mm As plaster in a single layer, application thickness 10 – 30 mm w24 value: 1 to 3 kg/m² μ value: < 12 Thermal conductivity approx. 0.2 W/(m·K) Compressive strength: CS II
Application rate	<ul style="list-style-type: none"> Approx. 7.0 kg/m²/cm layer thickness

Quantity per pallet	30
Packaging unit	20 kg PE bag
Container code	20
	Art. no.
grey (inherent colour)	0505 ■

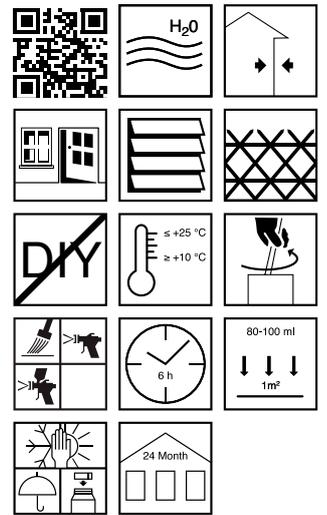


Aqua OWF-68/tm

Weather Protection Oil Finish [eco]

Durable, cloth matt, texture-emphasising opaque paint with sealing properties made from renewable raw materials for interior and exterior wood in sensitive areas

Range of use	<ul style="list-style-type: none"> For use on interior and exterior wood Dimensionally stable wood elements: e.g. windows and doors Wood elements with limited dimensional stability: e.g. folding shutters, matchboarding, summerhouses Wood elements with no dimensional stability: e.g. fences, framework, carports, planking Primer, intermediate coat and finishing coat Wooden bee boxes, beehives and other wood elements used in beekeeping Playground equipment Sustainable building: suitable for building certifications DGNB, LEED, BNB
Property profile	<ul style="list-style-type: none"> Water-based, very low solvent content Block resistant (acc. to Guideline HO.03) Non-drip Fine, cloth matt surface finish Good flow properties Elastic Does not flake Weather-resistant and UV-resistant Reduces discolouration due to water-soluble substances in the wood Made from renewable raw materials: min. 70% Tested bee-friendly formula Cloth matt
Application rate	<ul style="list-style-type: none"> Approx. 80 - 100 ml/m² per coat White and light colours: 3 coats Medium and dark colours: 2 coats



Quantity per pallet	200	22
Packaging unit	2.5 l	20 l
	Tin bucket	Tin bucket
Container code	03	20
	Art. no.	
white (RAL 9016)	7740	■
special colours	7741	■
Base C (pre-filling: 95%)	015177	■



System products	Art. no.
Aqua PL-413 Parquet Varnish	(2374)
Aqua IG-15 Impregnation Primer IT*	(7145)
Aqua AG-26 Uni-versal Primer	(7147)
Induline SW-910	(3777)

*Use biocides safely. Always read the label and product information before use.

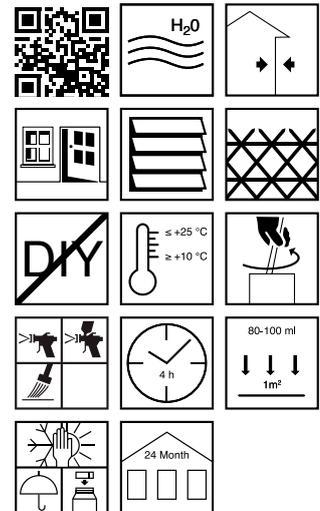
Aqua OML-48/tm

Medium Build Oil Stain [eco]

Durable, cloth matt stain made from renewable raw materials for interior and exterior wood in sensitive areas

Range of use	<ul style="list-style-type: none"> For use on interior and exterior wood Dimensionally stable wood elements: e.g. windows and doors Wood building elements with limited dimensional stability: e.g. folding shutters, matchboarding, summerhouses Wood elements with no dimensional stability: e.g. fences, framework, carports, planking Wooden bee boxes, beehives and other wood elements used in beekeeping Playground equipment Sustainable building: suitable for building certifications DGnB, LEED, BNB
Property profile	<ul style="list-style-type: none"> Water-based, very low solvent content Block resistant (acc. to Guideline HO.03) Non-drip Good flow properties Weather-resistant and UV-resistant Long intervals between renovations Made from at least 80% renewable raw materials Free from film-preserving and wood-preserving biocides Tested bee-friendly formula Cloth matt
Application rate	<ul style="list-style-type: none"> Approx. 80 - 100 ml/m² per coat min. 2 coats

Quantity per pallet	200	22
Packaging unit	2.5 l	20 l
	Tin bucket	Tin bucket
Container code	03	20
	Art. no.	
clear	7710	■
special colours	7716	■



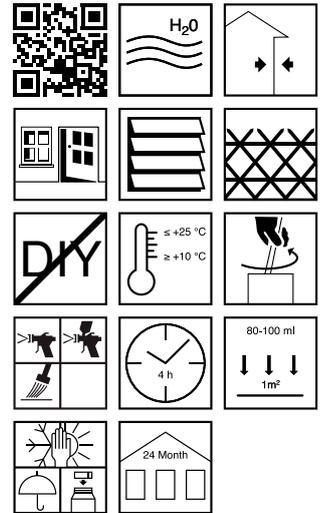
System products	Art. no.
Induline SW-910	(3777)
Aqua IG-15 Impregnation Primer IT*	(7145)
Aqua HSL-35/m Premium Wood Protection Stain 3 in 1*	(7120)
Aqua PL-413 Parquet Varnish	(2374)
Wood Impregnation	(0652)
Aqua RG-27 Renovation Primer	(7146)

*Use biocides safely. Always read the label and product information before use.

Aqua OVL-49/tm Grey Stain Oil [eco]

Durable grey stain made from renewable raw materials for interior and exterior wood in sensitive areas

Range of use	<ul style="list-style-type: none"> For use on interior and exterior wood Dimensionally stable wood elements: e.g. windows and doors Wood building elements with limited dimensional stability: e.g. folding shutters, matchboarding, summerhouses Wood elements with no dimensional stability: e.g. fences, framework, carports, planking Wooden bee boxes, beehives and other wood elements used in beekeeping Playground equipment Sustainable building: suitable for building certifications DGnB, LEED, BNB
Property profile	<ul style="list-style-type: none"> Water-based, very low solvent content Natural grey tones for wood Long-lasting, even colour in exposed and sheltered areas Made from renewable raw materials: min. 80% Tested bee-friendly formula Non-drip Good flow properties Cloth matt
Application rate	<ul style="list-style-type: none"> Approx. 80 - 100 ml/m² per coat min. 2 coats



Quantity per pallet		200	22
Packaging unit		2 × 2.5 l	20 l
		Tin bucket	Tin bucket
Container code		03	20
	Art. no.		
clear	3214	■	■
base M	3213	■	■
special colours	3215	■	■



System products	Art. no.
Wood Impregnation	(0652)
Aqua IG-15 Impregnation Primer IT*	(7145)
Induline SW-910	(3777)

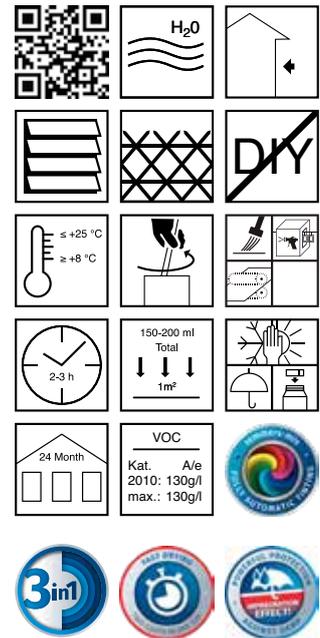
*Use biocides safely. Always read the label and product information before use.

Aqua HSL-36/m

Premium Wood Protection Stain 3 in 1

Fast drying, water-based premium wood stain with efficient application and excellent protection against moisture and UV, for exterior wood

Range of use	<ul style="list-style-type: none"> For use on exterior wood Wood without ground contact Wood elements with no dimensional stability: e.g. fences, framework, carports, planking Wood elements with limited dimensional stability: e.g. folding shutters, matchboarding, summerhouses Dimensionally stable wood elements (as a primer only): e.g. windows and doors Primer, intermediate coat and finishing coat Can be applied particularly efficiently with board coating machines Not suitable for coating floors (terraces, wooden decking etc.)
Property profile	<ul style="list-style-type: none"> Low-build stain for uniform matt, streak-free and brilliant stained surfaces 3 in 1: impregnation, primer and stain Protects wood against moisture and UV radiation Impregnation effect: Saturates the wood to protect against moisture Diffusion-open protective film: moisture can escape Water-repellent: wet surfaces dry quickly Protection against weather conditions (structural wood protection and moisture protection of the product) reduces the risk of development of blue stain and rot. Coating film protected against blue stain, mould and algae Water-based: No unpleasant odours, tools can be cleaned with water Fast drying: 2 coats in one day Hybrid binder mix: PU-reinforced alkyd resins and special acrylates for early resistance to water, resistance to dirt and long-term protection Subsequent treatment without sanding
Application rate	<ul style="list-style-type: none"> Approx. 150 ml – 200 ml/m² in min. 2 coats Planned or highly dense wood types are less absorbent and may require a third coat



Quantity per pallet	672	200	96	30	22
Packaging unit	0.75 l	2.5 l	5 l	10 l	20 l
	Tin bucket	Tin bucket	Tin bucket	Tin bucket	Tin bucket
Container code	01	03	05	10	20
	Art. no.				
clear	7051	■	■	■	■
light oak (RC-365)	7261		■	■	■
pine (RC-270)	7262		■	■	■
pine/larch (RC-260)	7263		■	■	■
teak (RC-545)	7264		■	■	■
nutwood (RC-660)	7265		■	■	■
palisander (RC-720)	7266		■	■	■
silver grey (RC-970)	7267		■	■	■
white (RC-990)	7268		■	■	■
special colour	7052	■	■	■	■

System products	Art. no.
Aqua IG-15 Impregnation Primer IT*	(7145)
Induline SW-910	(3777)
Aqua MSL-45/sm Medium Build Stain UV+	(7130)
Aqua OML-48/tm Medium Build Oil Stain [eco]	(7710)
Aqua DSL-55 High Build Stain PU	(7220)
Aqua NEL-56/tm Natural Effect Varnish	(7151)

*Use biocides safely. Always read the label and product information before use.

Product overview

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Compress render _____	100	Primer Hydro HF _____	114		
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FM TK _____	85	RM BC _____	94		
FM TK PH _____	86	RM GF _____	93		
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What can we get done for you?
Don't hesitate to get in touch.



**“Never stop
starting and
never start
stopping.”**

Guiding principle of
Bernhard Remmers,
founder

Remmers is one of the leading specialists for construction chemicals, wood paints and coatings, and industrial coatings. Founded in 1949 by Bernhard Remmers, we are an independent and owner-managed family business to this day. Our head office is located in the German town of Löningen in the Lower Saxony region – this is where we have our roots. At the same time, we have an international presence with 18 subsidiaries.



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Subject to changes. The current version of the applicable Technical Data Sheet is relevant for legal matters.

Colour variations are possible.

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