

FESTOOL MAGAZINE

THE PAINTERS' EDITION
SPRING & SUMMER 2020
N°7

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EDITORIAL

Dear Readers,

Painting is a fantastic profession! There are many painters out there who are considering how they can get even more from their job. Maja Greminger, a painter we visited in Switzerland, is constantly doing just that. To her, **painting** is not a straightforward path, but rather an inspirational road of twists and turns, branching off in many different directions.

It's no coincidence that for years she has been working intensively with construction materials and age-old craftsmanship techniques. Two excellent experts from Vorarlberg have also specialised in this: Gerold Ulrich knows everything there is to know about **lime and related plastering techniques**; Martin Rauch surpasses all others in his use of the traditional **material of clay**, a building material with history that today is seen as truly forward-looking in the world of sustainable building.

We focus on all of these facets of painting here at Festool. We offer a wide range of products for experts and professionals who love working with fantastic tools and prefer to trust in an entire system: when everything has to go together exactly right to prepare the **perfect substrate**, for example, or when aiming for the optimal mixing result when **material is being stirred**. Indulge in your passion for painting here!

Yours sincerely,

A handwritten signature in white ink, reading 'H. Mehrwald', written in a cursive style.

Herwig Mehrwald
Head of Sales, International Festool GmbH

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YOU NEVER STOP LEARNING

05

Coming from the mouths of our parents, the old adage that one never stops learning always sounded like a threat. But there is some good advice at the heart of that saying, especially when it comes to getting more from your profession. We spent some time with Maja Greminger, a highly dedicated Swiss painter who is always discovering and learning about new facets of painting with curiosity and passion.

Text
Ralf Christofori

Photography
Torben Jäger



It's Maja Greminger's first day of school. On a Wednesday morning in August, she travels from Gränichen in the canton of Aargau to the Haus der Farbe in Zurich, where the new class is being welcomed. Maja Greminger is a mature student, so to speak, but she is as excited as a little kid. It's not the first 'school orientation' she has been to, and it's not even her first time at the Haus der Farbe. She completed a course here in Design in Skilled Craftsmanship, including the final examination, from 2008 to 2010. Now she plans to go one step further with a follow-on course, culminating in a higher examination.

'If you are looking for someone who sees painting as less of a career and more of a calling, then you have to meet Maja Greminger,' Agatha Zobrist, Director of Education at the Haus der Farbe, told us. 'She is an excellent representative of her craft, who has dedicated years to getting more from her profession.' And that is clear: in our conversation with her, Maja Greminger exudes passion and motivation.

An unusual career path for a painter

She talks about her professional background. It's a story that is certainly not linear and is anything other than boring. She speaks of her training as an interior designer, which led her to painting. She discusses the challenge of green, sustainable building, a topic which she started grappling with early on. She raves about traditional craftsmanship techniques like lime rendering, tadelakt or clay construction, techniques that she has mastered. 'It's not about additional qualifications for me; I'm not collecting certificates to hang on my wall. What really drives me is the variety that painting offers, making it so unbelievably exciting,' explains Maja Greminger.

We believe her every word. And it's immediately clear why Maja Greminger, even with almost thirty years of professional experience, is so excited by this first day of school at the Haus der Farbe. In life and in your career, you never stop learning – Maja Greminger has truly internalised this. It's admirable, but no less astounding given the widespread opinion that such highly motivated, qualified experts in craftsmanship are just a laudable exception to the rule. The high drop-out rate in painting is noteworthy and many fresh young talents decide either during or after their training that painting is not for them. There are many reasons for this. One is that the possibilities of painting as a profession are undervalued and many painters do not reach their full potential.

'It's not about additional qualifications for me; what really drives me is the the variety that painting offers, making it so unbelievably exciting.'

Maja Greminger

→ A practical learning environment: Maja Greminger (left) with Agatha Zobrist, Director of Education at the Haus der Farbe.

↓ For Maja Greminger, completing a course in Design in Skilled Craftsmanship means more creative freedom in her work.





Expanding creative freedom in painting

Maja Greminger really loves painting. And she does a lot to reach her full potential as a painter. 'As a freelancer, of course, my circumstances are different from others', the painter openly admits. 'But in principle everyone has the opportunity to get more from their work as painters.' Completing a course in Design in Skilled Craftsmanship has helped her with this aim enormously – in two different ways: for one, it helped her enhance her technical and design skills as a craftsperson; for another, it has allowed her to significantly expand the creative freedom she has in her work as a painter.

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In her small workshop in Gränichen, Maja Greminger experiments with different materials and colours. She tries out innovative techniques, such as applying clay filler on textured wallpaper, a technique that she wants to work on further during her training at the Haus der Farbe. At the workbench, she carefully mixes a clay plaster and blends in a turquoise pigment. She has no end of tools, materials, binders and pigments – the shelves are full of them. She opens an old sideboard where the Festool abrasives are meticulously sorted according to grit size. In the lower workshop room, which used to be a cow stall, she keeps everything she needs for her work.

In her small workshop in Gränichen, Maja Greminger experiments with different materials, colours and innovative techniques.





↑ Maja Greminger set up her workshop in an old cow stall.

← Add the ingredients and stir: clay plaster, pigment and a large scoop of curiosity.

→ Creative design ideas are tested and sampled to give the customer an idea of what the final result might look like.





‘Unlike before, these days I receive many more orders which allow me to fully explore my craftsmanship skills and creative range.’

Maja Greminger

← Maja Greminger works on design concepts for customer projects in her office.

↓ In designing an interior wall in a house situated at the edge of a wood, the painter seeks inspiration from the view out the window of the home.



Using painting to achieve an effect

Maja Greminger's office is located on the upper floor, directly above the workshop. This is where she works on design concepts for specific customer projects. 'Beyond perfectly mastering the actual craftsmanship skills, something else I learned at the Haus der Farbe is how to present my design concepts in a clear and convincing way. Ultimately the most important thing is to give the customer as clear an idea as possible of what I'm offering them.'

It's a more involved process than just waving a colour wheel at the customer and asking them to choose a shade. Maja Greminger's design expertise goes far beyond that. She builds a picture of the design concept in situ. In every interior walk-through, she takes in the view to the outside as well, collects visual and tactile impressions, considers the orientation and state of the sunlight, gets a sense of the atmosphere of a space. 'All of this I consider to be part of the painting process, and alongside perfect execution, it is perhaps the highest form of art of all: to come to know the fantastic effect that a painter can achieve.'

An ambitious painter – and a successful one

In an era where the majority of customers expect painting to be done as efficiently and economically as possible, generally following a standard method, Maja Greminger's approach seems extraordinarily ambitious. But she is successful with it. 'Unlike before, these days I receive many more orders which allow me to fully explore my craftsmanship skills and creative range,' the painter says. 'And I am even afforded the luxury of turning down work from time to time, when all the customer wants is a white wall painted even whiter as cheaply as possible.' So is Maja Greminger just a laudable exception to the rule? Possibly. But it's an exception that is absolutely worth copying.

MAJA GREMINGER

After completing her school-leaving exam, Maja Greminger trained as an interior designer. Drafting and designing led her to painting. She went freelance at the age of 26. Her intensive work with green, sustainable building led to the founding of the company bionova in 1993 along with her husband, architect Werner Bohren. In 1997 she received her degree as a 'building biologist SIB'. She completed her training in 'Design in Skilled Craftsmanship', including a final examination, at the Haus der Farbe in Zurich in 2010, and then went on to start the follow-on course, which will culminate in a higher examination, in August 2019.

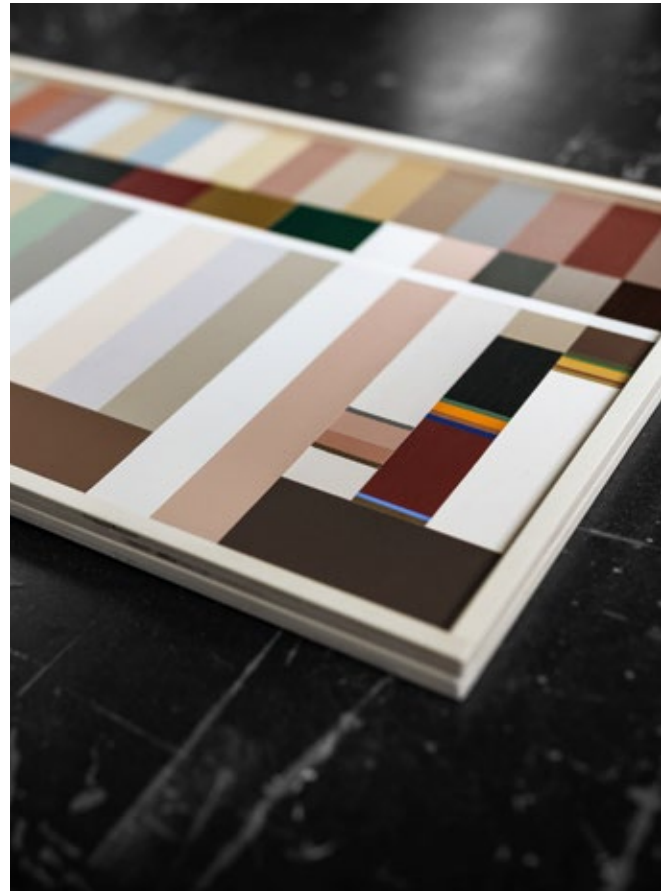
COLOURS OF A CITY

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Every village, city and region has its own 'local colour'. Stefanie Wettstein and her team at the Haus der Farbe in Zurich have been working on this concept intensively for several years: analysing local colour with academic precision and a great flair for shades and hues.

Text: Anja Soeder | Photography: Torben Jäger and Christoph Gysin

↓ For Stefanie Wettstein, the colour maps are more than just a building reference; they reflect the identity of a place.





↑ The colour map of Rheinfelden's old town (above) breaks down the rooftops, facades and natural stone, windows and doors into their individual shades of colour. The photographic documentation is a component of the analysis.

A painter who goes through the world with open eyes and simply observes the colours around them gains astounding insight. Stefanie Wettstein does it often and, in a word, professionally. Commissioned by owners, municipalities and cantons, she and her team at the Haus der Farbe analyse the colour-specific characteristics of houses, quarters and entire districts. The results are incorporated in meticulously cultivated colour maps and atlases, which were created for the canton of Thurgau and the cities of Schaffhausen and Winterthur, among others. What started years ago in Zurich as a colour atlas for the city has since been expanded to include cantons and municipalities. 'We want to make people aware of the colour space that they inhabit,' says Stefanie Wettstein, 'and above all, craftspeople, architects and city planners, when they decide on the colours of houses, facades, windows and doors.' It's an impressive and highly inspiring idea!

APPROACH IT SYSTEMATICALLY!

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The PLANEX easy long-reach sander combines with the CLEANTEC CT 36 AC and CT-VA pre-separator to form a perfect unit. Together they really get a lot done. With the ETS EC 150 and the hand-sanding blocks that can be used with dust extraction, your work just got even finer. For clean, healthy sanding of all surfaces everywhere.

Text: **Anja Soeder** | Photography: **Thomas Baumann**

Everyone knows that you get better solutions when you work systematically. When everything is perfectly coordinated with everything else in the system, it just makes the work faster, more efficient and easier. And the result is the living proof of that.

Surface preparation – reaching every last corner, right into the angles

Let's set the scene at the building site: there are grand old walls, reaching up to meet ceilings three metres high, with decades of wear and tear. Everything has to be renovated and refreshed. But for the painter, achieving that really is a mission. After all, in order for the customer to be able to enjoy their four new walls in peace for as long as possible, there is one main requirement: optimal surface preparation.

The skilled eye of the painter can see that material needs to be removed across the entire surface, right into the smallest angles. And the material is sure to produce a serious amount of dust. Here's where Festool's call rings out: approach it systematically! It's thoroughly advisable to really consider it: while the customer already has an idea of what result they want, the painter systematically compiles their tools. For the old walls described here, the painter grabs the PLANEX easy long-reach sander for large-area work on walls and ceilings, fitted with the GRANAT NET mesh abrasive, plus the CLEANTEC CTM 36 E AC-LHS special extractor combined with the CT-VA pre-separator, the ETS EC 150 eccentric sander for smaller areas, and for corners and edges, the HSK-A hand-sanding blocks that can be used with dust extraction.



↑ The Festool system is well-thought-out for every kind of surface preparation, even ambitiously high targets.

Take it 'easy' – but only with optimal dust extraction

Large wall and ceiling surfaces are no problem for the PLANEX easy. It starts up at just one touch of a button and the direct drive sets the pad and 225 mm abrasive into motion. Weighing just four kilograms, the long-reach sander is relatively lightweight and well balanced – making fast, effortless work on ceilings and walls easy. Thanks to the flexible joint on the head, the long-reach sander is also extremely manoeuvrable. And even the brush segment can be removed for sanding right along edges. With the PLANEX easy there's no need to worry about broken shafts, because it has no shafts. The brushless EC-TEC motor is designed to be maintenance-free. Just how efficient you can be with the PLANEX easy becomes clear especially when sanding large areas of mineral surfaces and drywall filler.

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You can take it 'easy' but still be really efficient and clean with optimal dust extraction. And when it comes to dust, it's a fact that the more powerful the sanding tool, the more powerful the dust extraction system needs to be. Dust-free work at head height and above is especially necessary for painters. The CLEANTEX CTM 36 E AC-LHS mobile dust extractor is specially designed for this kind of work with the PLANEX easy: it is approved for dust category M and has a 36-litre capacity, the use of which is optimised through automatic main filter cleaning (AUTOCLEAN). The cleaning intervals can even be continuously adjusted to match the intensity of the material removal. The extremely compact high-performance turbine delivers the perfect suction power.

And with the CT-VA pre-separator, Festool takes things another step further. The pre-separator comprises three modules which are 'stacked' on the mobile dust extractor: a cyclone separator, which is connected to the tool and the CT mobile dust extractor via two hoses; and under that, a tub and a removable collection container with an approx. 20-litre capacity. The sophisticated system captures up to 80 per cent of the fine mineral dust before it reaches the mobile dust extractor. This reduces the load on the main filter and ensures consistently high suction power throughout the work process. The pre-separator and mobile dust extractor can easily be coupled and decoupled via the tried-and-tested SYS-Dock system. The innovative collection container makes it much easier to dispose of large amounts of dust.

EXPERT TIP:

Renovation professionals can literally breathe easy thanks to the Festool pre-separator: the CT-VA-20 ensures not only dust-free work but also clean and effortless disposal of large amounts of dust.

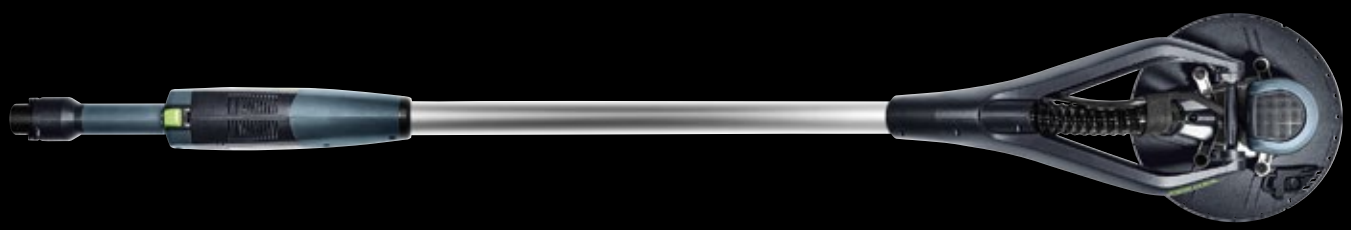
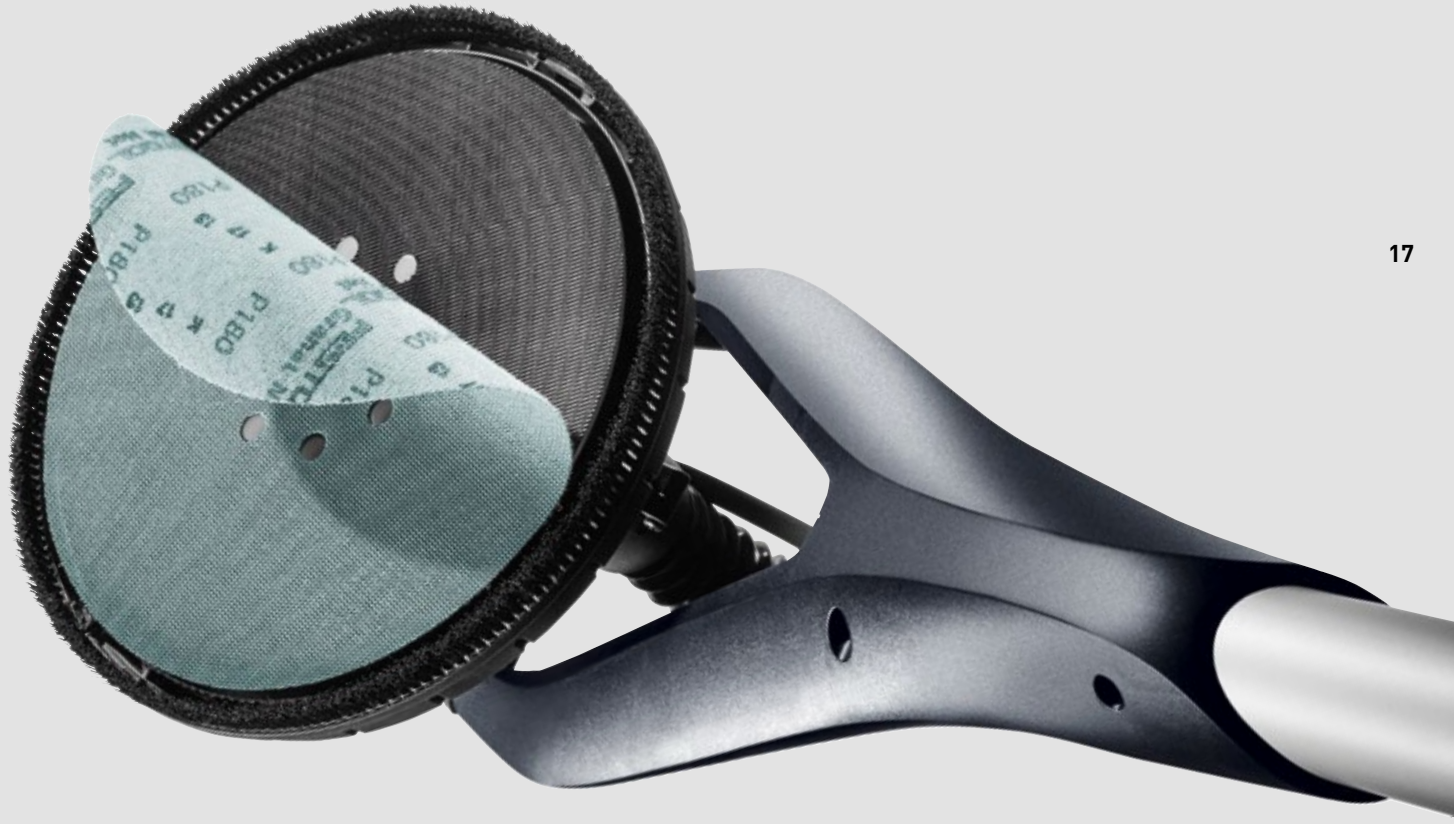
With the PLANEX easy, the drive sits directly on the pad. The fact that the long-reach sander is more flexible and robust as a result pays off in every way.

→ The GRANAT NET mesh abrasive ensures a high removal rate and less clogging.

↘ Size doesn't always matter – but with the PLANEX easy long-reach sander, it's all about the length.

↓ With the CT-VA pre-separator, even large amounts of dust don't stand a chance.







↑ No matter what sander is used, painters achieve optimal results with the GRANAT NET mesh abrasive.

→ The ETS EC 150 is available with a sanding stroke of 3 mm or 5 mm, making it an indispensable companion for a wide range of painting applications.

The ETS EC 150 is ideal for working on vertical or overhead surfaces: this powerful tool weighs just 1.2 kg.



A system that works hand in hand

The combination of the PLANEX easy and CLEANTEC CT 36 AC special extractor with CT-VA pre-separator make quick, efficient work possible, especially when removing material on large areas of mineral surfaces or drywall filler, where large amounts of dust are sure to collect. And in areas where the large pad of the PLANEX would be too big, the ETS EC 150 eccentric sander or HSK-A hand-sanding blocks that can be used with dust extraction take over. One handle. One touch of a button. And off you go. That's how a system that works hand in hand goes. That's how Festool does it.

EXPERT TIP:

The GRANAT NET mesh abrasive is especially suitable for materials that produce heavy amounts of dust. The open mesh structure allows for high material removal and comprehensive dust extraction – in four additional sizes alongside the ø 225 mm for the PLANEX.

↓ Our hand-sanding blocks take care of corners, edges and curves – with an ergonomic handle and of course with dust extraction.



SIMPLY GOOD, UNCOMPROMISINGLY DUST-FREE

Festool has optimised the PLANEX easy long-reach sander, CLEANTEC CTM 36 E AC-LHS special extractor and the CT-VA-20 pre-separator to work perfectly together. Combined with the ETS EC 150 and the HSK-A hand-sanding block, the resulting system is even better than the sum of its parts.

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LHS-E 225 EQ PLANEX EASY LONG-REACH SANDER

- › Robust and durable thanks to EC-TEC direct drive without flexible shaft.
- › Extremely good material removal – even better with the GRANAT NET mesh abrasive ø 225 mm.
- › Unpack and get started: the PLANEX easy starts up with just the flip of a switch.

CLEANTEC CTM 36 E AC-LHS MOBILE DUST EXTRACTOR

- › The special extractor for the PLANEX easy long-reach sander.
- › With AUTOCLEAN function, kink-resistant hose and closing slide for even more intensive main filter cleaning.
- › Ideal for use on the building site thanks to compact design and light weight.

CT-VA-20 PRE-SEPARATOR

- › Effective extraction of large volumes of dust and particulates.
- › The dust intake is quickly, safely and cleanly transported and disposed of in the stackable collection container.
- › Suitable for CLEANTEC CT 26, 36 and 48 mobile dust extractors.

ETS EC 150 ECCENTRIC SANDER

- › Ideally suited for coarse and intermediate sanding as well as fine sanding of mineral materials.
- › Perfect one-handed sander for effortless sanding in any position, even overhead.
- › The ETS EC eccentric sanders now come in the new Systemer³.

HSK-A HAND-SANDING BLOCK 80 x 130

- › Ideal for hand sanding (coarse, intermediate and fine) of corners or reveals.
- › Also suitable for sustained sanding work thanks to ergonomic handle and dust extraction.
- › Suction power can be adapted using bypass adjustment.

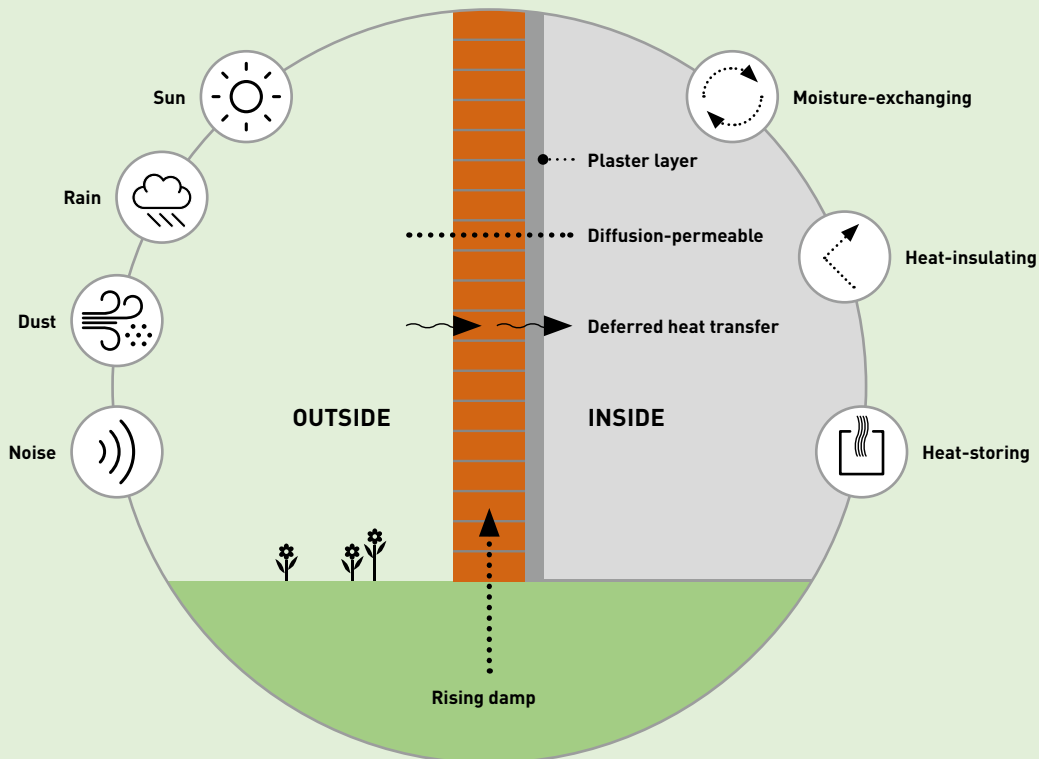
SYSTEMS GET IT DONE

Clean, healthy sanding with powerful tools and dust extraction systems from Festool – ideally operated as a set.

» www.festool.com/products/sanding-and-brushing/long-reach-sander

OLD TECHNIQUE, NEW TREND

Clay and lime are two of the oldest construction materials in the history of mankind. They have been rediscovered in recent times due to their especially ecological properties and their contribution to a healthy indoor climate. Read on here about what makes clay and lime plaster special and how to work with it properly.



CLAY AND LIME PLASTERS

Clay and lime plasters are mineral plasters. They are both considered to be especially breathable and good at moisture control. Clay plaster is able to absorb harmful substances from the air in the room. The same applies to lime plaster, which is also known for its high pH, making it excellent for fighting mould.

But be careful: not all lime plasters are equal. Any plaster containing at least 3% lime is allowed to be sold as lime plaster. But lime products only impart their specific properties when they are not mixed with cement or chemical additives.

The graphic above shows the benefits of clay and lime plasters. Lime plasters are suitable for both indoor and outdoor walls alike. Clay plaster, by contrast, is more sensitive to moisture and can therefore only be used outdoors in certain situations.

Clay plaster

Benefits

- > Easy to work with and can be applied to virtually any surface.
- > Green construction material, 100% recyclable.
- > Permeable and able to store heat.
- > Allergy neutral and blocks electromagnetic radiation.
- > Absorbs harmful substances and odours.
- > Noise-insulating and fire-resistant.
- > Low material costs (approx. EUR 3–10 per square metre).

Disadvantages

- > Softer and therefore more sensitive surface.
- > Sensitive to direct or sustained exposure to moisture.
- > Less suitable on outer walls or in wet rooms.

Lime plaster

Benefits

- > Permeable and able to store heat.
- > High pH (alkalinity) prevents formation of mould and kills germs.
- > Effective protection against pests.
- > Absorbs harmful substances and odours.
- > Noise-insulating and fire-resistant.
- > Wider range of colour than with clay plaster.

Disadvantages

- > Slower to process.
- > Climate control effect only works with plasters at least 15 mm thick.
- > Relatively high material costs (approx. EUR 20–50 per square metre).

APPLICATION

Lime plaster should be processed with speed, because it hardens quickly when exposed to air. The processing time for clay plaster can be extended by adding water. Nevertheless, you should still only ever mix only the plaster you can use within one to two days.



Brickwork
Float coat, coarse
Final coat, fine
Paint

Smoothing brush
Smoothing brush with a single row of bristles and a handle hole, for creating ridges and achieving rustic textures.

Ridge and groove trowels
For executing ridges and grooves with defined quarter-circle rounding.

Finishing trowel
Japanese finishing trowel for final treatments of clay and lime plaster.

Clay plaster

Preparing the surface

- › The surface should be solid and free from dust, oil and grease.
- › Slightly moisten absorbent surfaces before applying the plaster.
- › Stabilise transitions between different surface materials with plaster bases or reinforcement fabric.

Applying the plaster

- › One layer of clay plaster is suitable for level surfaces with good porosity, such as brick or clay blocks.
- › Where two layers of clay plaster are applied, the first layer is put on roughly and the second layer is applied on top after 12 hours.
- › Depending on the desired surface quality, different material qualities and grit sizes can be used for the float coat (coarse) and final coat (fine).
- › Process at an air and brick temperature of at least 5°C.

Painting the plaster

- › When painting clay-plastered walls, keep in mind that the clay wall will remain porous.
- › The most commonly used coating materials are clay paint, lime casein paint and mineral paint (e.g. silicate paint).

Lime plaster

Preparing the surface

- › The surface should be solid and free from dust, oil and grease.
- › Pre-wet surfaces well based on their ability to absorb water.
- › There must be no water on the surface prior to the plaster being applied.
- › Stabilise transitions between different surface materials with plaster bases or reinforcement fabric.

Applying the plaster

- › Lime plaster is usually applied in two layers.
- › Each layer must be kept sufficiently wet during application.
- › The thickness of the bottom layer (the float coat) is 10–20 mm.
- › The top layer (the final coat) should be 3–5 mm thick.
- › Rule of thumb for drying time: one day per millimetre of layer thickness.

Painting the plaster

- › It is best to use lime paint or limewash on lime plaster.
- › Avoid using the often recommended sealing primer before applying the paint.
- › Multiple coats are required for good coverage.
- › In heavy-use areas, treat the paintwork with olive oil soap so that it will be washable.

FIND OUT MORE

You can learn how to mix clay and lime plasters properly in this magazine issue as well.

» **Article on page 38**

THE LIME BURNER

Gerold Ulrich's passion for lime plaster was sparked more than twenty years ago. Since that time, he has been burning his lime himself. While he may employ a 100% natural, rather archaic method, what he makes from the resulting plaster is of the finest craftsmanship and architectural quality. We visited him in Vorarlberg, Austria.

Text
Ralf Christofori

Photography
Torben Jäger





Way up on the mountain, truly in the middle of nowhere, where the mixed forest becomes denser and the forest path gets narrower and narrower, we steadfastly follow Gerold Ulrich's car. We are going to where he burns his own lime. When you think of how he has to lug tonnes of stone up here and then somehow get the burned lime back down again, the fear of possibly getting lost forever in the woods seems ridiculous. Suddenly a clearing appears and we have reached our destination. It's not our satnav that tells us that, but rather the sight of the lime kiln, which Gerold Ulrich built into a steep slope.

The experienced master painter has been burning his own lime since 2005 – in different stages, if you want to call it that. The lime kiln here above Satteins, where Ulrich runs his business, is his masterpiece. He built it out of rammed earth, a kiln with the capacity to hold 18 tonnes of limestone. Powerful steel rings and anchors hold it together, so the lime mass and heat don't cause it to explode. The limestone is burned at a constant temperature of 900°C, fuelled exclusively by wood. The burning process lasts five days and nights, during which the temperature is constantly monitored and wood is replenished.

Burning and processing lime – a closed loop

Gerold Ulrich takes his time with this process, not because he has lots of time to spare, but because the result is important to him: 'The burning process in industrial production takes place at 1,200°C and is much faster. It's more cost-effective, sure, but it ultimately diminishes the quality of the lime, which is then artificially enhanced with additives. In our process, all of the natural characteristics of the lime are preserved, which has an extremely positive effect on the quality of the material and how it is processed.' Only after a further week, when the burned lime has cooled down, is it then hydrated or slaked. When just a little water is added, you get powder. If, on the other hand, lots of water is added, this results in what is known as 'slaked lime', which can be stored for years under a thin layer of water.

Gerold Ulrich is especially fascinated by the idea that the production and processing of pure lime is actually a closed loop: 'During the setting process, when the slake water evaporates and the plaster absorbs carbon dioxide, the lime carbonates and then over the years that follow, it returns to what it once was: stone.' This concept is not new. After all, lime is one of the oldest construction materials in the history of mankind. And the more Ulrich worked with the material, the more fascinated he became with it – particularly in his home region at the edge of the Northern Limestone Alps, where lime can literally be found right on his doorstep.

The limestone is burned at a constant temperature of 900°C, for five days and nights.

→ From nature, in nature: Gerold Ulrich on his self-made lime kiln.

↓ When lime burner Ulrich fires up his kiln, he creates a bonfire of such strength that it can bend even the hardest of steel.





'In our process, all of the natural characteristics of the lime are preserved, which has an extremely positive effect on the quality of the material and how it is processed.'

Gerold Ulrich

The heart of an 'alchemist'

At the start of his freelance career, when Gerold Ulrich worked on his first restoration projects, plastering historical houses with lime, he not only rediscovered old plastering techniques but also saw the limits of conventional, industrial construction materials. One thing led to another. The workshop grew, the production and storage of his own lime products built up speed, the excellent reputation of the lime specialist spread beyond international borders – Ulrich even established a second location in Diepoldsau in Switzerland.

What started as a little workshop in Satteins, Austria, has grown into a full-blown business over the years. Sacks of product and bagged goods are stacked on high shelves from floor to ceiling. Slaked lime is stored in huge containers in the yard. But the heart of this 'alchemist' still beats with the most passion in his workshop. At his workbench, Gerold Ulrich mixes formulas, tries out new things and samples colours. Rows of lime plaster samples line the wall, and the shelves are packed with different tools and glasses full of pigments. A book about Gerold Ulrich describes him as a 'tinkerer and a DIY-er' and that is what sets him apart: that he not only knows everything from a theoretical point of view, but can also actually do it in practice as well.

Pure lime plaster – ecological and sustainable

The fact that the lime burner from Vorarlberg just does his thing has given him something of a reputation as a rebel. Gerold Ulrich waves that notion off with a shy smile. But there must be a little kernel of truth in it: 'I came to realise that experience and good common sense alone would not stand up against the powerful building industry. When you look at how ecological and sustainable the natural insulating properties of pure lime plaster are, for example, then you have to wonder why we glue EPS rigid foam panels onto facades everywhere, which are also still required by regulations.'



↑ High shelves store lime, clay, pigments and additives for specific material mixes.

↓ Gerold Ulrich stores slaked lime in huge walk-in containers on the company premises.





→ Gerold Ulrich samples every idea – after all, an idea is only viable if the craftsman can make it work in practice.

↓ The heart of this 'alchemist' beats with real passion in his workshop.



**'The beauty of it is
that lime is a living
thing and naturally
breathes life into any
room or building.'**

Gerold Ulrich

Gerold Ulrich could actually tear at his thick hair over it, but he doesn't. Instead he rejoices in the many owners and architects who call on him for advice or commission his services. He gets as excited as a little kid when – like in the Türelíhus in Valendas in Switzerland – he has the chance to restore a three-storey home with a lime plaster facade that is over 500 years old! He virtually breathes new life into a vaulted cellar in a listed building by removing the rendering, desalinating the brickwork and then applying a thick layer of lime plaster. 'The beauty of it,' Ulrich explains, 'is that lime is a living thing and naturally breathes life into any room or building.'

Modern building with old plastering techniques

Gerold Ulrich has provided impressive proof, mainly in more recent building projects, that the use of lime plaster can also be versatile and modern. The next morning he takes us to Montforthaus, a modern cultural centre and conference venue in the centre of Feldkirch. The painter and his team modelled the impressive, curved railings in the entrance hall and the grand hall in smooth-finish lime plaster. 'To achieve a consistently smooth result, we applied the lime plaster all in one step, so to speak, first ultra compressed and then saponified,' Ulrich recalls.

After that, we drive a bit further north to Lustenau, to look at a rather unusual building with a facade plastered entirely in lime. Just like the olden days, and yet absolutely modern. And also totally visionary. Find out more about that building on the following pages.

For more stories about painters with a passion for their work, visit:
» www.festool.com/blog

MALERWERKSTATT GEROLD ULRICH

Experienced master painter Gerold Ulrich established himself as a freelance painter in Satteins, Vorarlberg, Austria, in 1989. His intensive work with old lime and clay plastering techniques led him increasingly to start producing his own building materials for this purpose. The materials range from lime plasters and paint to casein clay, smooth-finish soap and oil paint. No one knows better than Ulrich how these materials work together best. Today Gerold Ulrich also passes on his extensive knowledge to other professional craftspeople.



↑ In Montforthaus in Feldkirch, Gerold Ulrich did large-scale work with lime, in the entrance hall, the grand hall and in the sanitary rooms.

← The railings in the foyer of Montforthaus are modelled and saponified in smooth-finish lime plaster.





Text
Ralf Christofori

Photography
Torben Jäger

Is it possible to build a six-storey building complete with no heating, air conditioning and ventilation, and yet have the room temperature remain constant throughout the year between 22 and 26 degrees? In Vorarlberg in Austria, right at the foot of the Alps? Why yes, yes it is. With persistence, determination and rock-solid construction materials.



The lime plaster on the external facade preserves and reinforces the climate-relevant properties of the bricks and also takes on a protective function.

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↑ The hefty facade and load-bearing walls are bricked in a classic solid construction method.

← Inset windows and automatic ventilation flaps ensure optimal indoor air quality.

→ Constructed vision: the 2226 building in Lustenau makes a statement in more than just energy efficiency.



The building seems to say, 'Leave me alone. You don't understand me anyway...' That's what Dietmar Eberle says about his building, which was truly misunderstood at first. You certainly can't accuse the architect and owner, a native of Vorarlberg, of not knowing what he's doing. Quite the opposite. But the understanding of the experts at the time really hit its limits when he came up with his plans to construct a building with no heating, air conditioning or ventilation. And not in some region with a mild year-round climate. No, he wanted to construct his building in Lustenau, which experiences snow-fall every winter and regularly hits 30-degree temperatures in the summer.

It simply wouldn't work, they said. Full stop. Dietmar Eberle gathered his team from the architectural firm Baumschlager Eberle, along with lots of other experts, erased that full stop and replaced it with an exclamation mark when the 2226 building was completed in the spring of 2013. Since then more exclamation marks have been added, as the building has proven time and time again over the past seven years just how well it does work. And how!

Constant indoor climate without the complicated building technology

No really, how does it actually work? 'It wasn't rocket science,' explains project manager Jürgen Stoppel. 'We just followed a different path with firm consistency and persistence. Using detailed calculations, we developed an energy concept that eschewed complex building technology installations or extensive insulation and instead fully exploited the laws of physics.' Even the contribution of individuals' body warmth to the building's internal climate was included in the calculations. A look into the narrow service shaft that travels across the six floors reveals the inner workings: there are no tricks here, just at most electrical cables for controlling the flow of air and documenting the indoor climate.

Above all, the building envelope is of crucial importance. The basic shape of the 'stony cube' is structured by the triple glazed windows, which hold back the outside temperature and allow in more than enough light. In contrast to comparable buildings, concrete was only used for the ceiling panels. The 76 cm thick facade is made of brick, an almost old-fashioned approach. But 'old-fashioned' in this case really means especially insulating, especially good for heat storage, especially efficient as a buffer and especially weatherproof.

Less is more – and above all, sustainable

The brickwork construction is sealed on the external facade by a pure lime plaster, burned and processed by Gerold Ulrich. Specifically speaking, it is a 15-millimetre thick base lime plaster with a cover layer of 8-millimetre wood-burned lime. The lime plaster preserves and reinforces the climate-relevant properties of the bricks and also takes on a protective function, as the lime specialist explains: 'The plaster gets progressively harder the longer it is exposed to the air, and the quality of the stone improves as it weathers. This is a completely natural process that means that the facade becomes increasingly more beautiful and robust over the course of decades.'

Essentially the architects, specialist planners and executing companies took the credo of 'Less is more' literally – not just in terms of the shape of the design, but also in the sustainable handling of construction materials and energy resources. The result is extraordinary, consistent and impressive. 'Our building 2226 is in many ways an exemplary model and a reference project, totally aside from the fact that our employees in the architectural firm and our tenants here feel very happy with it,' says Jürgen Stoppel. And that is perhaps the best testimonial there is.

↓ Project manager Jürgen Stoppel (right) with lime specialist Gerold Ulrich.



BRICKWORK
Bricks laid with lime mortar



FACADE PLASTER
Limestone from Schnepfau and the Kanisfluh



WINDOWSILLS AND PARAPET
Cover made of Rorschach sandstone



WINDOWS AND EXTERNAL DOORS
Exclusively solid wood from silver fir

2226 – LUSTENAU, AUSTRIA

Architect: BE Baumschlager Eberle Architekten, Lustenau
Plaster facade: Gerold Ulrich, Satteins, Austria
Completed: 2013

MIX WITH

MX

They sit really nicely in the hand and have proper power and speed. Some things about the Festool MX series stirrers are reminiscent of motorsport.

Text
Anja Soeder

Photography
Thomas Baumann

Sometimes your imagination can run wild just from stirring. If you stand over the stirrer and look down, you notice that it actually looks like a Formula 1 steering wheel. It might be missing the paddle shifters, but you can still achieve some serious speed and performance. You can even lean into the curve, as long as you don't take the 'kerb' of the bucket with you. What is much more important, however, is the even spinning, at an even speed, until the material has reached the optimal consistency.

Obviously this isn't about track records or the thrill of racing along the asphalt, but rather the mixing of plaster, mortar and paint. Every painter knows just how much work that entails. The challenge is to make that work easier. And that is exactly what Festool developed its stirrers to do: five machines in three

performance classes, optimally designed for their respective purposes. With a pleasant hold that makes stirring no trouble at all.

Stirring with ease

Let's go down the row, starting with the MX 1000 stirrer. It is suitable for liquid materials such as paints, coatings, adhesive pastes and viscous levelling compounds and fillers up to a mixing volume of 40 litres. The MX 1200 and 1200/2 (with two gears) stirrers go up a level in terms of performance and can handle volumes up to 70 litres with ease. The MX 1200/2 can even handle viscous, compact material like plaster, tile adhesive and mortar. The top performers of the MX series are the MX 1600/2 and MX 1600/2 DUO, which can do it all and have a capacity of 90 litres.



↑ Hold on tight to the 'steering wheel' and then really get going: with the MX series stirrers, you can get the perfect mixing results with ease.

The Festool MX stirrers do their work reliably even under the toughest conditions and even during continuous operation.

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With top equipment like this, even the painter feels like royalty. Why? Because gone are the days when mixing mortar or plaster meant hunching down over a big tub and not being able to feel your wrist at the end of the day. Festool stirrers make the job much easier, safer and more ergonomic. You stand upright during stirring, hold the stirrer at chest height, grip onto both handles firmly – and ultimately end up with a better, more even mixing result than if you had done the job by hand. You can even adjust the working height perfectly to your own body size using the ErgoFix height adjustment. The FastFix quick-change system makes it really easy to switch mixer containers – no screwdrivers or spanners necessary.

Reliable and robust – even during continuous operation

With all the great features of these tools, the main plus point threatens to be overshadowed: the Festool MX stirrers are durable tools with an extremely robust design, and these tools do their work reliably even under the toughest conditions and even during continuous operation. A powerful motor delivers more than enough output for the optimal speed. The soft start significantly reduces dust levels and spray. Between the handles, the speed can be continuously adjusted to the desired stirring speed. And then you can really get going, until you've reached your target. Who says you can't feel like a race car driver at work?

EXPERT TIP:

Heavy, compact materials should be stirred in first gear because the high torque delivers the greatest amount of power here. Liquid materials should be mixed in second gear at the appropriate speed. Always observe the manufacturer's specifications!

A CLASS FOR EVERY MASS

With the Festool MX 1000, MX 1200 and MX 1600 stirrers, you are best equipped for mixing different materials in different volumes.



IMPRESSIVE WORK

- › Perfect mixing result: with the right stirrers, the right mixer container and an adjustable stirring speed.
- › Energy-saving work: thanks to a powerful drive and optimal lever action.
- › A clean machine: with soft start for much lower dust levels and reduced splashing – and therefore less cleaning up to do afterwards.
- › A protected investment: durable and robust stirrers can handle any job.

EASY TO HANDLE

- › Simply adapt the stirrer to your height using the patented ErgoFix height adjustment.
- › The FastFix quick-change system makes it easy to switch mixer containers quickly and without tools.

FIND OUT MORE

The right mixer container for every material

Learn why choosing the right mixer container is crucial on the following pages.

» [Article on page 38](#)

All about stirring

Find the entire range of stirrers and mixer containers on the Festool website:

» www.festool.com/products/stirring



STIRRED, NOT SHAKEN

Plaster and paint must be stirred properly in order for the components to blend in the right way. Ideally using a powerful stirrer. But few are aware that having the right mixer container is also crucial. The mixture is stirred to the right or the left and the mass is mixed up or down.

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STIRRING CLAY AND LIME PLASTERS

Clay plaster mainly comprises sand, mud and clay, while lime plaster in its natural form comprises sand and lime or limestone. The plasters are mixed with water. The amounts and mixing ratio in both cases depend on how the mixture will be used.



CLAY PLASTER

Clay plaster is available in powder form as bagged goods, and more rarely in moist bundles.

FORMULA

Clay float coat

- > 2 parts clay powder
- > 4 parts sand (0–2 mm)
- > 1 part straw chaff
- > Water as needed

Clay final coat

- > 2 parts clay powder
- > 5–6 parts sand (0–2 mm)
- > 0–1 part straw chaff
- > Water as needed

Clay wash

- > 1 part clay powder
- > 2 parts sand (0–1 mm)
- > Water as needed

MIXING PROCESS

1. Pour water into a bucket.
2. While the stirrer is running, add clay filler and stir carefully.
3. Leave the mixture to soak for approx. 20 minutes.
4. Stir the mixture again before processing.

LIME PLASTER

Lime plaster is composed of three basic ingredients: hydrated lime, sand and water. The lime part of the mixture is available in the form of a powder (hydrated lime) as bagged goods or in the form of slaked lime.

FORMULA

Lime float coat

- > 1 part lime
- > 3–4 parts sand
- > Water as needed

Lime final coat

- > 1 part lime
- > 4–5 parts sand
- > Water as needed

Limewash

- > 1 part lime
- > 3–5 parts water

MIXING PROCESS

1. Pour water into a bucket.
2. While the stirrer is running, add lime filler and stir carefully.
3. Leave the mixture to soak for approx. 5 minutes.
4. Then stir the mixture again and process it quickly.

MINERAL – ANIMAL – VEGAN

Clay and lime plasters are mineral construction materials. For reinforcement, plant fibres like straw or hemp are worked into the material. In addition to these 'vegan' options, there is also an 'animal' option: boar bristles are used for reinforcement, for example, and low-fat quark (approx. 1 pound for 10 litres) is used to create lime caseinate and increases the weather resistance of lime plasters.

NATURAL – COLOURFUL

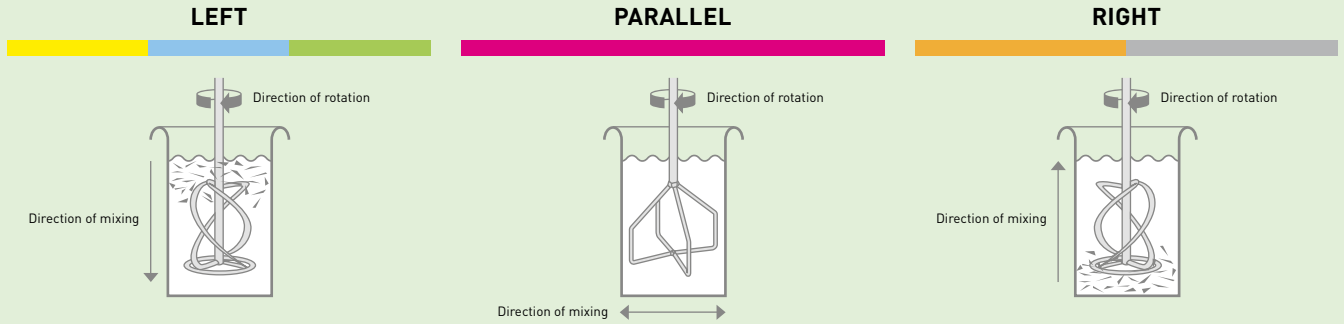
The intrinsic colouring of clay plaster means that the possible range of colours is limited. Thanks to the natural powdery white of lime plaster, however, any conceivable shade is possible with lime plaster. In the case of wet slaked lime you can also use the limewater to prepare and mix a shade. In general, solid-coloured plaster is more durable and long-lasting than stains and coats of paint.

FIND OUT MORE

You can learn how best to work with clay and lime plasters in this magazine issue as well.
» **Article on page 20**

ROTATION AND MIXING DIRECTIONS

There are spiral stirrers, plate stirrers and beaters in all kinds of designs. Why? Because the mixing direction determines the mixing result.



For low-viscosity mixtures. Works from top to bottom – this means the material is also transported downwards. Prevents material splashing.

For flowing mixtures. Thorough mixing of the material ensures optimal consistency and prevents air pockets.

For high-viscosity, compact mixtures. Works its way through the mixture and transports the material from bottom to top.

		RS disk stirrer	WS plate stirrer	HS3L spiral stirrer with 3 left-hand spirals	CS beater	HS2 spiral stirrer with 2 spirals	HS3R spiral stirrer with 3 right-hand spirals
Applications							
Parent material Liquid Mixing result Liquid	Colours	✓	✓	✓			
	Emulsions	✓	✓	✓			
	Adhesive pastes	✓	✓	✓			
	Paints, stains	✓	✓	✓			
	Epoxy resins	✓	✓	✓	✓		
Parent material Powder/viscous Mixing result Flowing	Filler				✓	✓	✓
	Adhesive mortar				✓	✓	✓
	Levelling compound				✓	✓	✓
Parent material Powder/viscous Mixing result Compact	Ready-mixed plasters					✓	✓
	Plasters			✓		✓	✓
	Grouts					✓	✓
	Mortar					✓	✓
	Quartz-filled epoxy resins						✓
	Concrete, screed						✓

✓ Highly suitable

✓ Suitable



LIVING

WITH

CLAY

Interview
Ralf Christofori

Photography
Beat Bühler



Martin Rauch is considered a clay prophet in professional circles. But the 'good news' he preaches has less to do with belief than with knowledge. He knows everything there is to know about sustainable clay construction. We visited him at his home, which he built from rammed earth.

FM: Clay is experiencing a renaissance in these times of ecological and sustainable building. But people have known about the special qualities of this material for millennia already. Why is clay only now coming up again?

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MR: I've been asking myself that for more than 30 years. For thousands of years, we've used clay directly from the ground to build houses. The first houses in rammed earth construction came into being around 3,000 years ago. Clay is a material that is available almost everywhere and is very versatile. It can be processed using very little energy and is 100% recyclable. What's more, clay – and it doesn't matter if it is used as clay plaster or rammed earth – creates a healthy indoor climate and is completely free of harmful substances.

FM: Why has clay fallen out of use?

MR: At our latitudes, clay was used everywhere right up until the 1930s. But at some point the material got a bad reputation because it was seen as too 'primitive'. The 'more modern' concrete overshadowed everything else because it could be manufactured on an industrial scale and was very cost-effective to work with. I don't have anything against concrete as a construction material, but the inflationary use of it and the high energy requirement for it does raise big problems. China installed more cement in 2011 to 2013 than the USA did in the last 100 years. The manufacture and processing of reinforced concrete are responsible for 14 per cent of global CO₂ emissions. In the meantime, people are increasingly considering the qualities of clay construction because they are perhaps thinking more seriously about how we want to live, today and in the future.

FM: It's quite astounding that something so old and traditional is suddenly seen as innovative and forward-looking.

MR: Yes, that's how it really is. And yet the idea is not easy to sell. Mainly you need proof that we can use a 'primitive' material like clay to create buildings that are not just modern but also even progressive.

FM: Is that why you built your own house completely in a rammed earth construction?

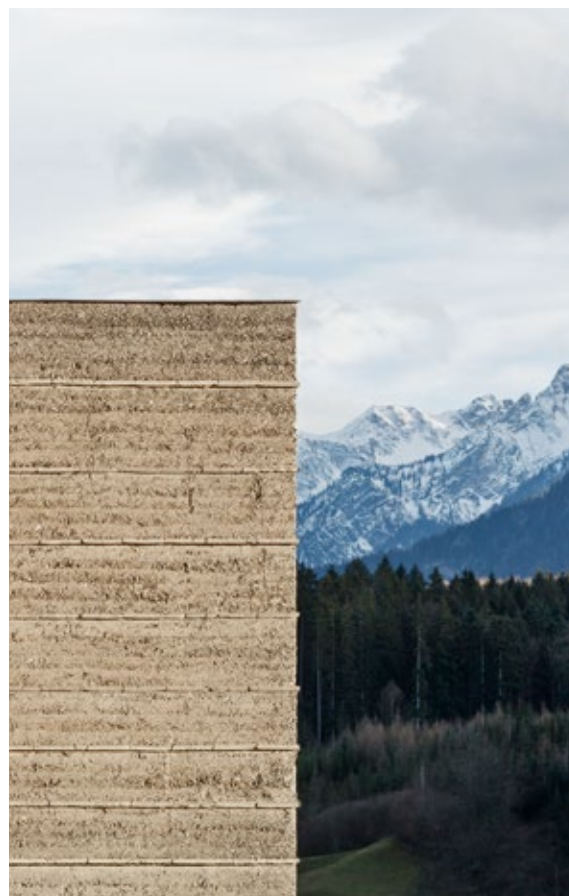
MR: Yes, that was twelve years ago. It's built in the style of an African clay hut, in line with modern European standards. I designed it with architect Roger Boltshauser. It was an experiment that incorporated lots of experience. But ultimately the years have proven that everything is working exactly the way we planned it: structurally, aesthetically, climate-wise and acoustically. If I had to do it again, I would build this house exactly the same way.

FM: And clay construction works on a large scale as well – for public and commercial buildings just like for private residences?

'Clay is a material that is available almost everywhere and is very versatile. If you design a building appropriately for the material, virtually anything is possible.'

Martin Rauch

↓ Out of the earth, in the mountains: the Rauch home made of clay, in front of the backdrop of the Arlberg massif.





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- ↑ Clear edges in the foyer and round curves in the stairwell.
- ↓ Natural materials and a healthy indoor climate in the living area.

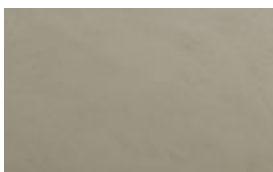




↑ The Rauch home shows how successfully a 'primitive' material like clay can be used to build a modern, contemporary and sustainable house.



OUTER WALLS
Rammed earth made of moist clay and mud slats



INNER WALLS
Clay plaster made of white mud and sand, reinforced with woven fabric



FLOORS
Clay casein screed, polished with wax and impregnated with linseed oil



MR: If you design a building appropriately for the material, virtually anything is possible. It's more a question of what the most cost-effective approach to rammed earth construction would be. When we built the house, of course, a lot of it was created and executed by hand, which for the bottom line meant around 30 per cent more working time. In 2012 when we constructed the Ricola Herb Centre in Laufen near Basel, we worked with prefabricated rammed earth elements on a large scale for the first time. For the Alnatura Campus in Darmstadt, Europe's largest office building made of clay, we developed a machine that would manufacture the rammed earth elements on site. Here in Schlins we are currently building a new factory hall where rammed earth products will be manufactured on machinery in future.

FM: So does that mean you will be supplying customers from here?

MR: No. That would go against our ethos, because the positive ecobalance of clay construction is based on the fact that the material is sourced locally and not transported over hundreds of kilometres. For the rammed earth walls in the Ricola Herb Centre, we actually sourced all of the necessary materials from a radius of eight kilometres. For Alnatura it was a bit different because we used the excavated material from the major Stuttgart 21 project for the most part.

In general we reuse material that would otherwise need to be taken away and disposed of at great expense. And there is more than enough of those materials to choose from. A few years ago, for example, Parisian architectural firm Joly & Loiret initiated a project that we were involved in. It is truly visionary and at the same time, it solves a problem that very few are aware of: in the course of construction and earthworks just in the metropolitan area of Paris alone, four million cubic metres of excavated clay are removed and disposed of each year. That is an unbelievable amount, which could be used to build a great number of homes and entire quarters in rammed earth construction.

FM: The call for sustainable concepts and solutions is getting louder and louder. Are you seeing greater demand as a result?

MR: Yes, definitely. We are noticing that in tenders for public or private construction projects, the topic of sustainable building is being given increasingly more weight. There no lobby behind clay construction, but it is gaining more and more advocates all the same. And that is good. What we need above all are specialists who can work with the material! That's why I also campaign for clay construction to be promoted more strenuously in universities, technical colleges and in workshops. Making the use of clay construction more widespread is the actual goal. When we achieve that, then it will be a vision with a future.

'Clay construction is gaining more and more advocates. What we need above all are specialists who can work with the material!'

Martin Rauch



Photography: Alexandra Grill

MARTIN RAUCH

Martin Rauch started his studies at the College of Ceramics and Kiln Engineering in Stoob, Austria, in 1974. In 1978 he transferred to the University of Applied Arts Vienna, where he graduated in 1983 with his work on 'Loam Clay Earth'. In 1990 he began working on the design, planning and implementation of clay construction projects both in Austria and abroad. He founded Lehm Ton Erde Baukunst GmbH in Schlins in Vorarlberg in 1999. He has received countless international awards for his projects and research. He has been an honorary professor of the UNESCO Chair of Earthen Architecture since 2010 and a guest lecturer (along with Anna Heringer) at the Department of Architecture at ETH Zurich since 2014. The new book 'Upscaling Earth' was published recently by Martin Rauch together with Anna Heringer and Lindsay Blair Howe.

RAUCH HOME, SCHLINS

Architects: Roger Boltshauser, Martin Rauch
Execution: Lehm Ton Erde Baukunst GmbH
Completed: 2008



CLAY CONSTRUCTION

ORIGIN AND FUTURE

Clay construction has existed for millennia. Clay did not have to be invented; it was just simply found. And found almost everywhere.

Text: **Anja Soeder**
Photography: **Georg Gerster**

In Mali, mud huts line up one after the other like strings of pearls. In Shibam (Yemen) high-rise clay buildings over 500 years old stretch to the sky, reaching up to 25 metres tall. In China, long sections of the Great Wall were evidently built using clay earth. Clay has been used for construction over millennia in desert regions where building materials are naturally hard to come by and the climate is extreme. More technically demanding and elaborate is the massive rammed earth construction (pisé de terre), which goes back more than 5,000 years in North Africa and the Near East and was also used extensively in Europe up until the 19th century. The fact that clay constructions were particularly sustainable in terms of material resources and also healthy was not likely to have interested many people at the time. Today we know that clay is a construction material of the future. So there is a lot to say that we can still learn something from our past.



↑ **Yazd, Iran**
Domed buildings with cisterns
and wind catchers.

← **Qusair 'Amra, Jordan**
A desert castle from the 5th century.



BETTER TOGETHER

Festool is always ready to listen to customers. When it comes to solutions that make work easier for painters, experienced application technicians like Johann Schlosser even use both ears, and everything in between. We visited him at one of his building sites with a test customer, Valentin Schlien.

Text
Ralf Christofori

Photography
Torben Jäger



Application technicians are certainly not homebodies who like to sit and think on their own. They have a practical mindset and dream of optimal tool handling at night. And they are rather uncompromising when it comes to that. Johann Schlosser is that kind of person. Just his decisive handshake alone is enough to confirm it. The master painter joined Festool more than ten years ago, and has been with Application Technology since 2013. He spends very little of his working time at a desk; he'd rather be 'out and about' visiting customers, on building sites, basically wherever he can be to make painters' work easier.

We meet Johann Schlosser on a Wednesday morning at a building site at the Hafenmarkt in Esslingen, just 15 minutes' drive from his workplace. The customer we've arranged to meet today is Valentin Schlien. In 2009 he founded his own company in Esslingen am Neckar together with Axel Schenke: the MALERTEKTEN. The company name is a nice amalgamation of what they do: both are painters, known as 'Maler' in German, and Schenke is also an architect. They plan and execute building projects with the help of their 12-person team. So they provide everything from one place – which is pretty unusual, and always demanding.

Together with his employees, Valentin Schlien unloads his vehicle. The Systainers are stacked simply and quickly on the roll board, so he doesn't have to run back and forth five times. He leads us to a rustic vaulted cellar and beams. Although at this point you can only imagine the result, he already has a clear idea of how it will soon look. The painter lives for his work and loves pushing the limits of his craft. In the case of the Hafenmarkt project, those limits involve food, because this isn't just any building site: Schlien is working on his new restaurant 'Embargo' here. A painter and a restaurateur? It is rather unusual, but you immediately get the sense that the enterprising doer will succeed.

Festool invests a great deal in application technology. For customers. For the big picture and the smallest detail.

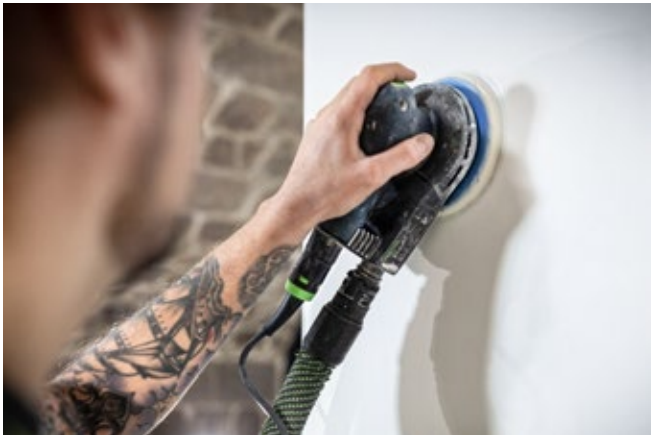


↑ Application technician Johann Schlosser prefers to be 'on the go' visiting customers or on building sites.

↓ The bosses are cooking here: Axel Schenke (left) and Valentin Schlien work together on all building sites themselves.







Simply better: how to establish more efficient workflows and improve work results

Valentin Schlenz is not just a loyal customer, but also an especially critical Festool test customer. 'How more efficient workflows are established using tools and the work result is improved, that is really important,' he emphasises. 'And in that respect, Johann Schlosser is exactly the right contact person.' Often the two sit together and talk shop. They discuss which tools work especially well or which product details have a big effect.

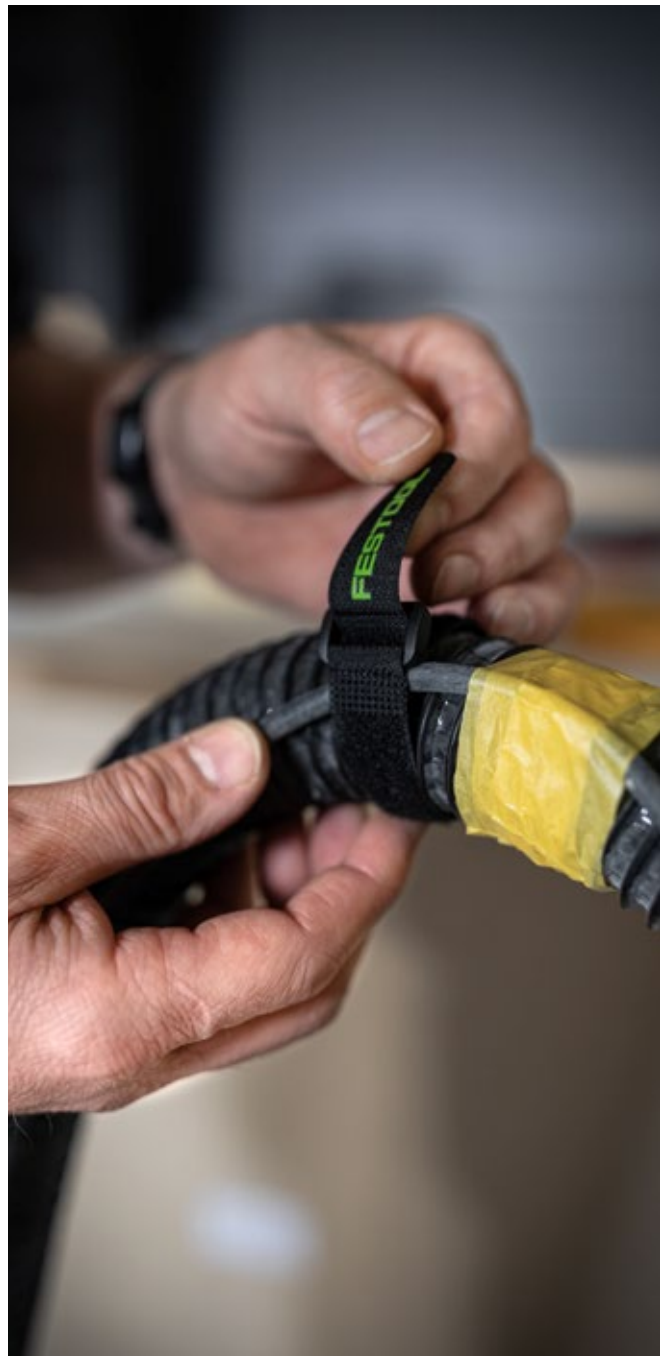
Take the nice cordless sander, for example: 'There are lots of sanders on the market, of course, with a cumbersome battery that is always in the way. Working with the customer, we managed to integrate the battery into the handle with perfect ergonomic,' Johann Schlosser says. It was also due to customer requests that Festool introduced the inconspicuous but useful hook-and-loop fastener, which can be used to very easily bundle up the suction hose and mains power cable between the tool and mobile dust extractor. The special bracket on the mobile dust extractor for the PLANEX was also developed from use, so that

'The feedback we get from customers is absolutely crucial, because that's where lots of ideas and solutions for new developments or further developments of products come from.'

Johann Schlosser, Festool application technician

← In order to ensure the optimal function of the Festool system, the tools must be put to the test every day.

→ Johann Schlosser and Valentin Schlienz talk shop and discuss little helpers with big impact: the new Festool KV-215 hook-and-loop fasteners.



the long-reach sander does not have to be placed on the floor in between working sessions. And if you look at the new Systainer³ you see that even big ideas are not left alone; instead they are continuously developed further.

Based on his long-standing experience, Johann Schlosser is best able to foresee what customers need – from a technical application, practical and cost-efficiency standpoint. 'We continuously consult with our test customers; with new products we even sometimes involve them three or four years before the

product is launched on the market,' he explains. Whatever Festool develops is put through its paces, but the real test is when the tools are with the customers, being put to day-to-day use. So, the application technician first gives a functional prototype or a pre-series product to test customers in selected markets, international above all. 'The feedback we get from these customers,' Schlosser explains, 'is absolutely crucial, because that's where lots of ideas and solutions for new developments or further developments of products come from.'



Always one more idea: because on the building site and in the workshop, only the best solution counts

When the application technician and the customer get together to brainstorm, the aim is not to outdo each other, but to collaborate to come to the best solution together. 'Naturally this requires a lot of trust, and also a willingness to offer honest opinions,' says Schlosser. He always gets that from his test customer Valentin Schlien. And the experienced painter knows exactly what is needed for the work.

In the vaulted cellar, Schlien drags in railings and a closed kitchen in drywall. He doesn't have a lot of light for painting, but thanks to his four SYSLITE DUO construction lights, he's able to illuminate large areas of the windowless room almost as if it were outdoors in the daylight. The walls are sanded with the ETS EC eccentric sander, and for large areas the painter uses the PLANEX long-reach sander. And of course no building site is complete without the cordless sanders with 18 V Ergo battery pack, which not only sit perfectly in the hand but also perform well even in angled corners. 'With us, everything has to be done like clockwork and everything has to intermeshed. The Festool system is excellent for doing that,' Valentin Schlien says: 'Especially when the work needs to be done quickly, which is actually always the case with us.'

And this is naturally the case at the building site in the vaulted cellar. In just under three weeks, 'Embargo' is set to open here. To the untrained eye, the timing seems impossible. Everything here really does still look like a rough building site. But Valentin Schlien is not just being optimistic – he is very confident: 'Actually we're almost finished. We'll definitely get it done.' It's easy to be confident when you are your own craftsman. And it's easy to be confident when you have the right tool for the job!

Find out if 'Embargo' was completed in time for the grand opening and what it looks like now by visiting:
» www.festool.com/blog

VALENTIN SCHLIENZ

The trained master painter first started his career as a product manager working for a large paint manufacturer. When that work became too 'red hot' for him, he and Axel Schenke founded the company MALERTEKTEN in Esslingen am Neckar. They celebrated their ten-year anniversary last year.

JOHANN SCHLOSSER

Johann Schlosser is a master painter and technical business economist. He joined Festool in 2009 as a product trainer and switched to the Application Technology department in 2013. He wears his Festool hoodie with pride, but only at work – as far as we know.

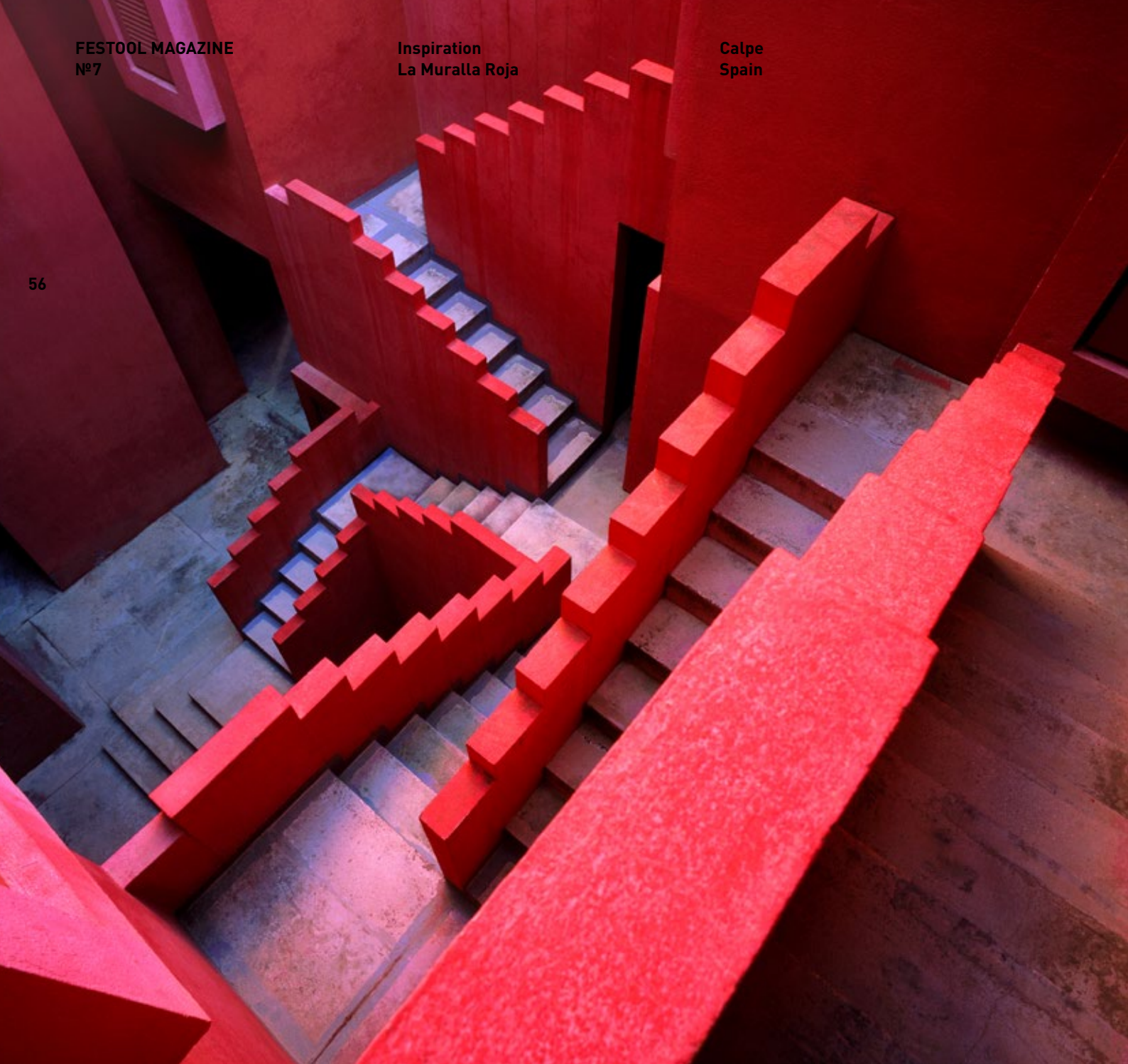
'With us, everything has to be done like clockwork and everything has to intermeshed. The Festool system is excellent for doing that.'

Valentin Schlien,
Managing Director of MALERTEKTEN

← Always at hand: the ETS 125 cordless sander with 18 V Ergo battery pack and the right abrasive in a Systainer.

↓ Valentin Schlien: successful painter, master, doer – and as part of his second calling, a restaurateur.





LA MURALLA ROJA

Opinions are often divided on the use of bright facade colours. An iconic building in Spain makes a clear statement on the matter.



‘We were young then; we were utopians,’ says Spanish architect Ricardo Bofill. In 1968 he designed a utopian apartment complex on the Costa Blanca. When it was finished in 1973 and the paint had dried, it was like truly being immersed in another world. Today as one takes a stroll through the bright labyrinth of red walls and steps, blue-washed passages and courtyards, the otherworldly feeling is still present.

LITTLE HELPERS

Festool tools are legendary. The little helpers are a blessing.
They play a crucial role in making work easier and achieving better results.



TP 220 WALLPAPER PERFORATOR

Removing wallpaper can sometimes be a tedious chore. When the wallpaper stubbornly sticks to its surface, the job of removing it seems more like a punishment or a test of patience. The Festool wallpaper perforator changes that: it makes an onerous task a breeze. When the TP 220 sinks its claws into the wallpaper, the material practically lifts away almost willingly. The TP 220 is aggressive with the wallpaper but gentle on the underlying wall. How deep the claws penetrate into the wallpaper can be adjusted individually. And with the telescopic arm, you can reach anywhere, even right up to the ceiling. It saves you time and energy, protects your fingernails and the wall – and reduces your stress level.

» Find more useful helpers and accessories from Festool at: www.festool.com/accessory

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FESTOOL MAGAZINE N°7

Publisher

Festool GmbH

Festool Editorial Lead

Alma Colbazi-Rebmann

Editing

RC Redaktionsbüro, Saarbrücken, Germany

Dr Ralf Christofori

Anja Soeder

Art direction and layout

Yama Inc, Stuttgart/Berlin, Germany

Ingo Ditges

Translation

STAR Deutschland GmbH, Sindelfingen, Germany

WIENERS + WIENERS GmbH, Ahrensburg, Germany

Media services

LOTS OF DOTS MediaGroup. AG, Mainz, Germany

Cover photo

Thomas Baumann

Image credits pg. 33

Muravev Dmitriy, aekky, billysfam

www.shutterstock.com

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Vibration levels and emission values can be found in the operating instructions at www.festool.com/operating-instructions

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Festool GmbH

Import Partner Customer Service

Wertstrasse 20

D-73240 Wendlingen

Phone +49 (0)70 24/804-25400

E-mail Sales.IP@festool.com



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*The Festool products with Bluetooth® are not available in all countries. Please contact your local dealer.