YOU HAVE YOUR IDEAS WE HAVE THE BRICK FOR IT

FORMFREI





Full of character, original, laid-back, lively, unique, multifaceted, resilient, special, authentic — with characteristics such as these, growing numbers of prominent architects from around the world are discovering classic and simple bricks with their natural, rustic charm as the 'real' material for their ideas. Using sophisticated manufacturing techniques, Röben rediscovers the artistry and natural characteristics of the brick and enriches architecture with a seemingly inexhaustible variety of textures, colours and shades. BRICK-DESIGN® opens up entirely new possibilities in brick architecture for architects.







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FREIFORM (please turn over)

"I could go on all day about what we have already done to turn architectural ideas into reality. We've programmed robots to handle the bricks roughly, had the kilns fire unevenly, got old brushes and belts out of the crate again and so on. You have to do something special for special ideas."

POSE HANS-JÜRGEN RESKE,

Röben Plant Manager Querenstede





The city can be pretty wild. Raw, authentic, rustic — The bricks are full of living history when you look at them closely. Each and every one are originals with all their rough corners and edges. From a distance they have a pleasantly shimmering appearance. The façade casually adopts the spiritual form of its surroundings, assuming its nuances. The building is new, yet it looks as though it has always been there. We are transported into a place of legendary urbanity. The docks of New York. The clatter of old air conditioning units. Life moves on, the bricks remain.

RACTER

RUGES

CAPE TOWN





Fascinating how perfectly the temperament of the naturally vibrant brick unites with the clear, often severe designs used in modern, urban architecture. Its expressiveness makes the façade the perfect interface with the city. As unconcerned as one can only be when one is strong enough to be unobtrusive. If you are not a copy of another, but simply oneself. If architecture wants not to create distance but rather be as vibrant as the life within itself and its surroundings.

 $\mathsf{E} \mathsf{R}$

If you are searching for the perfect material to contrast with a cool design.

W

H A V E

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BRICK

F O R

THAT.







The colour red experiences the highest honour in Bordeaux wines

If you are searching for a "typical brick Wred" that has never been seen before.

T H E
B R I C K
F O R
T H A T .

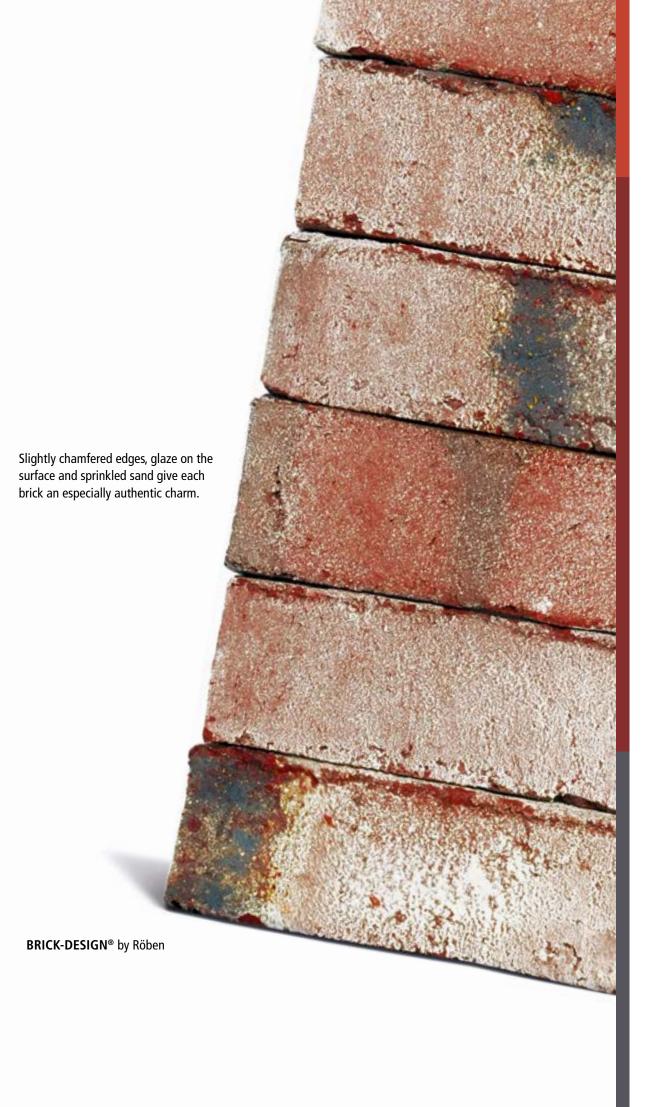
BRICK-DESIGN® by Röben





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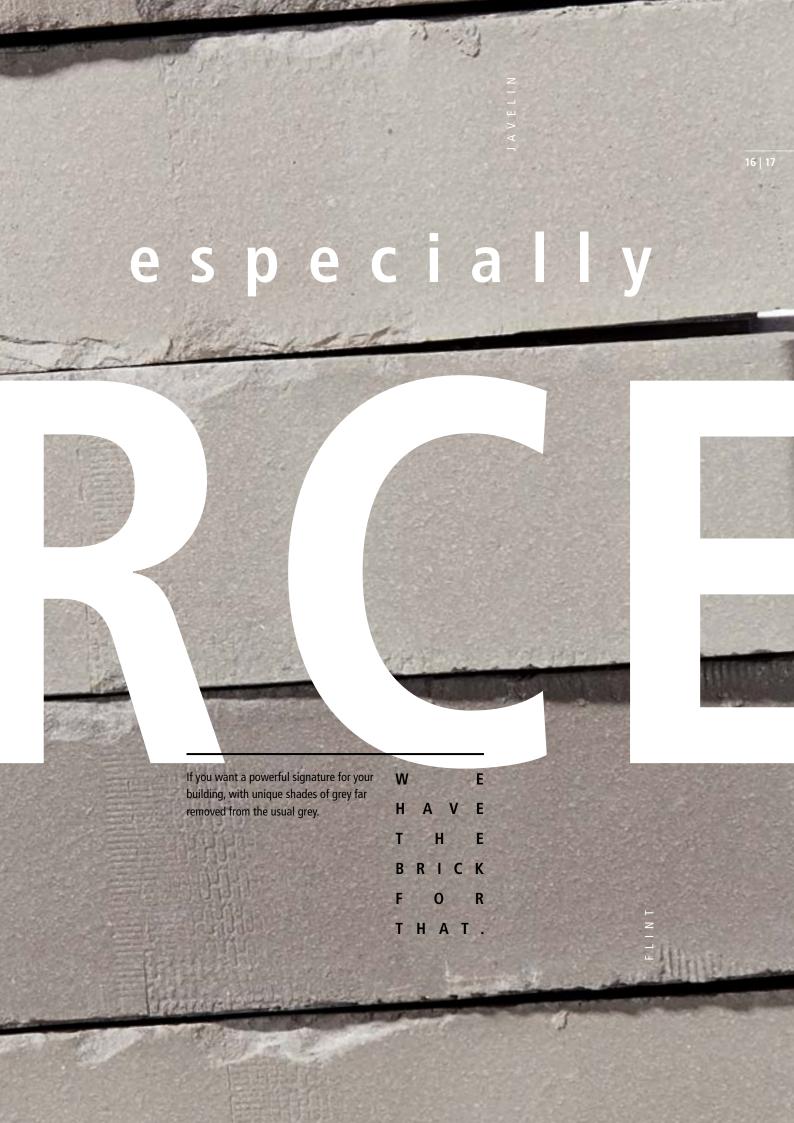
This contrast is simply wonderful: Bricks like these, strike chords within us such as we have not heard in a long time. As if individually formed by hand, the traditional manufacturing process translates into modern production technology. Each one is a beautifully unique individual with a pronounced rustic look.

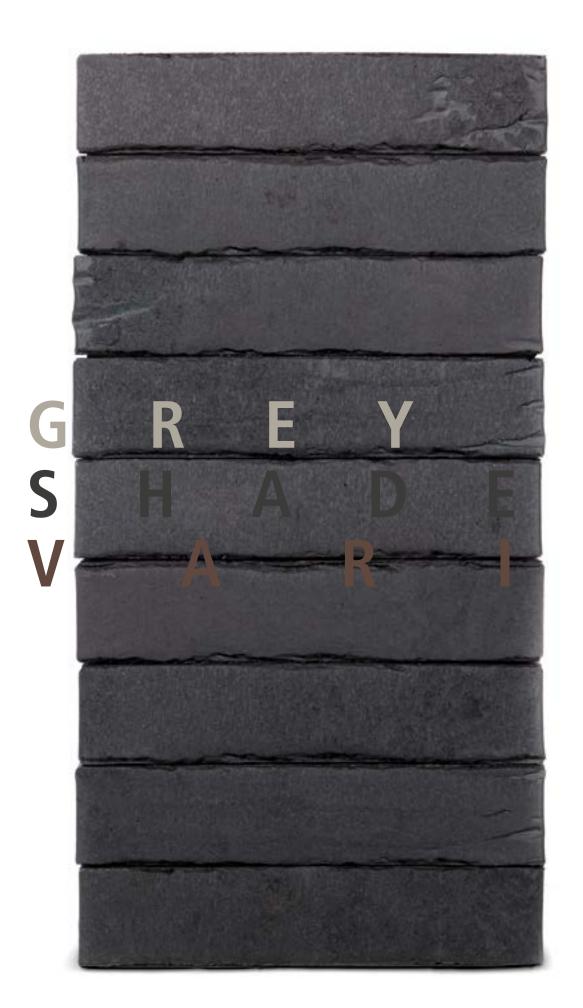
HANS-JÜRGEN RESKE Plant Manager Querenstede



[&]quot;I have been working as a brickmaker for nearly 40 years. And I still find it fascinating to see what water, air and fire can make out of a pile of clay. This rich diversity is quite amazing."







M S A



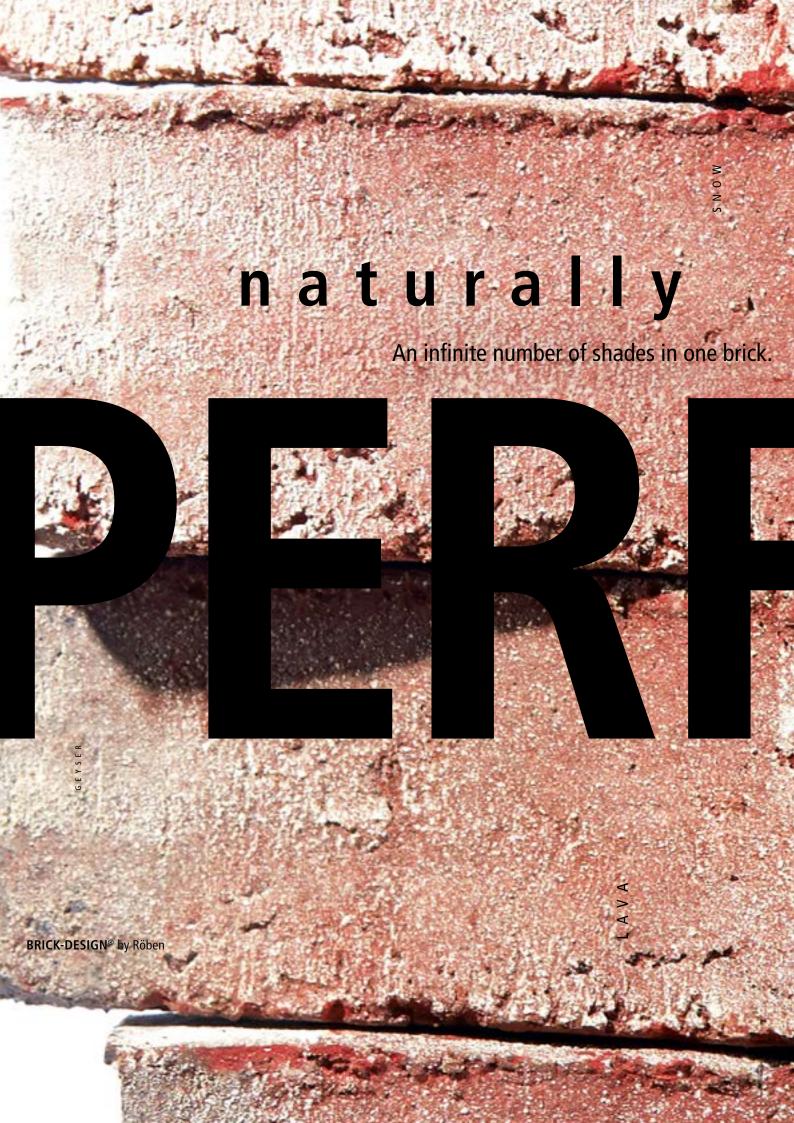


With shimmering hues of near white to deep black, highly individual compositions for façade textures can be composed. Depending on whether the mood should be solemnly soothing, elegantly restrained or playfully rich in contrasts, the composition allows a wealth of hues usually only perceived on closer inspection or bold shades that literally leap into the observer's sight.

HANS-JÜRGEN RESKE Plant Manager Querenstede



[&]quot;Whether the brick should now have more of a cold, blue cast or a warm, red cast — it doesn't matter. We'll manage it. We've been in business long enough to know how."











To revive the original rustic spirit of a brick façade, Röben has it all. An opulent, harmonious richness of colour as found only in nature, meets modern production techniques that also allow especially rough or sandy highlights, deep black fired colours and even traces of metallic hues or fog white. And in such a manner that each individual brick differs from the others in terms of surface, shape and interplay of colours.

HANS-JÜRGEN RESKE Plant Manager Querenstede



[&]quot;Special additions during the production process release very different reactions in the kiln. Crazy fiery images or barely visible shadows then appear on the brick. Or bright accents in a variety of colours. This can be controlled. Or it can be left to chance. Whatever you want."

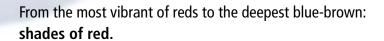
If elegant black should also be highlighted W in the outside masonry in addition to the H property sector. H BRICK 0 THAT. 0 ~ Ъ BRICK-DESIGN® by Röben



From off-white to earthy brown-beige: shades of beige.











From the whitest white to the blackest black: shades of grey.





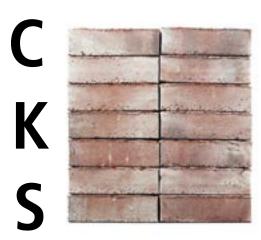


K

















perfectly

If you let them, machines make mistakes. Beautiful ones even.

A brick with traces of its manufacturing process written into it. Beautiful is made randomly and accurately.

W E
H A V E
T H E
B R I C K
F O R
T H A T .

BRICK-DESIGN® by Röben

ABOTAGE





ESCH.SINTZEL ARCHITECTS, ZURICH



After graduating from the ETH Zurich University, Philip Esch (born 1968) and Stephan Sintzel (born 1970) worked in various architectural offices. They founded the Esch. Sintzel Architects Office in 2008 and now employ 13 members of staff.

Philip Esch also worked as an editor at "werk, bauen + wohnen" and taught at the University of Lucerne after completing various courses, including the CEPT in Ahmedabad/ India.

After training as a draughtsman specialising in structural engineering, Stephan Sintzel began studying at the technical school in Winterthur, continuing at the ETH Zurich, which included a semester as a visiting student at Columbia University in New York.





Extensive video material on Esch.Sintzel and other architects on the Röben YouTube channel: www.youtube.com/user/RoebenKlinker

"The key factors here were, on the one hand, a bright colour suited to the district, on the other, the brick should show a hint of the production process."

PHILIP ESCH Esch.Sintzel Architects

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A WORD. ARCHITECTS ON BRICK-DESIGN®

Inspired by the typical Bern sandstone of the surroundings, the architects chose the colour and nature of the brick. The brick's deliberate 'flaws', created with such sophistication, makes it a homage to sandstone. This idea was continued into the grouting, its colour adapted to the light shade of the brick and the mortar merely levelled, not compressed. The Röben Planning Service was involved early in the process and was, therefore, able to help in the design and structural analysis of the façade in a significant way.

"To emphasize the craftsmanship aspect of the stone, we permitted 'flaws' that no longer occur in modern production practices. For example: Pre-cut parts using thicker wires, extra rough handling of the bricks while stacking before firing, kilns unevenly fired with shifted temperature settings, use of rejected assembly lines."

HANS-JÜRGEN RESKE Plant Manager Querenstede



MARC KOEHLER, MARC KOEHLER ARCHITECTS, AMSTERDAM

"For us, BRICK-DESIGN® is high definition architecture. Every detail can be designed with extreme precision."



AMSTERDAM, JET BLACK RESIDENTIAL PREMISES FLOODED WITH LIGHT

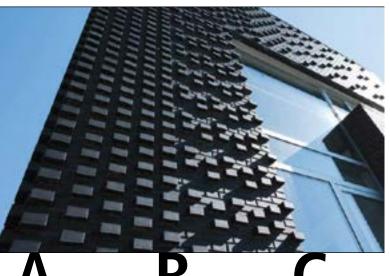
With its distinctive shape and jet black brickwork façade, the compact flat-roof building by "Haus IJburg" clearly stands out from its surroundings. The local architect, Marc Koehler, designed the house in the new Amsterdam district of IJburg for a family of three.

Koehler studied in Amsterdam, Lisbon and Delft and then worked for a time in an architect's office until he established his own. The IJburg house was one of his first projects and has been awarded and nominated for architectural awards numerous times.





Extensive video material on Marc Koehler and other architects on the Röben YouTube channel: www.youtube.com/user/RoebenKlinker



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DANIEL SPRENG, SPRENG + PARTNER ARCHITEKTEN AG, BERN

"During the ageing process, natural discolourations occur in the stock and which cannot be repeated. We embrace this and still bring forth something new."



BERN, UNIVERSITY OF EDUCATION INSTITUTE BUILDING

Daniel Spreng realised a new university centre for the canton of Bern on the former production site of Roll AG in Bern. A compact four-storey institute building has recently been completed — with a brick façade designed by Röben to withstand an earthquake. Before Daniel Spreng founded the architectural office of Spreng + Partner Architekten AG in 1977, he graduated from the Bern University of Applied Sciences for Architecture, Wood and Civil Engineering. A clear materiality and serenity pervades his projects, his residential development "La Pergola" has been called one of the "100 pearls of Swiss architecture" by the architecture critic Köbi Gantenbein.

In 2009, the "Sprengstoff" publication wrote about the work of the Bernese architects.

JIM CLEMES, ATELIER D'ARCHITECTURE ET DE DESIGN JIM CLEMES, ESCH-SUR-ALZETTE

"As far as I'm concerned, brick is an obvious choice for a building that needs to age exceedingly well."

LUXEMBOURG CAMPUS CAPELLEN

For Jim Clemens, there were several good reasons for choosing brick as a primary building material for a school campus. One of them is historical: The construction area in Capellen lies on an ancient Roman road and close to where the remains of old brick kilns for brick making were discovered.

Jim Clemens initially studied in the US and France and then returned to Luxembourg. He founded the Atelier d'Architecture et de Design there in 1984. He started as a oneman operation but now, Jim Clemens employs around 60 people. In 2009, his long-time colleague Ingbert Schilz became his partner.

The office realises major projects in areas of education, employment and health, both nationally and internationally – partly in collaboration with prominent experts and artists from all over Europe. The office's main objective is to meet the wishes, needs and planning designs of the customers.









Extensive video material on Jim Clemens and other architects on the Röben YouTube channel: www.youtube.com/user/RoebenKlinker

E C T U R E







Extensive video material on Daniel Spreng and other architects on the Röben YouTube channel: www.youtube.com/user/RoebenKlinker

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NATURALLY OCCURRING

Clay is a natural raw material, formed by weathering of different rocks in the course of the Earth's history. Often deposited in ancient lakes or primordial seas, they dried out over time and were covered by vegetation. Nowadays, clay is mainly surfaced mined from clay pits. These are subsequently restored to their natural state, giving rise to new habitats for flora and fauna. Man also benefits from this since local recreational areas are often created.



Clay is a phyllosilicate. Water can be stored between the layers, giving the material its typical plasticity (malleability).

A ceramic brick is composed of much more than just clay. It also contains feldspars, quartz and other material which give the mass its plasticity.

It is the firing process that gives a brick its typical characteristics such as low porosity, low water absorption and good frost resistance, making a façade much more weatherproof and easier to clean than other building materials.









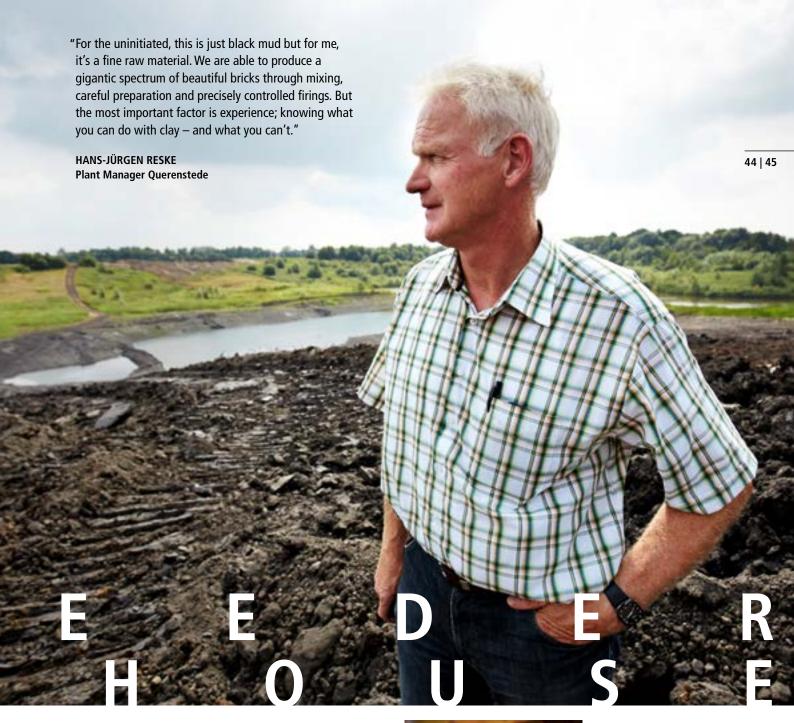
B O X A G E I

BUILDING MATERIAL

Man's pursuit in realising buildings in a cleaner, easier and faster way, led to standardisation of the geometric shape of the clay slug thrown into a mould which corresponds to our regular format. These roughly shaped, air-dried blocks of clay are the prototype of today's brick. The composition of the ceramic mass has been continually refined over the course of time. Quality is constantly checked in our laboratories, guaranteeing a steady, high quality.







E

THE HAND-MOULDED FACING BRICK

Röben hand-moulded facing bricks are perfect for individualists. They are manufactured piece for piece according to an old, traditional process, adapted to suit the methods of modern production technology.

Each brick is a beautifully unique individual with a pronounced rustic look. Perfect for homes with a strong personal touch, even in modern architecture.







S

Röben uses specific sand components to create surface effects and quality characteristics.



Clay isn't just clay. There are a variety of different



strip tiles, paving

As mentioned, it is the mix that makes the difference. The elementary components of brick have been the same for centuries. Röben combines these elements with 150 years of experience in the production of bricks and with a passion for the aesthetic attraction of fired clay. And this culminates to form a unique technical expertise, the courage to innovate and some of the most advanced manufacturing systems in the world.



UNIQUE SERVICE FOR UNIQUE IDEAS. THE RÖBEN PLANNING SERVICE.

With Röben, you will not only find the right brick for every conceivable colour and every type of surface. Our Planning Service will help you to find the best budget solutions for your project.

How can I build more economically with prefabricated parts? How should joints for movements be arranged? How are base points and intrados borders created?

The Röben Planning Service gives advice on all aspects of masonry construction, helps with tenders, designs and calculates components according to your wishes, assumes logistics up to the building site and follows construction right up to completion.

The experienced team consists largely of civil engineers who are happy to view your building plans, offer individual advice and are available for any last minute questions by phone. Wherever required, design proposals are individually drawn up based on the proposed project and submitted to you with a binding estimate and tender documents.

+49 44 52 88-123 info@brick-design.com www.brick-design.com



THE CLAY

Diggers extract natural clay deposits from our open cast pits, which we then use for our bricks. Experienced digger operators, a defined mixture of clays and continual analysis of the raw material in the laboratory, guarantee exactly the composition we need for our different bricks.



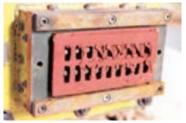
I L M C N T K A



Most of the raw material is extracted close to the brickworks, resulting in extremely short and energy-saving transport routes. Depending on the type of clay, the firing temperature and the firing atmosphere, different colours of brick can be achieved: From almost pure white to grey, yellow and red to extremely dark and, at Röben, even black bricks.









THE FORMING AND EXTRUSION PROCESS

Once the clay has been mined from the pit, the material is sent for processing. Here, the material is reduced in size by various systems and then stored in the ageing house for ageing. A conveyor transports the mass into an extruder where – driven by the feed screw – it appears from the die as a column. The column is cut into equal pieces by parallel wires, so that several wet bricks emerge at the same time.

THE CLINKER BRICK

Clinker bricks are bricks fired at high temperatures. Pores are closed through the sintering process, where the clay begins to melt, ensuring low water absorption. The name "clinker" comes from the noise two bricks make when knocked together. The height of the firing temperature depends on the starting material and the desired colour.

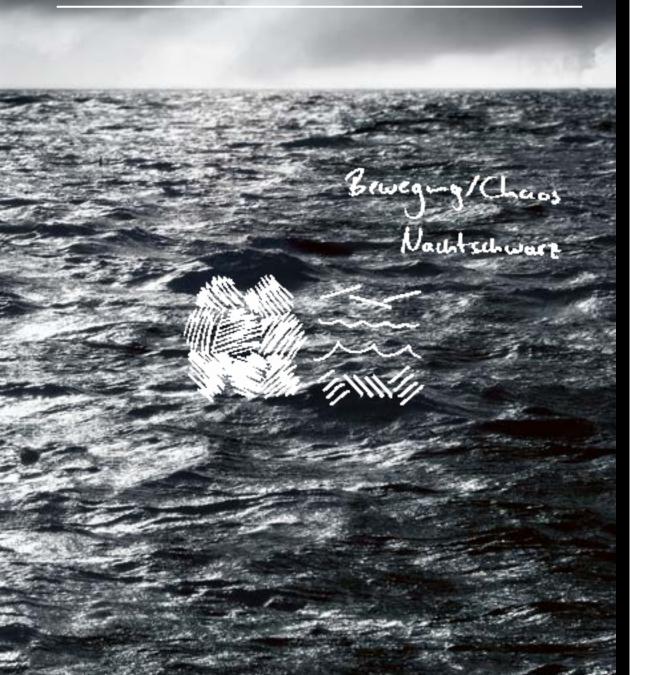






Whatever inspired you in your design: Röben has the technology, the methods and the knowledge to transform your ideas into a reality. Röben works in close collaboration with you to develop methods and tools to realise your dreams — this could be custom-made building bricks, unique textures, unusual shapes or extraordinary glazes and surface effects.

YOUR IDEAS MAKE THE BRICK.





A play on waves? The black sea at night, shimmering in the moonlight, powerful, unfathomable. A surface with depth and appeal. We love these ideas and rigorously hunt out a solution for you.



Barock? Perhaps your next design wishes to make an overture towards something filigree, ostentatious, artistically combining elements from the exuberant past with modernism, Röben offers a princely service. With fancywork that no one in the world has seen before.



Fish scales? Have you just angled a project which gives rise to an idea using a rare fish scale pattern? Obviously, irregularly layered, grained and sand-covered. We do that.









Images from outer space also cast long shadows in the world of ideas of earthly architecture. When your building should look like something out of this world, the experts at Röben will do everything in their power to put your ideas into orbit and bring a perfect conclusion. For an on-the-moon feeling.



"There are, of course, ideas which are out of our sphere of thinking. If he needs it for his concept, we do it."

ECKART LINOW
Head of Corporate Communications Röben

Ksatelandsduaft

pulves is i ert, weich

-> ucharfe kanten

Halt, matt, gran

FROM ASSOCIATION AND POWERFUL MOMENTS

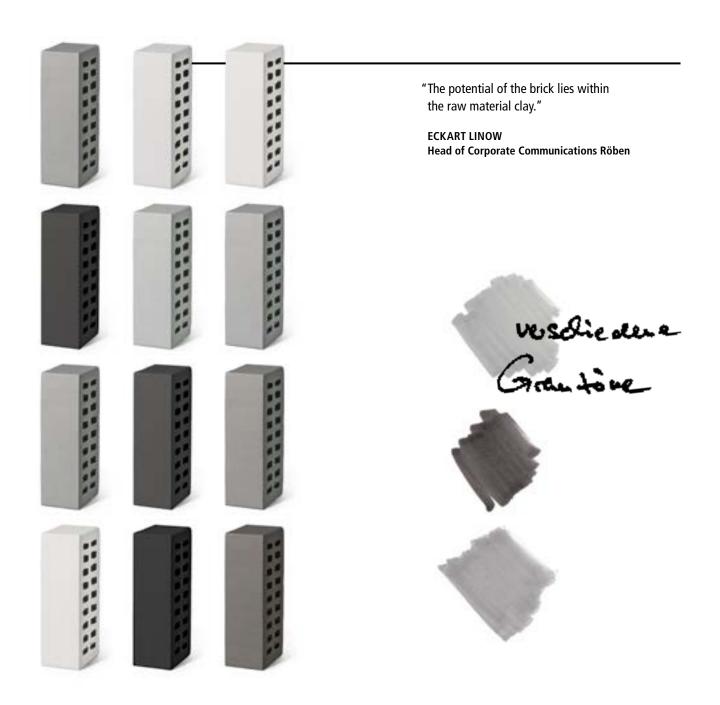
Whatever associations arouse and whatever image you wish to create to give your building an identity beyond known stereotypes – we make the brick for it.

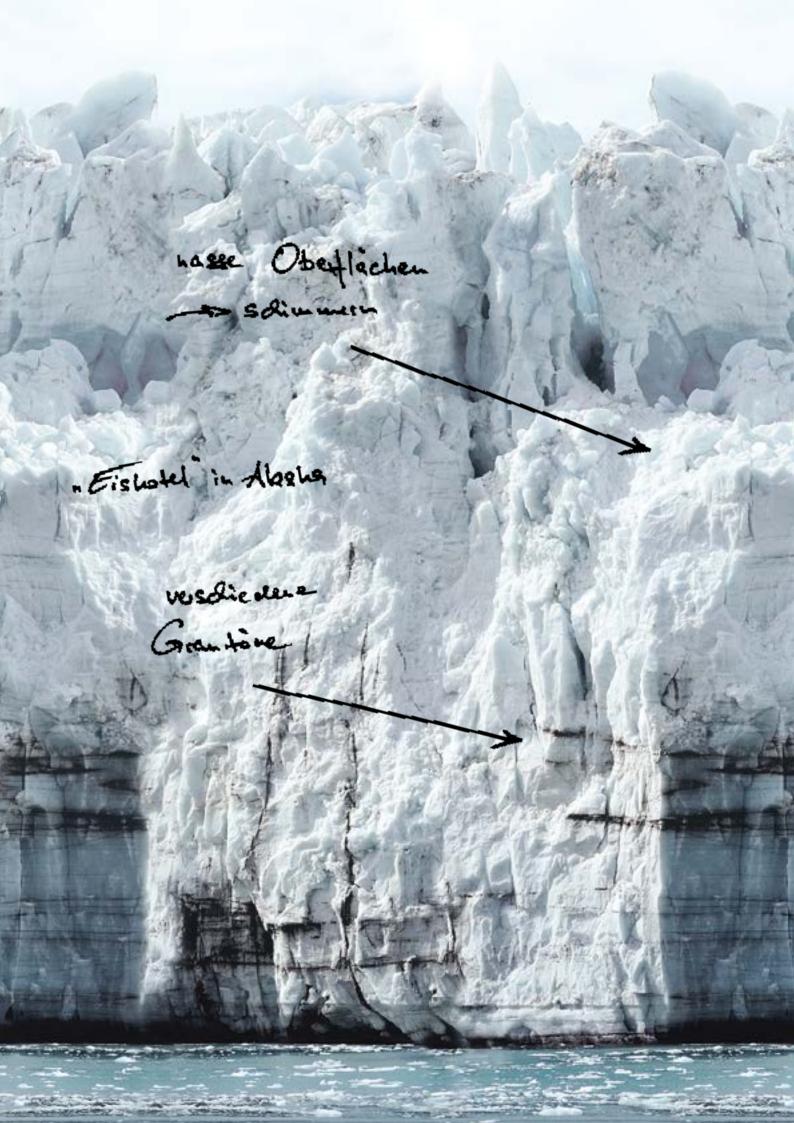
Exorbitant?

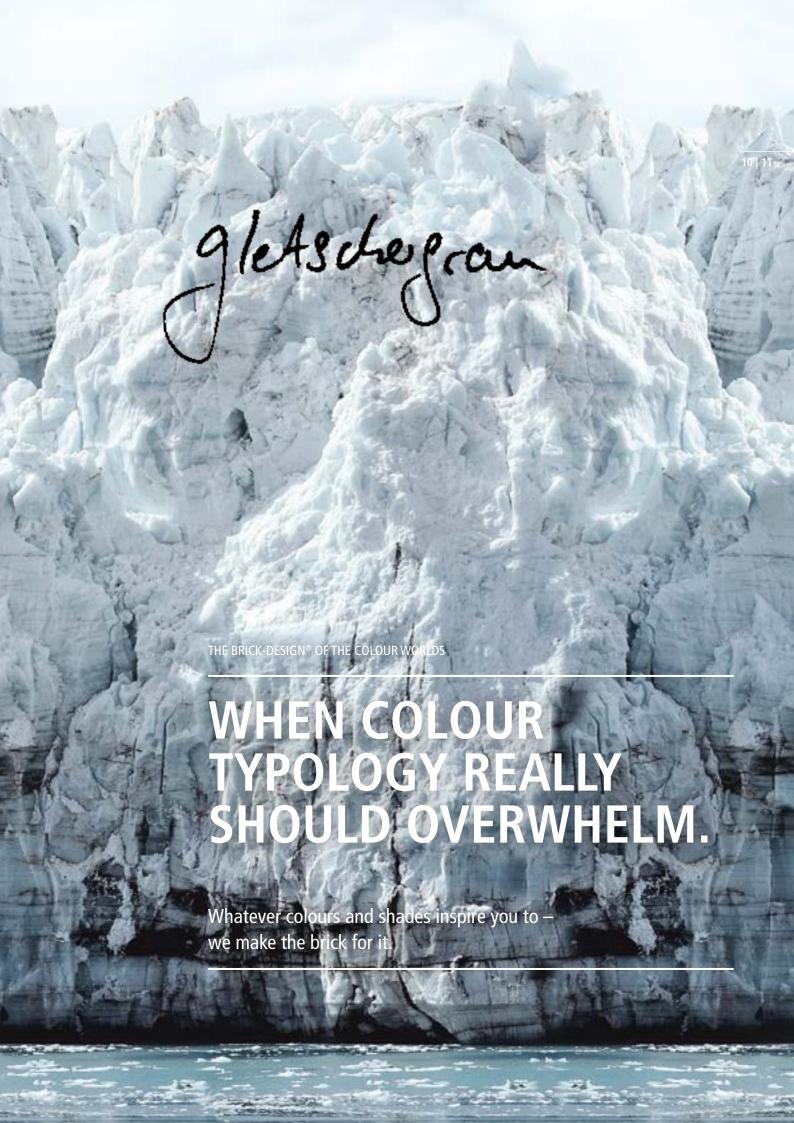




When an architect goes on a journey, inspirational moments arise. For example, you could be so impressed by the iridescence of the Margerie Glacier in Alaska that you would like to have this symphony of greys played out on a façade. You will see: every shade of grey you have ever seen between heaven and earth can be realised by Röben. For a distinctive building with your own personal **Glacier Grey**.







The rollers for embossing the scale pattern into the clay column were made the good old-fashioned way, by hand on a traditional workbench.



The accuracy of the croc roller is checked using a plaster cast.



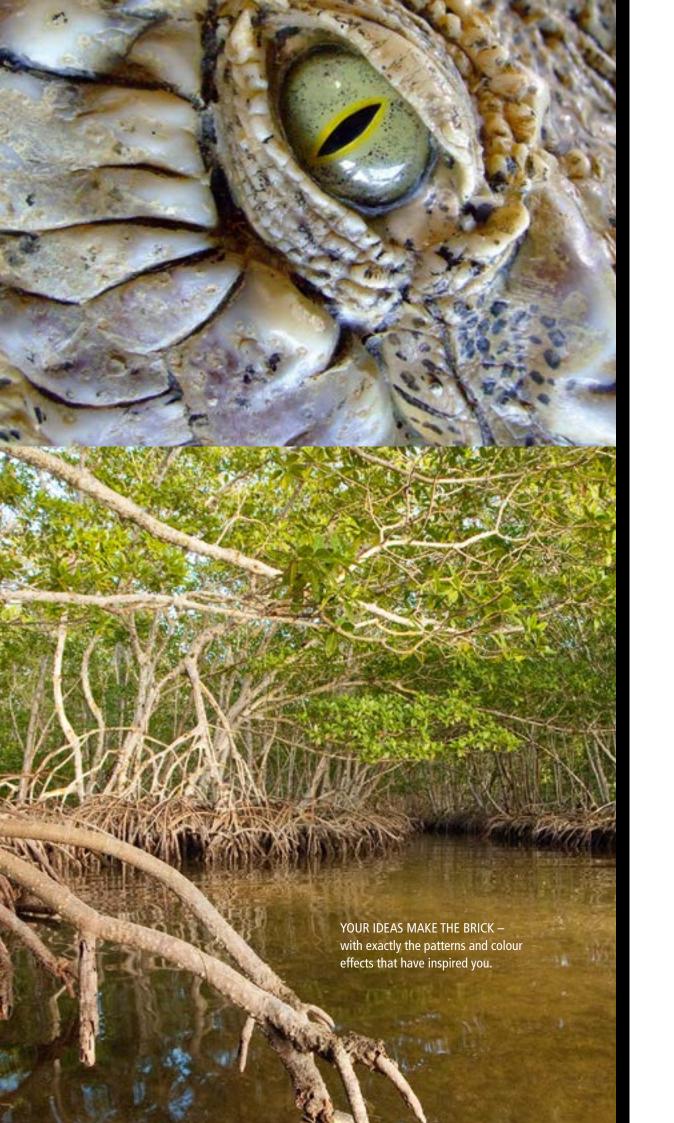
MAKING OF

The crocodile brick translates the visual and tactile attraction of leather skin into a brick wall, an extreme example of individual brick architecture. Special types of rollers are created by hand on a classic workbench and serve as the basis.

So-called "texturing rollers" were used to emboss the texture onto the soft clay column. The Hartenfels studio from Ransbach-Baumbach in Westerwald were commissioned with transferring the original crocodile leather onto the roller. Owner, Markus Hartenfels, who graduated from the University of Höhr-Grenzhausen in ceramics, created three rollers for the bricks with the crocodile leather texture: A long "stretcher roller" for the long side of the brick and two short "header rollers" for the two short end sides so that the brick can also be used as a corner brick.

The contract was an unusual one for the family-run Hartenfels studio, who specialise in constructing models and forms for the ceramics and porcelain industry. Wood and rock structure are usually used for the "texturing rollers", as well as modelling tools. This is the first time soft animal skin has been used as a template for a brick, but it is a winning one, as the crocodile leather has a powerful and characteristic grain pattern.





Let's imagine you are working on a design for the flagship store of a particularly high-end fashion brand. The crocodile image or the sight of one of the exclusive handbags gives you inspiration for a truly extravagant façade concept. Working closely with Röben will let you realise: There are actually no surfaces that BRICK-DESIGN® cannot turn into a reality. And at the end of the day, the architectural world, **experiences the birth of the crocodile brick**.



"The black of the brick is so captivating it heightens a desire to behold its surface and – as with leather – the yearning to touch."

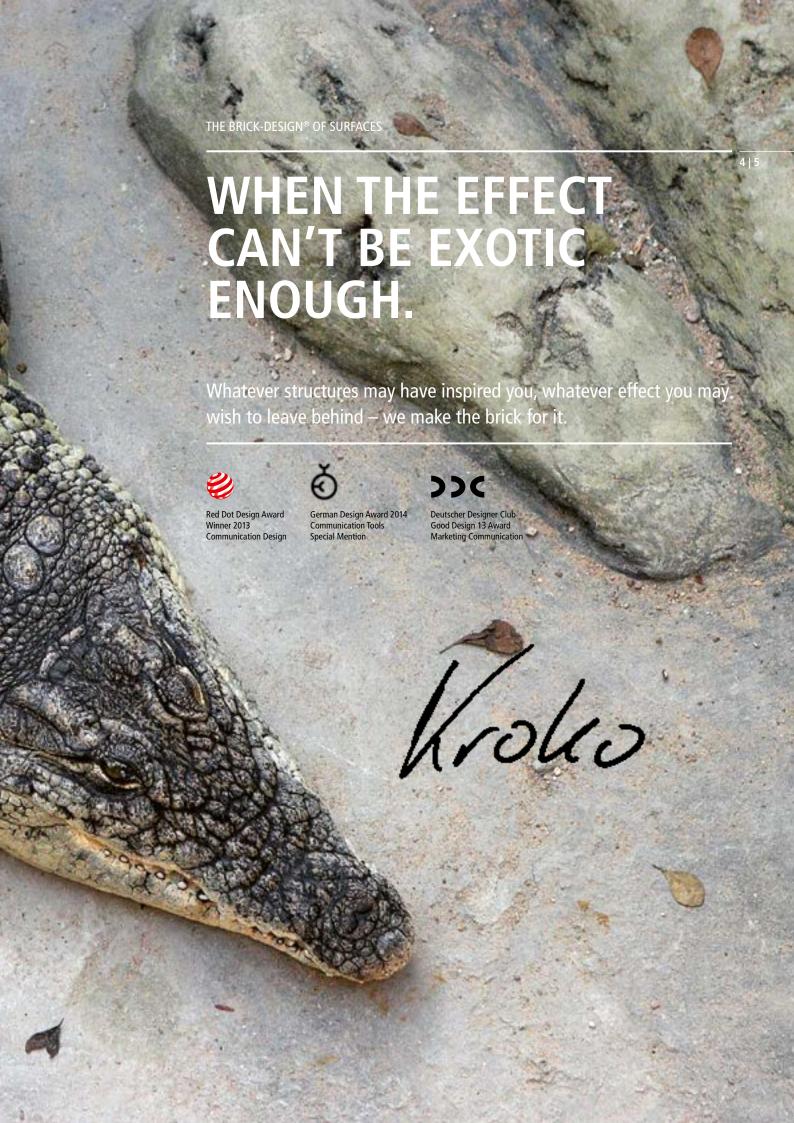
MICHAEL KASISKE Bauwelt













2 | 3

Although Röben's diverse range of bricks already offer almost unlimited design options, the basic concept behind BRICK-DESIGN® goes one revolutionary step further. It is the most radical principle that architects could ever use in designing a brick façade. Summed up into one sentence, it means: Your ideas make the brick! This means you do not choose from a "catalogue" of bricks the one that comes closest to your idea. No, it's your idea — perhaps still a little vague at the moment — that gives the initial impetus for the later brick and which we will develop together. As extraordinary as your idea may be: We make the brick for it. For completely new creative and constructive scope in brick architecture.

I D F A

CONTENTS FREIFORM

Inspiration Surface	
Making of Kroko	
Inspiration Colour Worlds	
Inspiration Building World	
Production	

FORMFREI (please turn over)

As far as we're concerned, BRICK-DESIGN® according to the 'won't work-not possible principle' means: You cannot expect an architect to just come up with a certain idea. You have to constantly research, experiment and look for new techniques. Of course, there are a lot of failed attempts in the process. Because this is the only way we can work with architects in finding the perfect solution."



ANDREAS ANDERNACH Plant Manager Bannberscheid



