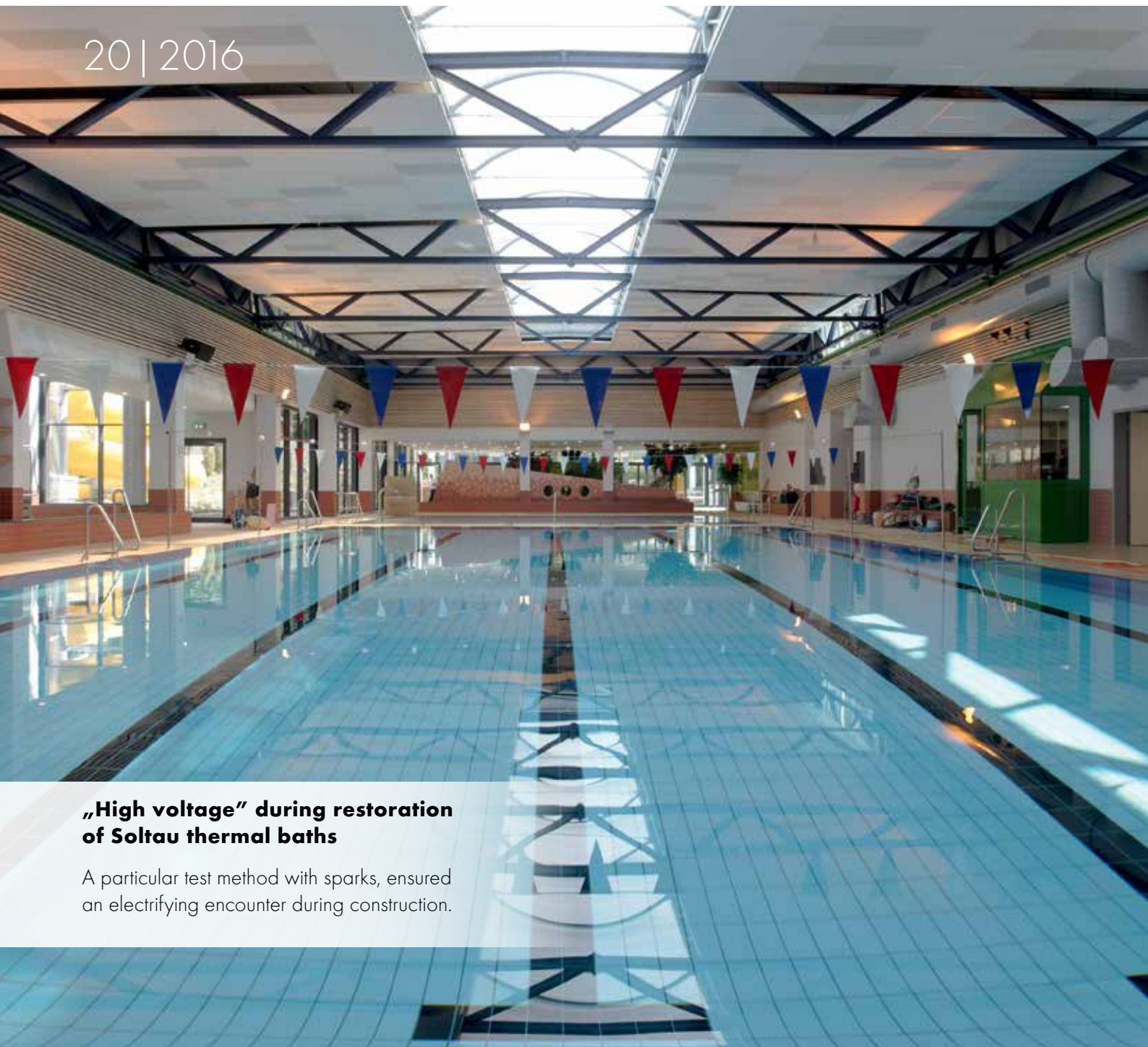


INSIGHT

The SCHOMBURG group company magazine



20 | 2016



„High voltage“ during restoration of Soltau thermal baths

A particular test method with sparks, ensured an electrifying encounter during construction.



Bikini-Haus, Berlin

SCHOMBURG's lightweight screed ASO®-EZ-LIGHT-Plus solves problems of structural loading and fire performance.



CRISTALLFUGE PLUS

Our research & development department developed a product, which lends a hand during grouting.



AQUAFIN®-TBS

Faith in our products - SCHOMBURG gives a 10 year guarantee for balcony renovation.

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Dear readers,

You are holding the latest Insight in your hand – the SCHOMBURG group's company magazine.

Once again in this issue we have put together exciting topics from the world of SCHOMBURG.

In addition to interesting projects we take a particular look at our swimming pool forum from April 2016 in Düsseldorf. We received positive feedback on our new website. This impressed our visitors not only because of its modern design but also because of its many useful functions.

We are especially proud of a few accolades we received. Our commitment to the protection of the environment was documented through the Ökoprofit symbol. Through von Heinze Architect surveys and the magazine "bba", we achieved third and first place.

In this issue we introduce our new brochures and AQUAFIN®-TBS, our terrace and balcony system as well as CRISTALLFUGE PLUS and other innovations.

We wish you every enjoyment when reading.

Ihr
Ralph Schomburg



After BAU is before BAU

In January 2015, the SCHOMBURG group of companies presented new products and innovative system solutions at BAU in Munich. There is also an exciting exhibition presence planned for 2017.



This year, amongst others, SCHOMBURG introduced the innovative DENSARE®-2002 waterproofing system. With this system, in comparison to conventional swimming pool waterproofing membranes, intrusive destructive testing of the membrane can be dispensed with. This innovation was especially well received during the tour of exhibition stands organised by SCHOMBURG together with a large Architect's portal. A further highlight was the terrace and balcony system, AQUAFIN®-TBS. SCHOMBURG showed distributors their interesting promotional package for showrooms.

Managing Director, Ralph Schomburg was satisfied with the exhibition: "The exhibition was well visited. We were able to conduct many interesting discussions with numerous visitors from home and abroad. Our seminars on the topics "Non-intrusive testing of pool waterproof membranes" and "The installation of tiles on terraces and balconies" were very well

attended. Managing Director, Alexander Weber added "The conversations had substance and demonstrated potential for our sales organisation. The customer structure was extremely multi-layered. In addition to the many distributors and applicators, there were many Architects and Planners on our stand looking for information on our system solutions and the possibilities for site advice from our project management and technical services teams."

Both Managing Directors look back on a successful business year both home and abroad, "Last but not least, the good vibes at BAU in Munich permit us to look positively into the future", according to Weber. "We can expect stable development of turnover and through our innovative product systems and further positive developments in the medium term."

For the first time in its 50 year history, BAU, worldwide exhibition for Architecture, materials and systems, broke through the

sound barrier of 250,000 visitors. 251,000 visitors came over the 6 days of the fully booked out exhibition, which is over 16,000 more than in 2013. As well as more visitors from Germany, we also have to thank international guests for the growth. Around 72,000 visitors came from abroad, which translates to a 20% plus. Also BAU lived up to its name as the "Architect's exhibition". Around 65,000 visitors came from Architectural or Planning offices, which is also a plus compared with 2013.

BAU is indispensable, everybody wants to be there. Everyone who wound their way through the 17 exhibition halls gained this impression. General thoughts of exhibitors: the halls were full from day one.

The next BAU will take place from the 16th to 21st January 2017 on the Munich exhibition site.

■
Jörg Pohlmann



Handing over first prize during the BAU exhibition campaign

At BAU in Munich, SCHOMBURG began a great lightning promotion. Everything revolved around the rapid setting products from the East-Westphalian building product specialist. A Segway was the main prize. The winner was drawn from all those participants who were 'flashed'. The main prize was given out in Wilhelmshaven to Frers Baukeramik GmbH. Sales Manager, Marcus Kuczer, visited the lucky winner and introduced the innovative personal transportation vehicle. In full sunshine, Managing Director Stefan Frers looked forward to adding it to his car fleet. He also demonstrated a natural talent on the Segway. ■

Marcus Kuczer



From left: Olaf Spahler (SCHOMBURG sales), Stefan Frers (Managing Director Frers Baukeramik), Marcus Kuczer (Sales Manager SCHOMBURG).



Holistic thinking in dynamic construction processes

Buildings for Industry, commerce, retail, sport and leisure etc, are predominantly planned and built to financial criteria. Therefore all building components, which come into direct contact with water, must be appropriately protected. Very frequently financial aspects are in opposition to a permanently functioning waterproofing concept. Waterproofing the pool shell of a swimming baths can for example, be achieved in different ways. However, which type of waterproofing is the correct one for the concrete quality, an organic pool shape, a tight construction timeframe and the water quality? Increasingly intricate construction requires the greatest attention to thorough planning and execution in order to prevent expensive consequential damages.



In order to answer these and other questions, our project management team is available daily to commercial builders, Architects/Planners as well as contractors during the entire project. Together we develop professional solutions to our customer's specifications and support them during all phases. As desired, we network with experts from planning, construction and building inspection. This is fortified with two periodic events with ever increasing numbers of participants. For the swimming pool of the year, we, together with the technical magazine Fliesen und Platten, search for the best

contractor in swimming pool construction. Under certain criteria, certified tiling contractors can apply for swimming pool of the year. A panel of experts and reader voting in Fliesen & Platten leads to the selection of the best three. At www.schwimmbad-des-jahres.de there is current information and the success story from the previous swimming pool of the year. In April 2016, as two years ago, the swimming pool forum takes place. A fixed industry meeting point during which those nominated professionals who took part in the project implementation can compare

notes. In Düsseldorf SCHOMBURG expects highly characterful references beneath the leading slogan: dynamic - planning, construction and operation of swimming pools, with over 100 participants placing the future of swimming pool construction under the magnifying glass. Of course there is a website for this meeting with all information including a review of the last conference. Read more at www.schwimmbadforum.com. ■

Marcus Kuczer

Annual international conference

In February 2016, our annual international conference took place in Detmold once again. In addition to those responsible for our 22 international sales and production businesses, our international market partners from more than 30 countries also took part. In addition to partners from New Zealand and the USA, we had participants from Pakistan, Iraq, Israel and the Lebanon. Many market partners also travelled from Europe.



This year focussed on various new products and an exchange of experiences. Product highlights presented were the new waterproofing, renovation and repair mortar ASOCRET-M30 as well as the rapid setting WTA restoration plaster THERMOPAL®-ULTRA. Further emphasis was placed on the subject of “crystalline concrete waterproofing” with our products and systems from the BETOCRETE® C series. “Auto-reactive crack healing – a topic gaining more and more significance” according to Pascal Zapf, responsible for projects.

During intensive exchanges within the scope of international project management, the innovative test method to determine watertightness of the DENSARE®-2002 swimming pool coating. Also of great interest were the reports from the individual regions on current projects and innovative system solutions within the context. Here the presentation by Steve Bradway (Sales Manager AQUAFIN Inc. USA) on the implementation of waterproofing green floor slabs with the mineral-based floor

levelling compound SOLOPLAN®-HF on a hospital extension in Pensicola, Florida had the audience enthralled. No less interesting for the conference participants was the introduction of the centre of excellence for concrete additives in Kutno, Poland.

At the conference we took the opportunity to thank Martin Vifian from the Swiss ROBOTEC-SCHOMBURG for his many years of service and to escort him into his well earned retirement. Mr Vifian passed the baton to his successor and will take an advisory capacity in the immediate future with ROBOTEC-SCHOMBURG.

In the evening it got sporty. The indoor ice hockey shooting competition was won by our Pakistani joint venture partner. Congratulations here once again. ■

Holger Sass



CRISTALLFUGE PLUS – the new mineral-based multi-function flexible grout with improved application comfort



CRISTALLFUGE PLUS is the first grout, which due to its longer working time, time saving and high levels of application comfort, grouts as if on its own. Influenced by this product innovation, SCHOMBURG has now commenced a particularly special campaign with new branding and packaging. Of pivotal significance within the product's presentation is the stylized hand, formed from the grout matrix, which symbolically represents the exceptional application properties of the grout.

CRISTALLFUGE PLUS is the result of intensive research and development work. A pivotal component of this was the execution of numerous tests with demanding test methods and real

conditions. The reasons for the very good application properties of CRISTALLFUGE PLUS are due to the specially developed C+ technology. This unique formula affects how smoothly the grout lies in the joints, filling them completely and flush. This results in an optimum joint appearance, which is achieved with minimal effort and time.

CRISTALLFUGE PLUS can be applied in interior and exterior areas on walls and floors. The mortar is suitable for sensitive natural stone such as marble, limestone and granite as well as for ceramic finishes such as earthenware and vitrified tiles, and glass tiles. Due to its well-defined initial hardening, the grout can also be used with finishes of low water absorption, such as porcelain and glass

mosaics, and in narrow joints. Furthermore the material was conceived for use with heating and cooling systems. CRISTALLFUGE PLUS fulfils the requirements for a CG2 WA, improved cement-based grout with high abrasion resistance and reduced water absorption to DIN EN 13888.

In addition, the formula approved in accordance with GEV EMI CODE EC1 PLUS and the AgBB-Scheme, offers the best possible safety relating to indoor air pollution, high environmental sustainability and health protection. Combined with building certification systems such as e.g. DGNB, BNB, LEED and BREEAM this leads to positive evaluations.

GROUTS ALMOST ON ITS OWN

The innovative CRISTALLFUGE PLUS allows for efficient and qualitatively high grade work. Following the preparation instructions, the grout is firstly mixed. The mixed mortar comprises special cement, mineral aggregates and high quality additives. Afterwards grouting can commence. During this process, the difference between CRISTALLFUGE PLUS and conventional grouts is especially noticeable: The mortar is easy to work into the joints and completely fills the joint space so that a flat surface is achieved. Whilst conventional mortars curve inwards in the fresh state, CRISTALLFUGE PLUS stays regular and flat. Furthermore it features rapid crystalline water binding technology, which guarantees trouble free working for 45 minutes. The alkalinity in grout combined with a stone's own components, which is responsible for picture framing

graphite, jasmine, pergamon, caramel, beige, Jura-beige, brown and nut brown. Thanks to this wide colour palette, tile and joint can complement each other optimally for a harmonic overall appearance. With ESCOSIL®-2000 and ESCOSIL®-2000-ST colour matched silicone sealants are also available. Joint widths from one millimetre to ten millimetres can be achieved with CRISTALLFUGE PLUS.

TRANSPARENT AND AIRTIGHT PACKAGING

CRISTALLFUGE PLUS arrives on site in a practical, five kilogramme, plastic grab bag with a viewing window. This is a new and innovative powder pack from PE-foil, which optimally fulfils the requirements for storing hygroscopic and rapid setting powder products. Compared with conventional paper bags, there is a clear advantage with the recyclable plastic packaging, as it offers maximum air and



Practical five kilogramme plastic grab bag with viewing window.

Ready for foot traffic after only **2 hours**.

and undesirable discolouration, is quickly bound and can therefore not damage the stone. The innovative C+ formula also prevents grout washout from the joint. Finally the joints are emulsified and the tiles cleaned free of mortar residues. It is noticeable during this process that there is only a small tendency to leave a 'film'. After only about two hours, the tiled area is ready for foot traffic. Thanks to the special formula, CRISTALLFUGE PLUS is very easy to clean, water repellent and insensitive to dirt, which is especially important when used in kitchens and bathrooms as the grout offers no surface to attack by bacteria or mould and is therefore particularly hygienic.

watertightness and protection. Even during filling on the production plant, the closed system reduces dust formation. The sealed packaging material really prevents the penetration of moisture into the bag, so that no lumps can appear. Additionally the robust material is less likely to become damaged during transportation than conventional paper bags. The innovative viewing window on the front permits the customer a first impression when choosing the grout colour.

SUMMARY

Thanks to the special formula, CRISTALLFUGE PLUS is the first grout, which lends a hand and considerably eases the grouting process for the tile fixer. The transparent and airtight plastic packaging guarantees long storage life and ensures even greater quality. So a wonderful and smooth grout joint is the result - almost on its own. ■

VERSATILE GROUT APPEARANCE

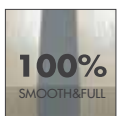
Whether a colour match or a strong contrast - CRISTALLFUGE PLUS is available in 13 appealing colours, which include white, silver grey, grey, medium grey, titanium grey,



Clearly improved application comfort when grouting, thanks to the new formula.



CRISTALLFUGE PLUS leaves an optically attractive appearance.



Jens Danke



“High voltage” during restoration of Soltau thermal baths



After almost two years, the construction work carried out for the refurbishment of the Soltau-Therme spa resort was successfully completed in the late summer of 2014.

Both the diving pool and the competition and swimming instruction pools underwent thorough rehabilitation. Thanks to the installation of a retractable roof, swimmers and families can now enjoy an open-top experience in fine weather with only 8 minutes needed to open the roof. The construction of a new giant slide, the complete reorganisation of the sauna areas and children’s bathing zone, and the stylish design of the modernised areas of the building with ceramic surfaces have succeeded in considerably enhancing the appeal of the spa in the Heidekreis district.

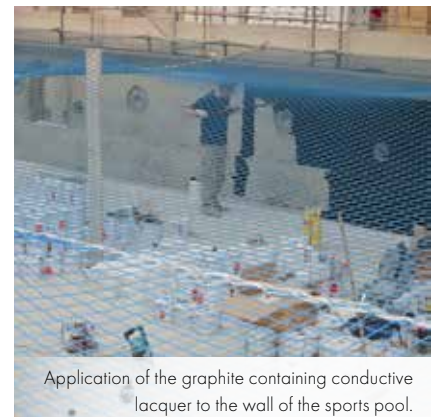
RESTORING THE POOL TANK

After the removal of the roughly 20-year-old ceramic tiling in the areas undergoing refurbishment, a firm of engineers was asked for an expert opinion on the quality of the building fabric. The reinforced concrete of the pools was found to be in a sound condition for re-laying with ceramics. However, the concrete cover over the outermost layer of reinforcing steel in the existing pools was found to be thinner than required in accordance with today’s regulations. As a result, after appropriate treatment of the substrate, the missing 20 mm was applied with a composite levelling filler containing a

concrete substitute mortar suitable for underwater surfaces. For this, ready-to-use ASOCRET-FM40 repair mortar from SCHOMBURG was worked into a freshly applied ASOCRET-KS/HB mortar bonding coat in layers 5 to 40 mm thick. To counter the risk of chloride corrosion of the reinforcing steel of the pool body, the DENSARE®-2002 reaction resin waterproofing system was applied. This system is sufficiently resistant to diffusion to prevent chloride ion diffusion in accordance with DIN EN 1504-2. The DENSARE®-2002 composite waterproofing system thus effectively protects the steel of the pool body from chloride ions from the pool water.

However, this protection was not the only reason why the designers, client and building contractor opted for application of the DENSARE®-2002 composite waterproofing system suitable for wet duty classes A, B and C. Unlike the classical ASOFLEX-AKB AIV-F reaction resin waterproofing system, the DENSARE®-2002 system is additionally equipped with graphite-containing ASODUR®-V115W conductive lacquer and self-adhesive conductive strips. This permits the non-destructive and full-surface highvoltage testing of the waterproofed surface in accordance with DIN 55 670. This test method reliably detects pores,

trapped air and insufficiently thick cover in the crosslinked waterproof membrane before the tiles are laid.



Application of the graphite containing conductive lacquer to the wall of the sports pool.

For testing, the earth of the test instrument is connected to the conductive strips in the conductive lacquer. The test instrument is pre-set to a test voltage dependent on film



Spark coil test to DIN 55 670.

thickness in accordance with DIN 55 670. Then the finished waterproofed surface is traced over its full surface with a brush electrode at a speed of roughly 40 cm/s. Theoretically, it therefore takes only about 2.5 s to check a square metre of waterproofing. The organic coating material of the waterproofing thus serves as the electrical resistance in this test process. Wherever this is too thin, e.g. due to flaws in the waterproofing, an electrical circuit is closed. These areas are indicated by visible sparking and an acoustic signal from the test device. Localised flaws are marked, repaired with freshly mixed reaction resin, broadcast with quartz sand and checked again a day later.

DENSARE®-2002 SYSTEM BUILD-UP

On the cured ASOCRET-FM40 composite repair mortar, the ASODUR®-GBM thin-bodied two-component epoxy resin primer is applied first. Quartz sand of 0.1 to 0.6 mm grain is broadcast onto the



Spark discharge - localised defect in the bonded waterproof membrane.

fresh primer. After complete cross-linking of the primer, ASO®-Leitband self-adhesive conductive strips are stuck on in a grid of 10 x 10 m so that, at the base and top of



Spark coil testing equipment
Left: repaired defective area.

the pool, about 5 cm protrudes from the subsequent waterproofing level to enable the spark inductor test device to be connected. Then the ASODUR®-V115W graphite-containing conductive lacquer is applied. The black conductive lacquer can be recoated after about 16 hours. The subsequent sequence of coatings complies with the familiar ASOFLEX-AKB Class C waterproofing system. The waterproofing layer (blue) and broadcast sand (grey) are pigmented in alternating colours so that the application of the composite waterproofing in two passes demanded in the codes can be documented.

On completion of the waterproofing and broadcast layers of ASOFLEX-AKB-Wall/-Floor, the spark inductor test is performed on the tack-free waterproofing level in accordance with DIN 55 670. Random destructive film thickness checks are rendered superfluous by this method, as is the 14-day test filling of the fully waterproofed pool body demanded in the ZDB leaflet. In addition to the application of the DENSARE®-2002 system described here as the construction product for the creation of a waterproof seal in conjunction with tiles and slabs in swimming, brine or thermal pools, the general test certificate of the building supervisory authorities for fields also documents the system's suitability for applications through to Class C in commercially used kitchens, bottling plants, cold stores and similar facilities of the chemical industry.

SUMMARY

By using this innovative test method on an electrically testable composite waterproofing system, the specialist tiler Uplegger Fliesen in Neubukow was able to demonstrate to the client and building contractor that the waterproofing of the refurbished diving, instruction and competition pools fully conforms to standard engineering practice in terms of flawlessness, minimum thickness and the resultant crack coverage and hence features the manufacturer's pledged properties. In the course of the project, approx. 3,900 m² of surfaces were waterproofed and approx. 4,200 m² of surfaces were tiled.

COMPANY PROFILE UPLEGGER

The tiling company, Uplegger GmbH & Co. KG is a medium sized driven company from Neubukow/Mecklenburg. Founded in 1990 by Hendri Uplegger as a private company, the nationally employed certified company of master craftsmen became a limited company in 1996 (GmbH & Co. KG) due to positive company development. Today the professional company works with over 20 qualified employees, master tilers, site managers, tilers, stove fitters, buyers and sales team, office administrators and trainees. This permits a diverse qualitative high value performance spectrum as well as flexible commitments for increasingly changing construction sites. The company of master craftsmen can refer to 15 years of experience in the construction of swimming pools with numerous reference projects.

Ingo Höll



Hendri Uplegger
www.uplegger-fliesen.de

Outstanding accolades received:

Structural waterproofing brochure gets first prize at the bba-competition "Planner communication", bronze won at Heinze Architects' Darling awards

The magazine bba announced a competition and appealed to companies to submit their informative material specially produced for Architects, Structural Engineers and Technical Planners. Which brochures impressed with practical guidance, information content and accuracy of specification were assessed as an aid to planning with appropriate design and optics, clarity and pleasant feel.



A five strong panel unanimously selected the first winner in the category "Detailed information document": the application guidebook for structural waterproofing and restoration from SCHOMBURG! In addition to bba editorial staff, on the panel were Dipl.-Ing. Architect Thorsten Kock (Bez + Kock Architects, Stuttgart) and Dipl.-Ing. Architect and Graphic Designer Annette Genkinger (H3polymedia, Römerstein).

There are various system solutions depicted for structural waterproofing and restoration in our waterproofing brochure. With the aid of clear illustrations, we

present individual work steps to complete the waterproofing job. Here topics such as cellar, container waterproofing or white tubs are shown. The depictions always represent the exposure class and present appropriate solutions. The exposure classes are expanded upon with numerous additional information such as regulations, wet duty exposure levels and a comprehensive glossary. The topics "Substrate preparation" and "Jointing tapes" have their own dedicated chapters.

The application guidebook for structural waterproofing and restoration can be ordered via export@schomburg.de.

At the Heinze Architects' Darling awards, we were decorated with the bronze grade. At the annual nationwide largest Architectural survey, we competed in the category "swimming pools, wet rooms". Around 1,800 Architects and Planners selected from their favourite brands in 24 product categories. We were placed in the top three in a strong field of entrants.

Jörg Pohlmann ■

ASOCRET-M30 - a real multi-talent

SCHOMBURG has developed a real multi-talented product in ASOCRET-M30. Smoothing compound, repair mortar, blocking mortar or coved fillet mortar - from now on applicators only need one product for all applications. The ASOCRET-M30 is the only restoration mortar, which combines all four products in one.

Our new development can do even more. The very easy and creamy to use universal restoration mortar impresses with up to 35% higher yield. At the same time there are no construction delays as the area is ready for overcoating after only approx. three hours. This offers the contractor real benefits in daily practice.

It doesn't matter whether it is for levelling and filling mineral-based wall and floor areas, as a repair mortar or non-sag

smoothing mortar. The applications are many and varied. The new mortar from SCHOMBURG is also well suited as a water repellent blocking mortar or building plinth render. It is also for preparing substrates to receive high-build bitumen coatings as well as flexible mineral-based waterproofing slurries.

ASOCRET-M30 is sulphate resistant and rapid hardening. Thickness from 3 - 30 mm can be applied in one operation. It does not matter whether used on internal or external areas. The mortar is CE marked in accordance with DIN EN 998-1. ■

Holger Eweler



Forming a coved fillet with ASOCRET-M30.



For smoothing or evening up from 3 mm thickness.



ASOCRET-M30 as a repair mortar.

THERMOPAL®-ULTRA - Renovation with system security

For renovating damp and salt laden substrates in old buildings, SCHOMBURG customers have trusted the THERMOPAL® restoration plaster systems for over 20 years. THERMOPAL®-ULTRA is the latest development in this product family.

This restoration plaster is an easy and quick to use plaster with a great degree of application security for producing vapour permeable and dry plastered areas. It can be applied to damp and/or salt laden inner and outer walls. The quick, reactive cure also takes place under critical site conditions such as high humidity and low temperatures. Due to special system related properties, possible mould growth is additionally prevented. THERMOPAL®-ULTRA is based on the novel SCHOMBURG binder technology TopTEC. Through this technology, hydrophobic and salt storing product

properties are quickly achieved even under unfavourable ambient conditions. A single layer application up to 3 cm is possible without problem. The consumption is approx. 8.0 kg/m²/cm thickness.

The reactive cure process saves long waiting times. Due to how the system performs, THERMOPAL®-ULTRA can be rubbed down traditionally or alternatively abraded with a grid float. Fine surface finishes are achieved with THERMOPAL®-FS33. With the light creamy white formulation, painting is no longer required as a rule and the appearance of the finished area can vary between rustic mediterranean to smooth modern, dependent on how it is worked. Water and salts are the most frequent causes of damage to buildings. Visible effects are sanding, surface delamination



Verarbeitung von THERMOPAL®-ULTRA.

or in the worst cases complete destruction of the matrix with instability issues. Moreover saturated masonry work is frequently also the cause of health hazards such as e.g. mould.

The THERMOPAL restoration plaster systems fulfill the special requirements of the Scientific Technical Association for Building Maintenance and Preservation (WTA) and are therefore appropriately certified. The main role of a restoration plaster to WTA is the storage of salts and the guarantee of dry and salt free surfaces. ■

Stefan Flügge

SCHOMBURG awarded for environmental performance

Since April 2014 SCHOMBURG has been engaged with the environmental project ÖKOPROFIT® (Ecological Project for Integrated Environmental Technology), which supports companies with environmental and climate protecting measures. The project is a cooperation between the Lippe district, the local economy and other regional and national partners. It is financially supported by the Ministry for the Environment and Nature Protection, Agriculture and Consumer Protection for North Rhine Westphalia. Eleven companies from the Lippe district have participated in the established concept and in the meantime, there are more than 2,000 companies nationwide from over 80 towns.



The sustainable economical and ecological strengthening of the organisation is the main drive for ÖKOPROFIT®. Specifically targeted measures enhance the environment and help to lower running costs. The central topic is the reduction of waste water and energy consumption, the lowering of waste quantities as well as increasing material efficiency. This leads to a considerable reduction in CO² pollution in the environment.

In addition to the photovoltaic units installed three years ago, SCHOMBURG has, within the scope of the project, planned or already

instigated additional measures. To avoid peak current, operational procedures have changed. In addition efficient and environmentally friendly heating technology has been conceived. Administration has been converted to electronic invoicing. In addition there has been a change from conventional lighting to modern LED technology.

“Ecological thinking and sustainability is an important part of our company philosophy”, said Managing Director Ralph Schomburg. “Anchored in our guidelines, it determines our daily trade”. For many years SCHOMBURG has

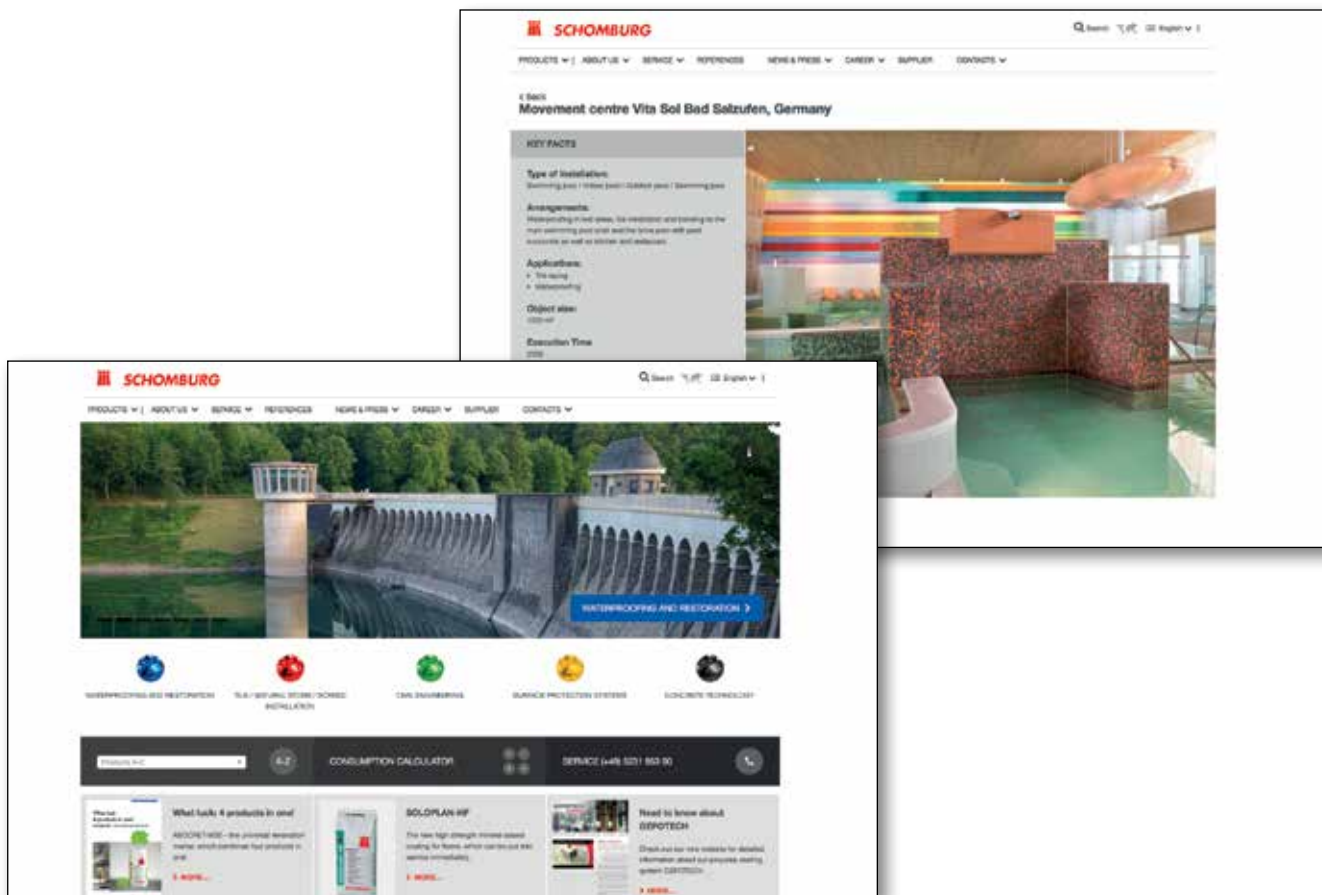
been focussed on environmentally friendly production and sustainable products. Many SCHOMBURG products now carry various environmental symbols. This demonstrates that the company sets new benchmarks regarding the requirements for sustainable economies, construction and ultimately also for living. ■

Jörg Pohlmann



New internet appearance

With immediate effect SCHOMBURG presents its company with a new internet presence. At www.schomburg.com visitors will find all the important information related to the german building product specialist. One of the highlights is the new highly effective search function, which in addition to indexing all available pdf documents also offers comfortable prioritization and an optically highlighted display of the search result as well as auto completion of the search entry.



The new internet appearance is impressive with its modern image, clear structure and user friendly programming. Whether desktop machines, smartphones, tablets - the responsive design dynamically suits all equipment and offers visitors comfortable service using current programming technology.

The home page designed with large topic pictures and the integrated Roll-Over-Navigation leads the visitor to products and information he is interested in. The product related application areas have been expanded which, in addition to clear detailed drawings, also shows extensive advice on sequential

construction and application areas for SCHOMBURG products. Also newly integrated are product and application videos, which can be found from the clear main area or also under individual topic areas and are played directly on the page.

In the reference area, SCHOMBURG offers a search for different criteria. Amongst others references specially related to an application area or matched to a necessary product can be selected. Under „Green SCHOMBURG“, the company presents its environmental activities. Here the visitor can find information on certified products.

The career area shows current job and training places for the company. The contacts area is well structured and helps the searcher to quickly find the right contact partner worldwide. The useful quick product access, the comfortable consumption calculator and the quick Newsletter announcement rounds off the new internet appearance of the Detmold based building product specialist. ■

Jens Danke

AQUAFIN®-TBS - Sustainable balcony restoration with a 10 year guarantee

Balconies belong to the most problematical of building structures, which need to be waterproofed and clad with ceramic tiles. Not least due to extreme thermal loads, there are high demands placed on the waterproof membrane, the installation mortar and grout.



On South-West facing balconies with dark tiles, the afternoon temperatures can be around 70°C at the surface. What happens when a weather front gathers and there is a downpour of rain? The sudden temperature change allows the tiled finish to contract through cooling, with the underlying waterproofing membrane and adhesive bed expected to accommodate this movement. If these layers cannot compensate for the shear stress, then there will inevitably be failure. To solve this problem, the normal setting, flexible waterproofing slurry AQUAFIN®-2K/M and the installation mortar UNIFIX-S3 were developed. With

AQUAFIN®-RS300 in combination with UNIFIX®-S3-FAST, there is a comparable albeit considerably faster system available. Both are components of the AQUAFIN®-TBS restoration system with its 10 year guarantee. This system combination is in a position to compensate for thermally induced dimensional changes. The following deals with the rapid setting variant and a usual 5 m² balcony, which can be promptly processed.

With this system, SCHOMBURG offers a proven system for the rapid, permanent and assured waterproofing of balconies and terraces. The thin-bed adhesives and

waterproof membranes are all two component products. The unique polymer dispersions impart very high flexibility and durability. AQUAFIN®-RS300 concerns a reactive self-crosslinking mineral-based waterproofing slurry. It is impermeable to water yet vapour permeable. Its tensile strength at break is approx. 1.0 N/mm². In addition it has a high elongation at break (approx. 85% at +23°C). Its suitability is confirmed with a "Certificate of general technical approval" on the building regulations list. Areas of application are in accordance with the ZDB data sheet "Bonded waterproof membranes", wet duty exposure classes

A0 and relevant for this topic, B0. Also published by the same association refer to the data sheet "Finishes in exteriors". Special screeds on balconies and terraces at ground level can be waterproofed with AQUAFIN®-RS300 once they have cured. Immediately the waterproofing layer has dried, it is possible to install tiles. Cracks near the surface, so called crazing cracks can be bridged and decoupled directly by the waterproofing slurry.

Complementary ASO®-Joint-Tape-2000 system products are available, which contain joint tapes (including pre-formed sections such as internal angles, external angles etc.) and gaskets. These can be used with AQUAFIN®-RS300 in prominent locations such as wall/floor transitions and floor drains. To complete the joint tape range, ASO®-Joint-Tape-2000-Sanitary is available. This joint tape is self-adhesive on one side and allows waterproof jointing to door and window sections on

be carried out quickly and securely without long waiting times. With the SCHOMBURG system no primer is necessary. In this case, a pre-wetted cementitious support like a screed or render is adequate.

The installation of the ceramic flooring can then commence. Here the tiles should be as solidly bedded as possible using the combined floating-buttering method. Dependent on the edge length of the tile, select an appropriate notched trowel to ensure an adequate bed of UNIFIX®-S3-FAST.

Once the thin-bed adhesive has dried, grout using the high strength, flexible grout HFO5-Brillantfuge. This water repellent and freeze/thaw stable grout is polymer modified and was conceived for the most heavy duty exterior areas. Form elastic joints with a closed cell backing material as well as the silicone sealant ESCOSIL®-2000 (in accordance with the ZDB data sheet "Movement joints in wall and floor tiling").

Quick and safe even **without priming**

balconies even where there is minimal height available.

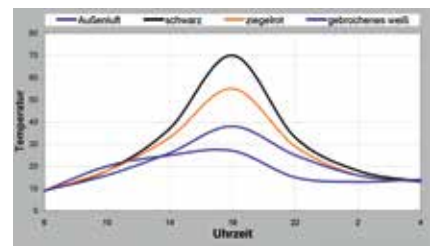
APPLICATION PROCEDURE

The cured screed must have a fall of 1 - 2%. The surface must also be abraded (so called brushed texture) to ensure optimum adhesion for following layers. As necessary, form falls with up to 15 mm of the thixotropic cement-based smoothing compound, SOLOCRET-15. If a completely new bonded screed to falls is required, then rapid setting screed systems such as e.g. ASO®-EZ-LIGHT-Plus would be suitable. Incorporate conventional balcony edging profiles or fitted drainage channel systems around the balcony in accordance with manufacturer's instructions. This is followed by waterproofing the floor area with AQUAFIN®-RS300. The regulations stipulate the application of two coats. Due to its self cross-linking property, AQUAFIN®-RS300 can be used effectively even in high humidity, low temperatures etc., thus permitting waterproofing works to

SUMMARY

The waterproofing and tile bonding materials AQUAFIN®-2K/M with UNIFIX®-S3 or AQUAFIN®-RS300 with UNIFIX®-S3-FAST are systems matched with one another, which have been used successfully for years. SCHOMBURG offers a 10 year project related guarantee for the bonded system. Special solutions are possible with these system variations on request.

Marcus Kuczer



Temperature development on a balcony (Southerly direction).



Bonding the ASO®-Joint-Tape.



Combing out the tile adhesive.



Tile installation with the floating-buttering method.



Emulsification.



Washing the tiles.

SOLOPLAN®-HF - high strength mineral-based coating for floors



SCHOMBURG has expanded the SOLOPLAN® product family and with SOLOPLAN®-HF presents a levelling compound, with which directly serviceable flooring can be produced for interiors or exteriors.



Application with a pin rake.



Spreading with a spiked roller.

The high strength levelling compound covers a band width from 3-30 mm and is ready for foot traffic after approx. 3 hours under standard conditions (+23°C / 50% relative humidity). After only one day the area can be driven over with cars and after three days with heavier vehicles such as e.g. fork lift trucks. The new development from the East Westphalian building product specialist is especially suitable for commercial flooring, which is frequented by foot traffic and vehicles with pneumatic, solid rubber and vulkollan tyres. It is also possible to use in private garages, hobby rooms and party cellars. The system is rounded off with the solvent free impregnator REMISIL-SI.

After only 5 hours the levelled area can be flooded with the aqueous system and rolled, which increases the resistance to contamination. Various coloured chip blends are available for decorative designs. These are broadcast into the freshly poured levelling compound. To encapsulate the INDU-DecorChips, the two component, solvent free sealer INDUFLOOR®-IB2255 is provided. It is usually rolled on the floor in a criss-cross manner on the following day. SOLOPLAN®-HF is based on the new SCHOMBURG TopTEC binder technology. The reactive binder saves time. The product is applied on to the system primer either by hand using a pin rake or spiked roller or applied mechanically through a screw feed pump. Skirting areas are isolated with the self-adhesive edging strip RD-SK50, to prevent stresses within the levelling compound. SOLOPLAN®-HF is very low emissions and carries the EMICODE EC1+ seal of approval. ■



white to black



light grey to beige



dark grey



beige to red to orange

Michael Hölscher

New swimming pool guide book

“Construct-waterproof-competency” – at the highest level. This is how the new guidebook “Assured tile installation in swimming pools and water parks” can be described. In this publication, everything revolves around swimming pool construction – one of the most demanding applications for structural waterproofing and tile installation.



20 pages describe the different areas in swimming pool construction. Pool surrounds, shower areas, sanitary rooms and saunas find equal reference to the varied pool edge details and water qualities under chemical and non-chemical exposure. The difference between interior and exterior pools is also mentioned in the guidebook. Whether waterproofing the pool tank or installing tiles in critical areas – SCHOMBURG presents an appropriate solution for everything. In the centre of the guidebook there is a

fold out detail drawing, which shows the correct build-up of mineral-based and reaction resin based waterproofing systems in swimming pools with swimming pool water to DIN 19643 and in salt water and thermal baths. Furthermore there are entries on the necessary waterproofing measures and appropriate product solutions in adjoining technical rooms.

The guidebook is augmented by a structured overview of the most current and important standards and regulatory works as well as a depiction of impressive

swimming pool references in which SCHOMBURG products were used for optimum waterproofing of the swimming pool.

The guidebook “Assured tile installation in swimming pools and water parks” appeals to planners and Architects but is also a helpful and practical reference work for applicators. It is available to download at www.schomburg.com or can be ordered via export@schomburg.de.

Ingo Höll

New brochure for non-invasive tested bonded waterproof membranes

In the DENSARE®-2002 brochure, the central theme is a bonded waterproof membrane, which can be tested without a destructive test. The DENSARE®-2002 system is used preferentially in heavy duty areas such as saline and leisure pools, commercial kitchens, cold stores, filling plants etc. It can be used in all wet duty areas defined in the ZDB information sheet “Bonded waterproof membranes”. The watertightness control in the DENSARE®-2002 system saves considerable time, is secure and practical as weak points can be determined

exactly to the point and overcoated as required.

In contrast to earlier destructive tests used, the assessment of the DENSARE®-2002 system is not carried out by the random sampling of individual positions but over the whole area. Clients and contractors can therefore be assured that the waterproof membrane will permanently fulfil its function. The areas of application and the waterproofing system are clearly illustrated in the brochure.

Johannes Bauer



Bikini-Haus restoration in Berlin: Structural loading and fire performance problems solved with the lightweight screed ASO®-EZ-LIGHT-Plus

In the middle of Berlin's Charlottenburg district directly next to the zoological gardens stands an old listed retail and office building - the well known Bikini-Haus. This now beams with a new glow. There were particular technical requirements for static loading and fire performance when restoring the floors. These requirements were fulfilled with the aid of the lightweight screed ASO®-EZ-LIGHT-Plus from SCHOMBURG.



In the period between 1955 and 1957, the stretched low-rise building with 6 floors was constructed following the plans of Architects Paul Schwebes and Hans Schoszberg. On the ground floor of the building there are rows of shops beneath an open portico. At the time of construction, the middle storey was conceived as an open access balcony and consequently gave the building a two-piece structure, like a bikini, from which the name of this venerable house originates. Four staircases are located at the rear.

During the last 50 years, the house has been in constant change, nevertheless whilst retaining its fundamental style. Even the typical large undivided bank of windows with their minimalistic profile, have remained and this was to be maintained after the alterations. The use of the new Bikini-Haus was, however to radically change. What formally

occasionally served as a theatre and an office building was now to be converted into a hotel and shopping complex.

As owner, Bayerische Hausbau started the conversion in December 2010. Following the design of the Belgian Arne Quinze and his Architectural practice SAQ, the bikini storey was to be converted to its original appearance and the adjoining roof terraces were to be extended. A total useable area of 54,000 m² was established.

During the renovation, the Bikini-Haus was gutted. As a consequence, a new floor had to be constructed. It was necessary to build a hollow floor. There was a requirement to find a material with which to level an uneven concrete substrate in such a way as to permit a hollow floor to be constructed on top. Care had to be taken to apply a material,

which conformed to the strict fire safety guidelines. In addition, a screed could only be installed, whose weight did not overload the existing concrete floor and also fulfilled the high structural requirements.

Following technical advice from SCHOMBURG to the consultancy firm Hild and K from Berlin, the cement-based lightweight screed ASO®-EZ-LIGHT-Plus from SCHOMBURG was jointly recommended. This is classified as CT-C25-F4 in accordance with the screed standard EN 13813. Furthermore, ASO®-EZ-LIGHT-Plus conforms to fire protection class A1 and was therefore suitable for use in the Bikini-Haus. With a surface weight of approx. 14 kg/m²/cm screed thickness compared with conventional cement-based screeds with a surface weight of approx. 22 kg/m²/cm

screed thickness, one could reckon on a weight saving of approx. 37%. The calculations of the Structural Engineer also confirmed these plans. The advantages of SCHOMBURG's lightweight screed compared with conventional lightweight construction systems, was the deciding factor.

Bozkava and Günay Estrichbau Gbr from Berlin won the contract. The experienced screed installer was able to prove their

screeds, rapid screeds and resin coatings. After a short briefing from one of SCHOMBURG's technical advisors, work could begin. The screed was to be installed bonded with ASOCRET-HB-Flex serving as the bonding slurry. Following a thorough clean of the concrete substrate, this was adequately pre-wetted. Now the bonding slurry could be applied with a conventional broom. The screed was then installed wet in wet. For mixing, the

37% **weight saving** with the screed.

ability from many previous projects. For example, the company was responsible for the screeding at the privy council building in Berlin-Mitte, the ALEXA Shopping-Center in Berlin Mitte and the Lehrte station, part of Berlin's central railway station. Bozkava and Günay Estrichbau Gbr could also prove their Know-how outside Berlin, in a range of areas, such as heated screeds, floating screeds, bonded screeds, industrial screeds, lightweight

employees of Bozkava and Günay Estrichbau Gbr used a Screed Boy. The experienced screed layers achieved 200 m² - 300 m² per day. A total of approx. 4,400 m² of bonded screed were produced. Almost 200,000 kg of ASO®-EZ-LIGHT-Plus and over 5,000 kg ASOCRET-HB-Flex were consumed. ■

René Meinberg



Installation of the screed.



Striking off the screed.



Applying the slurry bonding coat ASOCRET-HB-Flex.

Marmaray Project in Istanbul restored with our assistance



Marmaray is the name of a railway traffic project in Istanbul. It encompasses the construction of a railway tunnel beneath the Bosphorus strait as well as the extension and modernisation of the existing sections along the sea of Marmaram on the European and Asian sides. The name of the project comes

from combining the sea of Marmaram with the Turkish word "ray" for rail or track. The project comprises a 1.4 km long immersed tube tunnel and the 9.4 km long TBM (Tunnel boring machine) tunnel. After mounting the C50 precast concrete sections of the TBM tunnel, a two component, highly reactive polyurethane injection resin was injected into the joints to impede water ingress in the connecting joints. To comprehensively fill the connecting joints, cracks and voids between tunnel and stations, a two component, elastic polyurethane injection resin was applied. To impede water passage at these points, a one component water reactive, foaming polyurethane injection resin was successfully used. ■

Holger Sass



Leaking connection joints.



Polyurethane injection resin during application.



Water passage was successfully impeded.

Training at SCHOMBURG 2.0

The first industrial sales representative was trained by SCHOMBURG back in 1954. During the course of the year, more occupational training came along. In addition to male and female industrial sales representatives SCHOMBURG also trains male and female warehouse managers/assistants, materials technologists for mortars and concrete technology as well as IT specialists for integrated systems. We are currently occupied with 11 trainees in all areas of occupational training.



SCHOMBURG trainees are introduced into projects and receive diverse training around the subjects of products, dangerous goods, hazardous substances, telephone communication and much more. For the first time in 2014 a team of 4 trainees took part in the Energy-Scout-NRW project for the Lippe and Bielefeld Chamber of Industry and Commerce. During this project the trainees developed ideas for potential savings in energy, water and materials.

Also in 2015 the SCHOMBURG trainee team once again got involved with this project. Furthermore, we also took part at diverse training exhibitions around

Detmold and Lemgo with our new exhibition stand. SCHOMBURG is becoming better known beyond the Lippe border with an increasing demand for trainee positions. SCHOMBURG trainees are very keen on ideas for the configuration of and quest for training. So much so, that in the summer of 2015 they shot a video on training at SCHOMBURG. This was presented at 'Jobs Live' in September 2015 at the Lippe and Bielefeld Chamber of Industry and Commerce. ■

Nina Kemper

EUROBAUSTOFF forum in Cologne

For the third time now we were represented at the EUROBAUSTOFF forum in Cologne. Over 9,000 visitors experienced yet another extensive range of topics. There was much for the partners to discover from exclusive theme worlds to classics such as product auctions and trainee rallies.



This year our motto was "We won't leave you standing in the rain". And that was not related to our reliable product range. All guests on our stand got an XXL SCHOMBURG umbrella in the classic bubble design. Our pantomime created great ambience on and around our stand.

Furthermore, we joined in the trainee rally and welcomed many junior staff on our stand. ■

Uwe Eichler

Installation of a flat underfloor heating system

The time saving installation of innovative underfloor heating places high demands on the fixing system. Such a project was successfully carried out in Hünxe to the east of the lower Rhine. Here the underfloor heating from JK Fußbodentechnik was installed as a system with various products from SCHOMBURG, the east westphalian building products specialist.

More and more people are opting for underfloor heating because, in addition to high levels of comfort, it offers the best efficiency. Underfloor heating guarantees optimum temperature distribution in the living or working area. Underfloor heating works as an energy saving low temperature system compared with e.g. conventional radiators. For the efficient use of ground heat or heating pumps, low temperature surface heating is a prerequisite. With underfloor heating, heat is distributed from the floor to the ceiling with the temperature at body height being the most pleasant. In addition, underfloor heating reduces the

heating. This allows for a consistent floor height. Priming occurs before the grinding as the equipment grips better on the rough surface. The heating pipes are smoothed over with SOLOFLEX-FAST. Floor finishing work took place immediately once the smoothing material had dried. A 60x60 Mirage fully vitrified tile from the Ardesie Shore series was used. This was fixed void-free with the SCHOMBURG flow bed adhesive MONOFLEX-FB. Due to the tile format, the rear of the tile was additionally coated with adhesive. Once the flow bed adhesive had hydrated, the tiles were grouted with CRISTALLFUGE in the colour



Priming improves routing.



Routing out the joints for the heating circuit.



Trowelling over the heating circuits with SOLOFLEX-FAST.



Installing the tiles with MONOFLEX-FB.



Final result without increasing the construction height.

No **increase in height** of the existing screed.

risk of house dust mites accumulating and minimizes dust circulation. An ideal solution for those with allergy problems or asthma. In contrast to thin layer underfloor heating systems with low construction height, the routed out JK Fußbodenheizung has no construction height at all in the existing screed and is therefore ideal for renovation or refurbishment in old buildings. The total area of the project described in the single family home was 50 m². The JK Fußbodenheizung was installed without creating dust. The system is set up so that during routing a damp mist is produced at the cutting head, which can be disposed of almost dry with the cutting slurry. The total installation including preparatory work and tile installation took only 2 days. Firstly the old well bonded tiled finish is thoroughly cleaned with an alkaline cleaner. Then the adhesion promoter ASO®-Unigrund-S is applied for the subsequent installation of tiles. By routing out the underlying screed, there is no additional floor construction height from the underfloor

beige. Elastic joints to DIN 52460 were formed with ESCOSIL®-2000. The 3 heating zones were regulated by a wireless thermostat. Due to the proximity of the heating pipes to the surface, the temperature can be set 1 to 2 degrees lower than with conventional underfloor heating. The old screed does not need to be removed and disposed of, which saves time and costs. The patented method has proved itself a thousand times since 1994. Each year this innovative and tested installation method is successfully used in more than 6,000 renovation projects in both private and public areas. ■

Thomas Schmidt

CRISTALLFUGE PLUS – convincing campaign across the board

In January 2016 we were ready. The new CRISTALLFUGE PLUS was introduced at a Kick-off event to the SCHOMBURG sales team. During the two day function, not only were the exceptional product and application properties impressive but the comprehensive campaign with the SCHOMBURG POS for distributors in the foreground was too.

“It is great that the feedback is unanimously positive and the product holds true that which we communicate in the campaign message. We are sure that we can impress the distributor and applicator with the total CRISTALLFUGE PLUS package and offer real added value”, said Uwe Eichler, sales manager for SCHOMBURG GmbH following the practical trials at the Kick-off event at the beginning of January in Detmold. The product was applied at various joint widths with various tiles during live presentations. The consistent opinion: the new CRISTALLFUGE PLUS is impressive with very good grout application performance, long pot life, smooth application consistency, non-slump whilst wet and it is easy to remove. In short, CRISTALLFUGE PLUS is the first grout to lend a hand and practically grout by itself.

The event concentrated on the original marketing campaign conceived by our marketing experts, who added emotion and simplified the marketing of CRISTALLFUGE PLUS for the sales team and distributor with attention grabbing POS. The campaign was presented at the event and instantly found enthusiasm. Bound in a comprehensive and cross-media packing, impressive in pictures, text, and tone for print, Internet and exhibitions.



One of the highlights is the CRISTALLFUGE PLUS sales island, which can be placed on any side in the tile distributor or retailer – a real eye-catcher. But there are also brochures, binders, advertisements, pallet displays, shelf labels, roll-ups, counter top presentations, sample boxes, product films plus even a liveried lorry, which travels throughout the country ensuring that the advertising message is conveyed and the product is well placed for promotion.

Jens Danke



 **SCHOMBURG**

SCHOMBURG GmbH & Co. KG
Aquafinstraße 2-8
D-32760 Detmold (Germany)
phone +49-5231-953-00
fax +49-5231-953-108
email export@schomburg.de
www.schomburg.com

