

# pulse

MOVEMENTS IN ARCHITECTURE

02 | 2013



## Cocooning comfort

by roemer partner architektur

Interview with Stefan Marte

Living in a multiple generation house

Beyond the threshold –  
anti-conventional architecture





Vittorio Grassi was a partner in Renzo Piano's office for nine years. Since 2005 he has headed his own architecture studio in Milan.

# The topic: Home living and eternal values

*pulse* in conversation with Vittorio Grassi

## **Because we're so inquisitive ... what is your own home like?**

I live in the heart of Milan in an attic with a large terrace. The main feature of my home is sunlight. Outside the sunlight plays on the terrace with the plants of my garden, inside it is filtered through big French windows and regulated by micro louvers. I like open spaces and freedom to change them quickly. Regarding furniture my home is an unfinished work or, better, it is a work in progress always open to new ideas and experiments.

## **Were you ever your 'own' developer?**

Oh, yes. I must say that as my own client I am much more tolerant, especially when it comes to timing. This is because I always try to get as much fun as I can experimenting on my construction sites.

## **Society is changing. Are new developments**

## **such as the patchwork family or working from home influencing your work?**

I do not think that human habits have been dramatically transformed by social changes in the whole of human history.

Men have always looked for warmth and affection, friendship and love. Residential architecture must answer today to these ancestral needs, only playing with new technologies.

## **What does this mean in practice?**

Personally I feed my buildings with large and luminous reception and living spaces, high ceilings and comfortable furniture. These are the places where users can spend time with friends and relatives. On the other hand I also like to provide generous cupboards and service spaces. Today our memories are so dematerialized by electronic devices that some beloved objects regarding our personal story must be jealously preserved.

## **What meaning will criteria related to sustainability have in future residential construction?**

Sustainability can exist only if social, economical and environmental parameters are satisfied. Residential construction is a mayor, and the simplest, field where these criteria can be applied. Sure, it is the closest field to people's understanding and therefore the most effective for the health of the planet.

## **What role do building automation technologies (such as KNX) play in this context?**

Building automation technologies mean more comfort, more security, greater energy savings: the demand for building management systems is continuously growing. These systems are wonderful but must be modular and as open as possible. They have to work through devices that are very simple and that we use on a daily basis such as tablets or smartphones.

Beyond the threshold – new ideas for changed living environments > p. 4 How several generations can live together in practice > p. 8 Cocooning comfort in Cologne > p. 16 Living in courts – modern residential quarter > p. 22 Home of the Future > p. 28 “girls’ tower” by marte.marte architekten > p. 32 Recycled brick for Kunstmuseum Ravensburg > p. 38 Architect Hadi Teherani and Busch-Watchdog MasterLINE > p. 40

04 **Macro**

Beyond the threshold  
by Wilhelm Klauser

08 **Micro**

Architecture für multiple generation houses  
by Insa Lüdtké

16 **In practice I**

Cocooning comfort –  
the K-Star Residence in Cologne

22 **In practice II**

Living in courts – the residential quarter  
Hollerstauden in Ingolstadt

28 **Visions**

Home of the future

32 **Visit**

Interview with Stefan Marte on the  
“Girls’ tower” in Vorarlberg

38 **Material**

Lederer Ragnarsdóttir Oei  
on brick as material

40 **Insights**

Busch Watchdog MasterLINE – a new  
product from ABB/Busch-Jaeger

42 **Food for thought**

The competition question for this issue

43 **Imprint**



Few architects so consistently question our living habits as the Japanese architect Sou Fujimoto. His almost entirely transparent House NA in Tokyo has already become an international pilgrimage site for other architects (left).

# Beyond the threshold

In order to ensure that the way we live does not become run of the mill, architects and developers would do well to show some nerve by taking the familiar layout of kitchen, bathroom, lounge and bedroom and shake it up a bit. After all, our work and living environments are changing so rapidly that new ideas are essential. The most interesting architectural solutions are found in designs which consistently turn specific desires into reality.

Text **Wilhelm Klauser**

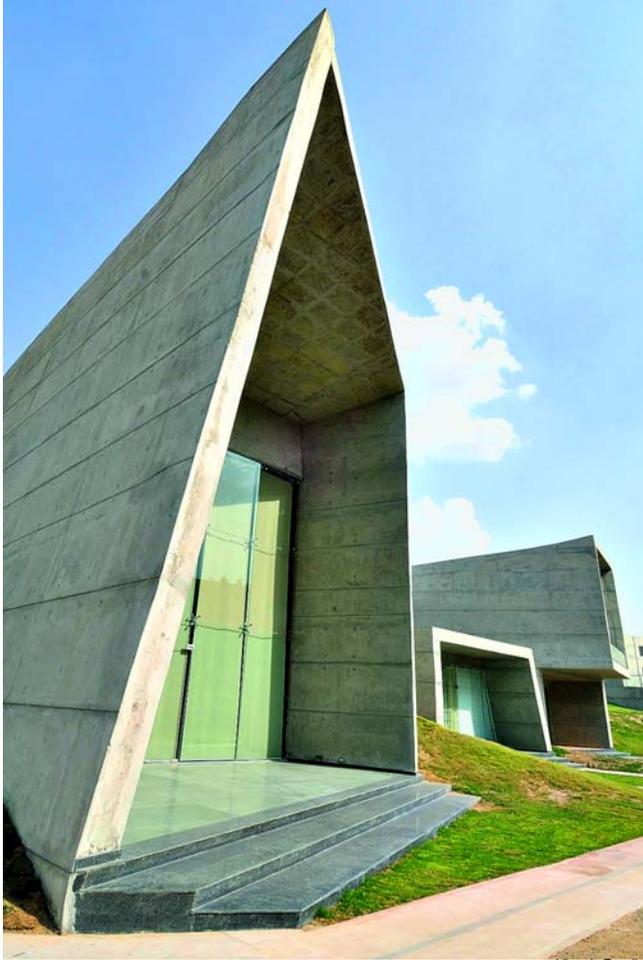
"What is meant by a residential unit is a number of self-contained spaces, as a rule grouped together, in a residential building or other building with living space, which are designed for residential use and allow tenants to run their own household." According to statistics, this is what an apartment is. In 2011 there were 40.47 million in Germany, the average size being 43 square meters per person.

## **Living: the superlative of residing**

Front door. Corridor. Cloakroom. Bathroom. Wash your hands. Living room. A glimpse of the kitchen from the corner of your eye. Sofa. Laugh. Dining table. Dessert. Television, then bed – but first back to the bathroom. Funny how doggedly many concepts of domestic life retain their hold. Certain configurations of rooms repeatedly pop up behind the front door. For a German advertising campaign a large furniture supplier coined the phrase "Are you living yet – or still just residing?". Not bad, after all it suggests that living and residing are one thing. But even better, the superlative of residing would be living. It is strange how readily ideas of public and social concerns and the idea of community are brushed aside from what we imagine living to be. The way we live, now that is a private matter.

## **Apartments have values**

Sharpened pencil in hand, a child sketches a footprint: a carpet, a bed with hot water bottle, a bouquet of flowers overlooking the scene. Front door. Corridor. Cloakroom. Bathroom. Wash your hands. Living room. A glimpse of the kitchen from the corner of your eye. Sofa. Laugh. Dining table. Dessert. Television, then bed - but first back to the bathroom. The care with which the child draws the objects is striking. It even draws the pattern on the carpet. 'Residing' clearly has nothing to do with reduction. Rather, our own apartment conveys our values, things of value, that we cherish as individuals. Which is why the child draws people who mean something in its life. In drawings such as these a specific idea of cohabitation frequently emerges, in the form of a cat, a dog, or Grandma. In drawings such as these, residing is not an aesthetic concept, but rather social context. When one day the dream of a place of your own finally becomes reality, as architects and investors start transcribing deep-rooted desires (materials, surfaces, spatial relationships and views), people are often left out. Planning an apartment is not the real challenge for architects: it's planning a lifestyle that poses difficulties.



Vinesh Gandhi



George Dupin

### Public and private overlap

This kind of task can easily become political, after all in the design of individual space power constellations emerge which are not easily resolved. Even today, for example, a wife, as a typical industrial resident, does not have a room of her own in the footprint. There is a children's room, a living room, a kitchen...but what does that really mean? It has long since been rare for both partners in a family not to be working. Both parents can apply for parental leave, traditional role models are being done away with, but not as far as apartments are concerned. The private sphere remains, and is becoming practical. What exactly is the term 'home office' trying to communicate? Are we living at the office, or working at home? In any case, this certainly poses an enormous challenge, since it questions the living concept of a private space for retreat. The public and private begin to overlap. The way we are living is changing, embraces more, with the time structures we have trained evaporating and social media structuring everyday life. Novels from bygone eras feature upper class salons, where there was no private enclave either: the "bel étage" was the perfect place for a grand reception. A glorious setting for social interaction: a social event, indeed, the center of the known universe. The women withdraw, the men smoke and time ceases to exist. In these surroundings, does one speak of

residing? Things only got really comfortable in the Biedermeier era, with its bourgeois families. This was the age in which the home became a cocoon shielding all of its inhabitants. It became a custom to be overcome.

### Individuality versus custom

Fifteen years ago, who would ever have thought that old industrial spaces would become desirable places to live? That children would be raised, meals would be enjoyed, and relationships cherished where once machines clamored? Open-plan footprints are popular, equated with freedom and independence. A unique style of living, rather than custom is de rigueur. It doesn't always work, even if the inner-city lofts with their kitchen islands and Nespresso machines are selling like hotcakes.

From an architectural point of view, any project whose concept is broad based and longterm can be successful. In these cases, living means much more than the famed four walls; it captures a social context. A live-in studio, an apartment shared by senior citizens, a student dormitory, communal meals, communal exchange. The rigidity of the cocoon is shattered when new forces emerge. Architects suddenly become independent, can propose things out of the ordinary, provided that is that their clients can articulate themselves and are at liberty to make their desires reality.

Individuality: Christian Pottgießer's "Maison L" is characterized by its five towers (top right). Sanja Puri's Indian "Courtyards House" is consistently based on regional circumstances (top left).



Adriano Pecchio



Clarity, reduction and elegance: the renovation of the Tuscan villa Podere Bedono, Vittorio Grassi places emphasis on flowing spaces and diverse materials (above).

### Life in a transparent seed box

The developers who commissioned the Japanese architect Sou Fujimoto with the House NA project envisaged living like nomads. Fujimoto specializes in this type of assignment and consistently questions everything we consider par for the course when it comes to living. When Fujimoto designs something he goes back to his architectural roots. What function does a room serve? What about a wall? Can a space do without either? For this reason, his House NA has no hint of a private space into which to withdraw, and the completely transparent facade calls to mind a seed box. On the inside visitors encounter no heavy furniture whatever. The architecture itself takes on its role, with steps serving as seating and hollows in the wall replacing cupboards. Projections and recesses can serve as balconies or roof terraces. In the entire building there are as good as no functions that are completely written in stone. The inhabitants themselves decide what function the glass cubes should assume. Which makes it possible to change the place you work in throughout the day depending on the position of the sun.

The radically reduced House NA is probably only possible in Tokyo, where domestic comfort has to make do with the smallest of spaces. However, it does not have to be about constantly reinventing domestic life. Sou Fujimoto himself

stresses that "I'm not telling people to throw all their furniture away! I just wanted to show that there are other ways of living."

The Milan architect Vittorio Grassi, who was a long-time partner in Renzo Piano's studio, was commissioned to preserve the 18th century Tuscan villa Podere Bedono, but also bring it into the modern age. He chose high-quality materials - select parquet flooring and stone floor tiling in muted colors. The views over the surrounding olive groves were an integral part of the concept. The result is a luxurious setting that is not showy, but designed for a long-term sustainable future (up to 70% of the energy requirements for the villa and pool are supplied by solar panels and geothermal heating). In a remarkable feat of hand, Grassi succeeds in creating a timeless piece of architecture that is at the same time technologically cutting edge. There is also a Japanese reference. Grassi happily describes the villa by means of a nod to Japanese culture, describing the aesthetics as 'wabi-sabi', in that it treasures elegance in simplicity as opposed to opulent gestures.

**Dr. Wilhelm Klauser** is an architect, urban planner and architecture critic. His new book "Baukultur Verkehr. Orte - Prozesse - Strategien" has just been published by the Federal Foundation of Baukultur. Editors: Michael Braun, Wilhelm Klauser. 256 pages, ParkBooks Zurich.

# Home 2.0 – how several generations can live together in practice

Both our aging society and the collapse of classic family structures speak in favor of the idea of a multiple-generation house. Successful projects combining living together with areas of privacy have been realized on repeated occasions over the past ten years. At the planning stage, architects are a popular kind of arbitrator and moderator, with technical innovations such as home automation becoming increasingly important.

Text **Insa Lüttke**

From an historical perspective, multiple generations living together was once a matter of course, with practicalities playing a far more important role than the romantic notion of an idyllic life in the bosom of one's extended family. Symbolically speaking, when at some point property such as a farm is passed on to an heir, the idea of the younger generation providing living quarters for the older one stands for a process of giving and taking between the generations. When a particular farming estate was made over to the younger generation the older one used to retain a livelihood (e.g., by means of payment in kind), a lifelong right of abode on the estate and various services or regular cash benefits.

In these days of a growing trend towards living alone and independently, the classic family structures are disintegrating to an ever greater extent. It is not only in a work-related situation that flexibility is called for, something that seldom makes it possible for different generations to live together in one place, even if they wish to do so. At the same time, life expectancy is on the increase, offering older people the prospect of embarking on a new and active phase of their lives when they reach retirement age. Whilst this gives some people the opportunity for engaging in voluntary social work, for others - for instance, those with no offspring - this is a

sheer necessity. The desire to choose one's own living situation in a lively environment together with other kindred spirits is growing, independent of age and social status. Here, what people are looking for is seldom that classic kind of apartment sharing with chore rosters, but more often a possibility of living together as a community while maintaining the option of keeping one's distance.

## Scope for a certain lifestyle

It was Franz Sumnitsch, a Viennese architect, who took the first step in this direction when, in close collaboration with its future tenants, his bureau BKK-3 transformed a former coffin factory into a modern condominium - the kind of complex where everything was within easy walking distance. The project, "Miss Sargfabrik", comprised an area of 3,000 square meters which housed around 40 living units. Offering places for communicating and networking with the neighbors such as a library and a common kitchen, the complex is aimed at creating a "social architecture", one in which all generations can feel at home. "What we are doing here is not just building a residential building, but providing scope for a certain lifestyle," Sumnitsch stressed in this magazine's editorial office four years ago. "Many of the residents moved in because

One of the classic multiple-generation projects, "Miss Sargfabrik", initiated by Viennese bureau BKK-3, was opened in 2001 and today represents a pilgrimage site for interested architects (right).





archimage/Meike Hansen

they no longer wanted to live anonymously but rather wanted to spend their lives as part of a community. Single parents, for example, can make very meaningful use of the full range of facilities such as the kindergarten, the swimming pool and the events hall."

#### **The architect as advisory moderator**

Today, "Miss Sargfabrik" is considered a model multiple-generation complex, a regular pilgrimage site for architects from throughout Europe and people interested in living there. The project was very much ahead of its times and is still considered a prime example of a cross-generation concept, for Germany, as well. A similar example: for the past five years young families have been living side-by-side with singles, the disabled and older people in a five-story former school building in Karlshorst, a suburb of Berlin. The tenants' cooperative, SelbstBau e.G., had this brick edifice dating from 1899 with its protected monument status converted into a cross-generation, integrative residential complex using plans by a Berlin bureau, Standort Architekten. The one to three-bedroom apartments are between 55 and 140 square meters in size, 16 of the 25 units are accessible in most respects, five are suitable for wheelchair users, the yard is for common use. For Peter

Weber the core idea behind the project is for people to "be there for one another on a day-to-day basis". As a member of the cooperative's executive committee he coordinated the decision-making process for the residents' group.

Anne Dellgrün is sure that "the people in Berlin got many things right". Above all, groups had to submit a feasible concept, preferably one with social relevance. Dellgrün, a Cologne-based social scientist, advocates the group structure concept of a combination of young and old, sick and healthy, families and singles. She advises groups of residents on devising concepts and developing projects. In her opinion, this kind of mix is a good starting point, particularly when applying to partners such as banks or the real-estate industry. However, she warns people that a well-meaning neighborhood is not enough. For a project to succeed, it is vital that future residents' wishes are taken into account from the planning stage. This is the time when the architect must demonstrate his competences as an advisor, moderator and organizer. This being the case, he must start by determining the different living requirements and, at the end of the day, varying lifestyles, and translate these into plans. For instance, in the form of a "neutral" floor plan, one that allows for different uses of similarly sized rooms or for adapting rooms to varying needs at

The apartments in a multiple-generation project realized in 2011 by Behnisch Architekten in the Hollerstauden district of Ingolstadt are grouped around a central atrium with a glass roof (above and right).



archimage/Meike Hansen

different times of life - in the final analysis, the brief for this kind of project focuses on social issues and competencies. Later, he may also need to be able to sell future residents those less pleasant decisions in order not to endanger the project.

#### **Close relationship with future residents**

Cross-generation projects have their origins in different quarters: groups of interested parties can come together locally ("bottom up"), in such cases the residents are often the owners of their own apartments. But the owners of more and more rental properties are coming to realize the need for communities of residents ("top down"). Dellgrün advises not only groups who want to buy for themselves but also the housing industry on what kind of properties are called for. Here, communal projects can play a major role and create real value added for their surroundings, for instance, if they include plans for a café, a service support point or a daycare center, facilities which impact positively on their environments. This in turn can be an argument for the housing industry to make this kind of convenient, centrally located plot of land available for such projects. In Dellgrün's experience a core group of between around eight and 14 people always comes together to do the groundwork. It takes about

three years to implement a project, from conceptualization until residents move in.

"I see several generations living together as a meaningful approach with regard to occupancy in this residential project," explains Dr. Marie-Therese Krings-Heckemeier, Chair of the Executive Board at empirica AG. This research and advisory institute for the housing and real-estate industry was commissioned to look after a residential project, "St. Leonards Garten", which was realized as part of the ExWoSt (Experimenteller Wohnungs- und Städtebau) project. Getting the future residents of St. Leonards Garten very much involved, it was possible to take a large number of user requests into consideration for the design process from the outset for this new residential project with some 100 residential units and 50 townhouses. It was erected between 2009 and 2012 at a former municipal railway depot in downtown Brunswick.

From the very beginning, events and question sessions got interested parties involved in the process. The city of Brunswick defined the basic design features for the projected buildings and grounds in a design handbook, following a





Julia Knop

Due for completion by 2016, a cooperative residential complex going by the name of "Drei Höfe" is being erected in the Neuhausen district of Munich in the midst of an existing perimeter block development.

"design for all" principle. One successful example of multiple-generation residential building is the "Giovanna" group. This project, executed by Perler and Scheurer Architekten, is fully accessible, from the basement parking garage right into the apartments, apart from the integrated townhouse. It falls 12% below the values stipulated in the current energy-saving directive (ENEV) and was awarded the "2011 quality seal of approval for sustainable apartment construction".

#### **Appropriate and sustainable living for all generations**

In the opinion of Alexander Grünenwald, when talking about multiple-generation living projects, quite apart from energy-related considerations, sustainability should be the byword, in terms of the social aspect, as well. As many as 20 years ago, this architect from Grünenwald + Heyl developed the "Kempten integrated living" project for a municipal subsidized housing company, Sozialbau Kempten: "The development's café still makes for a lively mood in entire sections of the old town; the community room also works outstandingly well." This architect's bureau was also commissioned with planning a multiple-generation residential project to be occupied as of 2011 for a municipal apartment cooperative in Ulm, Ulmer Heimstädte. Based on a German low-energy standard, kfw 55, 35 accessible rental apartments were erected with between one small and three bedrooms, a surface area of

between 50 and 105 square meters, a central community room with a kitchen next to the entrance area, communal open spaces and lawns, a children's playground, bicycle sheds and a basement parking garage. The project received the 2012 initiative prize from Baden-Württemberger Bausparkassen's working party, as well as the latter's special prize "This is how we want to live - suitable for different generations, integrated, sustainable".

Even Germany's third-largest housing company Vivawest Wohnen GmbH has opted for a multiple-generation residential project with its "Johanniskirchgärten" in Essen. Since 2007, modernization measures and new buildings have resulted in some 210 rental apartments, some of them maisonettes and lofts, over a total area of some 30,000 square meters in Altenessen, an established district of Essen. Eleven additional owner-occupied properties are currently at the planning stage. Broad arcades offer the opportunity for chance meetings and a companionable feel. The project has the objective of offering to young and old, families and singles, people with and without disabilities the kind of living space which does not stop at its residents' front doors. The majority of the apartments are accessible. They boast floor-level showers, wider doors and level access to balconies. An integral part of the complex is a meeting place for tenants



Jens Masmann

and the apartment provider's customer center with its concierge. Currently in the process of being implemented is a "generation garden" aimed at providing residents with a communal open space with room for neighborly activities. An eco-friendly rainwater concept makes for a healthy microclimate throughout the entire development.

#### Technical assistance systems

It is meaningful to include technical solutions in the concepts for cross-generation residence projects. An example: the KNX standard has been enhancing comfort and safety within users' own four walls for 20 years now. The associated building automation benefits all generations living together in one location. In addition to the power network, the KNX standard uses low-voltage wiring allowing the individual control elements, sensors and actuators to communicate with one another. It is also possible to activate colored light for orientation purposes in the corridors, the reading lamp in the living room or the kitchen lighting so as to offer residents their "own" customized individual feel-good environments. On the basis of their intuitive and self-explanatory functions in particular, the older generation is rating KNX increasingly positively. Networking an entire living complex via an Internet platform can also impact positively on cross-generation neighborhoods and communities. As part of the federal ExWoSt model program with its focus on "innovations for apartments suitable for families and older people", LUWOGÉ commissioned BauWohnberatung Karlsruhe to devise a living concept for Pflingstweide, a district of Ludwigschafen, that

would be appropriate for all generations. The brief was not only to come up with new living models but also to establish in-house service facilities. With this in mind, in 2008 adaptable, accessible apartments were created amongst the existing stock and a nursing service involved. This means that the social infrastructure includes professional assistance, help with everyday life and a range of caring services available on site for young and old. The community room, a concierge and the networker office plus the Internet platform contribute to getting the residents actively involved as well as promoting communication. [www.pflingstweide.de](http://www.pflingstweide.de)

#### Cross-generation network

So that in times of growing diversification self-determined living can succeed - whether as a family or a single and independent of age - what is required in the first instance is motivation and an exchange of opinions. Accordingly, this year, it was doubtless no coincidence that there was an exhibition going by the title of "Network Living - Architecture for All Generations" at Deutsches Architekturmuseum. This show in Frankfurt highlighted 35 international projects that demonstrated the importance of a cross-generation social network for providing a sense of security. This conditions both a feeling of being an individual and a process of collective consciousness that cannot start early enough.

**Insa Lüdtké** is an architect and freelance journalist. With her consultancy company "Cocon Concept" she specializes in "living in a state of flux". Together with Eckhard Feddersen, Insa Lüdtké has edited a guidebook to the residential models for old age, *Wohnen im Alter* (2009, Birkhäuser).

Making each and every resident feel comfortable in their environment: with technical assistance systems or special meeting places. The "generation garden" is currently being built at "Johanniskirchgärten" in Essen (right)





Livening up the monotony: At K-Star Residence the balconies are offset on every floor. The result is a very unconventional geometry of lines which lends the building its special character (left).

## Cocooning comfort

K-Star Residence is a luxurious residential complex located within eyeshot of Cologne Cathedral. The new ensemble combines small apartments and extensive penthouses and boasts a striking geometric façade that ensures it stands out from the surrounding buildings. In this way, the complex composed by the architects at Cologne's gatermann + schossig and römer partner architektur enters into a vibrant dialog with the extraordinary living situation in downtown Cologne.

Text **Lasse Ole Hempel** Photos **Jens Willebrand**

“Our present focus is city dwellings,” says Bernd Römer with emphasis. For more than 20 years the architect had his own company in Cologne before he teamed up with Stephan Kögeler in 2007 to establish römer partner architektur. Having steered a whole host of projects to success, the firm has built a reputation that far exceeds its home region on the River Rhine. Indeed, in Cologne's Rheinauhafen the pair dreamed up several edifices that catapulted the harbor area to fame as a superb example of modern residential district planning – and not just in Cologne itself. Among their creations are the Wohnwerft residential complex, a modular structure whose unusual façade imbues the banks of the River Rhine with an extraordinary aesthetic, and the modern Pier 15 office block (see Practice Report in puls issue 2/2009).

### **Living in a predominantly commercial environment**

Intriguingly, the architects were able to follow how their current residential project was taking shape from the windows of their own office: Located in the quarter of Kunibertsviertel, K-Star Residence has a prime downtown location, only a stone's throw from Cologne's main train station, opera and cathedral. In its immediate vicinity is the

erstwhile railway headquarters, a classicist building temporarily used by Cologne Art Fair before the start of conversion work. At present the elongated structure is being gutted to enable the construction of new offices behind the unusual façade adorned with columns. The property on which K-Star Residence was erected used to belong to the state. The street name “Altes Ufer” (former embankment) is an indication that not too long ago the River Rhine extended right up to this point, resulting in difficult building terrain, which given its slight downslope was classed as a “hillside plot”. In conjunction with the special urban structure of the surrounding district these preconditions meant that the project was a real challenge for the architects. “The overall location is excellent,” states Stephan Kögeler. “However, the immediate vicinity, which is a well-established commercial area, is quite complicated. We knew very soon that it would not be easy to embed a set of dwellings in the midst of commercial property.” Part of the building looks out on a multi-story parking garage.

Not too far from the complex is the delivery bay for the Marriott Hotel, which is located in the same neighborhood. “This is another reason why we came up with the idea that K-Star



Residence should essentially focus inward and on itself,” the architects explain. “Right from the outset we excluded the possibility of blending the complex with its surroundings. The result is a very individual aesthetic – you could actually describe it as a standalone building.” This explains the slightly defensive air communicated by the façade which seems to function like a cocoon to protect life inside. The seven-story building offers luxurious dwellings even if some of the floor plans are highly economical. The smallest units are just 47 square meters in size, while the epicurean penthouse at the top boasts a generous 300 square meters.

#### **Controlling your apartment via smartphone**

The decidedly geometric aesthetic of the façade, which those involved in the project describe either as a “coat of feathers” or a “crystal”, lends the complex its special character. In the evenings, the aluminum panels take on different hues as they reflect the light of the darkening sky, and when the first apartment lights come on at sundown the façade begins to emit a gentle sparkle. Moreover, the architectural design hinges on the brief that, as far as possible, all units should come with a small balcony. In an effort to avoid monotony

the architects opted to offset balconies and oriel on each floor. The overall result is an expressive façade aesthetic which gains its extraordinary character from the folding style and alternations of balconies and oriel.

There is only one central stairwell with a lift, with seven or eight apartments arranged around it on the lower floors with very deep rooms that give them a loft-like appeal. To guarantee as much natural light as possible, the building has been fitted with floor-to-ceiling windows with aluminum frames. The architects are fond of saying that the building is slightly “technoid” in character, which wonderfully complements the superb technology of the interior. Needless to say, it goes hand in glove with a sophisticated energy concept: The ceilings in K-Star Residence have integrated heating and air-conditioning systems. Originally designed for the commercial sector, the technology has the advantage that it responds more swiftly than underfloor heating.

It was clear from the outset that K-Star Residence was to be home to a mix of temporary and long-term residents. Together with the developer, Lebenstraum Gesellschaft für modernes Wohnen mbH, the architects focused on a target



Love of detail: The handrails are made of oak wood. Each apartment comes complete with the Busch ComfortTouch – enabling residents to set building services individually (top).

clientele consisting of professionals who work in Cologne but may not necessarily call the city their home. In particular the occupants on the lower floors were expected to be managers who would use their apartments only for limited periods each day, which tipped the scales in favor of this system, as it guarantees swift air-conditioning or heating at the touch of a button. As a welcome by-product, there was no need for radiators, allowing more flexibility in interior design. In all residential units functions such as heating, air-conditioning, light and shading can be operated via the ABB/Busch-Jaeger ComfortTouch. Thanks to KNX technology in combination with the relevant interfaces users can even use their smartphones to remote control or program the functions in their apartments. That way it is possible to adjust the lighting or interior sun protection before entering the room.

#### **Boarding concept with concierge and spa**

In an effort to tailor the project even better to the target group's expectations, the developer and the architects signed a management agreement with LH&E Group, a hotel management corporation specialized in the luxury segment. In 2011 the company inaugurated the "Kameha Grand

Bonn", which won the cherished "Hotel of the Year" award in the same year. With K-Star LH&E has introduced a new young designer brand that adapts the successful hotel concept to residential living. The collaboration spawned a system the architects describe as a "boarding principle": Classic hotel services are provided in a luxurious residential setting, including a concierge who assists visitors in the lobby from early morning to late at night. The range of services includes accepting items of clothing for dry-cleaning or calling a taxi or giving advice on the top restaurants in town. The spa area extends behind the stairwell. All owner-occupiers (K-Star Residence only offers condominiums) are free to use these services as they purchase the operating concept along with the apartment. By contrast, the Kameha furnishing concept is only available at a surcharge. The range of interior design options includes ABB/Busch-Jaeger's future linear switch portfolio along with special editions tailored to the K-Star concept.

#### **Wrap-around ring patios**

The apartments on the lower four stories are designed as open-plan units and are between 50 and 60 square meters





View Altes Ufer



Layout Level 6 (Penthouse)

A protective gesture: K-Star Residence is surrounded mainly by commercial enterprises, so the architects elected to forgo blending the complex into the neighborhood fabric, opting for a striking standalone instead (left).

in size. As of the fifth floor the apartments measure as much as 100 square meters and guarantee the much valued view of Cologne Cathedral. From the sixth floor the façade is slightly set back to enable wrap-around ring patios and penthouses with up to 300 square meters of floor space. From here residents can let their gaze wander as far as Hadi Teherani's crane houses at the Rheinauhafen.

"In cities like Frankfurt or Munich, which have large numbers of management consultants and bankers living there, projects such as K-Star Residence are no doubt more of a familiar sight than here in Cologne," explains Michael Müller, Managing Director at Lebenstraum Gesellschaft für modernes Wohnen mbH. "Cologne is somewhat different as a location. The project will yet have to prove its worth." And it did – turning out a huge economic success. The average square meter at K-Star Residence sells at 5,000 euros; builders and architects are delighted that prior to completion all apartments have been sold. As early as in spring 2013 the first residents breathed life into the new complex, with removal vans being unloaded outside and plants and flowers adorning the first balconies. The opening of the planned restaurant on the ground floor will shortly complete the chic new residential haven in the heart of Cologne.

## Project partners

### Project developer

Lebenstraum Gesellschaft für modernes Wohnen mbH

### Architects (consortium)

gatermann + schossig, Cologne  
römer partner architektur, Cologne

### Gross floor area (GFA)

5,712 square meters

### Integrated products from ABB/ Busch-Jaeger

KNX system

KNX operating element Busch-priOn®;  
Busch ComfortTouch; Busch-Welcome® door communication; Switch range future® linear

# Living in courts

With energy-efficient buildings, parameters are often calibrated to make things work. Moreover, if the budget is limited the design runs the risk of invariably assigning aesthetics a backseat. The new Hollerstauden residential quarter in Ingolstadt is an impressive exception.

Text **Franziska Bettac** Photos **Julia Knop**

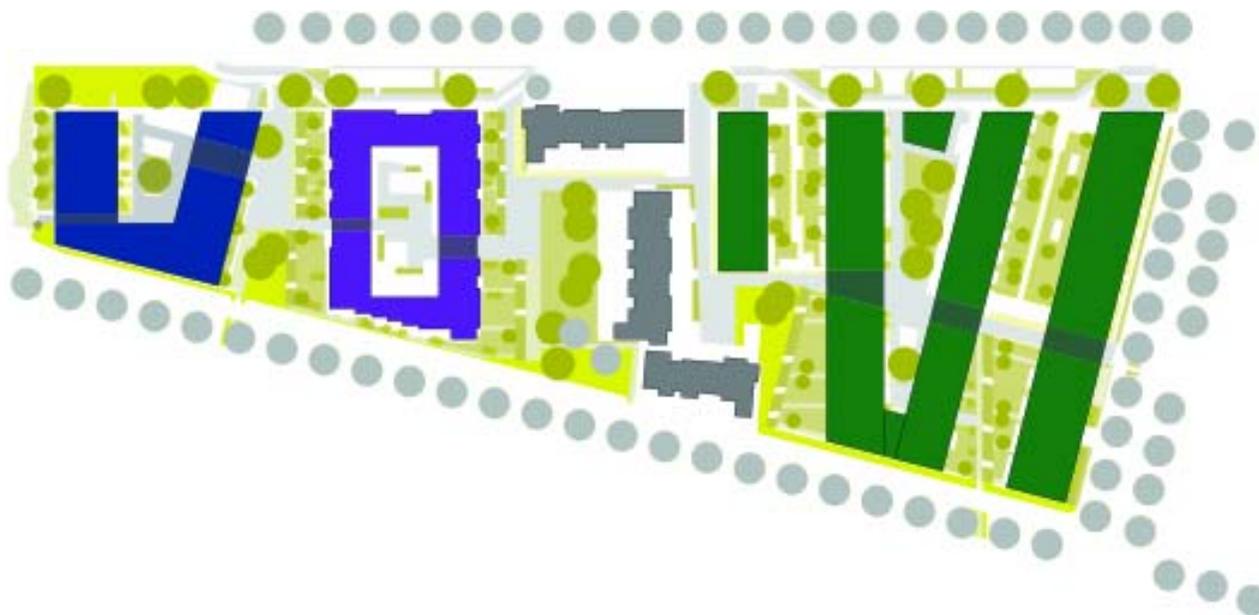
The State of Bavaria tendered for submissions for its "e% - Energieeffizienter Wohnungsbau" pilot project – a scheme that once again seeks to sound out the spread of parameters in energy-efficient architecture. Pilot projects that balance ecological, economical and aesthetic issues are the proud result. Not surprisingly, the Vitruvian Triad of firmitas, utilitas and venustas springs to mind here. The scheme subsidized a total of ten residential developments as part of a research construction project, and monitored the progress achieved. Hollerstauden quarter is one such residential proposal. In line with the requirements stipulated under the e% label, the aim was that energy consumption in the complex be 40-60 percent below the Energy Saving Ordinance EnEV 2009 specifications in force at the start of planning. At the same time, it was imperative that the plans not dramatically overshoot the budget for subsidized new dwellings. Social acceptability and appealing aesthetic likewise played a major role in the new buildings' design – as did the issue of sustainability.

## **A vibrant quarter with landscaped leisure areas**

The construction site on the western periphery of Ingolstadt already featured a residential complex for senior citizens, which was built in the 1990s. The partial development, a







The overall layout (left) shows the U-shaped apartment building by Tobias Brand (blue), the atrium building by Behnisch Architekten (purple) and the tenement blocks with open galleries by bogevischs buero (green). The existing complex from the 1990s can be seen in the center.



The idea is that the common, the playground and the leisure time areas will help ensure that the project is well received in the densely built residential development. The large underground parking garage resulted in ample space that cannot be used by cars (top).

prestigious residential estate designed by Günter Behnisch, formed the point of departure for the new development plan. In 2008, St-Gundekar-Werk, the developer and property owner, held a planning competition, in which the architects at the Munich studio bogevischs buero emerged as the winners. After the site was divided up into three sections, bogevischs buero was awarded the contract for the master plan and construction of the first section; to this end the architects designed a tenement block with open galleries. The runners-up in second and third place were commissioned with the planning of the two other sections in the west. Behnisch Architekten designed an atrium building for multi-generational living, while Ingolstadt's Tobias Brand planned a complex with blocks of mostly duplex apartments around an inner courtyard. A total of 142 residential units were built in a compact aesthetic, without, however, resulting in some faceless large housing estate. On the contrary, the architects used vibrant and intelligent landscaping to create a well-balanced new residential ensemble

with superb quality of life. The lavishly designed park area, which partly features a new topography above the underground parking garage, provides public recreation zones and slightly elevated private areas in the new quarter that nicely complement the estate's architectural proportions.

### **Three different design approaches**

The three sections, which show considerable differences in building style and residential structure, will be monitored and assessed for some time as part of the pilot project. While the apartments in the building with the open galleries are prefabricated wooden structures complete with private patios and shared courtyards, the atrium building designed in wood and concrete offers a large communal zone with a covered atrium garden. The focus here was on catering to the needs of a multi-generational range of tenants. Finally, in the third section of the development, constructed around an inner courtyard, the gardens and patios are more concealed from public view.

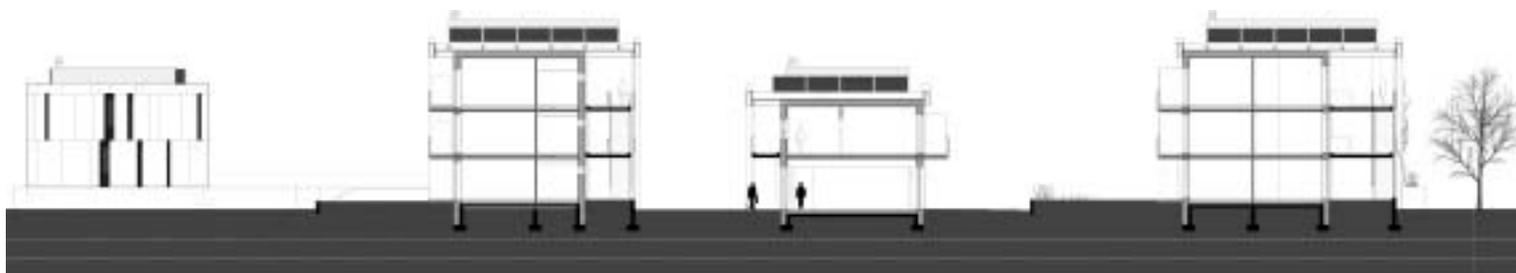


### Solar system with buffer tank

Experts were very impressed with bogevischs buero's building design featuring open galleries. The latter are laid out such that they form two parallel and one wedge-shaped courtyard. Positioned in the center, the triangular courtyard is fitted with benches, tables and a playground, and serves as a communal area. There are 81 residential units, the majority of which were financed by public funding; these are set in four blocks that are broken up by a covered walkway running transversely to them. The compact, highly insulated wooden structures, whose heating requirement per annum is less than 20 kWh/m<sup>2</sup>, extend from a gallery made of exposed concrete and galvanized metal. The low energy consumption levels were achieved thanks to a very careful design which connects the blocks to the compact outdoor gallery without a thermal bridge being formed. The apartments in the east-west structures have barrier-free access and two to four rooms; the one block that extends over two stories features several duplexes. Each apartment has a patio or balcony. The

cuboid apartment blocks have larch-wood paneling stained brown; just like the fair-faced concrete gallery in front of the building they are embellished on the sides with timber slats of differing widths, which creates visual coherence and unity. The residential blocks are framed starting on the short south fronts across the roof and on to the north side by a band of gray fiber cement, from the top of which the solar panels protrude like small sails. Two steel tanks, each with a 250,000 liter capacity, were lowered into the buildings from above by heavy-duty cranes. Running the height of the building, these buffer tanks store the warm water heated by the solar system. The heat is distributed to the apartments via a grid. Small heat exchangers supply the required volumes of hot water for heating and consumption. The remaining heat required is covered by district heating. The requirements in the Hollerstauden apartment complex are so low among things owing to a controlled exchange of ambient air - the relevant ventilation technology is fitted in a weatherproof unit in the center of the roof.

The vibrant design of the open galleries in the residential development creates areas for communication, while still leaving enough space for bicycles, flowerboxes, pushchairs and strollers. (top).



Overall section



Section ground floor



View detail of facade

### Well-balanced sustainability concept

Even if the total building cost of the Ingolstadt apartments slightly exceeds the average for the construction of welfare housing, the Hollerstauden residential quarter nonetheless comes up with a well-conceived balance between HVAC, construction and costs. Indeed the pilot scheme may – and indeed should – set the trend in welfare housing construction. During erection, the planners kept an eye on energy balance and the overall life cycle of the building, ranging from a sustainable design to demolition and disposal - factors that should always be taken into account when focusing on "sustainability".

In January 2013 the architects at bogevischs buero won the European architecture prize Energie + Architektur co-hosted by the German Architectural Association (BDA) and the Central Association of Sanitation Heating and Air-Conditioning (ZSHK) for the project of tenement block with open galleries – proof that the holistic and yet well-considered professional planning is on the right track.

## Project partners

### Client

St. Gundekar-Werk Eichstätt, Schwabach

### Architect

bogevischs buero, Munich

### Energy concept

TB Stampfer, Salzburg

### Integrated products by ABB/Busch-Jaeger

Switch range Reflex SI



Sou Fujimoto architects

# Home of the Future

A vacation home designed like a climbing frame, a patchwork-look Wilhelminian villa and an open pyramid for New York – residential buildings which steered clear of traditional patterns and represent an expression of changes in society and new standards.

## **Sou Fujimoto: Solo Houses – Geometric Forest, Cretas, Spain**

Transparency and the creation of continuous communicative spaces are the specialism of Japanese architect Sou Fujimoto, who has been running his firm Sou Fujimoto Architects in Tokyo since 2000 and was recently commissioned with the design of the next Serpentine Gallery pavilion in London. His “Geometric Forest” vacation home is his first residential structure project in Europe and, like the all-glass “House NA” domicile in Tokyo, which was completed in 2010, fully reflects Fujimoto’s passion for a highly flexible form of living in which, like in a tree, it is possible to jump from one area to another. “Geometric Forest” almost does without walls completely. Only in the inner core are the few opaque rooms such as bedroom and bathroom concealed. Instead of a facade there is a three-dimensional, archaic looking latticework made of untreated timber. A spacious terrace marks the point of transition from living space to the surrounding natural setting and affords a view of “Spanish Tuscany”. A fresh breeze circulates permanently through the open structure, the structural elements providing valuable shade. The architecture enthusiast Christian Bourdai, who in the south of the Spanish province Aragon gives several international architects an opportunity to develop pretty much freely, paved the way for the project. The love of experimenting is curbed only by a uniform cost limit, which is meant to prove that good contemporary architecture is possible at a sensible price. The ten vacation homes, which will be highly individual, can be bought or rented.

**BIG-Bjarke Ingels Group: West 57th, New York, USA**

Even in New York this building by the Danish group of architects is certainly going to attract attention. Located directly on the Hudson River on Manhattan's 57th Street, the spectacular hybrid combines the compactness of an atrium building with the imposing nature of a skyscraper, thereby allowing American and European building culture to meld. Depending on the viewer's vantage point, the building looks like an opened pyramid with a green interior or a wedge-shaped glass tower rearing skywards. Of the four corners of the edifice only one extends far towards the sky. The ensuing incline forges a link between the flat surrounding buildings to the south and the high residential towers to the west and north.

The building is intended to accommodate different-size apartments. Cultural and shopping facilities are envisaged on the bottom two floors. Opening up the atrium in the direction of the Hudson River enables natural light to penetrate deep into the complex, while the adjacent greenery of the Hudson River Park corresponds with the open section cut into the building. Though passers-by have a view of this interior courtyard from the outside, use of the calm zone is reserved for tenants only. Also striking is the irregular perforation of the facade, which is attributable to the individually shaped balconies, all of which face south. Geometric patterns define the footprints and are also clearly visible on the facade. The tapering projecting windows in each case face those of the neighboring apartment and are intended to facilitate communication between the tenants overall.





Henning Larsen Architects

**Henning Larsen Architects: Villas in the Sky, Riyadh, Saudi Arabia**

Henning Larsen Architects are also joining the ranks of European architects designing striking landmarks in the Gulf region. The “Villas in the Sky” residential tower is destined to become the new iconic landmark in Riyadh’s King Abdullah Financial District. The distinctive building will tower up over 34 stories and be available for both private and commercial use. In a transition zone located close to a public plaza the businesses on the lowest three floors are accessed via pedestrian bridges known as “skywalks”, which provide a link to the surrounding buildings. A further 14 stories are intended for use as office space, while the top 12 floors will house a total of 22 residential units. A straightforward square footprint forms the base of the tower. In the top section this floor area shifts alternately to two sides, causing the tower to appear to spiral skywards. The specially structured facade features integrated protection from the sun: Viewed as a cross-section, the outer sheath forms a zigzag, whose upward pointing elements are covered with light panels for shading purposes. Those facing down have glass, for an unrestricted outward view. The eccentric facade is intended to help reduce the building’s energy consumption. Ultimately the architects are striving for LEED Certification for “Villas in the Sky”.



© estudio abra/O3 Arch

**O3 Architekten: Living on “Innsbrucker Ring”, Munich**

By means of specific new buildings and redevelopment projects, several companies are attempting to create new, affordable living space in big cities and thus to counteract the current spiraling prices. The housing company Gewofag staged a competition to create a residential quarter in the Munich district of Berg am Laim. The brief also included reducing the noise level caused by the large amounts of traffic on the busy “Innsbrucker Ring” through compact structures. The young local firm O3 Architekten won over the jury with its design featuring a five to eight-story block, bent in several places, which the architects positioned on the edge of the site. This produces a plaza, which preserves the valuable, mature trees. A second building sheath takes the noise protection aspect into consideration. On the inside, a building reminiscent of a tower marks the visual anchor point for the overarching facilities including retail outlets, a crèche, and a district garage. The sliding perforated sheet metal elements, which the inhabitants can vary individually and which define the appearance of the facade, deserve special attention.

### Werner Aisslinger: Home of the Future, Berlin

Werner Aisslinger's "Loftcube" mobile residential unit has stood in the garden of the small, exquisite Berlin exhibition institution "Haus am Waldsee" since 2007. This spring the Berlin designer had the honor of transforming the main building into a "Home of the Future". To this end he cloaked the facade of the Wilhelminian villa in a patchwork woolen material, thus relieving the building of its historical context. In front of it he parked a 1970s sports car cloaked in the same material, thereby successfully parodying the bourgeois status mantra "my home, my car...".

Using examples of furniture and various objects, on two levels on the inside Aisslinger addresses the question of how we will live in the future. For him, the disbanding of the traditional family structure and the increase in the number of patchwork families spells decisive changes with regard to how we live. Aisslinger presents modular construction systems as storage space, a kitchen laboratory, and relaxation stations, as well as regenerative furniture. Biological structures and sustainability have always played a major role in the designer's work. Aisslinger calls his approach, which strives for a symbiosis of innovative engineering with nature, "upcycling". For the cantilever Hemp Chair, for example, which is on display in the exhibition, he used a totally degradable compost material. Elsewhere he uses bathroom vapor to water plants. The exhibition finishes on June 9.

Mirjam Fruscelle, Danielle Manducio, Bernd Borchardt



# “If necessary we ignore all the constraints”

Berhard and Stefan Marte grew up in the Vorarlberg region of Austria and learned about the subtleties of architecture from an early age. As architects they focus on concrete, Corten steel and timber. Their buildings are uncompromising, but never appear out of place. pulse talked to Marte. Marte Architekten about originality and the special dynamism of the creative process.

Interview **Lasse Ole Hempel** Photos **Anne Gabriel-Jürgens** and **Marc Lins**

**Mr. Marte, at the start of the year the “Mädchenturm” (girls’ tower), an expansion to your own home, received a great deal of praise from experts. The project has also won a prize. Were you ultimately surprised by this success?**

Yes, we were a bit surprised. Unlike other projects, which are fairly likely to interest a broader public, this one is about finding a pragmatic solution for my family’s living requirements. As you know we completed our house at the turn of the millennium, and it received international recognition. And I lived there quite comfortably with my family for several years. But we now have five daughters, and this made an extension inevitable.

**Experts have repeatedly praised the fact that the girls’ tower is an independent element, which can be used autonomously, yet is attached to the main house.**

That is one of the ingenious things about the project. I found it difficult to come up with any sort of expansion for the house, which was only finished a few years ago. Especially as the house was self-contained and complete in itself. Given these facts it was quite natural that the extension should have an independent character. After all, if we were to add a further unit to the existing house then it

ought to do more than just add three or four rooms for the girls; it should be something autonomous, a second residential unit, which can be very useful in whatever form for the upcoming generations. Regardless of whether one of our daughters wants to live in the ensemble alone or two or three live together in close proximity. We now have a number of options.

**Did you enjoy being your own client for once?**

I found it absolutely awful being my own client the first time round with the house. As an architect you continue to develop, but the house that you yourself designed and enter every day remains in the status quo of the year XY. That made every decision for me absolute hell. What happened with the first house was that we left it so late to hand over the plans that the site foreman rang up and threatened to do the formwork arrangement himself. Our houses are always our children, our babies. A lot of passion goes into them.

**Did you gain important new insights while realizing the girls’ tower?**

Of course. Today, the girls’ tower stands there like a Corten

The Rapunzel motif in Vorarlberg: the large windows of the girls’ tower face the main house. The three rooms for the girls stacked above each other can also be used as an autonomous living unit (right).





Marc Lins

steel sculpture. We knew from the start that we wanted a sculptural and homogeneous element. And that was ultimately only possible with Corten steel, and we implemented the model on an almost 1:1 scale. Once again it proved to be the case that the first idea was the right one. Because of the expense we initially looked for alternatives to Corten steel, but this is the only material that can really deliver everything we wanted.

**A material high up on your list of favorites?**

Corten steel withstands all kinds of weather and can essentially be used anywhere. We used it for the tower and the incisions in the sides. The courtyard is also realized in Corten steel. Even flaps and small elements – whether rigid or swiveling ones – could be executed with great precision and installed highly accurately. This slenderness of the overall construction could only be achieved using Corten steel. It would not have worked with wood, and we could not have realized many of the details if we'd opted for concrete.

**Is it possible to say your architecture is characterized by a rugged, robust and monolithic shell contrasting with gentle, cozy interiors?**

Wherever possible we work with natural and untreated materials. Which is why we like concrete and steel for the

outdoor areas, or occasionally timber. However, concrete has to be our absolute favorite, because you can create large compositions for which you don't have to plan with truss after truss. And inside we then use a soft, wooden shell. Our favorite combination is exposed concrete outside and birch inside. What makes birch such a good choice is the sense of well-being it exudes, but its softness means it also has its limits.

**Was residential architecture your favorite discipline from the start?**

As Vorarlberg is a small region with a fairly low population density you don't get a huge number of construction projects. The advantage of this for a young architect is that you start by designing houses because there is a market for them. But there is also a considerable appreciation here for architecture that has developed over the years.

**But the Vorarlberg region also stands for high-tech and a high quality of life.**

Absolutely. We have very well trained craftsmen and high-class industrial production. But if you compare it with the international cities nearby like Munich, Milan and Zurich, you find everything here on a smaller scale. In recent years we positioned ourselves successfully via the competition

Rugged charm: Thanks to its skin of Corten steel the tower appears both sculptural and homogenous. Thanks to its position it lends the Marte family home a new character and creates an intimate courtyard (top).

platform in Austria. Naturally, we are also very interested in competitions in Germany.

**Yes, last year your design won the competition for the Berlin museum of the Flight, Expulsion and Reconciliation Foundation.**

Yes, we were thrilled about that. But we don't take part in such competitions because of their international scope, but because we find the projects so exciting. We hope that the Berlin museum will appeal to people and will open the door for us to realize similar projects in Europe.

**How does sharing an office with your brother Bernhard work out?**

We both move in the same direction, and are in agreement as regards our aesthetic objectives, but we never agree about how to achieve our goals. When we start projects we always approach them in different ways.

**Yet you trained together for years.**

Yes, before studying we both did a five-year course at an advanced technical college. We trained there to become straightforward, soulless structural engineers. Basically that training equipped us for the construction industry. But we hadn't learned a single thing about designing. Unlike those that came from grammar school to learn at university, we went there to forget and let go of learning. And to be naïve and open for everything when it came to design. This dual training ultimately brings us many advantages. When we embark on work we ignore all the constraints so as to leave space for ideas and innovations. Though we remain aware of the overall framework, we tend when necessary to ignore it. Our approach is as naïve and open as possible. Afterwards, operating as engineers we are able to realize everything.

**Two sons who became structural engineers almost simultaneously. Is there a traditional affinity to building in your family?**

Our father fitted wooden floors and had his own firm that modernized old buildings. And he was not too thrilled about our studying architecture; he would have preferred us to carry on his business. But it did mean we were always close to woodworking and craftsmanship, and spent our childhoods and early youth on building sites. Spending time on building sites means we're familiar with all the problems that can occur in construction.

**Aside from your great respect for quality craftsmanship, the disputes you and your brother had also seem to have been key to your success.**



Anne Gabriel-Jürgens

Bernhard and Stefan Marte not only both studied Architecture at the University of Innsbruck but have since 1993 also worked together in their own office Marte.Marte Architekten. With 15 employees they reside in the "Rheintalhaus" of their childhood in Weiler, Austria. To date, residential buildings have been their favorite projects. Despite having a strong sense of attachment to their home region of Vorarlberg, they succeeded in winning a competition in Germany for the new museum of the Flight, Expulsion and Reconciliation Foundation. For the site not far from the Anhalter train station in Berlin Marte.Marte Architekten conceived a two-story building that will house the permanent exhibition (bottom).



Marte.Marte Architekten



Marc Lins

In recent years you could say that the most exciting concepts were the product of misunderstandings between Bernhard and myself. When we get stuck on a design we talk and discuss things with one another. Then one of us has an idea, and the other maybe says that he could well imagine it. Then we start drawing again, and what often happens is that though we think we've agreed on something, later it emerges that we both understood it completely differently.

**Can you give an example concerning the evolution of the girls' tower to illustrate what you mean?**

The first existing house is dominated by two main levels. And the building is adapted to the topography and its location on a slope. Which is why my original idea was that if we have to build an extension for the girls then it should be spacious and on a single level – like a glasshouse in a park, for example, something totally downbeat, loft-like, which is perched above the landscape. But that was simply not feasible at all. So we had to let go of the idea of a spacious level and think laterally. For a while we envisaged a “Hobbit village”: several cubes in the meadow that are connected via a set of underground tunnels. By simply taking

everything on board, regardless of whether it was sensible or not, we arrived (via approaches that verged on the absurd) at the idea of four cubes standing in a row next to the house. Three of the cubes got omitted, and one tall cube remained, which then morphed into the tower.

**And thanks to the extension you also get an attractive courtyard into the bargain.**

It was possible to see in the model that the constellation of volumes harmonized and was consistent. The central axis of the tower is aligned exactly with the front axis of the existing house. That has less to do with the golden section or the like, rather it became clear through a series of coincidences and after many ideas that the tower is ideally positioned. When we then started with the shell and the courtyard was conceptually formulated, but the tower was missing, you could feel a real gap at this place. The courtyard situation could be intuited but it only became specific when the tower came, which was three wooden boxes stacked on top of one another. In the end I said to myself: Hallelujah, now it's got that certain something. You can hear the angels singing.

Sensible choice of material: Marte.Marte Architekten had the outer shell of the shelter in Laterns Valley completed in 2011 made of injection-molded concrete (right). Inside, untreated concrete surfaces and solid oak make for a fascinating material composition (above).



# Brick

Materials are the soul of architecture. They lend character to buildings and atmosphere to rooms. But what do architects think of classic materials today? *pulse* sought their opinion.

Answers from **LRO Lederer Ragnarsdóttir Oei, Stuttgart**

**To what extent was your idea of creating Kunstmuseum Ravensburg as a building that you notice "at second glance" linked to brick as a material?**

We are familiar with brick from the fabric of the historical city and it thus blends in perfectly with the surroundings. Only on second glance do you notice that Kunstmuseum Ravensburg is a building that is a new design. Many small bricks create a large whole. That sense of scale forges a strong link to the city.

**Is the material therefore very suitable for timeless architecture?**

As a material, brick possess superb qualities. It is tactile, durable, easy to care for, robust and economic. Moreover, it does not reflect some fashionable trend, meaning that in it tradition and progress meld almost as a matter of course. A conscious use of the grouts not only enables you to address the location with great precision, but also gives the brick masonry an aesthetic impact of its own.

**Why did you favor recycled bricks for Ravensburg?**

With a view to sustainability, it bears thinking about reusing materials instead of constantly producing new things. Why not use materials for construction purposes that have proved their worth over 100 or 200 years and that will remain durable for at least twice as long.

**What potential is there for brick as a construction material?**

Given its sense of size, brick is a material that is commensurate with the human scale. In this way, the practical little modules give birth to a wall, a house or even an entire city.







## Busch-Watchdog MasterLINE – technical innovation in consistently reduced design by Hadi Teherani

As follow-on to the innovative Busch-iceLight switch solution, ABB/Busch-Jaeger now presents a new product developed in cooperation with architect and designer Hadi Teherani. Once again Teherani, who also worked as fashion designer during his first years as architect, has demonstrated his holistic approach and sense of elegance. When you make the "human senses the essential criterion of innovative space", Teherani said in an interview with *pulse* magazine in 2011, the architectural aspirations become "more comprehensive" and also "include design". Teherani's intention is to unite architecture and design into a coherent synthesis. As the creative head of his design team, the "Hadi Teherani AG", he has since 2003 successfully designed office furniture, sanitary objects and floor coverings.

### **Timeless, modern design**

The movement detectors of the Busch-Watchdog MasterLINE range designed by Teherani demonstrate the harmonious interaction between architecture and safety – as well as the successful reduction to only the essential. In the development of the Busch-Watchdog MasterLINE range, Teherani succeeded in creating a timeless, modern design. The flat body of the new movement detectors have a discreet and pleasantly downsized appearance. To match the respective façade, the devices are available in white, brown, anthracite and silver metallic. The structured surface of the lens is semi-transparent - for perfect harmony with every type of material and surface. The model range has been adapted by ABB/Busch-Jaeger to meet the most varied requirements.

### High-quality detection system

Quality of life needs safety – whether in a private home or in the commercial sector. The Busch-Watchdog movement detectors switch on the light, show the way and care for safety in interior or exterior areas. Their high-quality detection system ensures uninterrupted surveillance in all areas. Also your presence in the home can be simulated with the automatic activation and deactivation of the lights. Functions such as heating and air-conditioning can be intelligently and reliably integrated in the control.

### Precise reaction

Busch-Watchdog 70 and Busch-Watchdog 110 MasterLINE are flat movement detectors for the wall. Their visually discreet appearance makes them ideally suited for smaller areas – such as in terraced houses.

The Busch-Watchdog 70 MasterLINE has a narrow detection angle of 70 degrees, twelve meters to the front and four meters to each side. This area can be reduced by means of the mechanical adjustment of the sensors. Precise reaction is also guaranteed during a frontal approach. The integrated near-field detection allows the lights to be activated also when exiting the door. The Busch-Watchdog 110 MasterLINE also offers extras such as operation via remote control. This allows functions such as continuous off or presence simulation to be easily and conveniently activated.

### The disc-shaped Busch-Watchdogs 220/280

The MasterLINE devices distinguish themselves with their uninterrupted detection – 16 meters to all sides. The detection angle amounts to 220 degrees, in the larger version 280 degrees. Different versions are available for individual requirements – with or without KNX. All models can be remote controlled. The brightness switching threshold can be adjusted via the remote control.

### Easy to install on uneven surfaces

With its clear design the new Busch-Watchdog 220 MasterLINE is the perfect choice also for high-quality architecture. With its adjustable element the wall installation box can also be mounted on uneven surfaces without any problem. Also new is the additional theft protection, which prevents the device from being directly dismantled. Previous Busch-Watchdog models are easy to replace with the new Busch-Watchdog 220 MasterLINE models since the mounting holes are compatible. By means of a sensor the KNX versions of the new range are now also able to measure the temperature – for increased comfort and energy efficiency.



Everything within view: The Busch-Watchdog 220/280 MasterLINE is a movement detector with an exceptionally wide detection range and an excellent choice also for high-quality architecture (Top). The Busch-Watchdog 70/110 MasterLINE with its reduced detection range is ideally suited for use in terraced houses (Centre). Four detection levels provide precise detection even at a frontal approach. Many functions such as continuous light or presence simulation can be conveniently operated via a remote control (Bottom).



# How many residential units are found in the building with open galleries in the Hollerstauden district?

*pulse asks a competition question in every new issue. The winners each receive a book. Please email your answer to [pulse@de.abb.com](mailto:pulse@de.abb.com)*

# Globetrotting for ABB/Busch-Jaeger

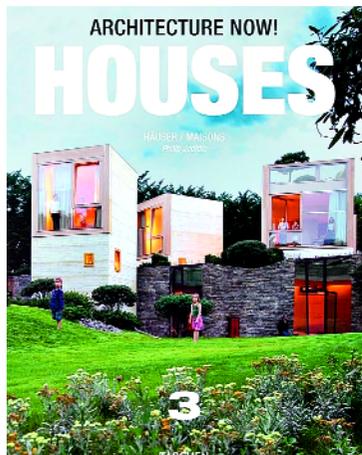
ABB/Busch-Jaeger is stepping up its communication with architects and designers.

Katrin Förster (photo) has been flitting around the globe since the beginning of 2013 as International Key Account Manager for ABB/Busch-Jaeger working on developing and intensifying the interfaces



between the architecture scene and ABB/Busch-Jaeger. In September the communication professional will be on hand at "100 % design" in London. In October she'll be visiting first the World Architecture Festival in Singapore and then LEAF International (Oct. 16 - 18) in Berlin. Among other things, this international meeting of leading global architects, companies and design professionals will see the bestowal of the LEAF Interior Design Awards. Another important date in Katrin Förster's diary is the major hotel trade fair SLEEP (Nov. 20 - 21 in London). Reports on these and other activities where ABB/Busch-Jaeger comes into direct contact with architects will follow in the next issue of pulse.

With her cosmopolitan background Katrin Förster, born in Münster, is predestined for her new role. Following a hotel management traineeship at the famous Brenners Park Hotel in Baden-Baden, she studied Business Administration. She lived and worked for a year in the USA, and has also spent time in Paris and Rio de Janeiro. Most recently she was sales manager for an international security company. Katrin Förster is our competent international contact person for architects and designers. Please feel free to mail her at [katrin.foerster@de.abb.com](mailto:katrin.foerster@de.abb.com)



## The prizes:

All correct answers to the competition question (left) will be put into a hat, from which ABB/Busch-Jaeger will draw two winners. The prizes are a copy of **Architecture Now! Houses. Vol. 3**, Taschen Verlag, and **Deutsches Architektur Jahrbuch 2013/14**, Prestel Verlag. Entry deadline: September 2, 2013. The winners of the last competition are Horst Fritsche from Lammersheim and Jürgen Welbring from Königswinter.

## Preview pulse 3/2013:

### Office and administration

Trend researchers are convinced: Communication will have a pivotal role in the working world of the future. Cue architectural ideas.



## Imprint

### pulse

Movements in architecture

### Editor:

ABB/Busch-Jaeger Elektro GmbH  
Freisenbergstr. 2  
D-58513 Lüdenscheid  
[www.busch-jaeger.de](http://www.busch-jaeger.de)

### Publisher:

Gesellschaft für Knowhow-Transfer  
in Architektur und Bauwesen mbH  
70771 Leinfelden-Echterdingen  
[www.gkt-publishing.de](http://www.gkt-publishing.de)

### Busch-Jaeger editorial team:

Dieter Lautz, Tobias Schlitzer, Wolfgang Schallenberg, Christiane Schulte, Mirko Simon

### Gesellschaft für Knowhow-Transfer Editors:

Lasse Ole Hempel, Marina Schiemenz

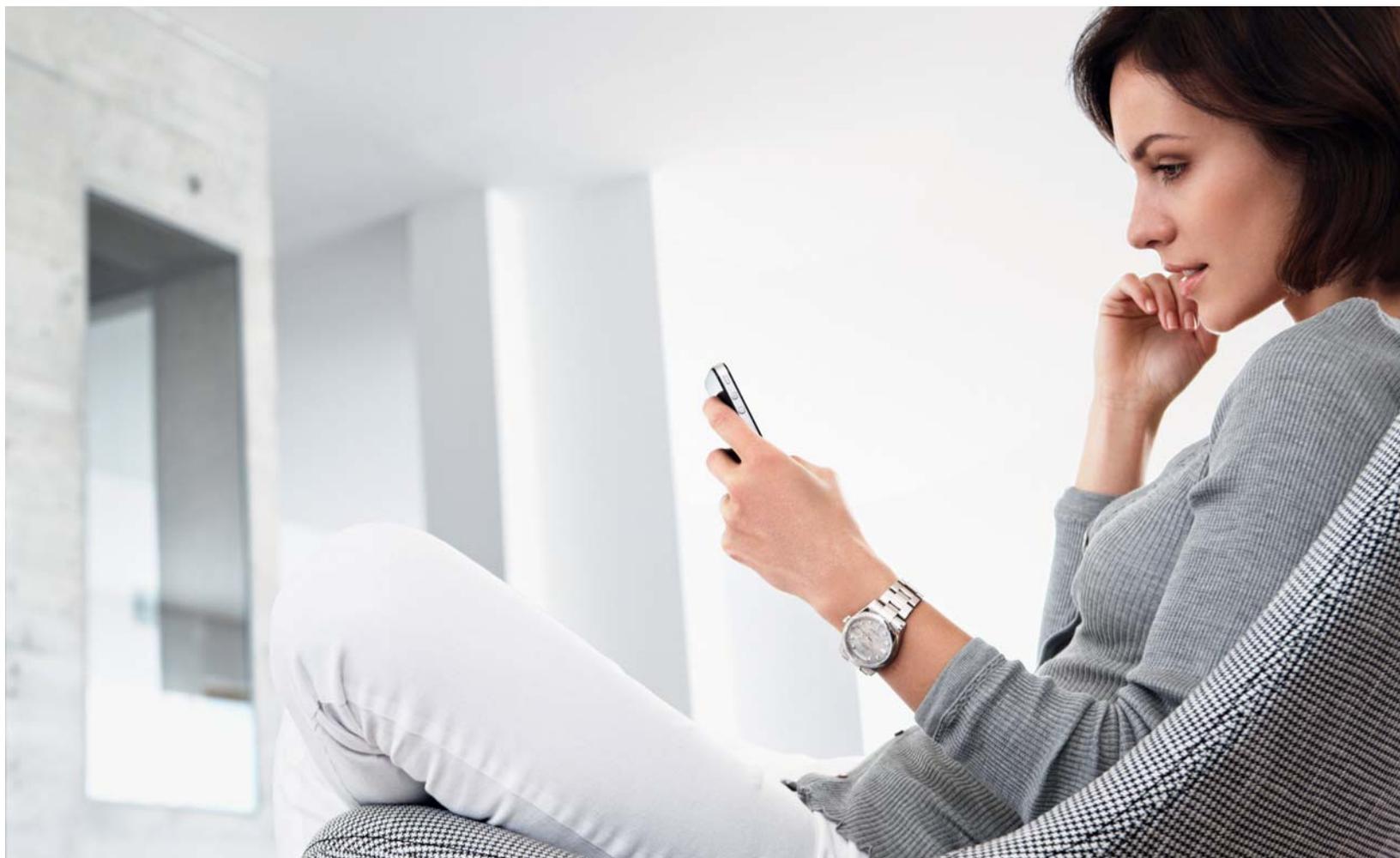
### Translation:

Dr. Jeremy Gaines, Frankfurt/Main

Printed in Germany – Imprimé en Allemagne

© by ABB/Busch-Jaeger

All rights reserved. In particular the rights of circulation, reproduction of text and pictures, translation into foreign languages or other reproduction of any kind be it by means of photocopy, microfilm, radio or TV programs for all published contributions including all illustrations are reserved. Subject to changes and errors.



A unique place. For two.  
SCHUKO® / USB socket outlet.



SCHUKO® / USB socket outlet. The combination of proven flush-mounted SCHUKO® socket outlet and USB power adapter. With Busch-Jaeger patent. For smartphones, tablets, cameras and MP3 players. Re-experience comfort at [www.BUSCH-JAEGER.com](http://www.BUSCH-JAEGER.com)

**Busch-Jaeger Elektro GmbH**  
Central sales service:  
Phone: +49 2351 956-1600  
Fax: +49 2351 956-1700  
E-mail: [info.bje@de.abb.com](mailto:info.bje@de.abb.com)

Power and productivity  
for a better world™ **ABB**