

pulse

MOVEMENTS IN ARCHITECTURE

01 | 2011

Shopping Mall in a state of change

by Atelier Plötzl

Urban revitalization –
interview with Hadi Teherani

The future of shopping

Networking and energy optimization
at the Westside shopping complex

ABB



Since the modernization of the Glatt Center in Zurich, Switzerland, designing shopping malls has become a core competence for Andreas Ramseier.

To the point: Modern shopping worlds

pulse in conversation with Andreas Ramseier, Ramseier Associates

Would you say that for a long time architects failed to recognize the opportunities inherent in designing shopping malls?

Well, architects are snobs in a way, and it sounds really brilliant when you say you are presently working, for example, on the design for a fascinating museum. For a long time, shopping malls were looked down on as inferior projects. Then along came Daniel Liebeskind, who set about designing Westside in Berne, Switzerland, and suddenly the architects were all thinking: "Wow, just look at the opportunities such complexes offer us! You can also be very creative with a shopping mall."

Looking to the future: Consumers are changing. How do you think what is expected of a shopping mall will also change?

Things are developing in two directions: Firstly, there is the Asian model – very high quality malls with excellent materials. Then there are the malls which are easy to alter and are inexpensive to build. An example of the latter would be the shopping mall we developed at the AFG Arena in St. Gallen. With just a few alternations – say a new floor – you can create a totally different setting.

Might the future lie in flexibility?

Yes, previously stores had a lifespan of 12 years, then it was ten, now it is just six. If a mall is built smartly and intelligently you can respond quickly and alter it.

For a while shopping malls moved out of the city centers and to the outskirts, but now architects are busy designing malls for downtown settings.

Malls are returning to the city, because they can offer considerable benefits here. For instance, having an adjoining car park or a nursery can be very attractive for young families, say, and provide security.

Is sustainable building a realistic goal given the energy requirements of a large shopping mall?

Today, you can build a shopping center in an extremely sustainable manner. First of all you have a closed building shell and no windows, which means that you can achieve first-class insulation values around the building. Using LED technology you can keep the energy consumption for lighting low, and simultaneously you can install heat recovery systems. As such, if you build a new center or radically modernize an existing one it can certainly be very energy efficient.

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Urban entertainment: At the Beijing shopping mall "Mosai", customers glide between the levels on reflective escalators. Keiichiro Sako upgraded a former abandoned construction site with an exciting new shopping mall.

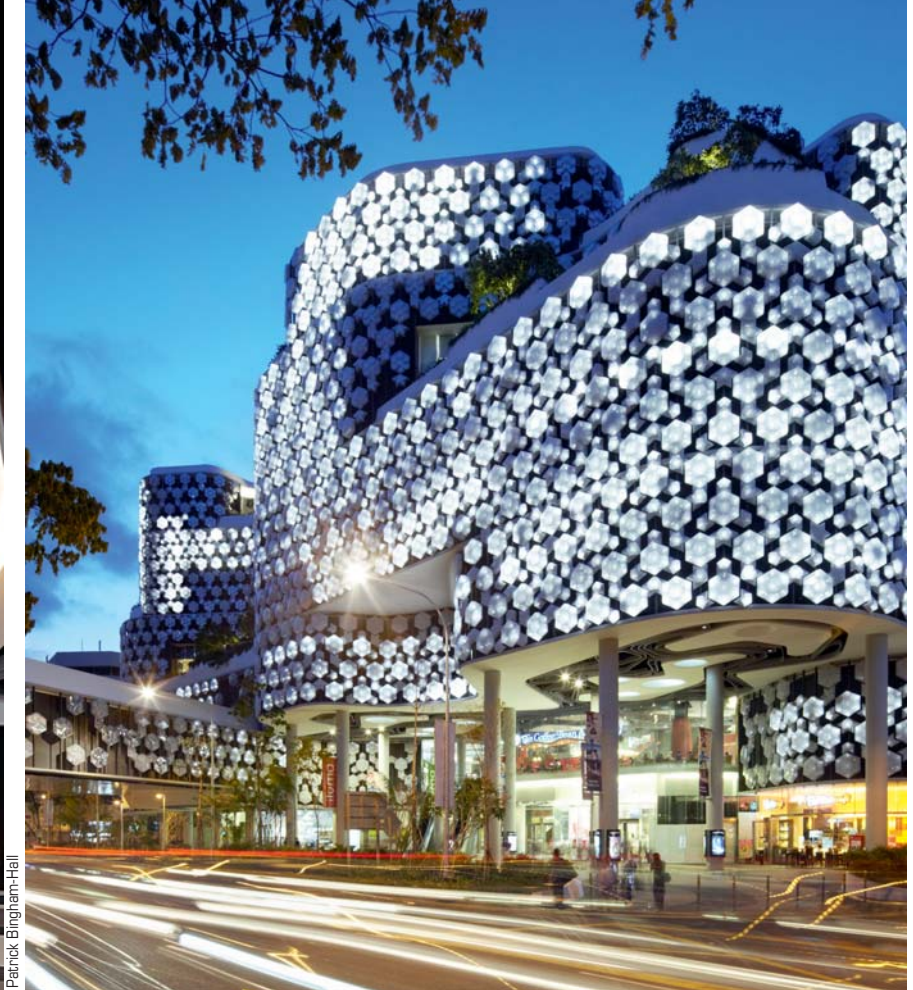
Commerce and change

For a long time architectural issues played no role in the construction of shopping malls. Then Rem Koolhaas stepped onto the scene and paved the way for inviting, aesthetically pleasing sales complexes that addressed consumers' increased expectations and helped make certain that shopping could become a leisure-time activity. With the revitalization of the urban space further innovations are emerging in mall and store design.

By **Wilhelm Klauser**

"Take 40 hectares of a suitable, level plot. And surround it with 500,000 consumers who have no other commercial institutions at their disposal," wrote Victor Gruen, the man generally considered to be the inventor of the shopping mall back in 1963. In his cynical sounding recipe for success, Gruen advises establishing "the best retailers of high-quality goods at low prices" in the area available. Then you garnish the whole thing with 10,000 parking spaces and ensure the mall can be reached via excellent highways with little traffic. Finally, you decorate the whole thing with bushes, a herbaceous border and a small sculpture and serve it hot to the customer." In 1956, the first shopping mall that bore Victor Gruen's signature opened in Southdale, in the town of Edina, Minnesota. Victor Gruen construed the mall as a new center, as public space. There were to be other things: a theater, exhibition rooms, cafés. Gruen dreamt of a European city in the prairies, which was how he saw the United States. For him the mall was the urban space for a landscape that did not know any other urban center. And what then happened was that he was totally misinterpreted. True, the idea of the mall as Gruen had conceived it was quick to catch on – but in a completely different guise from what its inventor had in

mind. For subsequent malls were organized as a setting for chain-stores, for stores that in very similar settings always offered the same range of goods. The organization behind retailing had formulated such clear conditions in 1960 that this architectural type emerged as the basis for a new business model. The stores were of a standard size, had standard fittings and standard ranges. Within a few decades malls sprang up like mushrooms and the successful model spread incredibly quickly – and that included to locations in other continents. The design requirements were minimal, the profit expectations high. Against this background architecture swiftly took a back seat and the planners retreated. They were no longer required. Parking lots dominated where previously it was buildings, landmarks were replaced by billboards. All architects could do was to confirm and analyze the situation. In 1972, Denise Scott Brown and Robert Venturi published a manifesto which very clearly reflects the mixed feelings evoked in architects by an environment over which they have no influence whatsoever. "Learning from Las Vegas" describes a city that is devoted solely to commerce and in which the mall celebrates its triumph: The "decorated shed" had become standard. What emerged was a counter reality,



Patrick Bingham-Hall

which would perhaps in future lend the architect a different role; at the time he was still damned to looking on.

Shopping as a leisure activity

In 2001, Rem Koolhaas entered the fray and in his book "The Harvard Guide to Shopping" presented commercial architecture as an interdisciplinary task in which style, design, product development, technology, marketing and financial constructions all came together. Koolhaas proved once again to have a truly great sense of timing, as commerce was gradually realizing that things could not continue as they were. Customers were no longer prepared to squeeze themselves into premises where they felt uncomfortable. Sales areas in the open countryside lost their appeal – a disastrous development for the retail trade. As population numbers in the industrialized nations were stagnating and a further upward trend in purchasing power was unlikely, other ways had to be found to ensure customer loyalty. Cautiously at first, but ever more powerfully, new approaches started to evolve. There are signs of a revival of the city in which retail trade occupies a key role. Around 1990, railway stations in large cities were recognized as potential locations for the retail trade. Models existed. In post-1945 Japan, enormous sales areas had developed at the central railway stations. They profited from the hordes of people changing trains here and

who thanks to the efficient means of transport could reach these places easily. In Shibuya, in Shinjuku or in Yokohama vibrant, bustling centers emerged. They were strange cities in which a strict division between public space and private enterprise was no longer possible and in which new store spaces and ranges constantly appeared. When the third-largest commercial district in France was created in Lille, it was none other than Rem Koolhaas who proposed in addition to a new, trans-European express train hub an enormous shopping mall. It was realized 1994 by Jean Nouvel and lent the place a magnetic attraction that a conglomeration of office areas would not have managed to do. Shopping had emerged as a kind of leisure activity, as a pursuit that could trigger something big in a city. Subsequently, architects and real-estate developers drew on the momentum offered by places of transition and brought it to bear in ever larger concepts, building hybrid spaces in which diverse functions could be combined. When, in 1997, the new railway station in Kyoto opened it was a 70-meter deep, 420-meter long and 11-storey high block in which hotels, department stores, shopping center and public space overlapped seamlessly, it was in fact a city within the city. In the lower floors, a gigantic ornamental staircase stood out, below a large roof which resembled a citation of Italian cityscapes while simultaneously functioning as part of the overall commercial staging. What was a place

The Iluma Shopping Center in Singapore attracts visitors with its "diamond façade." Inside, WOHA impresses with a 40-meter-high atrium (above). At the MyZeil Center in Frankfurt, Fuchsas went for a no less extraordinary, swirling light funnel (right).



Jörg Hempel

of transfer morphed into a standard shopping location. Today, there is no airport that does not long since have extensive shopping areas where passengers can while away the time between flights. Following the modernization of railway stations in Leipzig, Munich or Dresden train travelers in Germany can also enjoy the seamless transition into illuminated commercial worlds where the tenants pay premium rents: The high frequency coupled with the spatial quality of the old sales infrastructures has spawned spaces of urban identification, which turned out to be ideal shopping locations.

Urban entertainment

For the same reasons, downtown locations have likewise long since become a standard. Downtown profits from an urban quality that in the old urban spaces can be had for free, as it were. In places where, owing to the external conditions, the general situation is not so favorable the downtown shopping mall becomes an urban attraction in its own right. This is the approach taken in the new centers in Arabian countries. The fact that comparable concepts could also function in downtown areas was proven when in 1989 Jon Jerde opened Canal City in Fukuoka on the island of Kyushu, Japan. Visitors found themselves in an open mall, a carmine red model city, which had not been implanted into an inner-city area on such a scale before. Canals were

created in which carp swim and bamboo grows, 3D cinemas and every conceivable form of entertainment rounded out the facilities. The mall was no longer a place for shopping, and instead the idea was to provide comprehensive urban entertainment which had previously only been realized in this guise in Disneyland. There is no denying that these trends are not without their problems. As a large, well-organized unit a downtown center still represents a challenge for Europe's urban landscapes which tend to entail small-part structures. Thanks to professional marketing and tenants' insatiable hunger, the mall can eclipse and challenge the downtown's identity if it is not conceived with care. The attentive observer notices that large structures increasingly experience problems. They offer a homogenous environment, but which no longer exerts the attraction it once did, when people's hunger for goods was still insatiable. First signs that things were altering further in the Western world were evident. In 1994, the Hackesche Höfe in Berlin were modernized, and for the first time the rental concept in Germany specifically focused on avoiding the mainstream. The result: a shopping complex that was not roofed over and in which mixed use and different sized units won the day. The concept benefited from the unusual courtyard situation and it embraced the existing urban space as a starting point for the development, then continued it. Though risky, the concept proved successful. Incre-



Product worlds on the border of feasibility: In 2001, Rem Koolhaas designed a stage for the famous prada store in Soho, New York (above) – an ironic gesture designed to be used for fashion shows. The Ann Demeulemeester store in Seoul (below), designed by Minusk Cho, demonstrates “green” shopping: Herb-like shrubs thrive along the curving incised façade. The foyer is covered in moss.



asingly a new generation of retailers are now following their own individual signature again, which is exactly suited to dynamic sales concepts and simultaneously interacts with the urban space. Tremendous efforts are made to orchestrate product worlds, some of which reach the limit of what is feasible in terms of realization and serve to drive innovation. The façade of the Prada Store by Herzog de Meuron in Tokyo consists of concave panes, which had to be developed new in such a size; indeed, such locations are often the place where new materials are tested, new lighting concepts realized in large media façades. Commercial architecture is also becoming a realm of discovery for the construction and real-estate industry. In many places brand and theme worlds are created that startle visitors, fascinate them with the carefully conceived overlapping of uses and are simultaneously part of a distinct urban space. There is less willingness to accept the neutral sales premises of shopping malls. The character of presentations as events in their own right is taken to the extreme in pop-up stores and guerilla outlets, which target well-informed customers and operate for a short period only at unusual locations. In deserted factory buildings far removed from the customary flows of customers, offers are launched that deliberately use the city as part of staging themselves and may well be conceived by large brands: After all, if bags are made from old truck tarpaulins then naturally containers are the right sales area and are employed as a clear symbol. The new premises celebrate an authentic urban landscape, which the malls cannot match unless they open themselves to this new trend. Increasingly, the smooth, immaculate forms of commercial architecture are giving way and a new world is emerging, which still holds many surprises, because it no longer focuses on the goods but has turned its attention to the city once again.

The changing views are the main attraction: Through the glass sides the various structures that make up the Vitra Showroom, Herzog & de Meuron give visitors a panoramic view as they pass through the building.

Wilhelm Klauser studied architecture in Stuttgart and Paris and obtained his doctorate in Berlin. From 1992 to 1998, he worked in Tokyo, until 2003 in Paris. In 2003, he set up InitialDesign in Berlin – a development and research unit that specializes in the retail trade and logistics. Wilhelm Klauser is an architect, urban planner and architecture critic.





Eccentric shopping mall: for Berne's Westside, Daniel Libeskind unleashes an interplay of slanting walls, slopes and sharp edges. Less conspicuous: the ingenious energy exchange between the various building elements.

Westside – well networked and excellent energy efficiency

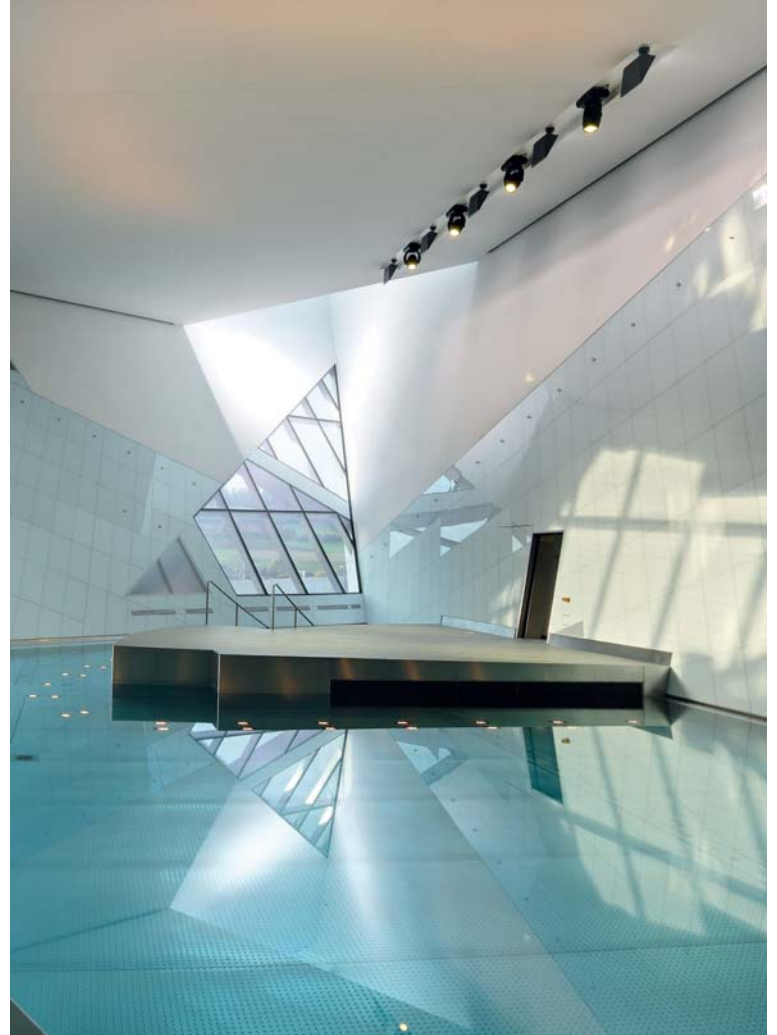
For many people, shopping malls have a reputation as being energy wasters that are harmful to the environment. But that need not be the case, as proven by the Westside leisure and shopping center just outside Berne, Switzerland. Designed by Daniel Libeskind, the complex meets the Swiss Minergie standard for low-energy consumption and as such can be deemed a model for the modern, analog use of technology. The efficient recovery of energy in an internal cycle is equally pioneering.

By **Pierre Schoeffel** Photos **Bitter & Bredt**

Anyone exiting Berne and heading for Geneva on the A1 interstate automatically encounters Westside. Almost like a gateway to the city, the complex opened in October 2008, towering up majestically over the highway. The complex includes the leisure and shopping center Westside, a hotel and a senior-citizens residence. Visually, the elements form an axis that extends from the railway station, the old city through to the Paul Klee center designed by Renzo Piano. The complex, which is named after the famous New York Westside, forms the heart of an extensive urban expansion scheme. As early as the 1960s, plans matured to develop the Brünnpfeld area close to the district of Bümplitz Bethlehem. In 1972, the oil crisis put paid to the endeavor, and in 1978, the undertaking was thwarted by a referendum veto issued by Berne's citizens. Then in the 1990s the idea of a moderate expansion gradually won the day, and in 1999 an architecture competition was organized, which foresaw an attractive urban mix of leisure and shopping center, park and residential construction plots. Daniel Libeskind was the mastermind behind the plan that best united the requirements and simultaneously promised to give the 34-hectare development zone a new and very attractive landmark.

Crystalline structures

The underlying concept envisaged commercial, leisure and residential areas, which (as in a district that has developed naturally) are busy both day and night. Libeskind organized the squares and streets in line with the ground-plan of a Medieval town and realized the concept using 21st-century materials and technologies. The familiar Libeskind design vocabulary of acute angles and uneven walls was transposed onto the architecture of the mall and given a fresh interpretation by the master. Accordingly, the higher levels are set back and swiveled, affording a view upwards. Crystals break out of the façade, then there are the so-called cuts, generous window openings. The ingenious alternating of low and high rooms, alleyways and squares results in interesting perspectives and views. Similarly, in the 10,000-square-meter spa and bathing complex, the playful use of acute angles and changing perspectives dominates. Libeskind's highly individual design continues through all the elements of the complex – be it the shopping area with its 55 stores, the movie theater complex with 11 screens, the Hotel Holiday or the residence for the elderly adjoining the mall, Senecasita.



Reclaimed heat

In deciding to ensure that Westside met the Minergie certification standard, the project manager and planners from the start set out to keep energy consumption levels low. As such, it was evident that the majority of the energy requirements would have to be met using renewable energy. Consequently, Westside can be seen as a prime example of the implementation of the very latest know-how regarding energy use. Thanks to the ideal insulation of the outer skin, heat recovery systems and efficient ventilation and heating systems, the building uses less energy than comparable complexes. An ingenious concept ensures that the heat from the shopping mall is recovered and used to heat the adventure pool. To this end, in the entire spa area there is a bathing water treatment plant. The windows in the senior citizens residence have triple glazing. Ultimately, oil for heating is only used to meet 15 percent of the annual heat energy requirements for the entire complex. 35 percent comes from heat recovery and around 50 percent from a modern wood pellet heating with a filter system. The filter means that air pollution levels are well below those prescribed by law. In order to comply with the

high energy efficiency standards the planners and system integrators were only prepared to accept an integral facility management planning. Good individual solutions that did not feedback into the overall loop would never have sufficed to achieve such excellent energy efficiency. The magic formula here is an interdisciplinary mindset in place across the different systems combined with system networking. If you take the air conditioning technology as an example, you realize that cold is not simply cold but also represents a potential for heating. The heat given off by the cooling devices becomes warmth that is distributed via the heating and ventilation. These processes are managed using building automation.

Integral building automation

A sophisticated measuring concept was devised to control and monitor the data. Basically, heat, cold, water and electricity are monitored. The shading of the various buildings and the lighting concept are incorporated into the process. All the building sections of Westside i.e., pool, hotel, shopping mall and senior citizens residence represent in themselves highly complex individual systems. Moreover, the

In keeping with the energy efficient concept so central to Westside there is a water treatment plant in the spa area (above). Unusual for a Libeskind project: the wooden façade, which integrates the building harmoniously into the landscape (right).



requirements regarding heating, ventilation, air conditioning and electrical installations vary enormously: The commercial area requires cold, the pool and the home for the elderly, by contrast, heat. The hotel boasts individual comfort for guests. In the multiplex cinema and in the pool the technology must function perfectly yet remain concealed. If all of these requirements had been addressed separately then the positive energetic properties of Westside would not have been achieved. Accordingly, integral building automation was necessary in order to meet 35 percent of the heat requirements by using the heat given off in cooling the commercial sector and the heat generated in producing cool air for the air conditioning. The bottom line: careful planning, using innovative building automation technology such as KNX, and clever programming means that a third of the entire heating energy can be saved in Westside.

Presence dependent management

A modern Ethernet network manages the communication between adventure pool, shopping center, hotel, senior citizens residence and multiplex cinema. All the automa-

tion stations, server and periphery devices are hooked up to a network distributor and connected to one another as a network via fiber optics. This networking primarily provides communication between the various systems. Another important element is the presence dependent management, say, of the lighting. This is in turn dependent on a door management system and a central input for all lighting time control systems. After all, while the hotel operates around the clock, the stores in the shopping mall are frequented during the day, and the multiplex cinema in the evening. Moreover, for the infrastructure and to ensure visitor and staff safety an impressive barrage of advanced alarm- and monitoring functions are employed. The dimensions of such a huge project demand extraordinary performances from the hard and software and make high demands of their integration.

Qualified engineer Pierre Schoeffel has been Director of Gebäude Netzwerk Initiative GNI in Zurich since September 2010. He succeeded Richard Staub. Since 1997 he has been on the Board of KNX Swiss.

Snow beneath palm trees

In Dubai, shopping has become synonymous with superlatives: In its very first year, the gigantic complex that is the Mall of the Emirates already attracted some 30 million visitors. An international travel guide even terms the shopping Eldorado one of the "architectural wonders of the world".

By **Lasse Ole Hempel**

"Shopping is what drives Dubai – an engine that is always running at full speed," writes Titus Arnu in the German daily *Süddeutsche Zeitung*. The Mall of the Emirates is impressive for its massive proportions alone – here, in what is the Middle East's largest shop window, consumers will find almost anything that money can buy: "Some visitors will casually buy an entire new apartment after they've been to Gucci and Prada in Little Florence." Even following the headline-grabbing financial crunch, when the Emirate in the wake of Lehman's bankruptcy suddenly found itself in financial difficulties and was bailed out by its neighboring Emirate Abu Dhabi, Dubai continues to cultivate its image as a new metropolis of superlatives, where everything is possible. As Dubai's oil resources are drying up, the country is on its way to transforming into a leading center for trade, finance and leisure time, attracting investors from around the globe. This change is still continuing its rapid pace, only Dubai is no longer making as much of a fuss about it, allowing its neighbor Abu Dhabi to make the headlines with sensational buildings such as the Yas Race Track (see pulse 3/2010) or the recently opened Ferrari World theme park.







Shopping and entertainment under a single roof

Situated in the immediate vicinity, Burj Kalifa, currently the highest building in the world, was still a building site when the Mall of the Emirates shopping paradise opened its doors back in September 2005. Before the year was out, the jury of the London-based World Travel Awards named the center "The World's Leading New Shopping Mall". Ever since, the mall has been progressively enhanced and expanded, and the opulent range of products and services on offer (the complex houses the largest Harvey Nichols department store outside the UK) has been rounded out by additional shopping facilities. The "Magic Planet" entertainment center comprises a riding arena, a bowling alley, the region's biggest sports store, and a 14-screen cinema. The Mall of the Emirates is scheduled to be linked up to the Metro in early 2011. The developer is the Majid Al Fut-

taim Group, one of the largest real estate companies on the Gulf of Arabia and a highly successful specialist in major projects. Andrew Feola, founder of Californian-based firm F+A Architects, was commissioned to act as the head architect.

Fresh snow every night

The Center is located in the heart of the master-planned expansion district known as New Dubai, located between the Port of Jebel Ali and Dubai City Center. The main attraction of the complex is "Ski Dubai" - the first indoor ski slope in the region. Every night, the 400-meter-long and 50-meter-wide ski slope and sled run is groomed with freshly made snow. The adjacent retail complex is divided into architecturally distinct sections. As a result, the overall final design encompasses a range of different styles.

Mall of the superlatives: the 18-meter glazed dome skylight that tops the Milanese Gallery is the highest of its kind in the Middle East (left). The ski resort with its artificial Alpine panorama (right) maintains a constant temperature of -2° Celsius.

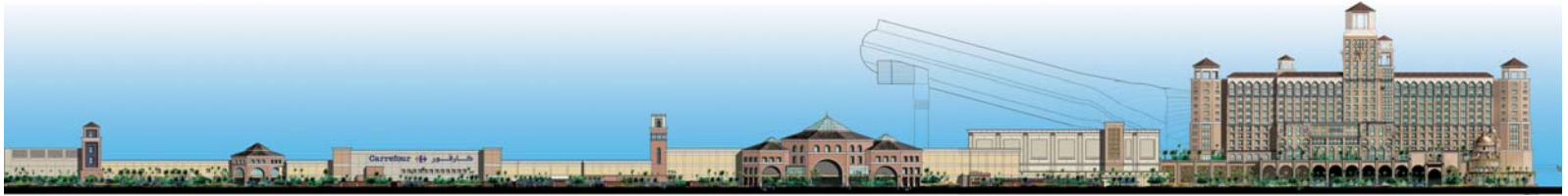


Inspired by the Galleria di Milano in Italy, an 18-meter glazed dome skylight, 36 meters in diameter, covers the Milanese Gallery - the largest hemispherical glazed dome in the Middle East. In another section, the Moorish Arcade, diffused light filters through the timbered fretwork offset by hammered bronze, evoking the drama of an Arab souk, as in Damascus or Cairo. This modern interpretation of an ancient bazaar includes solid wooden trusses, traditional Marabesha screens, and Arabian mosaics. Other Moorish design elements take their cue from the Arabic influence visible in the architecture of Morocco and southern Spain, including parapets, medallions, pavement patterns and distinctly curved, peaked arches. The intricately designed granite flooring extends throughout the entire structure: Close to 27,900 square meters of stone pavement called for 21 different types of granite, much of it quarried in the

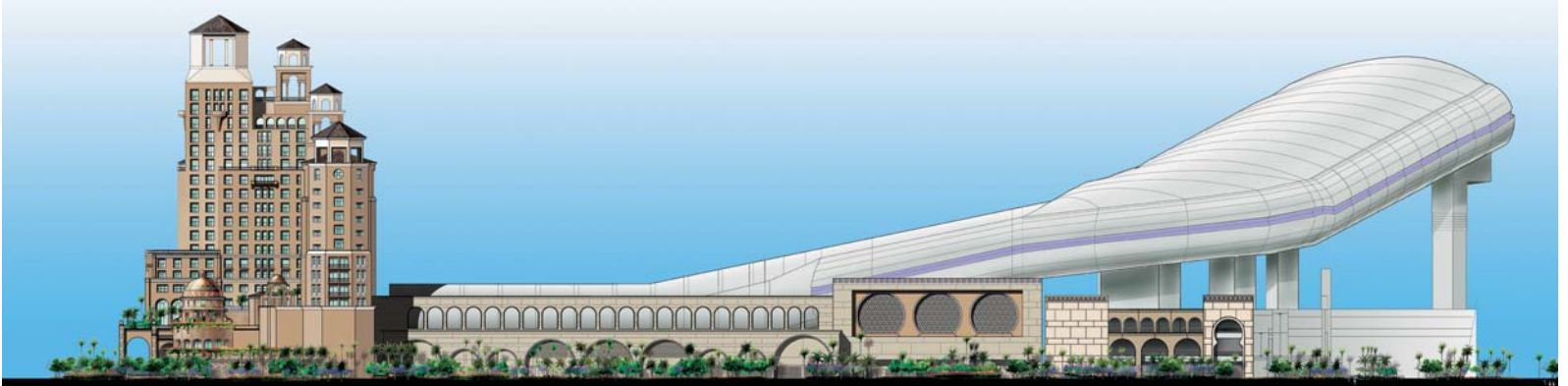
Amazon Basin. The material was then shipped to Portugal where it was cut, polished and re-cut into varying sizes to create the mosaic pavement and elaborate medallions.

Alpine scenery en miniature

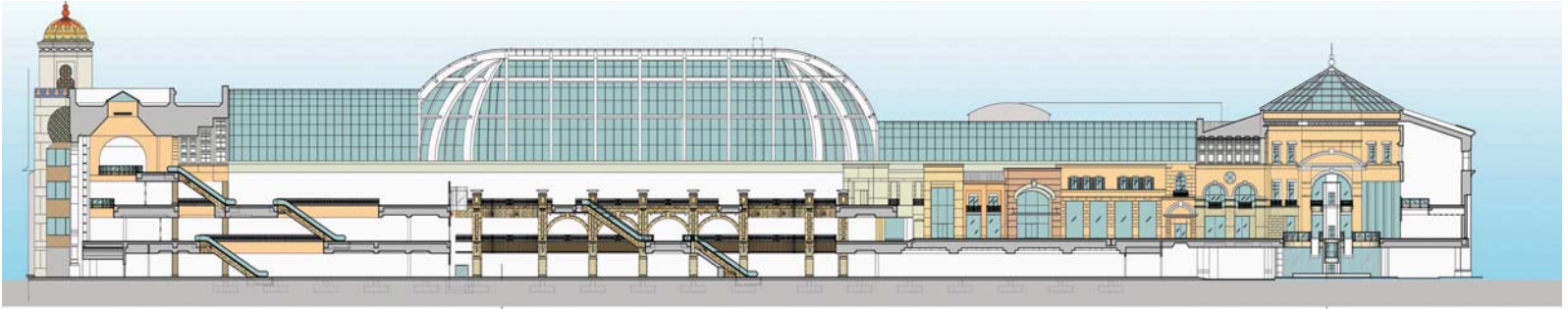
The indoor ski resort is best described as a miniature version of a European Alpine region. As in the mountains, primarily rustic and natural materials have been applied. While the outside temperature in Dubai ranges from 15.5° to 57° Celsius, the ski slope and the entire winter sports area maintain a constant -2° Celsius. The equipment employed to produce snow and control the temperature in the ski center is similar to the extensive systems used to preserve fresh food at the nearby Port of Jebel Ali. The technology was modified to function on a larger scale in a new context. Refrigerated coils installed in the floor of the



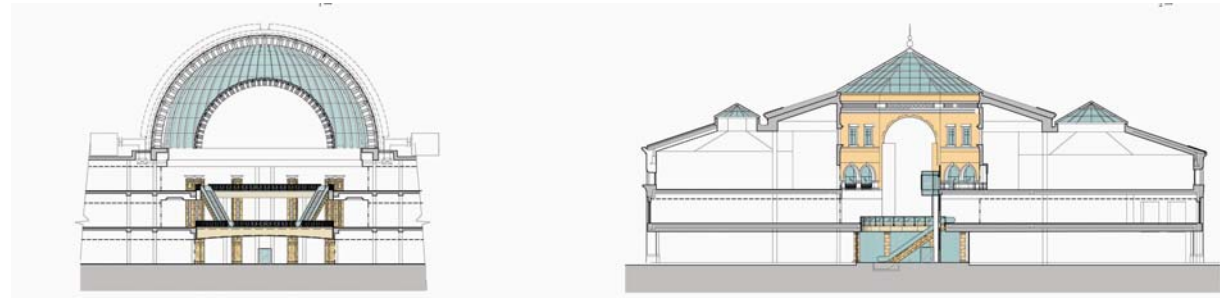
North elevation



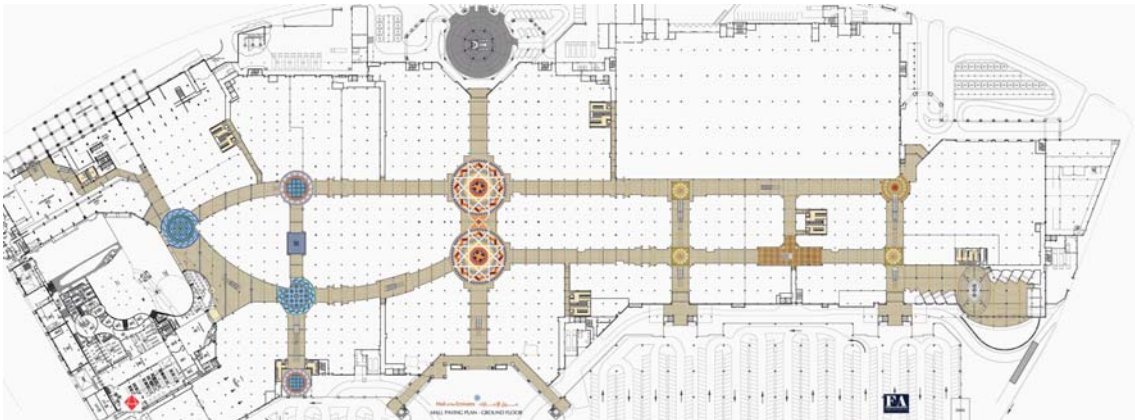
West elevation



Section



Sections



Layout

The 400-meter-long ski slope is held aloft by a steel and concrete "bridge", keeping the area beneath the structure available for future development (see 2nd row from above). The vertical reinforced concrete columns house the stairways and utilities.



A feel for snow: The ski slope has transformed the Mall of the Emirates into a spectacular center offering ample leisure activities.

ski slope create a base layer of ice. An electronically controlled device installed in the ceiling atomizes water into mist, and then freezes it into snow that falls over the entire winter sports area. Two feet of packed snow lies underneath a layer of fresh powder snow that is replenished every night. The other sections of the complex, including those that overlook the ski slope through glazed partitions, are conditioned to a comfortable temperature throughout the year. Each Saturday, locals and tourists alike stand in the queue to develop a feel for snow for around 30 euros a person; and that price includes a ride in the chair lift that drops them off at the peak of the mini mountain. The hustle and bustle in what is for Western eyes an almost surreal snowscape can be witnessed through the large glass fronts of the adjacent cafés and restaurants, and also from the top-class Kempinski Hotel, which boasts suites overlooking the ski slope on the third floor.

Project partners

Client

Majid Al Futtaim Group, Dubai

Architect

F+A Architects, Pasadena, USA

Construction engineers

Mott MacDonald

Leasable area

233,467 square meters

Integrated products by ABB

Lighting control using timer and visualization software. Outdoor lighting controlled by brightness sensor

Metamorphosis of a discount store

The story of the PlusCity mega-shopping center in Pasching, nr. Linz, Austria, reads like the tale of the ugly duckling. In a matter of years the onetime Plus supermarket has evolved to become a first-class shopping center that few can match. And its success story is by no means over.

By **Hanna Dietrich** Photos **Werner Krug**

Since the Plus complex was originally built back in 1964, the face of the small community of Pasching, located a few kilometers outside of Linz, in Northwest Austria, has changed dramatically. It largely owes this change to Ernst Kirchmayr, who was then manager of the small Plus Kaufland store and is today director of PlusCity. In the 1980s, Kirchmayr persuaded the wholesale dealer family Pfeiffer to invest in his vision of a new shopping center: In doing so he paved the way for a shopping and leisure center where visitors would not simply spend money shopping. The catchment area extended far beyond the immediate region and the location was perfect logistically as it is linked to the highway and the Linz interstate, making it a natural choice. The idea itself was no accident, as the existing market was no longer profitable at the time and the competition was already planning a supra-regional shopping center not far from the Plus store. In the end, the investment was made, and the land required for it next to the existing discount store was purchased, effectively preempting the rival company and its plans. Thanks to Linz-based architecture studio Atelier Plötzl, within a few years PlusCity arose on the site previously occupied by the supermarket. An

additional 20,000 square meters of sales area were purchased to create one of the first large modern shopping centers in Austria. The competition followed suit two years later, launching the Uno Shopping Center in the neighboring community - less than 700 meters from the location of PlusCity.

American way of life

That was, however, only the first coup. Into the new millennium PlusCity was extended and expanded, step by step and phase by phase. Kirchmayr, who is not only a department store tycoon but also a real-estate developer, multi-millionaire and racing car driver, drew his inspiration for the design of PlusCity from the American way of life as witnessed on his frequent trips to the United States. This is especially evident in the interior and outdoor areas of the center. The entire complex consists of steel, concrete, and glass, and like a classic American shopping mall is positioned in the middle of the building. As such, the inviting entrances to the mall are also centrally located while the areas for sanitary, administration and warehousing are to be found along the outer façade and demonstrate unity. The

A landmark in the area of Linz, Northwest Austria: The curtain mounted glass façade glows in the dark, offers great views of the mall interior, and is visible from miles away.





exterior of the building shell is a curtain-wall glass façade. It protects the actual outer wall and the aligned balconies running in front from the elements and is outfitted with innumerable colored fluorescent lamps, which also mean the center lights up at night as a landmark visible for miles. Only a few building sections are clad with insulating metal caissons and stand out from the glass shell thanks to their silvery, shimmering surface. The center extends out over two levels along the mall, which is interrupted by several lavishly produced squares. The latter sub-divide the mall spatially and given names such as Marcusplatz or Atlantisplatz convey a truly Mediterranean sense of well-being. The Marcusplatz, which is modeled on a Medieval Italian town, forms the heart of the center and functions as the Food Court in the complex. Across both sales levels the lion's share of hospitality outlets (seating up to 1,000) are grouped beneath an immense expansive glass dome. The dome is based on a delicate steel structure, which is also employed in the rest of the mall for the overhead glazing.

Not only does the varied use of styles makes for easy recognition, it also helps visitors find their way around. The Leonardo da Vinci Platz, which is characterized by an elaborate fountain system and two room-high Greek portals that even boast Doric columns, describes a rectangular shape and is covered by a 45-meter-long glass arch. The mall is flooded with daylight, providing space and brightness while shopping. So that the natural daylight and spacious ambience can also be perceived on the lower level the upper sales level was set back a few meters. Galleries and atriums also serve to break up the structure of the mall and permit diverse views through the space. At night modern fiber optic technology ensures the glass ceiling shines impressively in a deep midnight blue.

Mega cinema, go-kart track and tennis center

The shopping center is complemented by an integrated health and wellness center, a 2,500-square-meter office and administration wing above the mall roof, and by the varie-

The sky's the limit: Thanks to the delicate steel construction and the glazing over the squares and paths in the mall the heavens seem to open up



ty of leisure activities available in the outdoor area. The latter range from a huge cinema complex via a go-kart track through to a tennis court. There is also a DIY store and garden center. Go-kart races take place regularly around and through PlusCity. Sometimes celebrities are invited. The number of visitors speaks for itself: Every year some 10 million people flock to PlusCity and shop on 70,000 square meters of sales area, while around two million take advantage of the entertainment on offer. This makes the center with its 2,000 staff the third-largest shopping center in Austria. But Kirchmayr is not content. He has long since had his sights on the next project: the shopping mall Lentia City in downtown Linz.

Project Partners

Client

PlusCity Betriebsg.m.b.H. & Co. KG, Linz

Architect

Atelier Plötzl Plötzl Arch + Ing, Linz

Leasable area

75,000 square meters

Integrated products by ABB

Blind regulation using KNX actuators and weather station. Integrated built-in voltmeters, electricity and power output meters

Between Soho and souk

The shopping mall The Avenues has already taken its place in the absolute top bracket of shopping centers. Following the completion of the last construction phase, consumers in Kuwait's capital will have a wide choice of very different retail experiences.

By **Britta Rohlfing**

Kuwait has long-standing experience with architecturally daring and extraordinary projects. The futuristic Kuwait Towers, built in the 1970s and which radiate technological optimism, continue to be the most important landmark of the state on the shores of the Gulf of Arabia. At present, not only are plans being drawn up to redesign the towers, which have lost their function as water towers, but also for the planned city Madinat al-Hareer, to be built on a peninsula. One day, a railway line could even run from here, over several bridges, to Damascus, Baghdad, Iran and even Israel. The city may also be able to claim the honor of having the tallest tower in the world: One day Burj Mubarak al-Kabir is to soar 1,001 meters into the sky and thus dwarf all other super skyscrapers. The city is scheduled to be completed in 2030, at least according to the superlative-packed press releases.

Conquering new business fields

Projects like The Avenues shopping mall, which was opened in 2007 and since then has been continually enlarged and extended, must be considered against the background that here a Gulf state blessed with rich deposits of







crude oil and enormous purchasing power is attempting to conquer new business fields and spruce up its image in the world. Located in the Al Rai district of the capital Kuwait City, The Avenues is intended to blaze the trail for the region. The project initiators even speak of a new shopping event and a milestone in development. They are hoping that in the coming years, Kuwait, which owns roughly ten percent of estimated global oil reserves, will transform into a region of business and trade which is increasingly attractive to foreign investors. Two areas within The Avenues complex are named after the subdivision of the project into construction phases: Phase 1 and Phase 2. The retail heaven Phase 1 was opened in 2007. IKEA lost no time installing a showroom among the 230 stores of this construction phase. One year later, with the completion of Phase 2, arcades were opened boasting some 200 boutiques and a large restaurant section with spacious outside areas. Now, Phase 3 is to complete the entire complex in style, designed by Gensler, the interna-

tional architecture studio based in Los Angeles and London.

Champs Elysées on the Persian Gulf

Gensler promises for the future of The Avenues a "completely new shopping concept." Based on well-known global cities, the complex will present five distinct zones, each offering a different atmosphere. They are: "Luxury Mall", "Grand Avenue", "The Mall", "SoKu" and "The Souk". The Mall is intended to function both as an extension and connecting element and in part be directly linked to the existing buildings. A series of squares with cafés and restaurants will shape the area's character. Based on the famous Champs Elysées, Grand Avenue is an appealing, tree-lined shopping mile covered by a large glass roof. The 425-meter-long and 24-meter-wide Grand Avenue forms the circular main artery of the complex and at the same time provides visitors with a point of reference. The store façades are highly varied: European, regional and contempora-

Immerse yourself in the world of the souk: Despite all its contemporary qualities, one of the areas of The Avenues is to be based on the traditional Arab shopping streets, souks (left). The concept also features squares and cafés as places of relaxation and refreshment and points of reference (right).



ry elements are juxtaposed. The SoKu area is 100% urban retail landscape and clearly based on New York's Bohemian district Soho. With The Souk, Gensler offers a contemporary interpretation of the souk, that traditional, busy Arabian bazaar with its many, densely packed stalls. The Luxury Mall is intended to offer visitors the ultimate shopping experience. Haute couture and luxury brands are brought together here in exclusive, partly intimate surroundings. Following completion of the extension work, from 2011 The Avenues mall is set to intoxicate customers with its over 900,000 square meters. It is already the largest shopping mall in Kuwait today, and on completion of the extension work it will be one of the shopping giants in the entire Middle East region. The Avenues can also be considered a harbinger of further spectacular buildings, with which the Emirate will make numerous headlines in the coming years.

Project partners

Client

Mabane Company SAK, Kuwait

Architect

Gensler London

Integrated products by ABB

Lighting control via timer and visualization software.
Dimming control technology for conference rooms and atria



Love Architecture

Glitz, glamor, gigantonomy

Shopping was yesterday. The architectural shopping scenarios of tomorrow increasingly network different areas – shopping becomes an event and a holistic experience. And at times even combines commerce and ecology.

Love Architecture: GTS

The Grand Towers in Sofia are intended to attract consumers even from a great distance and reanimate the downtown area within the inner ring road. Vienna-based architecture studio Love Architecture has designed the office, commercial and conference center GTS to create a futuristic scenario on fallow land formerly used for military purposes in the context of the ongoing development of the Bulgarian capital. Three independent towers rise up from an eight-storey base structure to form an outsized ensemble, combining a shopping mall, offices, hotel and apartments. The first few storeys of the 110-meter-high complex with 28 upper floors comprise 22,000 square meters and are reserved in their entirety for commercial purposes. Above them are offices and a hotel; the towers are arranged in a triangle as far apart from one another as possible in order to make the best possible use of daylight and guarantee attractive views from the offices and hotel rooms. In the base of the three towers, visitors can choose between the hotel lobby, conference rooms and restaurants/café or take a stroll in the landscaped outside areas between the towers. The greened terraces function like galleries framing two gigantic atria which, shaped like inverse pyramids, supply the entire lower part of the building with daylight and duplicate the shape of the three towers up to street level. The elevated “green levels” are also remarkable, stretching through several storeys and designed to both serve as recreational areas and air-condition the towers.

OMA: Porsche Towers

For Business Bay in Dubai, OMA and Porsche Design reinterpreted the idea of the twin towers: Porsche Towers I and II complement each other not because they are similar, but because they are different. The two towers, one cylindrical and the other box-shaped, offer over 120,000 square meters of luxurious living and office space. A shopping mall is integrated into the office building and a sunken plaza with cafés and restaurants is planned in the cylindrical residential building. The buildings, as yet only designs, have been adapted to the climate in Dubai: The architects headed by Rem Koolhaas designed the structures in such a way that the façade openings stand in their own shadow for as long as possible and thus protect themselves against the fierce sun.



ECE: Quartier am Mailänder Platz, Stuttgart

There can be hardly a German TV watcher or newspaper reader who has not heard about it: Owing to the political battle surrounding the Stuttgart 21 railway station project and the decision to relocate many of the railway platforms underground, more space will be available in the city, which, however, owing to its location in a valley has very little room for growth. In November 2010, Hamburg-based project development company ECE submitted initial plans for part of the space. The concept, supported by the city's Mayor, envisages a new urban ensemble, Quartier am Mailänder Platz (Mailänder Platz District). The multi-use concept foresees apartments, restaurants and cafés and retail outlets forming a single entity. And together with the central library Bibliothek 21, likewise to be built on the site, the planners see an opportunity to give the city a new urban meeting place. The planners have concentrated the retail stores in three separate buildings, linked by transparent bridges on the first floor. In the current designs, planners are attaching great value to a sustainable and climate-friendly realization, particularly in terms of the use of energy and resources. For instance, the retail space, measuring 43,000 square meters, is to be ventilated naturally and without electric cooling systems. The planners are hoping to be awarded certification from the Gesellschaft für Nachhaltiges Bauen, DGNB (German Sustainable Building Council).

ECE





Holzer Kobler Architekten

Holzer Kobler Architekturen: Ebisquare

For the Zurich-based studio Holzer Kobler, the sprawling structure in the Rhone valley between Lucerne and Zug, where green spaces have become rare and the old village centers have lost their significance, is a perfect example of the “disappearing landscape”. Here, the architects believe they have found the ideal backdrop for their extraordinary shopping center and meeting place: the Ebisquare. As an antithesis to the classic American-style shopping mall, the “Mall Creation” section of the complex is designed to remind visitors of the scenery of wide open landscapes – reduced to the typical (according to the architects) Swiss landscape elements, namely, lakes, mountains and fields. The mall will cut into the envisaged volume of the building as a new space with public appeal, similar to a Möbius strip. As visitors stroll through the levels on the curving walkways, they will be accompanied by collaged and abstracted landscapes. The natural and yet artificial shopping experience will be orchestrated by media-based representations of natural phenomena – meaning that here, it might even be the case that claps of thunder in a storm drown out the ringing of the cash registers.



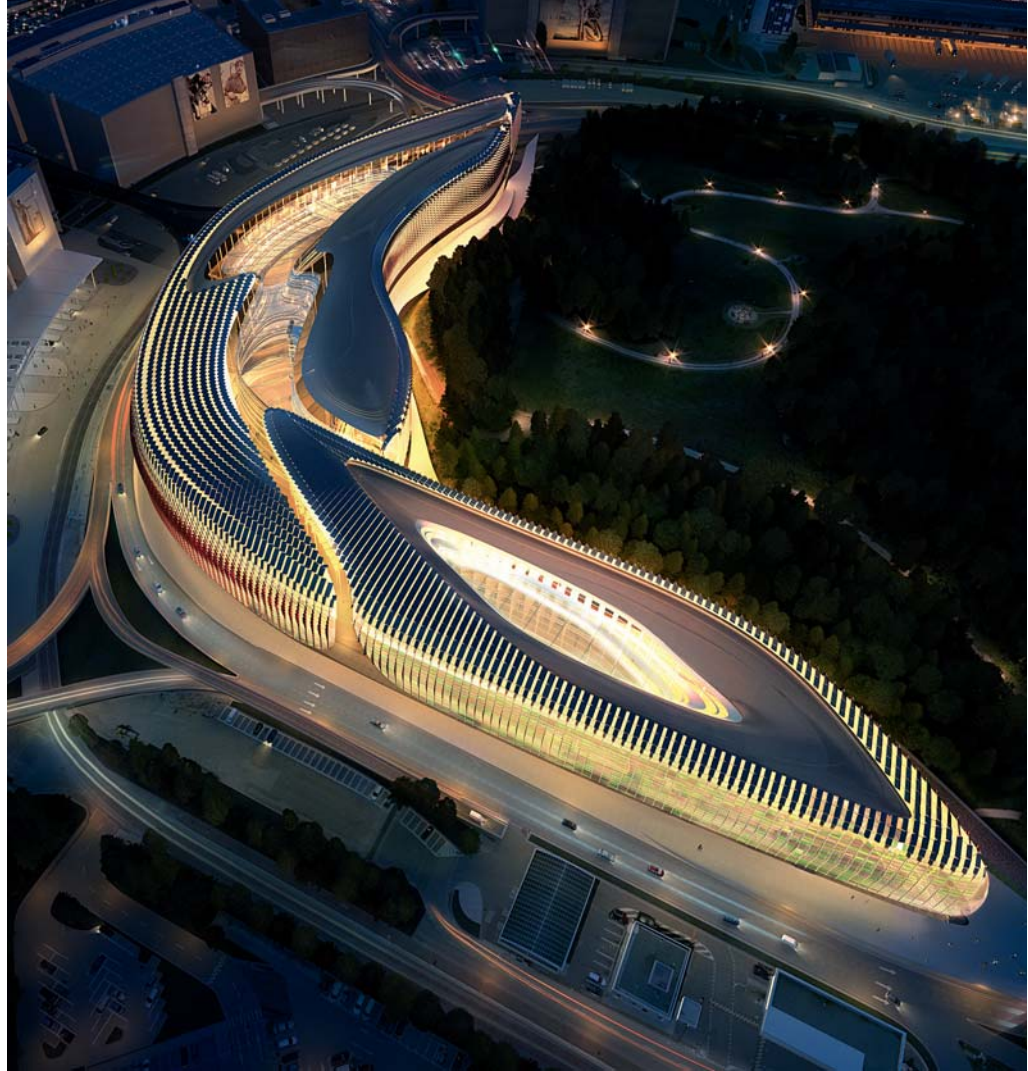
Sparch 2008

Sparch: Vision City

Originally, Vision City – a complex consisting of a shopping mall and office and residential towers – was due to be opened before the turn of the millennium in Kuala Lumpur. However, for financial reasons the project had to be discontinued when it was only half completed. London’s Sparch studio developed a new concept for the ruins of the mall. The architects broke off the central section of the existing monolith and thus created a negative volume, which although it has natural light and ventilation is protected from rain by a glass roof. This space, which can be used in a number of different ways, is not bound to the opening hours of the storeys located there, but is accessible around the clock as a public space. A vertical gap in the 200-meter-long main façade directs visitors inside from the street and across stepped, landscaped terraces to a large garden area, designed to offer an ideal place to pass the time, two storeys above street level.

Zaha Hadid: Freitag (Zurich Airport Circle)

The development of the Butzenbühl site at Zurich Airport is to encompass a service center with offices, hotels and a shopping mall measuring around 200,000 square meters and costing €685 million. In early 2010, Riken Yamamoto & Field Shop won the competition with the design "Divers(c)ity", seeing off entries by many a prominent architect. Zaha Hadid supplied the spectacular design, taking second place in the end in the three-tier competition. As was to be expected, Hadid's design is an iconographically interesting one-off. The architect, who lives in London, designed an urban sculpture with integrated flowing spaces. It is intended to enable interaction between different building modules such as "Health & Beauty", "Brands & Dialogue" and "Culture & Event". Generous incisions, which Hadid calls "canyons", point to the three entrances, create spatial depth and aid orientation within the complex. An area for exclusive brands and showrooms is envisaged on the roof, designed like a popular boulevard.



“Commerce is at the heart of the idea of the city”

Playful charm meets polished technical elegance – buildings by Hamburg-based BRT Architects have brilliantly upgraded entire districts in recent years. Hadi Teherani, who drafts all of the firm’s designs, spoke with *pulse* about his passion for urban design and his vision for modern shopping worlds.

By **Lasse Ole Hempel**

The list of major urban projects built by BRT since 1991 is long: With the completion of the Kranhaus buildings in Cologne’s Rheinauhafen district in 2009, the firm sent an impressive architectural signal for revitalization and optimism. In Hamburg, the architects have successfully shaped the cityscape with projects such as the “Berliner Bogen” and the “Docklan” office buildings. The trio of Jens Bothe, Kai Richter and Hadi Teherani initially came together during their studies at TU Braunschweig in the 1970s. The firm’s office moved into Hamburg’s HafenCity district in 2002. Their comprehensive approach includes a focus on interior design, which is represented by Hadi Teherani AG, founded in 2003.

Mr. Teherani, more than four years have passed since the Europa Passage opened in Hamburg. You designed this indoor shopping center. Do you sometimes use your “arcade” to test your vision of the consumer as flaneur? Paris wanted to cover its boulevards with glass some 140 years ago, but this wasn’t technically possible at the time. In Hamburg, we succeeded with the Europa Pas-

sage. The specific appeal lies in its success in making a typical Hamburg street architecturally accessible vertically with bridges and galleries, as well as its interaction with the adjoining buildings to create an extremely unusual functional structure thanks to the complexity of the park, arcades and office levels. The structure and pathways of the Europa Passage come from the city’s footprint. The new arcade follows the route of the old street. Because the arcade not only runs at ground level but at five levels, pedestrians can travel up to the rooftops of the street’s former buildings.

Your ideal is the vital inner-city space where all areas of life – from housing to shopping – overlap and intermingle. What does a shopping complex have to look like to fit into this urban concept?

Commerce is historically at the heart of the idea of the city. These roots are evident today in the appeal of the weekly markets. If commerce is no longer the engine of the city, the city’s culture also suffers. The two cannot be separated. It is therefore important to connect urban

Glass-covered boulevard: With Europa Passage, BRT realized its vision for an urban shopping complex that elegantly combines a diverse, modern offering in a clearly designed structure.

EUROPA PASSAGE





design with commerce and ground them architecturally. In the competition between cities, it is no longer enough to facilitate commerce. People are looking for a special experience. The product becomes an enduring memory, and embodies the atmosphere and charm of a complex urban situation. This is the task of architecture.

After Nicolas Berggruen took over the Karstadt chain, a lot was said about the future of the department store. Can this form of shopping compete with the specialized flagship stores or anonymous shopping online?

The department store is very much alive, as is the idea of the arcade, the shopping street, or the market hall. Its function is much to general and important. The structure of the department store must become more lively and dynamic in the sense of the variety of the bazaar on several levels. Because you can buy everything online these days, from tea to cars, it is even more important to maintain and improve the analog, urban counterpoint. This is the job of the city's urban and architectural mise en scène. Nobody has fond memories of a purchase made online but everyone wants to experience the city.

What criteria must a shopping complex fulfill in the 21st Century in order to meet the demands of consumers?

Basically, the commercial district must be the city itself, which was once the essence of city. The best shopping mall is, in fact, the well-run shopping street in the middle of the city, with all its appeal and temptations. Every store is responsible for its own image in the public sphere; the business people strive to beat each other in the battle for customers, with special offers and special service. Customers have an entirely different image when they are greeted personally and their wishes are recognized at once because they are long-standing customers. That is the entire secret. When you try to synthesize this sensual aspect of commerce in too easy, too unsophisticated a manner, you are bound to fail in the long run. The internet can do this much better.

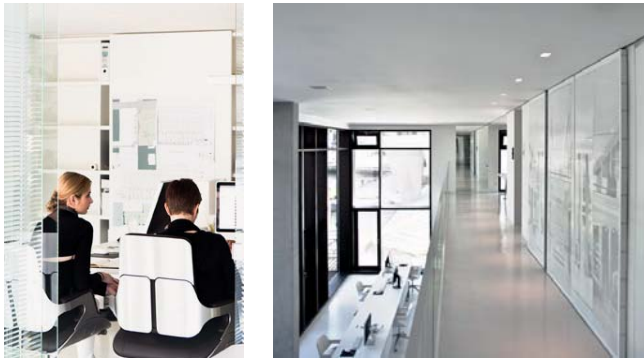
Do you believe that urban space as we know it still has a chance of keeping pace with these rapidly changing demands?

The diversity and complexity of the old urban model is important, and it can be enhanced by new building techniques and materials. The result can be a dynamic of weekly market, market hall, shopping street, arcade, department store, offices, housing, and culture – the full spectrum of city life. Then our northern, difficult weather conditions won't play a major role. Why not use



The urban experience: The architectural renderings produced by BRT for a shopping center in the Belarus capital Minsk are based on a thriving commercial street (above). Maritime symbolism is evident in the Europa Passage, particularly in the free-standing, parabola-shaped arch designs (left and below). With bridges and galleries, one of Hamburg's typical streets also opens up vertically to the urban flaneur.





The office of BRT Architects has been in the Deichtor Building in Hamburg's HafenCity district since 2002 (left). Together with designer Sören Jungclaus, Hadi Teherani developed for Busch-Jaeger the innovative switch solution Busch-iceLight (right).

awnings and arcades again? You have to look at the urban picture as a whole, not just the separate building blocks of the city.

You have shaped and changed the face of Hamburg with your work. From the windows of your office in HafenCity, you can follow these changes on a daily basis. How does the interim result look?

I worked as a youngster in the old warehouse district, where there were many Persian carpet dealers. This atmosphere of wild, exotic fragrances and smells is part of the old warehouses. And I feel at home here. This is not to say that HafenCity leaves me entirely satisfied architecturally or with regard to urban planning. The great appeal is simply living and working directly on the water. Without its dramatic connection to water, Hamburg would not be nearly so important to me. Both offices and my apartment are directly on the water. This passion for urban design on the water is irrepressible.

What led you to open your own design company in addition to the BRT office?

When as an architect you leave the purely functional or purely visual observation and evaluation of architecture

in order to make the human senses an essential criteria for spatial invention, then the architectural vision is broader and it encompasses design. I would like to synthesize both working levels of design in a coherent whole in order to shape the overall human environment. The true luxury is always space, and all the other design elements have to bolster and illustrate this basic architectural statement.

You worked previously as a fashion designer. Does this experience also influence your architecture?

That was a small trick to help clients get over their fears and visit my architectural office one floor higher. The passion for fabrics and clothing comes from my parents. Yet basically design centers on one question, regardless whether you are dealing with a fruit rind, a suit, a carpet, an office chair, a door fitting or a small or large building. The answers are always found at the functional, emotional but also financial levels, as well as in the interpretation of a specific activity or person.

New landmark in the Arabian Gulf: With the Zayed Water Palace, Abu Dhabi will have a new emblem. The project's 12 levels consist of housing, a hotel and conference rooms, as well as a shopping mall.



Corian

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 by **Ippolito Fleitz group, Stuttgart**

Which material properties informed your decision to use Corian for the wall design of Forum Uzbekistan in Tashkent?

The material had to reflect sound, as this is the central event and concert hall. We only had five and a half months for the design, planning and realization of the project. Thus a decisive factor was being able as far as possible to have the walls prefabricated. Thermal expansion presented a great challenge: the walls were installed when the temperature outside was 40°C, and then the room was cooled down to 20°C with air conditioning. We took advantage of Corian's translucence by back-lighting the walls.

Which properties do you wish the material had?

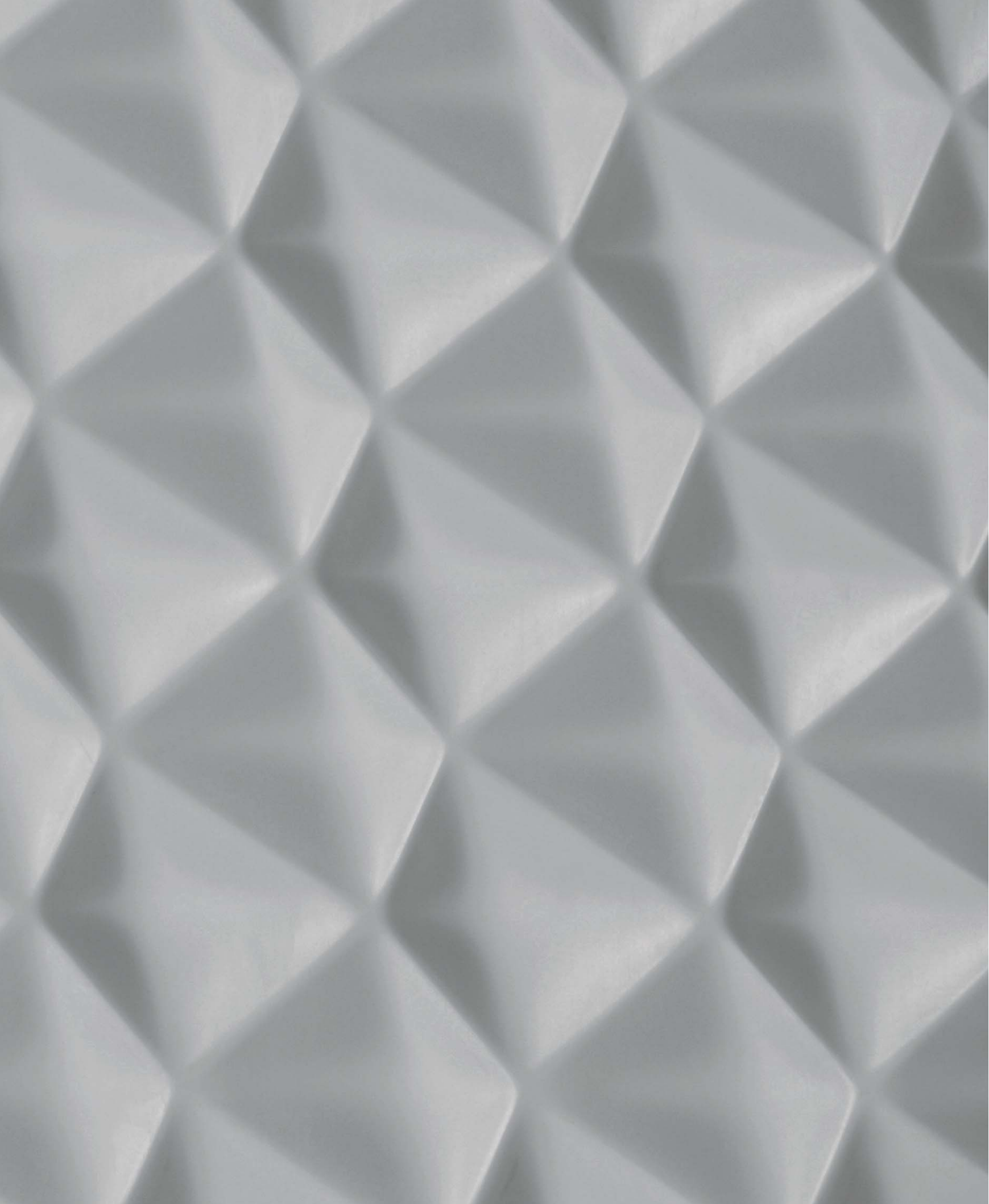
An even more resistant surface would definitely be an advantage. But this weakness of the material, its high percentage of acrylic, is also its actual strength, as it is heat malleable and can be shaped to fit practically any design. Corian sheets are only available with a thickness of six millimeters. As we often use the material for interiors, we would like to see a three millimeter sheet as well.

Where do you see Corian's future?

On the one hand, there will be a greater focus on exterior work, for instance façades, although we have to keep an eye on its durability. And, on the other, on product design, but on a smaller scale. The material's advantages don't really seem to have been exhausted there.



Andreas J. Focke / HenselKnapf (1) DuPont™ Corian®





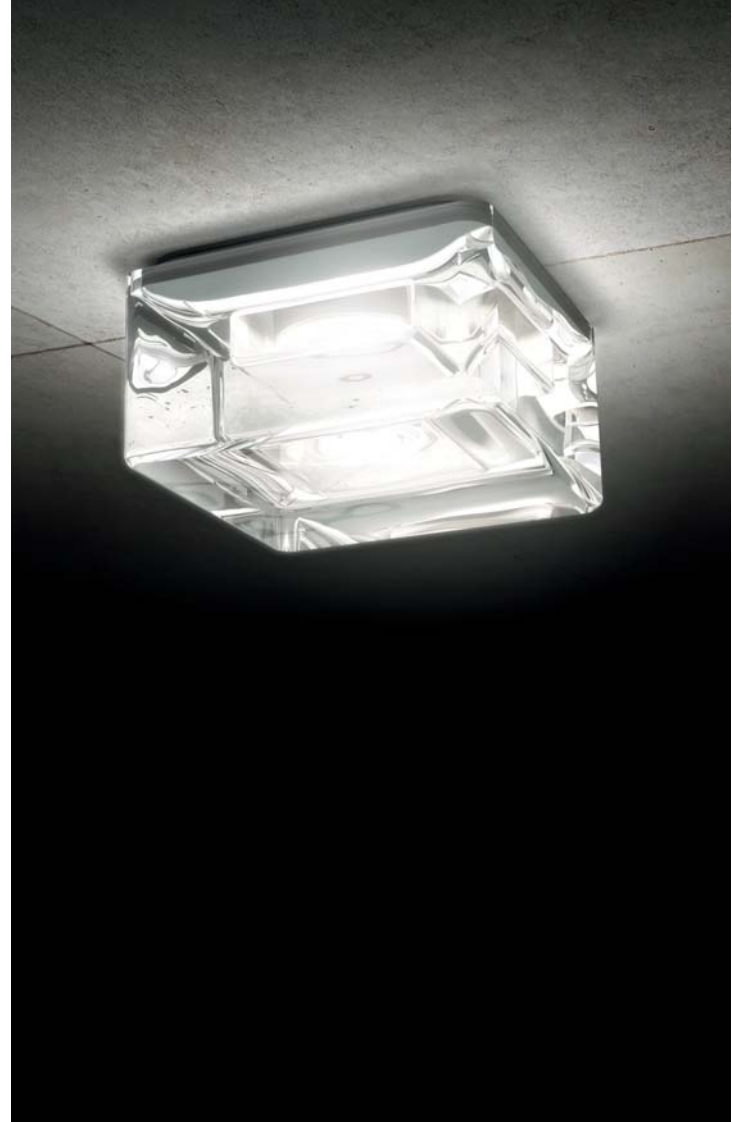
Busch-iceLight: Light in a New Dimension



Flexible applications:
Busch-iceLight as a wall
module for ambience and
wall module for orientation
(from the top).

Light is a key component in architecture. It can place a building in a good light, literally, and bring out its architectural strengths. The new Busch-iceLight, developed in collaboration with the Hamburg-based architect and designer Hadi Teherani, provides architects with flexible design elements: Busch-iceLight can be used to accent a room's lighting, light the way for orientation, or create a harmonic ambience. Equipped with innovative LED technology, Busch-iceLight requires only a standard VDE wallbox – and thus adds an innovative product line of lights for walls and ceilings to the traditional options for flush-mounted switch installations. "Because they use less space than conventional lights, it is possible to integrate very specific light situations in the architecture – to set a mood or for orientation and information," states Teherani. The material plays an important role, because it affects the lighting and atmosphere.

Teherani chose transparent acrylic with a thickness that gives it "a very profound effect and fascinates us like a gleaming gemstone." As a result, not only does the eye catch the light, it also takes in the virtually smudge-resistant lamp. With Busch-iceLight, a new type of flush-mounted lighting module has been developed, which offers an almost unlimited range of applications with its modular design: Light direction and light emission can be set precisely. The acrylic glass element can, for instance, direct light downward or upward, or it can shine light from all four of its sides.



Depending on its intended use, Busch-iceLight can create atmosphere or provide orientation and security. You can choose from three different color temperatures: warm white, neutral white or cold white, and there are two different settings for the basic brightness. As an orientation light, Busch-iceLight can be equipped with different design covers and pictograms. These metallic icons and templates in modern design idiom once more clearly highlight the innovative look and feel of Busch-iceLight. It can be combined with Busch-Jaeger's switch programs *c a r a t*®, pure stainless steel, *s o l o*®, Busch-axcent® and *f u t u r e*® linear, and its appearance fits perfectly with existing electrical installations.

Busch-iceLight is a comprehensive, modular system whose many features are bound to spur design ideas. Specifically in the area of shopping, there are many potential applications such as light installations with a decorative character or as light with a guiding function.



Busch-iceLight for quick orientation: 30 different pictograms provide clear information for nearly all requirements in commercial or semi-public areas. Additional design covers are available upon request.

How many people fit under the PlusCity Center glass dome?

pulse asks a competition question in every new issue. The winners each receive a book.

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☐

Yes, please. I would like to receive 'pulse' regularly,
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Answer

people fit under the PlusCity Center glass dome.

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Postcode/City/Country

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Fax

Email



The prizes:

All correct answers will be placed in a hat, from which the winners will be drawn. ABB/Busch-Jaeger is offering the following prizes: **Shopping. Architecture now!** and **Staging Space**, published by Gestalten Verlag. Deadline: March, 15 2011. The winners will be announced in the next issue of pulse. The winners of the last competition are: Josefine Kollmeier from Bad Feilnbach and Helmut Keller from Dudenhofen.

Preview pulse 02-2011:

Medical care + housing for the elderly

Many innovative buildings are currently being constructed in the areas of diagnostics, treatment and residency. pulse 2/2011 presents a selection.



Stefan Müller-Naumann

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