OBJEKTIV

Magazine for architects and fabricators

0 18
20 1

CULTURAL PEARL OF PARIS

Star conductor Laurence Equilbey, how does it feel to be working at La Seine Musicale?

LONDON'S FIRST SKYSCRAPER

Beatlemania, homeowners, luxury flats: the eventful life of Centre Point

MASTER OF THE FREEHAND SKETCH

When a metal construction specialist draws the technical solution in the first meeting

EXCELLENT WORK

These building ideas impressed us the most in 2017

MY BIG DAY

Celle, 9 November 2017, Architect's Darling award ceremony

My my, so many people here. Have they all come because of me? Right after the artist Loni Kreuder made me, the first architects were already calling me the "building industry's Oscar" or "Architect's Darling". Now they're going to hand me over! In the "Best Product Innovation Technology" category, among others. The architects have long been deliberating over where I'm going to move in.

There, now the jury spokesman is coming up onto the stage. I know him, he's Jürgen Steffens from JSWD Architects: "The jury and architects who benefit from the opportunities of streamlined constructions in the new steel façade system THERM^{+} FS-I congratulate the company RAICO on its win."

That was my big day. Now I have a new home and a family. The CEO presented me to the whole team the next day and everybody wanted to hold me. I feel really comfortable here – and between you and me: I'm a well deserved prize!

Yours, Phoenix

THERM^{+} FS-I GOLD Winner in the "Best Product Innovation Technology" category

PERFORMANCE SPECIFICATIONS

A MEETING WITH A VIEW

4 There's no stopping these two: Whether it's downhill biking, climbing, alpine tours or deep-snow descents – André Eschelbach (left), proprietor of metal engineering planners AE Plan in Wikon, and Gerhard Limacher from RAICO Swiss share the same passion for outdoor sports. The pair have known each other for 20 years and have planned and realised numerous façades together. Last autumn they set off on a climbing tour on the Säli rock in Olten. After two hours of clambering on wet, crumbly rockface they reached the top via the so-called "Viva las Vegas Route" and enjoyed the fabulous view of the Jura Mountains over coffee and cake.

Interaction

Objektiv 1 — 2018

WORKING BY HAND

He's the man they call the "master of the manual sketch": Stefan Gauss from the company FREYLER Metallbau draws technical details on paper even during consultations with architects and clients. What do his clients value most about this way of working? And how much of the sketch is present in the subsequent realisation?

Interview: Gabriele Werner

Mr Gauss, when did you discover your gift for manually sketching complex technical solutions?

It was during my studies in lectures that went on for hours. I am a qualified metalworker and during my apprenticeship I took a metal construction engineer access course at the DHBW Mosbach. Studies back then were still very engineering-biased. I was interested in metal construction, though – and I kept myself busy with sketching during lectures. Now I've been holding lectures in metal construction in Mosbach myself for 25 years. And guess what I teach all my students?

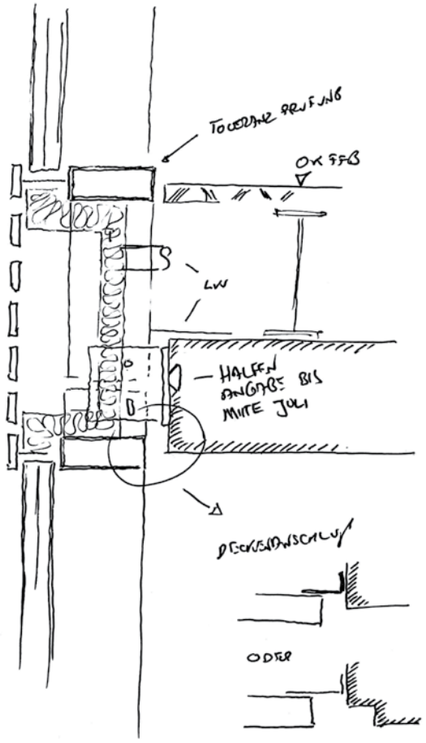
Sketching?

With me there's no ruler, no squared paper – just working by hand!

Why is that so important to you?

All these high-gloss visualisations these days convey the impression of absolute rightness. Your counterpart sees exactly how something's going to look. And afterwards, during technical editing, you practically have no more opportunity to integrate any static or technical influences of any kind. With a manual sketch, though, everyone can clearly see what's being talked about. We're not talking about a millimetre and a half here. It's about the essential. And that can even be shown using a fat pencil on a piece of cardboard. If you're trying to explain something to an assembly operator on the building site, for example, a sketch always helps – no matter what language he speaks.

→



"Drawing is the language of the architect and engineer. A scribble, like this one by Mr Gauss, takes up the ideas of the blueprint and translates them into metal. In the figurative sense, virtual reality becomes tangible here!"

Mathias Orth from KMB Plan Werk Stadt GmbH on Stefan Gauss's sketches for the Teamtechnik headquarters (left)

Is it not hugely practical as well, if you can show things live and in real time?
Yes obviously, you're super quick. I can do the architects' groundwork straight away without booting the laptop, with no "sorry, my cloud's just crashed". And I can even point to potential difficulties. If I can say, based on a sketch: There's this or that problem here in the execution or technology, then for the counterpart – whether client or architect – it's always a bonus. It generates trust: Gauss knows what we're talking about.

No doubt a whole load of practice is required for this, alongside professional competence.
Of course, you won't learn how to do it in a fortnight. Since 2007 I've been collecting my sketches in sketchbooks. I've now got to book number 48. Sometimes, when an engineer comes to me after weeks and says: Mr Gauss, there's one sketch I haven't copied, I say: No problem!

A manual sketch also has an aesthetic quality, it conveys the individual expression of the person doing the drawing.
Well yes, people are what it's all about! The way they live, work, how they feel while doing so. "People build for people", is the slogan at FREYLER. I would like to add "people build with people" to that. Building is about working together. About getting along. As it was the case with the new Teamtechnik headquarters – the "modern thought factory for highly qualified engineers" as it's called. A general contractor asked us whether we wanted to co-provide the façade work. We submitted a tender comprising sketches and, as a result, received the opportunity to be right at the first consultation with the client and architect. The particular challenge lay in building the ventilation elements into the ceiling completely inconspicuously. I developed the way that can work right at the table with the architect! And just in time for its 40th anniversary – after a construction period of only five months – Teamtechnik inaugurated its new central office.

How much of the sketches from the first consultation is still in the end result, in percentage terms?
Everything! It's the foundation for the whole implementation.

How was it for you when you stood in front of the finished building?
I was happy as a child. □

PROJECT	Teamtechnik headquarters
LOCATION	Freiberg am Neckar, Germany
CLIENT	Teamtechnik Maschinen und Anlagen
ARCHITECTS	KMB Plan Werk Stadt GmbH, Ludwigsburg
PLANNING AND CONSTRUCTION	FREYLER Metallbau GmbH, Kenzingen
SIZE	2.600 m^2
DURATION	5 months; completion: March 2016
RAICO SYSTEM	THERM$^+$ A-V aluminium curtain wall, System width 50 mm, U_{cw} = 0,508 W/m^2K

FROM CONSULTATION SKETCH TO HIGH-TECH FAÇADE: THE TEAMTECHNIK HEADQUARTERS IN FREIBURG

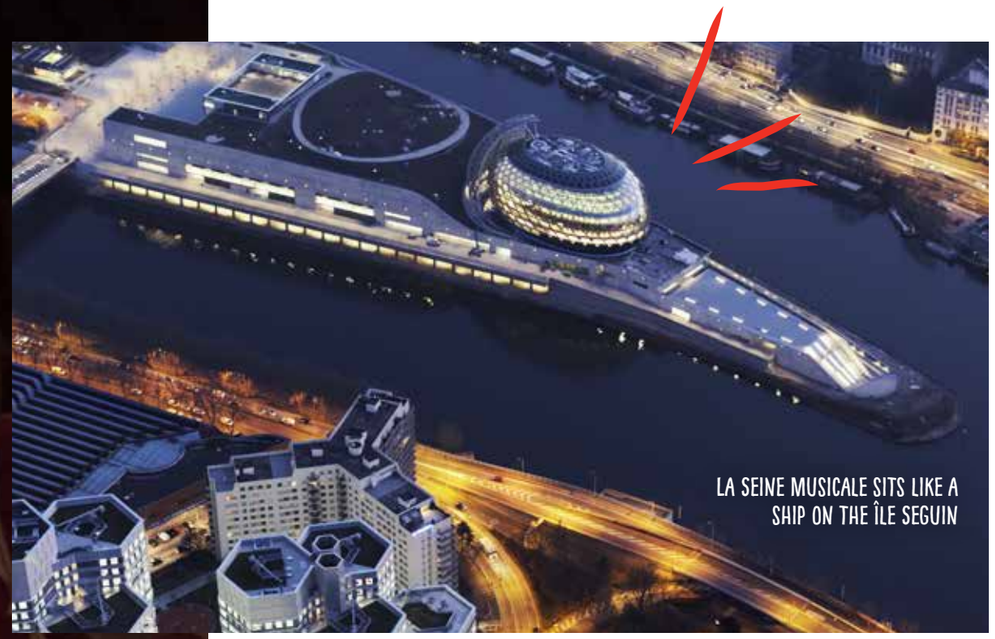
EXQUISITE MUSICAL PEARL OF THE SEINE

Architect's Darling, system developer's masterpiece: La Seine Musicale is Paris's new music culture centre. French star conductor Laurence Equilbey lets us in on how it feels to work in it with her orchestra on a regular basis. What is not apparent when looking at the building: The façade system had to be specially developed and realised in the space of only one year.

Text: Ernst Hofacker, Lars Thieleke

"To me, La Seine Musicale is pure inspiration. My orchestra's artistic values are excellence, innovation and openness – they are in perfect harmony with those of La Seine Musicale. The building is flooded with light and open to its natural surroundings, which gives it a clear expression." If anyone knows that, it's Laurence Equilbey. After all, she has earned the French Order of Merit, on top of that the Ordre des Arts et des Lettres, and she leads the Insula orchestra and performed one of the opening concerts at La Seine Musicale with it.

Like a ship, Paris's new music culture centre presides over the river, upon Île Seguin, the former factory island of carmaker Renault. It is crowned by its gigantic, honeycombed timber and glass-clad Auditorium – the pearl-like concert hall for an audience of 1,150 people. The clever trick is a solar veil with a 800 m^2 photovoltaic facility, which circles the Auditorium like an oystershell, always in line with the sun's position as it travels across the sky.



LA SEINE MUSICALE SITS LIKE A SHIP ON THE ÎLE SEGUIN

„We used less than five serial parts in the entire construction project."

Stefan Sepp, RAICO

On account of the unusual shape of its pearl, the building has already been hailed as a landmark of the Parisan district Hauts-de-Seine. Besides the Auditorium, La Seine Musicale comprises another venue for an astonishing 6,000 spectators called La Grande Seine, as well as recording studios, seminar and rehearsal rooms, a music school and, not unimportant, sufficient catering possibilites for the visitors; all accommodated within the total 36,500 m^2 of the 'oyster temple'. Michel Sardou and Bob Dylan have already honoured La Seine Musicale with their presence, and Leonard Bernstein's musical "West Side Story" has also been a guest here.

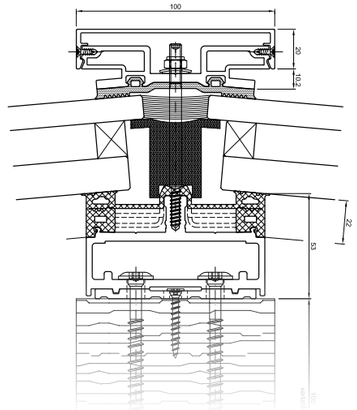
Luckily, no building betrays the struggles that went into its construction.

When Stefan Sepp, head of the engineering division at RAICO and responsible for the façade system of La Seine Musicale, is asked where his biggest challenge lay during this project, he takes a very deep breath. Then he says: "A French system developer had already compiled a full planning in 2015. A custom system comprising custom profiles, sealing and everything. In short: the system didn't work, so the assignment went to the processing company MTECH BUILD. There they were in Paris, with a special construction project, needing special French permits, and they just didn't have a clue how to do it. So they came to us, asking for help and whether we could complete this project in line with the appropriate quality standards in minimal time."

Nerves were raw in Paris.

Stefan Sepp and his team had just one year starting from the first talks with the general contractor. On top of that, it was clear that construction and assembly on the building site on the Seine island was going to be extremely difficult. Stefan Sepp: "Our partner, the processing firm MTECH BUILD, had to store construction materials in floating freight barges within reach of the cranes. The whole thing happened on a site the size of a proverbial postage stamp. The scaffolder had to alternately build ten metres higher, ten metres lower so that the spherical shape could be fitted with profiles bit by bit. At peak times, 50 to 60 fitters were at work on the building site."

→



MEN AT WORK: FRANÇOIS GEHANT (RAICO FRANCE) AND STEFAN SEPP DISCUSS THE PLANS FOR THE COMPLETELY NEW CONSTRUCTION WITH SPECIAL DRAINAGE

DESPITE THE SIZE RATIO: THE FITTERS WON THE BATTLE AGAINST THE ELEMENTS

THE FITTERS WERE able TO BASE THEIR WORK AT LA SEINE ON THESE MODELS

A TIGHT SQUEEZE: NARROW SPACE AND LITTLE TIME REQUIRED GOOD COORDINATION AND FIRST-CLASS CONSTRUCTION SITE MANAGEMENT

Stefan Sepp and his team opted to start from scratch and developed an entirely new system for La Seine Musicale which was adapted to the given conditions of the substructure that was already present: “We used less than five serial parts in the entire construction project. The profiles, which we newly developed, are based on the fundamental principles of our THERM^{+} system, but they were individually custom-adjusted: No element was completely level, instead everything sloped towards the back, while the diagonals shaped the seals inwards. We made it a little softer so the glass panes fit better. The most important question was: How do we manage to build a sensible sealing system for the water run-off? Our solution: three tiers and drainage via the gulley circling the ‘equator’ of the sphere.”

Rock me, Amadeus!

During construction, Laurence Equilbey observed the various stages of the evolution of La Seine Musicale from afar. She says the building’s aesthetics with its clear, seamless design and the veil fascinated her day and night. On 22 April 2017 she had the privilege of opening La Seine Musicale. The conductor experienced a dream come true. Now she makes regular appearances there with her Insula orchestra and her chamber choir accentus, and she thanks the Département des Hauts-de-Seine for its commitment: The decision to invest state resources in culture, and in music in particular, has gifted Paris with a beautiful concert hall to match the Philharmonic and the Radio France Auditorium, in which festivals and unusual themed performances take place. Just right for the Insula orchestra, with which Laurence develops innovative stage productions that combine music, visual arts and circus performance.

What composition does one play to open such a dazzling and important venue, Madame Equilbey?

“One that has both surprises and a statement”, she replies. “To put it precisely, Mozart’s ‘La Finta Giardiniera’, which I find very interesting in its German version ‘Die Gärtnerin aus Liebe’. It alludes to elements from ‘The Magic Flute’ and offers a strong dynamic in the German libretto. We varied the singing from German via Italian and French to English. A clear statement for openness and equality.” □

PROJECT	La Seine Musicale
LOCATION	Île Seguin, Boulogne-Billancourt/Paris, France
DURATION	2013 - 2016
CLIENT	Bouygues Construction, France
ARCHITECTS	Shigeru Ban Architects Europe & Jean de Gastines Architectes, Paris
CURTAIN-WALL CONSTRUCTOR	MTECH BUILD, Luçon
RAICO SYSTEMS	Special system of a THERM^{+} timber add-on façade construction, which was newly developed for this project

BRONZE winner in the “Best Reference Property” category

La Seine Musicale, Paris

Centre Point, London

THE ANIMATED BUILDING

Swinging Sixties, Beatles, Carnaby Street – and one of the first skyscrapers in Great Britain: When the 117 meter Centre Point in the middle of London was completed in the summer of 1966 it was the herald of a new age. Pop stars like David Bowie posed before it and squatters occupied it. And after its refurbishment in 2018 it once again embodies the spirit of the age. The building has been through a lot.

Text: Ernst Hofacker, illustration: Jan Reiser

What is to become of it? Londoners may well have asked this same question in 1961 when building works began on the site near the Tottenham Court Road underground station, also in the centre of London. Although major building sites were still the order of the day in the post-war Thames Metropolis two

James Bond's Aston Martin DB5 is the coolest sports car of all time.

decades after the devastation caused by Hitler's bombardment. The property tycoon Harry Hyams knew exactly what it should be: a real skyscraper; a project which epitomised the spirit of the age. It was to move things forward, into the future, into modernity. It embodied limitless optimism.

A euphoric outburst in the midst of Beatlemania

The history of Centre Point actually starts in the late 1950s. St. Giles Circus is already one of the traffic nodes of the City of London, and town planners want to redesign the space. Interested parties come and go but Harry Hyams and his company Oldham Estates Co persevere. There are tough negotiations as the authorities apply strict conditions to the planning permission. Amongst other demands are a new approach road and wider traffic lanes. Hyams appoints architects George Marsh and Richard Seifert to draw up the plans. The first draught appears in 1959 and building work starts on the nine-storey eastern block in 1961. Permission for the 34-storey tower to the west is granted in January 1963. It will take three years before the stunning concrete structure in the heart of London reaches its full imposing height.

At exactly the same time as London becomes the centre of the new pop culture. In 1963 Beatlemania sweeps first Great Britain and soon after the rest of the world. The city becomes more colourful from month to month. There's activity everywhere you look: art, fashion, literature and photography set new trends in everyday life, the urban landscape and the media. Andy Warhol's pop art is the word of the hour, James Bond's Aston Martin DB5 is the coolest sports car of all time and television, it is said, will soon transmit in colour. Mary Quant's mini skirt takes over the fashion world, the skinny London model Twiggy takes over the catwalk and the new pop music resonates from every speaker with songs like „A Hard Day's Night", „You Really Got Me" and „My Generation". Along with the Fab Four, the Rolling Stones, the Kinks and The Who dominate the airwaves – pop made in Swinging London.

Brutalism in the heart of London

When Centre Point is completed in 1966 it immediately becomes a symbol of its time. The star architect Ernö Goldfinger who, with his clean, hard-edged rational designs has earned fame as one of the most creative exponents of architectural modernity, names Centre Point „Londons first pop-type skyscraper" – the style enters architectural history as „Brutalism". Goldfinger raves: „Like the Beatles and Mary Quant the building stands for the utmost confidence in the principle of pure professionalism."

It's the summer in which the fans of the English football team celebrate the first, and so far only, world championship title

Empty Centre Point is gradually becoming a political issue and a concrete provocation!

won at Wembley Stadium in the legendary final of 30th July (4:2 AET). For example at the „The White Lion" pub on the of corner Denmark St. and St Giles High St. Anyone taking a few steps from there towards the tube and then looking up into the night sky can see the three-meter-tall neon letters, dizzyingly high above: At the top of the colossus, they spell the proud words „Centre Point", which can be read even from the other side of the „dirty ol' river" Thames. The night time wanderer might hear „Sunny Afternoon" playing on a radio – the Kinks song is number one on the English charts that same week.

Squatters occupy Centre Point

After initial scepticism, the Londoners soon take their new landmark to their hearts. These include the young David Bowie, whose career is only just beginning - he has a promotional photo taken against the backdrop of Centre Point in 1967. A few unusual figures, even for the world metropolis of London: The building of the tower cost the astronomical sum of 5.5 million pounds (in today's money around 35 million € but with far greater buying power at that time), the total of 34 storeys tower 117 meters high and offer an overall area of 27,180 square meters.

But – what to do with the thing? Property tycoon Hyams has his own ideas. Having leased the enormous site from the city for an agreed 150 years at 18,500 pounds per year, he does not want to rent out the 34 storeys of the fully-fitted palace separately, no, he wants a single tenant. And he cannot find one. And so he leaves Centre Point empty. He can afford to. Which soon causes anger. In London at the end of the 1960s

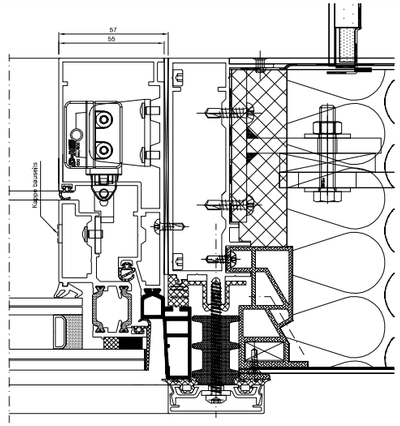
housing, especially affordable housing, is scarce and so the empty Centre Point gradually becomes a political issue; a concrete provocation. Soon, the first public campaigners demand that conservative Prime Minister Edward Heath's government take over the building and make it available for housing. The protests reach their peak in January 1974 when the tower is occupied by a group of activists, two of whom had previously obtained jobs as Centre Point security staff. Above the entrance there is now a placard saying „Homes not offices!". Hyams finally gives way under the pressure of the Heath administration and public opinion and gives consent for the storeys to be leased individually. However it is a few years before this happens.

Modern masterpiece

In 1980 Centre Point becomes the headquarters of the Confederation of British Industry (CBI). It remains so until March 2014. Nine years previously in 2005, still the most striking skyscraper in the vastly changed London cityscape, it is sold for 85 million pounds to the investor Targetfollow. In 2011 the company sells the property for around 120 million to the English property giant Almacantar – at a tidy 48 percent profit. Almacantar now devises a new utilisation concept and in 2015 it starts the refurbishment of the now iconic Centre Point which now has protected status having been designated a „particularly important building" in 1995. In 2018 the building is enjoying a new transformation and finally houses private tenants, albeit affluent ones: The architects Conran & Partners and Rick Mather were appointed to convert the 34 storeys into 82 luxury flats plus pool, fitness area and exclusive penthouse bar – the average purchase price of the 1 to 5-room apartments is 3.2 million pounds. An adjacent block will also be refurbished with 13 flats for less wealthy tenants and the area around Centre Point is to be redesigned.

If Centre Point was once emblematic of the leap into cultural modernity of the swinging sixties, in the new millennium it will symbolise the post-Brexit age of the financial metropolis of London. Kathrin Hersel, development director of Almacantar, expresses the building project philosophy: „We will make Centre Point an address of which Londoners can be proud. The project will breathe new life into this area and contribute to an exciting sustainable future for the benefit of London and its visitors."

Meanwhile, Conran's Managing Director, Tim Bowder-Ridger, enthuses: „The new Center Point will assert its position as one of London's most cherished design classics – a masterpiece of modernism in the heart of a great, creative city!" The centre of the kingdom.



800 ELEMENTS AND A SANDWICH

During the complete renovation of Centre Point, the optical requirements of a 1960s high-rise faced the technical and structural challenges of the 21st century. The solution for the façade was the RAICO THERM^{+} A-V standard system, supplemented with a slim sandwich frame. This enabled a very high level of prefabrication and took into account the above requirements ideally. For ventilation and smoke extraction in the staircases, outwards-opening top hung and sliding windows with an all-glass look were integrated into the façade construction.

PROJECT	Centre Point
LOCATION	Tottenham Court Road, London, UK
DURATION	1963 - 1966; Renovation: 2015 - 2018
CLIENT	Almacantar
ARCHITECTS	Conran & Partners and Rick Mather
PLANNING	Wintech Façade Consultancy
CONSTRUCTION	Lindner Fassaden GmbH
RAICO SYSTEMS	A bespoke variation of our THERM^{+} A-V façade system and FRAME^{+} window system

Award-winning ideas

EXCELLENT WORK!

Of all the buildings that received a RAICO façade system and won awards in 2017, there are four that have particularly impressed us – due to their sustainable idea, their pioneering design or simply due to their perfect craftsmanship.

Text: Roman Felden

PROJECT
The GlaxoSmithKline Centre for Sustainable Chemistry

AWARD
Building Magazine's Sustainability Project of the Year

RAICO SYSTEM
THERM^{+} H-I

The University of Nottingham is proud of its showpiece: "Morgan Sindall's carbon agenda has promoted an intelligent approach for the use of resources and energy efficiency – a thoroughly sustainable, exemplary and innovative building," the jury said in its verdict. Main contractor, Morgan Sindall, has built the world's first chemistry laboratory – The GlaxoSmithKline Centre for Sustainable Chemistry – designed to achieve carbon-neutral status within the next 25 years. In order to make no overall contribution to greenhouse gases, the lab is powered by solar power and sustainable biomass.

PROJECT
HanseMerkur Insurance Group reception building

AWARD
German Metallbaupreis (Metal Construction Award)

RAICO SYSTEM
THERM^{+} S-I

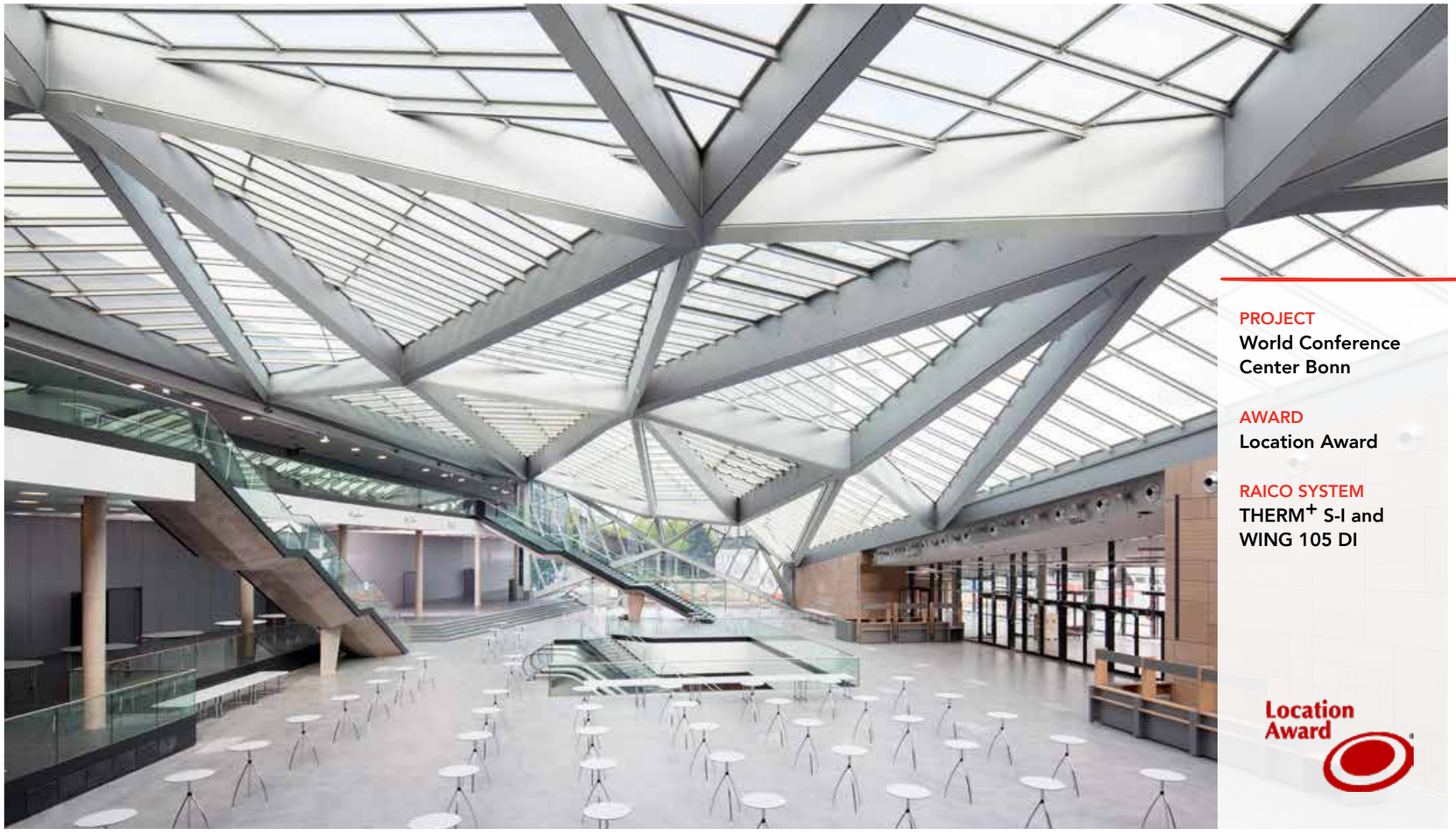
First place in the „Steel Constructions" category in 2017 went to Hamburg: The jury for the German Metal Construction Award honoured the modern design, and the technical and artisanal perfection of the new reception building of the HanseMerkur Insurance Group – planned, created, fitted and developed by Buthmann Ingenieur-Stahlbau AG. A distinguished entrance solution of the highest design, construction and artisanal quality.

PROJECT
Headquarters of Métropole Rouen Normandie

AWARD
The American Architecture Prize

RAICO SYSTEM
THERM^{+} H-I and FRAME^{+} 90 WB

A true landmark on the banks of the Seine in Rouen: the façade of the headquarters captures the horizontal lines of the main harbour, its silhouette reflects the renovated industrial buildings on the right-hand banks of the river, and its transparent architecture toys with the alternating light of the sky and the reflections of the water. Its external shell is coated in fish-like „scales" – colourful pieces of glass – and results in impressionist colour variations. A worthy winner of the American Architecture Prize in the „Architectural Design/Institutional Architecture" category.

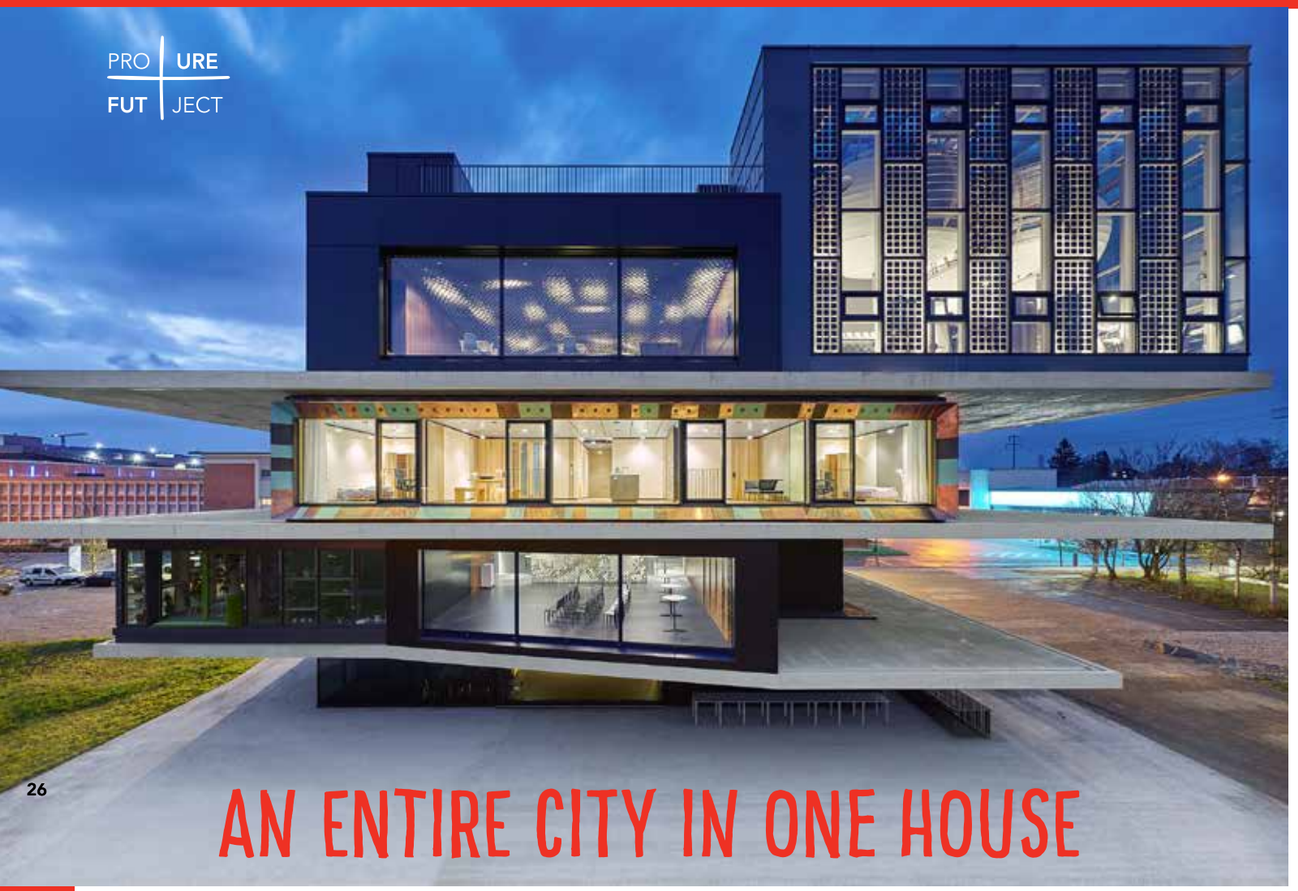


PROJECT
World Conference Center Bonn

AWARD
Location Award

RAICO SYSTEM
THERM^{+} S-I and WING 105 DI

„The World Conference Center Bonn has a captivatingly unique architecture and an interesting history," said the ten-person jury when justifying its decision to award the prize in the „Trade Fair and Conference Centres" category to the WorldCCBonn. The Location Award is one of the highest awards for top event locations in Germany. As soon as one enters the building, the foyer, with its spectacular roof construction, creates a unique atmosphere for various different top events, such as the World Climate Conference, at the World Conference Center Bonn.



PRO URE
FUT JECT

AN ENTIRE CITY IN ONE HOUSE

This house is destined never to be completed: NEST unites a diverse array of building units to form a fully innovative test laboratory for the construction industry – and hence a constantly changing and evolving construction. What is its purpose?

New technologies don't have an easy time of it in the construction and energy sector. Until they have achieved documented market maturity and investors have cast off their scepticism, lots of time goes by. NEST stands for "Next Evolution in Sustainable Building Technologies", was created by the company Empa from Dübendorf, Switzerland, and helps to speed up innovation cycles for materials, technologies and processes.

On three storeys, its jutting concrete slabs form the ceiling and floor for alternating, modular residential and research units. This means it is no closed research laboratory, but a "living lab" in which people work and live in objects of research. Real-life conditions for innovations.

Electricity generated by treadmill runners

The units in there at the moment could not be more diverse: "Solares Fitness & Wellness", for example, runs itself on electricity generated during training. "Vision Wood" shows what modern timber construction can do in conjunction with applied timber research. "Meet2Create" investigates how future office environments will have to adapt spatially and technically to the constant transformation undergone by the ever more mobile world of work. "Digital Fabrication" deals with the seamless linking of digital technologies with the physical construction process and the possibilities of new architectures that arise from this.

The "HiLo" unit takes its inspiration from far into the future and is building a self-supporting lightweight concrete roof as the optical crown of NEST. An adaptive façade with dynamic solar modules is deployed on the southern and western wall. These solar modules regulate the unit's light, shade and temperature, and generate energy. Further units range from the wildly leafy passive room via special toilets through to the high-tech work cell with dimmable window.

Inside-out building

What vision did architects Fabio Gramazio and Matthias Kohler have in mind? "It important to us to grant as much freedom as possible to the builders and users. We therefore designed a fixed supporting structure. The units' construction is thus simplified; they don't need any pillars, for example. Secondly, we let go of the notion that all units had to be identical. Instead we view NEST as a little city," explains Gramazio.

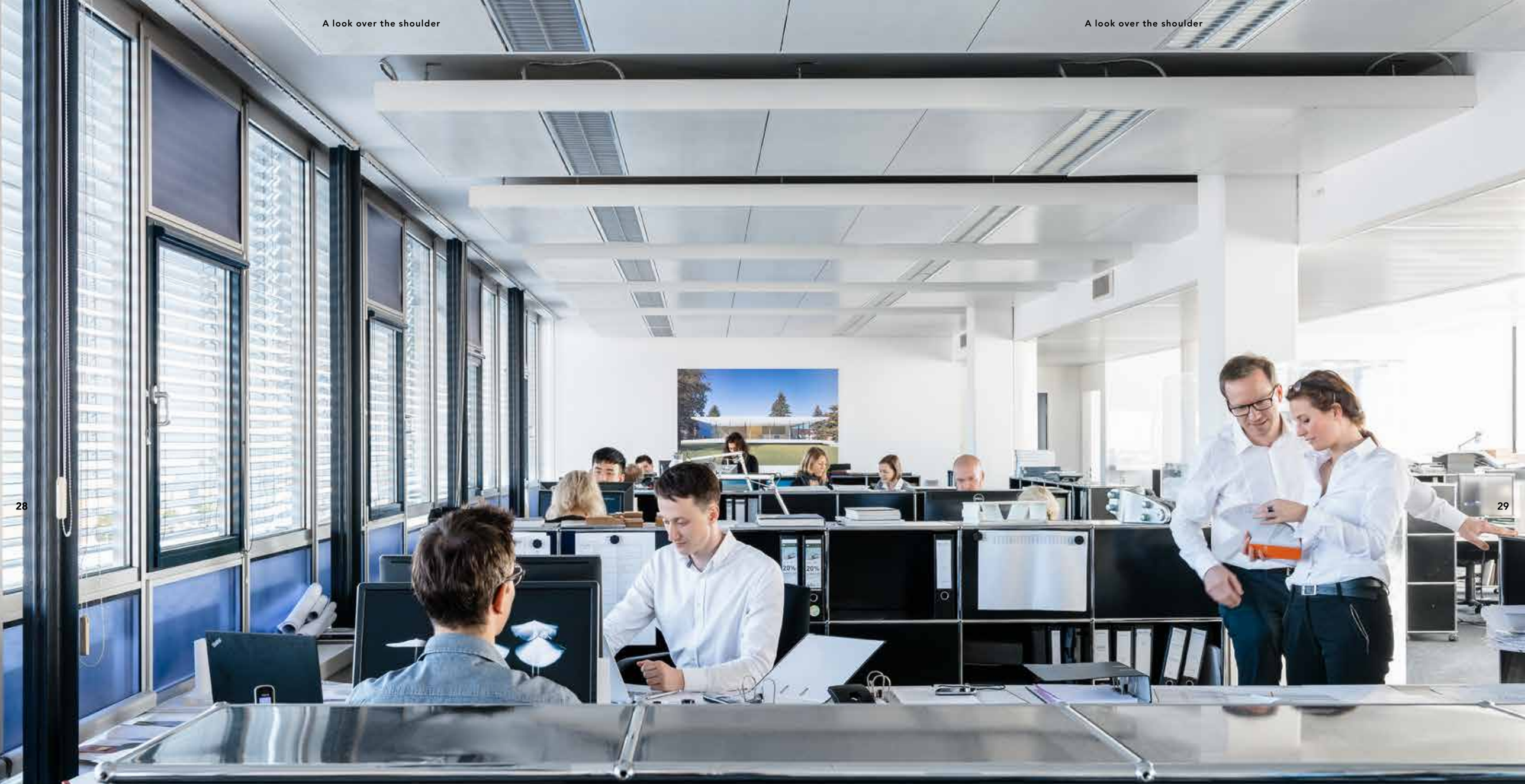
Whereas the atrium and hence also the interior façade are stable and very clearly shaped, the external façade changes constantly. NEST is a laboratory that has been turned inside out, so to speak. It combines the use of renewable energies with a high-insulation construction shell. The "Solare Fitness & Wellness" unit deploys the RAICO system THERM^{+} H-V, which was fitted by a system processor from Ernst Schweizer AG: The eight-metre-high northern façade is equipped with innovative quadruple glazing. With a U-value of 0.3 W/m^{2}K, the glass package achieves a peak value in thermal insulation. As a result, thermally speaking the transparent northern façade forms the equivalent of a well insulated opaque exterior wall.

NEST brings people, companies and universities together, while at the same time acting as a kind of trade show and events location and social meeting point. Here, architects and planners can see for themselves what possibilities and approaches are available in order to cleverly overcome conventional problems and challenges. Since the innovation platform has been put into operation, an average of 1,000 visitors have been coming every month – 80 percent of them are professionals from a whole variety of construction and energy sectors.

More information at:
www.empa.ch

A SELF-SUPPORTING LIGHTWEIGHT CONCRETE ROOF IS SET TO BECOME THE FUTURE CROWN OF NEST

A look over the shoulder



THINK LOCAL, ACT GLOBAL

"We value a particular work atmosphere: interdisciplinary project teams with a high degree of self-responsibility, continuous knowledge exchange between individual focal divisions and locations," emphasises Dr Frank Heinlein from the Werner Sobek Group. This goes for all locations – Stuttgart, Buenos Aires, Dubai, Frankfurt, Istanbul, London, Moscow and New York. The name Werner Sobek is a global byword for structure planning, façade planning, design, sustainability, TGA and energy. And for a philosophy that Frank Heinlein describes as "creative, innovative, ingenious, thinking in life cycles, planning holistically and committing to sustainability".

FAB FOUR

LIGHT AND SPATIAL EFFECT PLAY A PARTICULARLY IMPORTANT ROLE IN INDUSTRY EVENTS. AT THESE FOUR EXHIBITION HALLS, THE ARCHITECTS AND CRAFTSMEN HAVE SOLVED THIS PROBLEM BRILLIANTLY, ALSO THANKS TO A RAICO SYSTEM.

▲ **Fair hall 3 A Nuremberg (DE)**
Client: Messe Nuremberg
Architects: Zaha Hadid office Hamburg
Planung: Werner Sobek, Stuttgart
Construction: Roschmann Konstruktionen aus Stahl und Glas GmbH, Gersthofen
Duration: 2012 - 2013
RAICO system: THERM^{+} S-I steel curtain wall

◀ **Messe 9 + 11 (AT)**
Client: Messe Dornbirn GmbH
Architects: Marte.Marte Architekten ZT GmbH, Feldkirch
Construction: Starmann Metallbau
Construction year: 2017
RAICO system: THERM^{+} S-I steel curtain wall

▼ **CityCube Berlin (DE)**
Client: Messe Berlin GmbH
Architects: Code Unique Architekten, Dresden
Construction: Metallbau Windeck
Construction year: 2014
RAICO system:
THERM^{+} S-I steel curtain wall
WING 105 DI rooflight window

▲ **Umweltarena Spreitenbach (CH)**
Client: W. Schmid AG Bauunternehmung, Glattbrugg
Architects: René Schmid Architekten AG, Zurich
Construction: Ernst Schweizer AG, Hedingen
Duration: 2010 - 2012
RAICO system: THERM^{+} S-I steel curtain wall
FRAME^{+} 75 WI tilt and turn window

LEGAL DETAILS

PUBLISHER
RAICO Bautechnik GmbH
Gewerbegebiet Nord 2
87772 Pfaffenhausen, Germany
www.raico.de

IDEA, CONCEPT AND CREATIVE DESIGN
KOCHAN & PARTNER GmbH
Hirschgartenallee 25
80639 Munich, Germany
www.kochan.de

EDITORIAL TEAM Verena Inninger, Andrea Jall, Dr. Stefan Lackner, Lars Thieleke
ART DIRECTION Andrea Jall, Claudia Bannwarth

PRINTED BY
Kessler Druck, Bobingen, Germany

PICTURE CREDITS
Julien Benhamou (Cover, p. 3, p. 10) | Roman Thomas (Editorial) | Jan Reiser (p. 3, p. 16 et seq.) | Monika Born (p. 4 et seq.) | Urs Kyburz (p. 4) | FREYLER (p. 6 et seq.) | Philipe Guinard (p. 11) | Nicolas Grosmond (p. 12 et seq.) | Andrea Jall (p. 13, p. 21) | Stefan Sepp (p. 13) | Olivier Orditz (p. 13) | Boegly+Grazia / Architectes Shigheru Ban & Jean de Gastines (p. 14 et seq.) | Martine Hamilton-Knight (p. 22 et seq.) | Buthmann Ingenieur-Stahlbau AG (p. 24) | s.h. schroeder (p. 24 et seq.) | Luc Boegly / Architecte J. Ferrier (p. 25) | Empa / Zooey Braun, Stuttgart (p. 26) | ETH Zürich (p. 27) | René Müller, Stuttgart (p. 28 et seq.) | Stadt Nürnberg (p. 30) | Bernhard Rainer (p. 30) | Michael Egloff (p. 30) | Metallbau Windeck GmbH (p. 30)

Published by:

RAICO

Bautechnik GmbH

Gewerbegebiet Nord 2
87772 Pfaffenhausen/Germany
www.raico.de

phone: +49 8265 911 0
fax: +49 8265 911 100
e-mail: info@raico.de