HÖRMANN Schörghuber

PORTAL 59

SUSTAINABILITY

INFORMATION FOR ARCHITECTS FROM HÖRMANN AND SCHÖRGHUBER
AFF, INGENHOVEN, PETER HAIMERL, TENNIGKEIT+FEHRLE, WITTFOHT

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HÖRMANN
Doors for Home and Industry

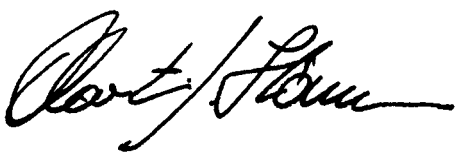
EDITORIAL

Dear Readers,

Do you also have a sustainable lifestyle? In that case, you are bound to separate your rubbish and ride your bike or travel by train wherever possible. You also won't buy fruit in winter that has been shipped from half way across the world. When it comes to your own home, you probably do your best to save energy and resources. You use climate-friendly products or perhaps plant greenery on facades and roofs. As a company, we have appointed a “sustainability officer” and are working to calculate, reduce and offset our emissions. Everyone is doing their bit to help. But sustainability is not just about reducing CO_2 emissions in the short term. The Eiffel Tower, St Peter's Basilica and the pyramids must also have required a great deal of energy to build. It puts things into perspective, however, when the amount of energy is calculated over 135, 500 or even 4500 years. That's why, in this issue of PORTAL, we're not just looking at examples of architecture obviously designed to be “green” – such as the new Calwer Passage, a small urban jungle that improves the microclimate in the heavily polluted Stuttgart valley basin – but also at projects that will be very long lived and therefore won't generate any additional CO_2 emissions. The “Kornversuchsspeicher” warehouse on the Berlin-Spandau shipping canal, which has been converted into an office block, stood there long before the Europacity residential neighbourhood was built. And there is a good chance that the listed brick buildings will last longer than the neighbouring apartment blocks. In the small town of Zell along the Moselle, vineyards are of great value. They remain open spaces, without any unnecessary buildings. The focus here has always been on sustainability. As flooding has been a recurring event along the Moselle for centuries, “climate-resilient construction” is the norm – a feature of the new town hall that is also likely to be important for other areas in the future. And lastly, in the Franconian town of Lichtenfels, local entrepreneurs donated an “Archive of the Future” whose architecture will remain in place for a long time to come. As you can see, cultural sustainability is also playing a role.

We hope you enjoy this issue.

Christoph Hörmann



Martin J. Hörmann

Personally liable general partners

In mourning: honouring the memory of senior partner Thomas J. Hörmann

On Friday, 22 March 2024, Thomas J. Hörmann, personally liable partner of the Hörmann Group, passed away at the age of 85 after a long and fulfilling life. He was the third generation of his family to manage the Hörmann family business, which under his leadership developed into a global door manufacturer with firm roots in Steinhagen in the East Westphalian region of Germany.

Is there anything he would have done differently today? "Nothing at all, to be honest!" Thomas J. Hörmann once said with complete conviction. He looked back with satisfaction at the many decisions he had to make as a company director, as well as the ever-increasing responsibilities that came with the job over the decades. Born in Bielefeld, Thomas J. Hörmann became a chartered engineer before officially joining the company in 1963, at a time when it was very different from what it is today. The product range was smaller, there were far fewer employees and sites, and very limited sales outside Germany. However, the deep roots in the region and the inextricable link between family and business are as strong today as they were then. In 1963, Thomas J. Hörmann joined his father Hermann Hörmann in a company that his grandfather August Hörmann had already founded in 1935 under the name "Bielefelder Stahltürenfabrik" (Bielefeld steel doors factory).

His first roles within the family business

Initially, the young entrepreneur was drawn to Freisen in the Saarland, where a factory for steel fire-rated doors had recently been completed. From there he managed the business for 25 years. The company founded another plant in Eckelhausen in the Saarland in 1972, followed by acquisitions in Germany and abroad in the 1980s. As the 1980s drew to a close, Thomas J. Hörmann, together with his brothers, took on greater responsibilities alongside his father at the company's headquarters in Steinhagen and relocated from St. Wendel (Saarland) to Bielefeld to play a more active role in the business's operations.

Personally liable general partner

In 1990, he joined his father Hermann Hörmann as a personally liable partner of the Hörmann Group. Other forward-looking decisions were made during this period, highlighting the entrepreneur's open-minded approach. In 1988, Thomas J. Hörmann seized the opportunity and took over Schörghuber Spezialtüren KG,

The personally liable general partner of the third generation, Thomas J. Hörmann, passed away on 22 March 2024.

the leading supplier of timber fire-rated doors in Germany. He also took the family business international, paving the way for its current global focus. A new factory was built in Genk, Belgium, and the acquisition of the French door manufacturer Tubauto gave the company a strong presence in France. Hörmann now has its own sites in more than 40 countries.

The next generation

Following the death of his father Hermann Hörmann in 1994, Thomas J. Hörmann, together with his sons Martin J. Hörmann (joined in 1990) and Christoph Hörmann (joined in 1992), became the third and fourth generations of the family to run the company. Today, the first members of the fifth generation are already working in the company. In the last few years, Thomas J. Hörmann increasingly handed over the operational side of the business to his sons. However, he remained a personally liable partner and was involved in new construction projects, investments in the production sites and new products. Up until his death, he could be found at the company headquarters in Steinhagen almost every day. When asked to describe his perfect working day at Hörmann, he once replied: "From 8 a.m. to 6 p.m. in the office." Even if work seemed like a hobby to him, he made time for many other interests. He was a keen horse rider and tennis player as well as a golf and ski enthusiast. In addition, he also cared deeply about social and cultural issues. Together with his wife, Sybille Hörmann, who is in charge of initiating the projects, he promoted integrative golf tournaments, offered production factories as venues for cultural events or sponsored sporting activities. Environmental awareness was another topic close to his heart. Sustainable production and green transport logistics were as important to him as the environmental projects he supported with his sons and grandsons.

An influential entrepreneur

Thomas J. Hörmann's outstanding personality was characterised by his warmth, a strong sense of responsibility, entrepreneurial vision and courage. With his exemplary motivation, exceptional expertise and admirable energy into old age, he led the Hörmann Group to its present international significance. He accompanied many employees along their careers at Hörmann and was a direct contact person and role model. And he was a firm believer that the employees were at the core of the company and the foundation of its success.

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Printing
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Ackerstraße 54
33649 Bielefeld, Germany

Cover photo: Stephan Falk, Berlin, Germany

A fresh start! There is a growing demand for a responsible approach to the way we use our existing buildings.

On sustainability

A FRESH START!

Having more courage to bring about change

With Architects For Future, Arno Brandlhuber, Peter Haimerl and Sieben Linden

The actual meaning of "sustainability" will always come down to perspective. For this issue, we asked four very different advocates of sustainable building for their views on the matter, including two architects, an association and an entire village. We couldn't have had a wider range of opinions.

One thing they can all agree on is their aversion to any kind of waste. After all, one thing is generally true: we don't need to replace what we already have and can still use. Be it the trend towards "fast fashion" clothing, which is designed, produced and then disposed of in record time, or the construction of new buildings that have been erected without a second thought,
for people with a fully ecological lifestyle, the path to achieving a sustainable existence means building with straw bales and clay, using separation toilets, eating a vegan diet and engaging in an ongoing discourse about the right way to live as a community. This has been an ongoing practice in the "Sieben Linden Ecovillage" in Saxony-Anhalt. For an architect like Arno Brandlhuber who wants to serve his community, social engagement is one of the factors that leads to more sustainable construction, as illustrated by his involvement in co-founding the citizens' initiative "HouseEurope!".
The aim was to make people realise that demolishing buildings should be a thing of the past, the same as wasting food. The initiative also aims to create a new legislative framework. For the "Architects for Future" association, the issue is more than just a simple energy-related CO_2 equation with a simple result at the end. Instead of using a lot of energy to demolish existing buildings and spending even more energy to build new ones, they should be systematically renovated. The reduction in CO_2 emissions would be huge as a result. This consideration prompted a widespread call for a moratorium on the demolition of buildings. Above all, the association wants to instil a new attitude in all those involved in the design and construction process. Architect Peter Haimerl is taking things one step further. For him, existing buildings are not the only huge CO_2 stores that need to be protected. He views existing buildings as warehouses of valuable, shared memories. Such intangible memorabilia, which serve to hold together a society that is becoming increasingly divided, are therefore an essential part of cultural and social sustainability. While these are four fundamentally different approaches, they all share common elements and a common goal.

THE "ARCHITECTS FOR FUTURE" ASSOCIATION

Society often underestimates the damage caused to the climate and the environment by the construction sector. This is a fact also neglected by politicians and businesses. Transforming the construction sector is not only an absolute necessity, but also an opportunity to establish a new building culture. The "Architects for Future" association has ten demands.

Closely linked to the move towards renewable energy and more sustainable transport, transforming the construction industry is a key factor in meeting the Paris climate protection targets. If we want to improve our quality of life and social equity, we need to decouple the further development of prosperity from resource consumption.

[1] Need

"What do we really need for a good life?" is a fundamental question when it comes to shaping a better future. Given the increasing demands from individuals and society as well as the counterproductive legal requirements, improved technical solutions are not enough to effectively conserve resources. An important factor is the demand for heating. Although buildings have required less and less heating energy per square metre since 1970, the heating energy requirement per capita has remained the same. This is due to the fact that the average living space per capita doubled from 25 to 50 square metres

Collage: allanswart, istockphoto / Eskemar, istockphoto

Photo: HouseEurope! / Erica Overmeer / Edward Beierle for Euroboden

HouseEurope! advocates for renovating rather than speculating.

Radical preservation: Brandlhuber's home attracted a lot of attention.

ONE OF THE ARCHITECTS: ARNO BRANDLHUBER

Together with Olaf Grawert, Arno Brandlhuber from b+ founded the citizens' initiative HouseEurope!, which advocates a European directive on the preservation of buildings and against demolition due to speculation.

I am an architect and the co-founder of the European citizens' initiative HouseEurope.eu. The issue of our living environment plays a crucial role in the quality and stability of our community life. It affects each and every one of us, regardless of age, profession or background. As part of the HouseEurope.eu initiative, I see it as my responsibility not only to create awareness, but also to promote sustainable legislative solutions that effect profound change in values in our society.

Collective action

It may come as a surprise, but many studies show that a large proportion of the population does not recognise the direct impact that property has on their lives. In fact, buildings have a significant impact on our daily lives: they determine how much we pay in fixed costs, influence our quality of life, our CO_2 emissions and our future. In my everyday life, I always make an effort to use resources responsibly and try to consider the impact of our actions on society. It is vital to think outside the box and think ahead to future possibilities. Thinking ahead and anticipating the possible consequences of our actions is essential in promoting harmonious and sustainable coexistence.

Fair and sustainable

HouseEurope.eu's efforts are an important step towards a more sustainable and fairer living environment in Europe. By working together, we can help make building demolition a thing of the past – just like single-use plastics, fast fashion and food waste. Everyone has the right to affordable housing and a climate-friendly future. For me, it's important to find a way of reconciling ecological, economic and social aspects, thereby improving the quality of life for everyone.

THE OTHER ARCHITECT: PETER HAIMERL

Known for his innovative use of existing buildings, Peter Haimerl also has a positive attitude towards new builds – as long as the architectural quality ensures sustainability.

I come from a small farm in the Bavarian Forest, so of course sustainability was an important consideration for us. The resources available to people were limited. With the exception of a few machines, the amount of energy that was required to carry out work was limited to personal energy consumption. CO_2 consumption was therefore calculated in kilojoules rather than kilograms. The aim, however, was not to use as little energy as possible, but to create the most comfortable and attractive living environment with the little energy that was available – regardless of whether the aim was to optimise the fruit harvest or to make a house as attractive and comfortable as possible. We made our way to school on foot or by bike and even then, I didn't take the shortest and most efficient route with my classmates, but the most exciting and thrilling one.

Maintaining this attitude

Ever since then, I have tried to maintain this attitude in everything I do. When it comes to developing good architecture for an existing building, as well as exploring visionary possibilities, it is important to find approaches that already have the current building or future possibilities in mind. Perhaps that's also one of the reasons why I decided to keep as many of the original features of my own farmhouse "Birg mich, Cilli!" as possible. The existing buildings contain energy in the form of grey matter and, more importantly, in the form of stories that, like potential energy, are just waiting to be activated. The combination of history and contemporary architectural thinking revealed unexpected spatial expansions and modulations that would

Unconventional upkeep: one of Peter Haimerl's converted farmhouses.

Architects for Future
Established in Wuppertal, Germany, in 2020
Find out about funding opportunities and how to take part at
www.architects4future.de

Peter Haimerl
Born in Eben, Germany, in 1961
www.peterhaimerl.com

Arno Brandlhuber
Born in Alzenau, Germany, in 1964
Find out about funding opportunities and how to take part at
www.houseeurope.eu
www.brandlhuber.com

Sieben Linden
Established in Beetzendorf, Germany, in 1997
Find seminars and webinars at
www.siebenlinden.org

have been impossible if I had built a house on a greenfield site without historical features and a character of its own. It would have been much harder for me to come up with an idea and would have taken more effort to find and develop a plot of land with building rights. We would have had to extract, transport and refine new materials and come up with a suitable design to combine and assemble them into a house.

Intangible energy

Few things are more unsustainable than our present-day approach to architectural design, which follows the rules of classical modernism, being able to stand on its own and remaining neutral. For a hundred years, current architecture has been unable to find a link to its own past. For me, the question of sustainability is therefore not so much a question of conserving resources. We need to create architecture that uses immaterial energy, that creates space alongside facades and walls, that charms and inspires people. That is the kind of architecture that is able to last a long time, that is visited and brought to life by many people. Everyone who visits can get a lot out of this space and bring their own ideas and life identities. Current efforts to be more sustainable solely through the choice of materials or new mobility concepts miss the mark by a long way. We need more stories, more eloquence, more architecture!

within this period. To ensure that buildings cause significantly less harm to the environment and climate, we need to consider simplifying our own needs and legal requirements.

[2] Demolition

A key factor in transforming the construction industry involves avoiding demolition in favour of renovating existing buildings. In the long term, renovations usually generate fewer emissions than the construction of new buildings. Post-war buildings dating from the 1950s to 1970s therefore present one of the best opportunities to bring about this change in the building sector: they make up around 40 percent of existing properties and are easy to renovate into near-zero energy buildings. Adding extra storeys, as well as converting and repurposing buildings, can also create more living space.

[3] Energy transition

We need well thought-out, energy-efficient renovations and a fossil-free energy supply. Our dependency on fossil fuels is a major contributor to climate change, creates conflict-ridden trade relations and jeopardises long-term energy security. 80 percent of buildings in Germany use fossil fuels for their heating supply. The goal of the German government is to reduce the emissions generated by the construction sector to half of the 2021 level by 2030. This is only possible if the energy consumption of existing buildings is drastically reduced.

[4] Future-oriented quality

Future-oriented building design aims to ensure that buildings and cities can be enjoyed and used by future generations. To achieve this, we must embrace a new building culture with functional and aesthetic qualities as well as social, ecological and economic added value. Future-oriented building design means creating cities that are designed to keep travel times to a minimum, creating areas with minimal traffic and car-free city centres, providing areas of land, floor plans and buildings that can be used in a variety of ways, as well as being adaptable and resilient.

Photo: Architects for Future (this page) / Sieben Linden (following page)

The Architects for Future association was established in Wuppertal in 2020.

[5] Recyclable and climate-friendly

50 percent of all raw materials produced in Germany are used for construction purposes. After packaging, construction products are the second largest area of application for plastics. All of these raw materials usually end up as waste or scrap after a single use. Yet our urban environment is a valuable storehouse of raw materials. In order to utilise these "urban mines", components with detachable connections and the separation of individual layers according to type and quality must be ensured. Components and building materials should be reused whenever possible. Only when a component cannot be reused after several cycles should building materials be recycled.

[6] Healthy environment

Buildings are at the centre of our daily lives. We live, work and relax in them. We spend 80 to 90 percent of our lives indoors. Our cities, with their infrastructure and open spaces, also have a major influence on our health and well-being. For this reason, it is important to consider all relevant factors during the planning stage. This includes ensuring there are no pollutants and that there is a sufficient supply of fresh air as well as considering thermal, visual and acoustic comfort, accessibility, fire protection and architectural-psychological factors.

[7] Climate resilience

The planning process should be based firmly on climate resilience. People's lives and well-being must be safeguarded even in extreme weather conditions. Ecological, economic and social damage must also be prevented or at least kept to a minimum. For this reason, no new land should be allocated for construction. Areas of land must be actively unsealed and renaturised. As part of our urban redevelopment, we need to consider the microclimate and establish local water management. Passive strategies such as creating new urban green spaces, light-coloured surfaces, shading concepts and retention areas counteract the effects of "heat islands".

[8] Biodiversity

Together with climate change, the loss of natural biodiversity poses the greatest threat to human existence. Unsealed surfaces and ecosystems must be preserved and expanded. Development and land-use plans must take into account the need to preserve biodiversity quality. Ecosystem services must be taken into account when considering economic viability. There should be no more designation of greenfield sites for new development or completely sealed industrial estates. In existing urban centres, roofs and facades with vegetation can bring about improvements.

[9] Social responsibility

Those involved in the construction process bear a high level of social responsibility, which is not reflected in current construction practice. The added social value is rarely taken into account when commissioning construction projects. Fair working conditions and social impact across the supply chain are often seen as less important. Due to the lack of climate justice, poorer regions suffer more from environmental damage and its costs than many countries in the global North. Socially responsible construction activities should focus on people and the common good. It is also important to work towards fair working, rental and ownership conditions, social inclusion and personal fulfilment without discrimination against minorities or those at a social disadvantage.

[10] Integral planning

Integral planning requires co-operation between the various specialist disciplines and with those who will eventually use the building. Experts from previously less integrated areas can take the pressure off planning processes. These specialist areas include building biology, ecology and sociology, life cycle considerations and alternative business and financing models. Implementation can be facilitated by establishing interdisciplinary planning teams and participatory processes, identifying real needs and digitalising planning processes.

An alternative to conventional construction methods? The building shell of most of the houses in the Sieben Linden ecovillage consists of timber frames, straw and clay plaster.

LIVING SUSTAINABLY IN SIEBEN LINDEN

For people who lead strictly ecological lives, standards such as those set by Architects for Future are part of their everyday lives. In the "Sieben Linden Ecovillage", for example, people are taking a holistic approach to sustainability (see more on this in our "Recently in …" section on page 50). One aspect of this fully sustainable lifestyle is that most of the houses in the village are built from straw bales, which is still looked down upon in many places. The community has been leading the way in this field.

In Sieben Linden, our goal is to reduce our ecological footprint in all aspects of life. A study by the Technical University of Turin found that our ecological footprint per person is around a third of the national average in Germany. Solar electricity and hot water supply, the use of composting toilets, building with natural, locally available raw materials such as straw, clay and wood and professional ecological gardening for self-sufficiency all play a decisive role. The shared use of infrastructure, the comparatively small living space per person and avoiding the need for travel by offering social and cultural activities directly in the village also reduce emissions. We add value to inhabited areas by creating diverse habitats for flora and fauna.

With the exception of two existing buildings, which were fully renovated in an environmentally friendly way and formed the starting point for our project, Sieben Linden is a village that has been built from the ground up. As it continues to grow, ecological construction is a key focus. There are now 16 eco houses and low-energy houses, 14 of which are straw bale houses, on 6 hectares of building land. We have done some pioneering work, particularly with this construction method. The straw bales usually come from fields nearby. The wood for some construction sites came from our own forest. As our local clay is much more difficult to work with than bought clay plaster, we now mostly use clay from North Rhine-Westphalia. The straw-insulated building not only saves energy when it is in operation, thanks to its good thermal insulation, but also during construction, as it requires about half as much primary energy as a conventional solid construction.

Each straw bale house has marked an important step in the development of this construction method: In 2001, the "Villa Strohbunt" was the first residential building in Germany to be granted a building licence for construction with straw bales as a building material. The house was also built entirely by hand as part of an experiment using only local and recycled materials. The three-storey straw bale house "Strohpolis" was the largest straw bale house in Europe at the time of its completion in 2005. In cooperation with the German straw bale construction trade association FASBA, we were able to obtain a national test certificate for straw as a building material for this house. There is now an official straw building guideline and building authority approval for building straw as a construction material. "Windrose" was the first straw bale house with prefabricated wall elements in Germany. The straw bales were also positioned upright for the first time, which helped to reduce the wall thickness while maintaining the same insulation thickness.

Right from the outset, Sieben Linden has avoided the use of building materials such as mineral wool, PU foam and components containing PVC. The village naturally uses modern wood heating systems, good passive solar energy and solar thermal systems. These principles and the many years of experience of our architect, Dirk Scharmer, can be seen in the "Strohtel" guest house, which opened in 2021. Complying with the strict fire protection requirements for a guest house presented new challenges. The "Strohtel" was the first accommodation in Germany to be built using straw bale clay construction. It has 14 rooms and a 70 square metre seminar room – the perfect setting for our training courses on straw bale construction.

DURABLE

"KORNVERSUCHSSPEICHER" WAREHOUSE IN BERLIN BY AFF ARCHITEKTEN

Renovating existing buildings is more sustainable than constructing new ones.

The most sustainable buildings are those that don't need to be built in the first place, simply because they are already in place and have maximum durability. However, such buildings will be even more sustainable if they do not have a maximum use-by date in terms of structural design. And the peak of sustainability is reached when the planning process has already made sure that the architecture has no aesthetic expiry date.

The striking "Kornversuchsspeicher" brick building right on the Berlin-Spandau shipping canal has ticked all of these sustainability boxes since 1898. And following its most recent renovation by AFF Architekten, there is a good chance that it will stay that way for another 126 years. When the Berlin office won the bid to preserve and use the listed warehouse, the building once again proved its future viability.

Major interventions

The "Kornversuchsspeicher" was initially designed as a structural test laboratory. This was because no one in the 19th century knew how best to store large quantities of grain for the rapidly growing city. This was trialled in the "Versuchsspeicher" in various test series and with different machines. In the future, it will house offices and public spaces.

Admittedly, some major interventions were required to make it fit for purpose in today's world. This included reducing the number of storeys in the building to leave enough space for the required ceiling room height, for instance. The old storage levels did not even have headroom under the edge beams. However, the basic structure of the building allowed for this both constructively and aesthetically. The historic brickwork and the striking silo funnels made out of reinforced concrete are so distinctive that hardly any further architectural enhancements seemed necessary. Nevertheless, the contemporary touches added by AFF Architekten ensure that the original architectural style has not only been incorporated and preserved, but also further enhanced.

Lengthy renovation

Initially, the striking industrial building still had a timber interior, which was replaced by a reinforced concrete structure after a fire in 1915. However, the design, which was still a work in progress at the time, caused problems. The steel bars used were smooth. The concrete had no grip. The overlap was too low. The concrete chipped off and the renovation work, over a hundred years later, was a lengthy process. The brick wall, however, only needed cleaning. Any damage was repaired and the building was raised to its original height.

Suitability for sustainability

After the foundation of the German Empire in 1871, it was not only German politics that was restructured. Masonry construction was also standardised throughout Germany by law and by using bricks in the standard German Reich format. AFF Architekten now also completed the extension of the warehouse using the same standardised system. It is obvious where the old part ends and the new part begins: the fact that every second row of bricks has been stepped back gives it away. If you step out onto one of the newly added balconies today, you can look across to the other side of the canal. The expressionistic "Scharnhorst substation" has stood there since 1928. In 2006, Kahlfeldt Architects converted it into the Vattenfall distribution centre. Just like the "Kornversuchsspeicher" warehouse, the huge brick building has also proven its suitability as a sustainable building. However, if you then look to the other side, you will see the new "Wasserstadt Mitte" with more than 700 apartments and will wonder whether these buildings will one day be as sustainable, both structurally and aesthetically.

The architectural history of the “Kornversuchsspeicher” warehouse can be seen in the facade through various additions and renovations.

The chutes and their massive reinforced concrete structure are the defining design element in the interior.

The interior of the warehouse once consisted of a sustainable timber construction, but concrete has dominated since 1915. Working now to preserve the warehouse is, in turn, sustainable.

A slide that seems to appear out of nowhere: The former sack slide has now become a sculptural feature in the room.

Hörmann expertise:
Steel and aluminium fire-rated doors

As a rule, architects like to use fully glazed tubular frame elements made of aluminium for filigree, elegant fire-rated doors. And as for steel doors? These can usually be found in the functional rooms or in the basement, but that's not the case when the building is characterised by industrial charm. The more rustic doors also work well here, as illustrated by the "Kornversuchsspeicher" warehouse. The steel fire-rated doors blend in perfectly with the unplastered concrete walls. Along with its durability, this type of door has other advantages: it can be equipped with a wide variety of functions, while maintaining a matching appearance. Its door leaves are available with thin and thick rebate, but can also be supplied flush-closing. In addition to the universal corner frame, numerous other door frames are available for fitting. Although the door leaf consists of a composite construction, it can be separated and recycled according to material. Hörmann also ensures that the doors are produced using sustainable methods, as confirmed through an environmental product declaration from the Institut für Fenstertechnik (ift – Institute of window technology) in Rosenheim.

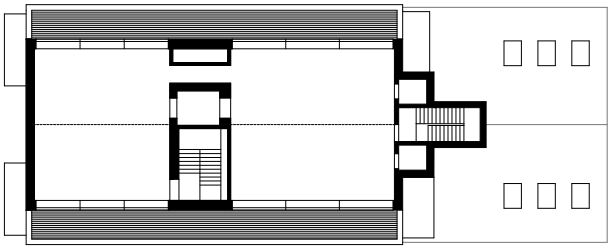
T30 steel doors are usually found in the basement, but that's not the case in the "Kornversuchsspeicher" warehouse. Here they are part of the design concept for all to see.

Fire protection in the stairwell with steel doors.

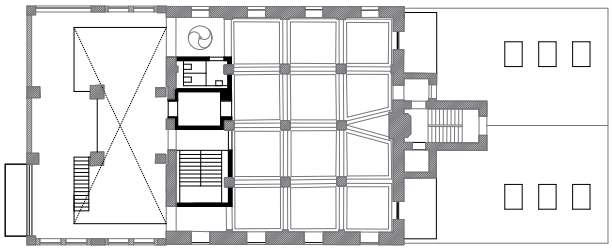
Fully glazed T30 aluminium tubular frame construction project doors are fitted in the "Kornversuchsspeicher" warehouse.

Location: Hedwig-Porschütz-Straße 20, Berlin, Germany
Building owner: Adler Group, Senningerberg, Luxembourg
Project management: Taurecon Real Estate Consulting, Berlin, Germany
Architect: AFF Architekten, Berlin, Germany
Structural design: ISKP Ingenieure, Berlin, Germany
Gross floor area: 3588.02 m^2
Gross volume: 12520 m^3
Completion: 2023
Photos: Stephan Falk, Berlin, Germany

Hörmann products: steel construction project door H3 OD, aluminium tubular frame construction project doors HE 311, steel profile frames, steel block frames
Schörghuber products: acoustic-rated doors Rw 32 dB, damp room doors, T30 fire-rated doors with acoustic insulation Rw 32 dB, HPL laminate version, ABS edge and concealed hinges

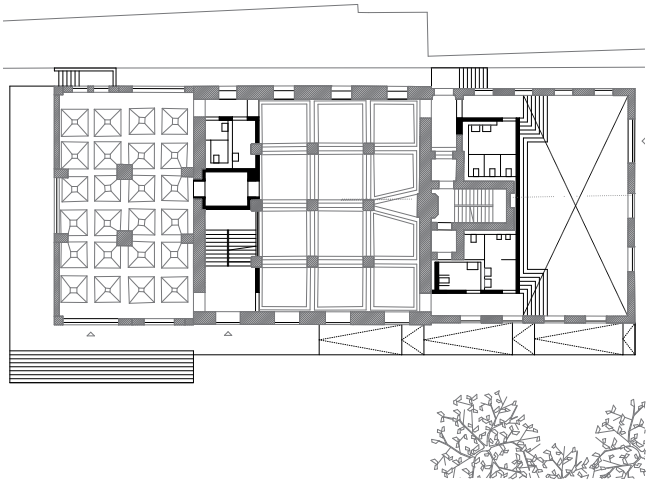


Top floor plan

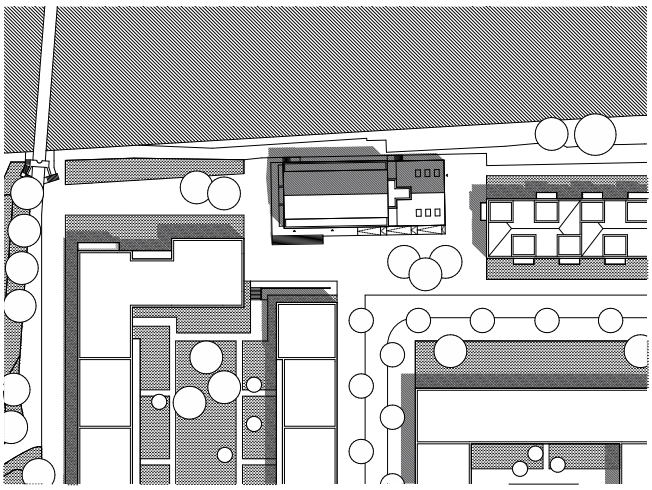


Floor plan of the first floor

Cross-section



Floor plan of the ground floor



Site plan

BREATHABLE:

CALWER PASSAGE IN STUTTGART
BY TENNIGKEIT+FEHRLE ARCHITEKTEN / INGENHOVEN ASSOCIATES


CMS
CMS

The facade requires a lot of maintenance and must be trimmed regularly.

Nothing is more sustainable than nature. In Stuttgart, an architectural bulwark from the 1970s was transformed into a vertical city park and marked a first step towards a more climate-friendly city centre.

The city of Stuttgart lies deep in a valley basin that only opens up to the Neckar on the north-east side. This Swabian metropolis can get hotter than you would expect in the summer, and in the mostly windless winter, a heavy blanket of smog hangs over the city. The vineyards on the banks of the 240 metre deep basin have more to offer than just scenic views. They are vital cold-air corridors that allow the city centre to breathe in critical weather conditions. They are a no-go zone for large urban planning. But on a smaller architectural scale, the new Calwer Passage in the city centre has also done something good for the city's climate.

A new beginning for the city centre

When the British firebombs were followed by the great firestorm in autumn 1944, some of the houses along Calwer Strasse were spared. They even survived the car-friendly conversion of the city in the 1950s. Hans Kammerer, the architectural grandfather of the region in the 1970s and 1980s, tackled the row of houses, using the Galleria Vittorio Emanuele in Milan as a somewhat grandiose reference point. That may have been over the top, but it marked a new beginning for the city centre. From that point on, a massive row of offices more than 130 metres long shielded the listed buildings from the busy Theodor-Heuss-Straße urban motorway, keeping a good distance from the historic buildings and forming a sheltered shopping street in between, the Calwer Passage.

When ingenhoven associates and Tennigkeit+Fehrle Architekten revamped the site more than four decades later, the objectives had changed significantly. While the passage itself remained untouched, the massive structure was largely demolished and rebuilt with seven storeys of offices and flats.

Not only in summer do the fully greened facades and the veritable forest on the roof resemble miniature lungs in a basin plagued by exhaust fumes. All kinds of plants growing upwards and hanging downwards are already obscuring large parts of the actual architecture. The trees on the roof, carefully secured against wind loads, are growing into an urban forest. And because a range of plants was chosen that are both evergreen and change with the seasons, the new Calwer Passage doesn't just look like a single block of green in the cityscape.

The greenery provides shade and allows evaporation, keeping the area behind it much cooler. It's not just the offices and flats that are quieter. The traffic noise is also reduced in public spaces. And the precipitation does not end up directly in the sewage system, but first in the vegetation layers of the roof forest.

An extensive facade

A core element of the design concept is the facade construction, developed by the firm Werner Sobek. The whole facade involves a great deal of horticultural work. It houses the irrigation system and nutrient supply and is accessible. The plants growing on ropes and nets over the storeys can be monitored remotely at any time to ensure that they are healthy. They are all suitable for the local climate zone and are also particularly stress-resistant.

For decades, the Kammerer building, formerly clad in copper, stood as an emblem of 1980s modernism on Rotebühlplatz, a key urban development site. The new Calwer Passage is no way any more inconspicuous. However, it feels like a new beginning for architecture and urban development, designed to be more climate-friendly and sustainable.

Green is also used as an accent colour in the lobby.

The passage that gave the building its name remained practically unchanged, but was renovated from the ground up.

Evergreen: The plants were selected to ensure that the distinctive look of the facade remains intact even in winter.

Hörmann expertise:
Aluminium tubular frame construction project doors with fire protection characteristics

Light is a key feature of the Calwer Passage. Although the floors of the office building are fully glazed, the greenery on the facade may well reduce the amount of light entering the building. This makes it all the more important to maximise the use of daylight. And to allow the light to penetrate as far into the building as possible, the architects opted for fully glazed aluminium tubular frame construction project doors. They create an open and transparent interior design. The tubular frame construction project doors with their large glass surfaces also help people get their bearings, especially occasional visitors to the building. Some versions of the door sets are double-leaf. The traffic leaf is equipped with a lever handle and allows passage. The fixed leaf is only opened up if necessary and ensures a maximum clear passage width. From a purely functional point of view, they ensure fire protection in the individual building sections with different fire resistance classes from fire-retarding T30 to fire-proof T90. Fire-rated doors made of steel were installed in the basement, where no light can reach and good visibility would not be important.

The fully glazed T30 aluminium tubular frame construction project doors allow natural light to enter the interior and ensure good visibility.

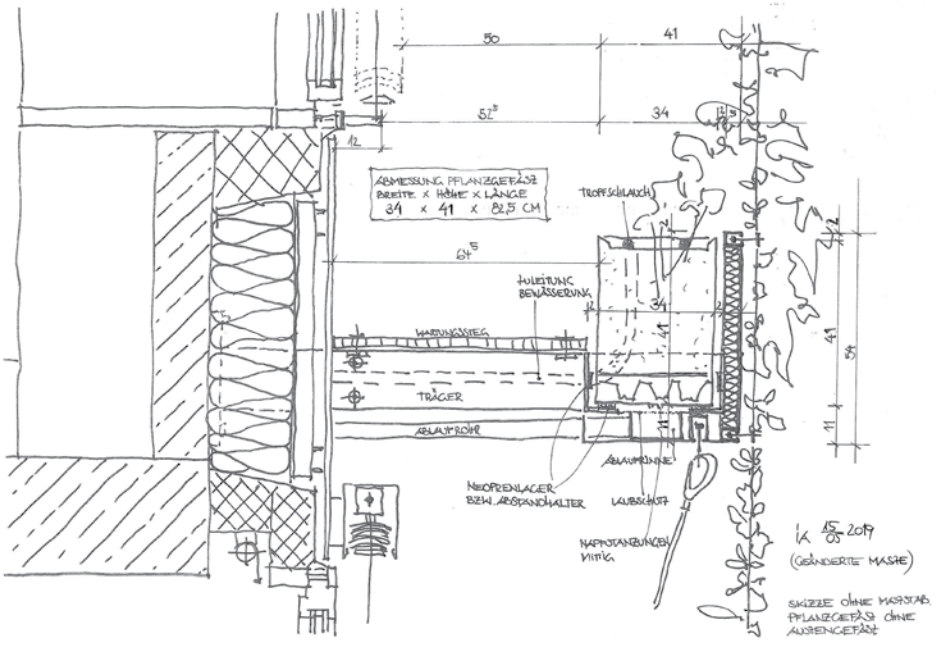
Steel doors with fire protection characteristics protect the rooms.

To ensure a maximum clear passage width, the fixed leaf can also be opened up.

Location: Rotebühlplatz 20A, Stuttgart, Germany
Original building owner: Ferdinand Piëch Holding, Stuttgart, Germany
Current owner: Konzern Versicherungskammer, Munich, Germany
Architect: Tennigkeit+Fehrle Architekten, Stuttgart, Germany (design) / ingenhoven associates, Düsseldorf, Germany (facade)
Facade planning: Werner Sobek, Stuttgart, Germany
Gross floor area: 17000 m²
Completion: 2022
Photos: Stephan Falk, Berlin, Germany / Daniel Najock, Lübeck, Germany (p. 25, top right)

Hörmann products: aluminium tubular frame construction project doors HE 311, HE 321, HE 921, ARS-100, ARS-150, ARS-250; T30 automatic sliding doors ASW-2; steel construction project doors H3 OD, H16 OD, D65

Floor plan of the ground floor



Facade sketch

ARCHIVED

ARCHIVE OF THE FUTURE IN LICHTENFELS

BY PETER HAIMERL

Keeping the future in mind: The Archive of the Future building is almost fully glazed, offering maximum transparency.

Sustainability can cover a whole range of areas. A building in Lichtenfels in Upper Franconia is designed with social and cultural sustainability in mind – just as any public building should be.

You may not have heard of Lichtenfels unless perhaps you are interested in basket weaving or digital 3D metal printing possibilities. The town once became wealthy thanks to its wicker basket trade. And like all wealthy citizens, the successful merchants liked to show their wealth off with magnificent buildings that still characterise the city centre today. This wealth is a thing of the past because, unsurprisingly, there's not much money in the wicker basket trade these days. Despite this, the town is still thriving. Much of its new industry is focused on sustainability and its successful entrepreneurs are now once again reshaping its image. After all, the first 3D steel printer was launched 25 years ago, not in Stuttgart or Silicon Valley, but in Lichtenfels in Upper Franconia. The Hofmann brothers have since sold their shares in the company and are now giving something back to their hometown. They used a share of the profits to create the "Archive of the Future". The aim is to alleviate concerns surrounding digitalisation, but to also challenge new developments.

Underrated spots

While many other small provincial town centres are becoming increasingly empty, the "Archive of the Future" in the centre of Lichtenfels aims to unleash a new lease of life into the town. You could say that architect Peter Haimerl is the perfect prophet of the province. Up to now, at least, he has mostly worked on projects in places that are extremely overlooked, be it the concert hall in the village of Blaibach or the regional Waidler houses in the Bavarian Forest. He is now continuing his work in Lichtenfels as a result of winning a competition. On the entrance floor of his "Archive of the Future", the miniature models of the other competition entries are on display to offer a direct comparison. The architecture presented here is nothing short of top-notch – and yet the designs are taken from a world that is miles away from the fully implemented "Archive of the Future". Because rather than erecting a building at the market square in Lichtenfels, Haimerl created a sculpture instead. He planted a small grove of weeping willows made out of metal. The two trees "grew" with the help of Haimerl's computer algorithms until they reached the imaginary shell of the building that once stood on the site. From there, the branches of the willow now "lean" down towards the ground again. In the original design, the growth of the willows was much denser. However, the trees were then thinned out over several steps until they were ready to be finalised and constructed using traditional metalworking techniques. While it may have been a more obvious option, 3D printing was ultimately too expensive.

New findings

The actual building now stands under this willow tree and is more conventional in style. Exhibition spaces and administrative offices are located behind the glass facades, while the conference areas are located underground between the rough concrete piles of the foundation. The historic vault discovered during the construction work not only provided completely new insights into the city's history, but also created complications for the construction of the new archive. A lot of effort was put into carefully restoring it and "re-archiving" it in the basement. The excavation pit contained 40 boxes of archaeological findings and shifted the date of the first settlement from the 9th century AD to the year 1000 BC. The "Archive of the Future" has such intricate attention to detail that public-sector clients are unlikely to dare to attempt again. The amount of money that was spent by the private building owners to create a building that will outlast more than just the people of Lichtenfels is therefore not known.

The ground floor acts as an exhibition space.

Offices can be found on the upper floors. The furniture is fixed to steel struts that extend the image of the tree into the interior.

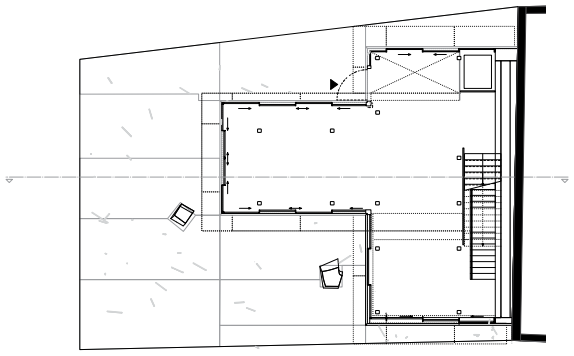
A small lecture room can be found in the basement, which is enclosed by rough bored piles.

Hörmann expertise: Steel fire-rated door

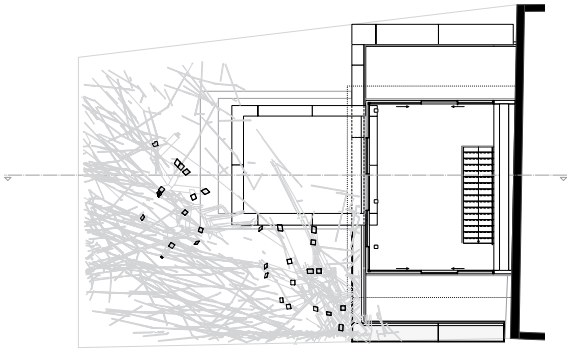
Materials and their sustainability – this is a topic that has the potential to spark debate, which is justified as long as it is handled carefully. During the manufacturing process, concrete requires a lot of energy. The same goes for steel. Can steel doors also be sustainable? Or are they sustainable because the energy they consume is justified by the benefits they provide? Steel doors are highly resistant, making them a good choice for heavily frequented passages. Steel doors are also sturdy, they cannot warp and are very durable due to their material. However, the most important aspect, aside from its durability, is that steel is relatively easy to recycle. Steel doors therefore also act as a raw material after they have reached the end of their service life, so they are a good fit for the concept of cyclical construction that is now being propagated by many architects. In the Archive of the Future in Lichtenfels, a steel door closes the air-conditioned server room. This complies with the strict fire protection regulations, as the door protects the surrounding rooms from fire in the event that the technology fails and catches fire.

The "Archive of the Future" server room lies behind the door. The room is air-conditioned and, for safety reasons, there is a slight vacuum inside.

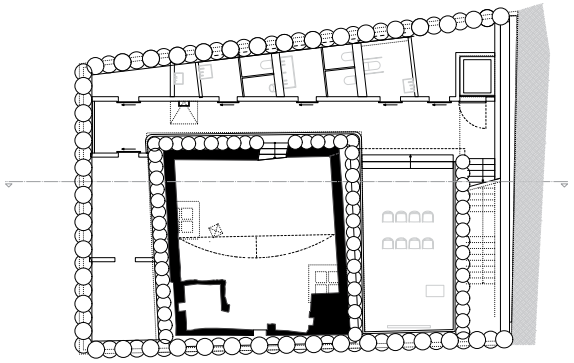
Location: Marktplatz 2, Lichtenfels, Germany
Building owner: R+G Asset Management, Lichtenfels, Germany
Architect: Peter Haimerl . Architektur, Munich, Germany
Engineers: Ingenieurbüro Fuchs, Lichtenfels, Germany
Gross floor area: 1310 m²
Completion: 2023
Photos: Stephan Falk, Berlin, Germany
Hörmann products: steel construction project door H3 OD



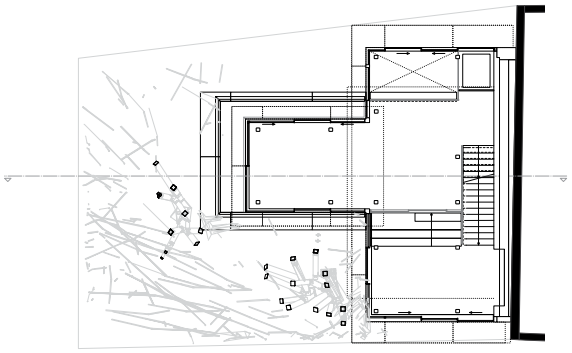
Ground floor



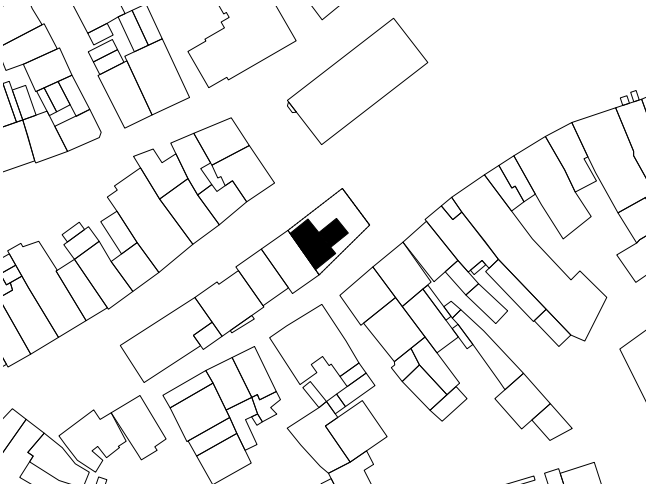
Second floor



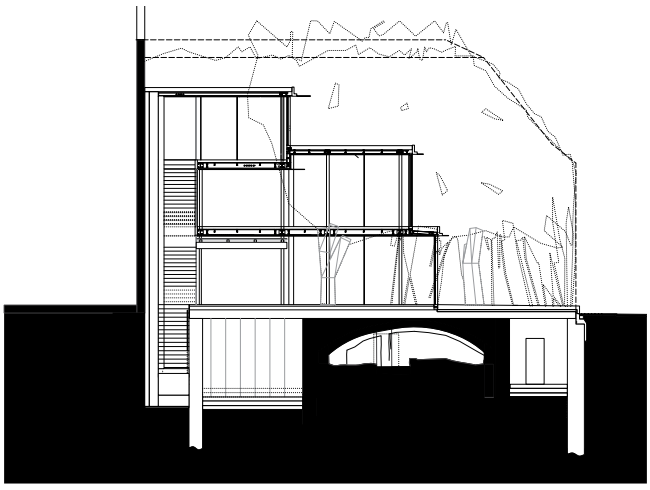
Basement and crawl space



First floor



Site plan



Cross-section

MINIMAL

TOWN HALL IN ZELL (MOSEL)
BY WITTFOHT ARCHITEKTEN

Easy to get around: the small town of Zell (Mosel).

People living and working along the Moselle, having commissioned buildings such as the Zell town hall, have known for generations what sustainability means. You don't need to explain the issue to these guys.

The “Moselaner” (as they call themselves) know a thing or two about sustainability. The Moselle, with its narrow bends and fluctuating water levels, its steep, sunlit slopes on both sides, and the people who live on the narrow stretches of riverbank, have spent centuries forming a system that can only survive if it is used sparingly and not overtaxed. There is little room for expansive architecture here. The steep slopes are far too fragile. What's more, as world-famous vineyards, they are far too valuable to simply be dug up. The winemakers' narrow houses nestle close to the vineyard of the “Schwarze Katz” site, so as not to lose a single square metre of valuable vineyard space.

High bottom section

The recurring flooding of the Moselle is also an integral part of life and local architecture here. The highest river levels can be easily read off at the historic town hall, and it was these markers that provided the essential design criterion for the newly built town hall just a few hundred metres away, which the Stuttgart-based firm wittfoht architekten had to adhere to.

Locals are well aware of the reason why the entrance to the town hall is not at ground and street level. Those who are just visiting, however, have to be told that the main entrance is not on the upper floor for appearances' sake, having to be climbed via a staircase. Anyone who grew up on the Moselle also knows that it is impossible to control the river. You simply have to live with it – and in the case of the town hall, build an unusually high base storey.

This means that even in the event of the dreaded flood of the century, the desks in the administrative offices will always remain dry. The only cars that will get wet are the ones in the underground car park, which is not very deep. Alternatively, the administrative offices can be accessed via the new town hall square, which is also situated at an unusually high level. This outdoor space has also created something that is generally a rarity in Zell: a public area.

No stand-alone architecture

The design by wittfoht architekten is not intended to be a stand-alone piece of architecture. It is designed to slot into the small town as best it can given the size of the building, but it also doesn't modestly hide away. In order to appear almost as small-scale as the surrounding buildings, the town hall is divided into two building structures. Like all the others, the eaves sides of both buildings face towards the street. And because the buildings in Zell have pitched roofs, the town hall also has two gable roofs. The building services were then also installed under the areas covered with PV shingles, which can cover 70 percent of the energy requirements, and are flood-proof.

Standard brush cleaning

The monolithic brickwork made of insulated bricks was given a customary light brush cleaning, and its horizontal texture and two-tone colouring give it just the kind of sophisticated look that is appropriate for a public building in a small town at a time when money is tight. As world-famous as the vineyard town is as a tourist destination, there are just over 4000 people who live in the municipality, and fewer than 1500 in the actual town centre. A municipality in such a prominent location on the Moselle can only allow for architecture that will be around for our grandchildren to see, and that is sustainable in the best sense of the word.


Out of the ordinary: The bottom section is used to protect against flooding. To get into the building, you only have to climb up a few metres.

Enclosed yet open: The entrance is fully glazed with a movable pane, allowing for more personal contact.


The colour scheme of the municipal administration is muted. Furniture only adds a touch of colour here and there.

Schörghuber expertise: Acoustic-rated doors

Data protection is of particular importance in German offices. Acoustic-rated doors up to 70 millimetres thick dampen the sound by up to 42 decibels and ensure that any discussions cannot be heard outside of that room. As the building is open to the public, all doors are fitted with a composite latch to reduce noise. The architects' aim was to keep the design of the doors as simple as possible. Therefore, many of the doors are designed to be ceiling-high, for instance. Others have a transom panel that does not stand out and instead blends seamlessly into the overall appearance of the door assembly. The doors are flush-closing. The edge recess is one of the most important details for architects. The door assembly surfaces are made of an oak veneer coated with a natural wood effect lacquer. This adds to the calm, homogeneous appearance of the doors, which contrast nicely with the white plastered walls and the rough unplastered concrete ceilings. Special features include the switches, some of which are integrated into the frame, and the sliding ceiling connection.

The acoustic-rated doors to the administrative office are all designed to be room-high. Some of the them have fixed side elements with a glazing cut-out.

The doors to the wet rooms are the only doors that are not room-high.

Lights and timber doors create rhythm in the hallway.

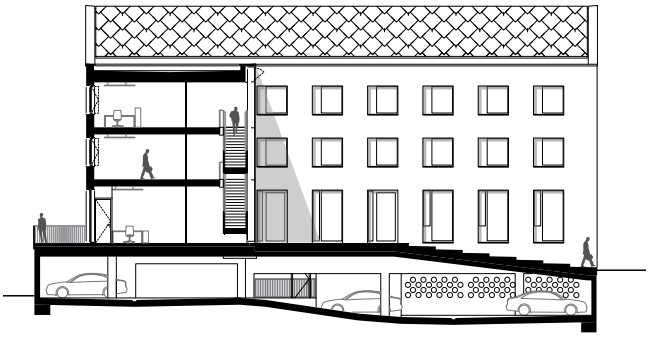
Location: Schlossstraße 69, Zell (Mosel), Germany
Building owner: Municipality of Zell (Mosel), Germany
Mayor: Jürgen Hoffmann / Office manager: Andreas Schorn /
Project manager: Martin Steinmetz
Architect (design): wittfoht architekten bda, Stuttgart, Germany
Architect (construction): wittfoht architekten planung gmbh, Stuttgart, Germany
Construction supervision: Weltzel, Hardt + Partner, Trier, Germany
Gross floor area: 4350 m²
Completion: 2023
Photos: Laura Thiesbrummel, Munich, Germany

Processor: Peters, Sohren, Germany
Schörghuber products: acoustic-rated doors Rw 32 dB with transom light and side element, acoustic-rated doors Access Rw 42 dB with a single sealing level, composite timber doors, T30 fire-rated / smoke-tight doors, some versions with transom light and side element, solid timber frame with jamb cladding, edge recess version, rebated frames with jamb cladding, solid timber bolt for flexible ceiling connection

Floor plan of the first floor

Floor plan of the second floor

Floor plan of the ground floor



Cross-section

SCHÖRGHUBER EXPERTISE: ARCHITECTURE CONSULTANCY AND SUSTAINABILITY

Developing detailed solutions

Detailed custom solutions are needed for demanding architecture. Schörghuber specialises in finding such solutions. Alexander Reinstädtler discusses town hall planning in Zell.

How was Schörghuber able to assist the architects in the planning of this project?
The first point of contact came about via the Schörghuber architects' hotline. wittfoht architekten first explained the demanding project and what was required of our products. We then made some initial suggestions. After the technical details had been clarified, we drew up the solutions internally and prepared a detailed cost estimate.

How was the communication with the architects?
We use all of the standard channels to communicate with the architects. Working together was a very pleasant experience. The technical requirements for the detailed solutions were compiled step by step by all parties. A sample of the surface finish was provided. For this project, the architects requested a veneer made out of European oak with a natural wood effect. The veneer is plain, slip-matched and painted matt, creating a beautiful, uniform colour scheme.

Were there any solutions that they specifically asked for?
A high level of acoustic insulation is becoming increasingly important for administration buildings, particularly for the doors to administrative offices and meeting rooms. In this project, they had to design a room-high, fixed glass side element. The architects' idea was to place a multi-switch in the post between the door and the side element. The architects also wanted the doors to be flush-fitting on both the hinge side and the opposite hinge side and did not want a silicone joint in the door view.

How were the integrated switch boxes implemented?
So that the switch box could be integrated into the mullion, the post had to be wider than usual. A protruding folding part was designed to fit the hole for the switch box. In this case,

The doors in the Zell town hall are designed to be ceiling-high. A flexible ceiling connection prevents compression when the ceiling bends.

Alexander Reinstädtler, Schörghuber sales representative.

the challenge was to still meet the architects' acoustic rating requirements despite the thin wall width. Some elements also had to meet the necessary fire protection requirements. The electrical supply for the switch box was then fed in through the floor and integrated into the folding part.

And how does the flexible ceiling connection work?
A flexible ceiling connection had to be provided so that the room-high elements could not be compressed by the bending of the ceiling. The difficulty with this is ensuring that the technical fire protection requirements are met. We work with a U-profile that is directly fitted to the ceiling. The top cross section of the element is designed with a block frame and has two milled grooves in which the U-profile can then be slid into place. This allows a height adjustment of a good 30 millimetres. Due to the thin wall thickness, this was quite a demanding task.

Were there any other special features to this project?
There were very few standard solutions. Most of the details had to be drawn up in the factory and undergo multiple technical checks, which of course takes time. Smooth communication between the architects, construction managers and processors is essential here. The result speaks for itself and makes all this work well worthwhile.

What does Schörghuber do to promote sustainability?
Timber doors are Schörghuber's speciality, so the raw material used is already sustainable. But there is more to being sustainable than that, because transport and processing also require energy. A number of small and large measures ensure that Schörghuber produces its products in a CO_2-neutral way. The factory buildings are equipped with a 4500 kWp photovoltaic system. This supplies the energy for the lighting and the company vehicles, all of which are electric cars. Schörghuber also minimises the use of paper. Since 2021, the amount of paper used has fallen by 45 percent. We recognise that environmental protection must be taken very seriously and is the foundation of our economic future.

Double-leaf acoustic-rated doors are used to access the meeting rooms.

Integrated switch boxes within the door frame.

Photos: Laura Thiesbrummel

HÖRMANN
CORPORATE NEWS

Martin J. Hörmann, personally liable partner, and Sarah Osterholt, sustainability officer at Hörmann, in conversation.

SUSTAINABILITY AT HÖRMANN: "WE WANT TO JOIN FORCES!"

In conversation: Martin J. Hörmann, personally liable partner of the Hörmann Group, and Sarah Osterholt, sustainability officer at Hörmann. They discuss specific sustainability measures in place at Hörmann, corporate responsibility and how the market recognises the importance of sustainability.

Sustainability plays a major role in Hörmann's communication with architects, dealers and private end customers. Residential construction products are even offered CO_2 neutral as standard. Why is this such an important topic?

Sarah Osterholt: As a company, we have a great deal of influence and therefore bear a lot of responsibility when it comes to climate protection. We want to take the lead and show what is possible. The CO_2 neutrality I mentioned, which we also optionally offer for all other construction project products, gives our customers the opportunity to do their bit. This is not only because it is beneficial from a environmental point of view, but also because the market clearly demands this approach in a number of areas. By using our products, architects can achieve a significantly better sustainability balance for their buildings – a key factor in ensuring the long-term viability of buildings. However, from our point of view, customers are entitled to demand more from us in the future. Everyone has to do their bit to protect the climate, or else nothing will change.

Products for residential construction

Products for construction projects

Does the issue of sustainability lie in the hands of management at Hörmann?

Martin J. Hörmann: Only in the sense that it is something that is very important to me on a personal level, and the same goes for my brother. As a family business in its fourth generation, we are of course focused on the long term. What is important, however, is that the commitment to sustainability and climate protection needs to be widespread. To succeed, everyone has to pull together. This is why sustainability is not just our concern, but that of all our employees and, ultimately, our partner companies and customers. As far as we know, we are the only company currently offering CO_2-neutral construction components. However, this is a unique selling point that we would be willing to give up if our competitors also got behind the idea. We want to join forces!

What sustainability strategies has the company been implementing?

Sarah Osterholt: Our main goal is to further reduce our greenhouse gas emissions. For this reason, Hörmann has been voluntarily calculating the carbon footprint for all manufacturers in the group in the European economic area since 2019. This allows us to accurately determine our corporate carbon footprint (CCF) and evaluate the efficiency of our operations. We have already been very successful in reducing emissions, wherever we can tackle this ourselves. Thanks to the use of 100 percent green electricity at almost all of our European locations, our certified energy management system and the many measures we have taken to reduce emissions, we are making a positive impact. However, the majority of emissions are generated by upstream and downstream supply chains, outside our sphere of influence. In order to make a positive contribution here, we are working with ClimatePartner to offset the remaining CO_2 emissions through certified climate protection projects. And this gives us our very effective threefold approach: calculate, reduce, offset. We also extend our commitment to our partners. We are already working with our first suppliers who provide us with CO_2-neutral products.

From your perspective, what role does technology play in helping tackle the climate crisis?

Martin J. Hörmann: A crucial one. To succeed, we need to drive change and should be open to new ideas. One example of how we are doing this is at our largest production site in Ichtershausen near Erfurt. We produce our own hydrogen there, using electricity from a photovoltaic system that we have installed above a rainwater retention basin. This not only significantly reduces our natural gas consumption, but also our dependence on the public power grid. We hope that this pilot project will provide us with important insights that we can apply at other plants. We are also planning to further invest in solar energy at many other locations.

In what other areas is Hörmann breaking new ground in its sustainability efforts?

Sarah Osterholt: Take the circular economy, for example. Our latest project is a collection and recycling system for used door sections. Dealers return the sections to us, and we separate the sheet steel from the hard foam core in two recycling plants. These are then both sent directly to be recycled. In the case of steel, this is not a problem as the recycling cycle already works well. In the case of PU foam, however, a new development has emerged: We process the material so that our supplier can reuse it in production. This is a real cradle-to-cradle principle that is currently exclusive to us. This is what Hörmann is all about: tackling challenges head on and implementing well thought-out, pragmatic solutions. Personally, I think it's brilliant.

SCHÖRGHUBER CORPORATE NEWS

Whether it's a meeting in the office or a cultural event in the theatre, sound should be confined to where it's intended. Doors from Schörghuber can help with this.

SCHÖRGHUBER IS EXPANDING ITS RANGE OF ACOUSTIC-RATED DOORS

New EU product standards, changes in building laws, more demanding user requirements and increasingly open architectural room concepts call for door solutions that feature ever better acoustic insulation and fire protection. In addition to a high level of fire protection and acoustic insulation, Schörghuber door sets and fixed glazings are also available with additional functions and a custom design. The already comprehensive range has now been expanded with further innovative products.

XXL sliding doors for increased architectural requirements

To meet the demands of contemporary room concepts, Schörghuber has developed the single-leaf acoustic-rated sliding door "Sound XXL". It is used wherever there is a need for smooth transitions as well as the option to separate zones, or where hinged doors would simply take up too much space and be a nuisance. Examples are large corridors in nurseries, hospitals and care facilities or in conference spaces. Here, the "Sound XXL" sliding door from Schörghuber comes into its own, with acoustic insulation of up to 42 dB at a maximum door leaf size of 2500 × 3000 mm (width × height). Wherever there are stringent fire and smoke protection requirements, the "Function" sliding door version with T30 fire protection is the perfect solution. This sliding door with fire resistance class T30 provides acoustic insolation of up to 37 dB and is available in dimensions of max. 1708 × 3000 mm (width × height).

Photos: Schörghuber

Carpenters are equally as welcome as apprentices and students specialising in wood technology.

SCHÖRGHUBER IS AN ATTRACTIVE EMPLOYER

Whether in production or order management, as a carpenter or machine operator, Schörghuber has the right career opportunity for every tech-savvy specialist. There are also plenty of benefits that make the Ampfingen-based door manufacturing specialists an attractive employer in the region. Schörghuber has specialised in innovative product development and the highest standards of quality, design and functionality for almost 60 years. Schörghuber also has its employees in development and administration, logistics and production to thank for upholding these values. Around 450 people work across more than 100000 square metres at the sites in Jahrdorf and Ampfing to create customised timber door and frame solutions, which are used in office and administration buildings, schools, hospitals, hotels and swimming pools, to name but a few. Schörghuber produces doors that offer functions such as fire, smoke and burglar protection as well as acoustic insulation for use in commercial and high-end residential construction. Schörghuber employs carpenters, CNC machine operators and wood technicians as well as consultants and administrative staff with great enthusiasm and a feel for timber, architecture and innovation. In addition, Schörghuber also employs many people from commercial, technical and academic professions. Technical understanding, especially of the material wood, is a basic requirement for everyone.

Acoustic insulation for wet rooms is also of importance.

Elegant and accessible, with a single sealing level

With a 70-mm-thick door leaf and an acoustic rating of up to 42 dB, the "Access" acoustic-rated door only needs a single sealing level in the door frame. This means that they can also be supplied in an accessible version – as a tested and certified complete system with door leaf, door frame, lever handle, closer and seal. In combination with optional T30 fire and smoke protection functions as well as break-in resistance equipment in line with resistance class RC 2 or RC 3, they open up vast scope for architectural designs. The acoustic-rated doors are now also available in a new double-leaf variant.

Smooth room transitions with high acoustic-rated fixed glazings

Fixed glazings with a high acoustic rating of up to 50 dB are another new addition to the range. These elements are now also available in a safety catch version with a national test certificate. They are ideal as room partitions in music rooms and event and meeting rooms and come with F30 fire protection function with test certificate on demand.

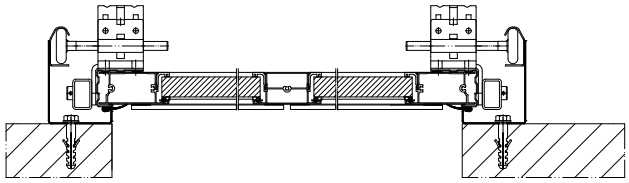
Double-door systems with acoustic rating of 60 dB

With a tested and proven acoustic insulation of up to 60 dB, Schörghuber double-door systems offer flexible application in construction projects. These types of door constructions are in high demand wherever standard door sets are not sufficient to ensure acoustic insulation, for example as connecting doors between hotel rooms or for concert halls.

TECHNOLOGY: HÖRMANN INDUSTRIAL SECTIONAL DOOR ALR F42 VITRAPLAN AT

Scope of application: The Hörmann aluminium sectional door ALR F42 Vitraplan AT is the perfect choice to suit high design requirements. With its flush-fitting ALUCOBOND® and TRESPA® facade panels, it creates a harmonious overall door and facade appearance. It is available in eight designs – matt or reflective. The colour-coordinated frame profile of the industrial sectional door is concealed and thus adds to the clear, sleek look. This is ideal for the architectural requirements of modern industrial buildings and impressive buildings in construction projects and residential construction. What's more, it delivers durable quality: ALUCOBOND® is a stable yet flexible facade material, while TRESPA® is a robust high-pressure laminate (HPL). Combined with proven Hörmann door technology, it can be integrated into digital service concepts and is available as a CO_2-neutral version on request.

Model: ALR F42 Vitraplan AT **Use:** aluminium sectional door with exclusive facade panels for special architectural requirements **Max. size:** 6000 × 7500 mm **Depth:** 42 mm **Glazing frame:** anodised aluminium extrusion profiles with steel end caps **Infill type:** PU infill with aluminium sheet cover, Stucco-textured on both sides, (FU) 26 mm and ALCUBOND® and TRESPA® facade panels fitted in front **Thermal resistance:** 2.6 W/(m^2·K) for sectional door without wicket door in size 5000 × 5000 mm **Resistance to wind load:** Class 4, from more than 4000 mm wide: Class 3 **Water tightness:** 3 (70 Pa) **Acoustic value:** 23 dB for sectional door without wicket door **Counterbalance:** torsion springs, with carrying cables on the side (with a low headroom track application, a combination of carrying chain and carrying cable) **Opening and closing speed:** up to 1 m/s **Security features:** finger trap protection, side trap guards, spring safety device for manual operation, safety catch for doors with shaft operator **Fitting:** concrete, steel, brickwork



Horizontal view

ALR F42 Vitraplan with modern ALUCOBOND naturAL Reflect facade panels

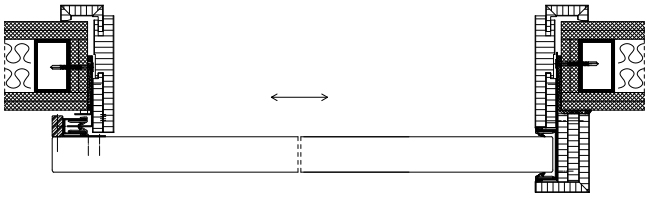
Exclusive design possibilities in Italian Walnut NW08 Matt design.

Photos: Hörmann

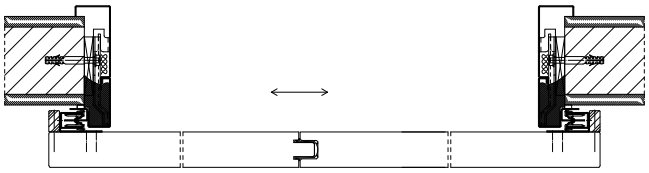
TECHNOLOGY: SCHÖRGHUBER
XXL FIRE PROTECTION SLIDING DOOR FUNCTION

Scope of application: Doors with particularly large dimensions are used in spacious corridors and passages to separate individual areas or fire zones from one another if necessary. In nurseries, hospitals, care facilities and hotels, for example, it is often important that they can be operated easily and without taking up too much space. The Function fire protection sliding door from Schörghuber, which not only fulfils T30 fire protection requirements but is also available in XXL dimensions, combines all these requirements. The single and double-leaf T30 sliding doors have national technical approval. With maximum dimensions of 2825 mmm by 3000 mm (W × H), the Function sliding door can be used to close off especially large passages and hallways and separate individual areas.

Product: XXL fire sliding door Function **Functions:** T30 fire protection and optionally with smoke protection, acoustic insulation Rw 32 and 37 dB, wet room, damp room **Version:** single and double-leaf, running in front of the wall **Door frames:** 2-part steel profile frame for retrofitting (plate / clamp fastening), steel profile frame VarioFix with wall thickness adjustment, timber profile frame **Operation:** with automatic operator **Dimensions (overall door leaf dimension max. height × width):** single-leaf 50 mm door leaf thickness: 1750 mm × 3000 mm, double-leaf door leaf thickness 50 mm: 2825 mm × 3000 mm **Fitting in:** partition wall and solid wall **Surface finishes:** HPL laminate, premium coating, veneer, Durat, CPL, raw for surface treatment on site **Door leaf edges:** flush, plastic edge, batten, ABS edge 2 mm, concealed edge band, cast PU edge, nursery edges



Wooden wrap-around frame horizontal view, single-leaf



Steel frame horizontal view, double-leaf

Photos: Schörghuber

Sliding doors are especially space-saving, easy to operate and do not pose an obstacle, as the door leaf does not swing out.

ARCHITECTURE AND ART
RIGO SCHMIDT

Untitled, 30 × 24 cm, oil on canvas, 2024

Endlich (At last), 30 × 40 cm, oil on canvas, 2007

Animals and humans – an ambivalent relationship. Occasionally loving. Often cruel. Rarely sustainably. Rigo Schmidt explores this co-existence in many of his images.

For his motifs, the artist uses familiar forms of animal representation. In some cases, he makes use of stuffed animals from natural history museums. In other cases, he makes reference to animals described in literature or animals that have already been painted by other artists. In theory, the search for motifs could also extend to zoos. Because here, too, animals are put on display – certainly in a setting that the animal did not choose for itself. This environment is designed by humans, and the animal itself is also made to look the way humans want it to. Objective images are rarely produced – they are mostly subjective projections. But why are animals presented in this way? Rigo Schmidt's paintings address this question – sometimes in more obvious ways, sometimes not so much. An example of this is the painting "Endlich" (At last), in which the artist explores the relationship between Captain Ahab and the whale Moby Dick from Herman Melville's novel by the same name. Hunting and killing the whale was the whaler's goal in life. Why? Because the hunted animal fought back and once tore off one of the whaler's legs. The theme of the novel would certainly be described today as the role reversal of perpetrator and victim. But what would have happened if Captain Ahab had been successful? In his painting "Endlich" (At last), the dead animal lies on the beach. Captain Ahab stands disorientated next to the whale and stares blankly out to sea. But what now?

Photos: LFN (p. 48)/ Stefan Fischer (p. 49, below) / Andreas Grahl (portrait)

Artist: Rigo Schmidt
Born in Altenburg, Germany, in 1974,
initially trained as a state-certified social assistant before studying painting and graphics at the Academy of Fine Arts Leipzig from 1996 to 2004 under Arno Rink, with whom he subsequently worked as a master student. Rigo Schmidt still lives and works in Leipzig.
www.ladenfuernichts.com

Das Kleine im Großen (Small things amongst the big), drawings 60 × 80 cm, 2018
Leipzig Museum of Fine Arts Collection

RECENTLY IN ...
SIEBEN LINDEN

The residents of the "Sieben Linden" ecovillage in the Altmark region lead a strictly sustainable lifestyle. Speakers like Michael Würfel share their way of life with the public at numerous workshops.

What is it like to live in the middle of nowhere?
In my opinion, Beetzendorf and Sieben Linden have plenty of cultural offerings. There are also enough schools. By contrast, access to healthcare is very poor. The lack of doctors in rural areas is also a major problem in our region. We therefore have no choice but to live a healthy lifestyle.

Are there any preconceptions surrounding your way of life?
We are usually able to dispel any concerns about our way of life fairly quickly, as we are extremely transparent. We are open to visitors and offer workshops as well as a self-guided tour that gives guests an informative insight. We also have a strong media presence and have released films and books about Sieben Linden. Some people may take inspiration from our way of life, some may not.

How do you define "sustainability" and how do you put it into practice?
In practice, we live sustainability by minimising consumption. We share a lot, such as cars, washing machines, saunas, various facilities. We try out everything that can be done sustainably: permaculture, agroforestry, dry separation toilets with a constructed wetland and faecal composting. We utilise straw bale clay construction, and our energy concept is based on renewable energy sources. We endeavour to be conscious of our consumption of animal products, and many of us are significantly reducing our consumption or going vegan.

Is sustainability only feasible on a small scale?
Yes, that's interesting: what is the limit to how big a community can be? In Sieben Linden, for example, we are organised into a kind of council system; we delegate decisions to small groups and still manage to stay informed about the work of the councils. We do not have the same separation as there is between citizens and politics. This creates a sense of trust, cohesion and self-efficacy.

Aerial view of Sieben Linden.

Will this catch on soon? Building with straw.

Photos: Freundeskreis Ökodorf e.V.

Michael Würfel
Born in Füssen (Allgäu), Germany, in 1972,
trained as a carpenter and is a filmmaker. After training, studying and working in the Allgäu region, the Eifel region, Berlin and Hanover, he moved to the Sieben Linden ecovillage in 2007. There he initially worked in media, later becoming editor of the eurotopia directory and managing director of the eurotopia book distribution service. He works in public relations and management. He has also published his own work, including "Dorf ohne Kirche" (Village without a church, 2012) and "Öko Dorf Welt" (Eco village world, 2014). His latest documentary film about Sieben Linden is entitled "Kein richtig falsches Leben" (No really wrong life) and was released in 2021. His novel "Yukon" was published in 2023. Michael Würfel also supervised the development of the "Strohtel" guest house as project manager and the "Schloss Mü" housing community as site manager. He also gives seminars and informs guests about the structural and social aspects of the ecovillage.
www.siebenlinden.org

Are there any limits to how sustainable you can be?
We try to balance sustainability with living comfortably. Everyone's limits are different. In my film about Sieben Linden, "Kein richtig falsches Leben" (No really wrong life), one man says that he enjoys cycling to Beetzendorf in the rain because it allows him to experience and feel closer to nature. For me, that would be stepping out of my comfort zone – especially when travelling with my children, I prefer to take a car from our carpool.

Can your sustainability model be adapted for the city?
Probably not the approach taken by Sieben Linden, as it is built around a manageable village community. However, there are enough starting points to promote communal life in the city.

You can read the full interview on www.hoermann.de/portal

Community is a top priority at Sieben Linden.

PORTAL 60: Hospitality

Times are tough for the professional hospitality industry. Fewer people travelling for business combined with rising prices are causing problems for the hotel and catering industry. New investments are now expected to win back previous guests. One way to do this is to find a niche with individuality and flair. We take a look at the role that architecture can play in this and, in the next issue of PORTAL, present buildings from the hospitality industry that have reinvented or established themselves in a variety of ways.

Photo: La Corte, Sextantio Albergo Diffuso, Santo Stefano di Sessanio, Italy

Individuality and authenticity are key trends in catering.

Innovation and design with maximum security.

Super Secure

For nurseries, schools and healthcare facilities.
The Schörghuber Super Secure finger trap protection door eliminates the risk of injury at the secondary closing edge.

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