HORMANN

PORTAL 10

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INFORMATION FOR ARCHITECTS FROM HÖRMANN

Building for Education

Projects from Kohlmayer Oberst Architekten; Meck architekten; Stephan Köppel; Staab Architekten and Ferdinand Heide

CONTENTS

EDITORIAL

4 / 5

3

PORTAL TALKS TO CHRISTIAN RUNGE

The value of education in a poor country. For seven years, the Association of Myanmar has supported the largest school in this Southeast Asian with advice and assistance.

6 / 7

FINLAND'S SCHOOLS

Role model GDR: How Finland has become an "educational wonderland" since the 1970s – and what German architectural training could learn from this nation in the far north.

8 / 9 / 10 / 11 / 12 / 13

UNIVERSITY IN BRIXEN

A bold success in the historic city centre: At first glance, the new university building in Brixen appears to break the mould – and yet at its core it still manages to continue in the tradition of the city's small-scale structures. Design: Kohlmayer Oberst Architekten, Stuttgart

14 / 15 / 16 / 17 / 18 / 19

LIBRARY AND LECTURE BUILDING IN WEIMAR

University library reunited: The Bauhaus University library catalogue found a new home on a remaining plot in the centre of Weimar. Design: meck architekten, Stephan Köppel, Munich

20 / 21 / 22 / 23 / 24 / 2

LABORATORY BUILDING FOR GENOME RESEARCH IN BERLIN-BUCH

Solo in the park: The Max Delbrück Center for Molecular Medicine makes a deliberate break with its neighbours on the Berlin-Buch campus and follows its own bold line. Design: Staab Architekten, Berlin

26 / 27 / 28 / 29

PARK AND WIELAND SCHOOLS IN WEIMAR

When a lack of space becomes a virtue: A lean, low-key wing expands the Park school and the Wieland primary school in the centre of Weimar. The new gymnasium has been placed underground. Design: Ferdinand Heide, Frankfurt am Main

30 / 3⁻

PREVIEW / IMPRINT / HÖRMANN IN DIALOGUE

Cover illustration: University in Brixen Photo: Stephan Falk / baubild / Hörmann KG EDITORIAL



Martin J. Hörmann, Thomas J. Hörmann and Christoph Hörmann Personally liable shareholders

Dear Readers,

Two tendencies have taken hold in the German educational system since the oft touted "Pisa shock". They are: economisation and personalisation. Not only in Germany do both already start in the pre-school years: In New York's upper-classes, for example, nannies who speak fluent Mandarin are the latest trend. They are supposed to make getting ahead in a future, Chinese-dominated world society (and global economy) a bit easier. In schools, terms such as "controlling", "benchmark" and "performance" have long been a standard part of the vocabulary used to evaluate pupils' achievements. Everything has been and is being done to adapt the educational system not only to the demands of the free economy, but also to adopt its structures at the same time: educational vouchers. university tuition and loans to finance studies, as well as an individual application to one's university of choice. Simultaneously, countless new school forms and courses of study have emerged in recent years. It appears that we are currently living in an educational supermarket where everyone is able to find the right match for their needs. Only those who do not have enough money will face increasing problems when it comes to acquiring a quality education.

Therefore, we start this issue of PORTAL by taking a look at a country in which, although poverty-stricken, the majority of schools charge fees: Myanmar. In the country's largest school (sought-after precisely because it is free-of-charge), the Association of Myanmar has provided considerable support in the past years – also with financial assistance from Hörmann KG.

Dormitories were built and computer classes set up, and now the school is to become an incubator for trade-based training of Myanmar's youth.

Architects in the "Pisa wonderland" of Finland are not only planning new schools, but also subsequent use of existing ones in the face of declining birth rates. Finnish architect Päivi Kataikko gave PORTAL a look behind the scenes. Furthermore, in this edition we introduce an elementary school, two university buildings and a research laboratory, which, despite their individual differences, are all united by a common thread: their first-class architecture. The comeback of architecture in the area of education is no coincidence: In a world where an increasing number of people make their own decision on which educational institution to attend, spatial quality can quickly become a factor that can make or break such considerations, to the benefit or disadvantage of a school or university.

Martin J. Hörmann

Thomas J. Hörmann

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PORTAL TALKS TO CHRISTIAN RUNGE

In many developing countries, education is seen as the key to a better future – even in places where un-democratic governments inhibit a country's development, such as in Myanmar. Since 2000, the Association of Myanmar has supported the largest school in this Southeast Asian country with know-how and financial aid. PORTAL spoke with the organisation's founder, Christian Runge, about the educational system in Myanmar and the future plans of volunteer aid workers.

PORTAL: Mr. Runge, you established the Association of Myanmar in 2000. What is the social and economic situation in Myanmar like compared to other countries in the region? CHRISTIAN RUNGE: Myanmar is ruled by a military government. There were free elections in 1990, where 62% of votes (about 80% of the seats) were cast in favour of Aung San Suu Kyi, the daughter of Aung San, the country's founder who was assassinated in 1947. But the election results were not implemented and Aung San Suu Kyi, the recipient of the Nobel Peace Prize in 1991, has been under almost permanent house arrest since then. There is a boycott from the EU countries and a trade embargo from the USA. A considerable lag exists in the development of trade relations and the majority of the population lives in poverty in bamboo huts. PORTAL: You have concentrated your work on the city of Mingun and the Phaung Daw Oo school in Mandalay, which is directed by a Buddhist abbot. What role does religion play in the school system and daily life in Myanmar? CHRISTIAN RUNGE: The Phaung Daw Oo school (PDO) was founded by Abbot U Nayaka and his brother, the monk U Zawtika, in 1993 to provide a school education to children from poor families. For this reason, no school fees are charged in contrast to state schools.

When we started there were 3500 pupils at PDO; now there are 7300. It is the largest school in Myanmar. It has a good reputation and draws a lot of attention and pupils accordingly. The Buddhist religion does not play any part in the lessons. It does, however, influence how people lead their daily lives. Each person has to make sure that his or her lifestyle does not bring about any disadvantages in their next life. The fact that the school is directed by a high-ranking abbot is of major significance, of course.

70–80% of the population is Buddhist; but other religions are also permitted to flourish.

PORTAL: To what extent have your experiences in Myanmar changed your perspective on the German educational system? CHRISTIAN RUNGE: A long time ago, school lessons in Myanmar were influenced by the cloister schools - which still can be felt to some effect today: Most classes have 100 or more pupils. The teacher reads a sentence, which all pupils repeat in chorus (and as loud as possible). Memorisation is the primary learning technique. To improve individual guidance, U Nayaka has made efforts - as far as the number of teachers allows - to set up smaller specialised classes with around 30 pupils, in which lessons are conducted from the start exclusively in English, and not in the language of Myanmar (Burmese). The final university entrance examination is also held in English. To date, there is still no vocational training in this country. So, we have multiple starting points to bring in the experiences we have collected in Germany, as well as the know-how of our specialists. In comparison to Germany, the children are very interested in learning and – although they are also guite lively – completely silent in the classrooms when the teacher wants it to be

CHRISTIAN RUNGE Born in 1932 in Halle/Saale, (

1950–1954	studied law in Munich and Munster
1955–1956	studied at the Europa-Institut of
	Saarland University
1959	passed the 2nd state examination
1959–1964	assistant at the Europa-Institut (with
	numerous publications)
1964–1974	employed as a lawyer
1974–1984	Managing Director of the State
	Transport Industry Association
	(cofounder of the journal "Transport-

(cofounder of the journal "Transportund Speditionsrecht" (Transport and Shipping Law) 1984–1994 collaboration with the Saarland state government (including in the Ministry of European Affairs, the State Chancellery and the Ministry of Economic Affairs)
Since 1994 diverse activities as a pensioner;
2000 founding of the non-profit Association of Myanmar, today with 290 members and 280 sponsored children.

Web page: www.help-myanmar.org



so. Because, according to Buddha, you should honour your parents. It is even more important to honour your teachers. And finally, monks must be especially honoured. This school is directed by a high-ranking abbot. Him simply walking through the school grounds is enough to take care of all potential problems.

PORTAL: You have constructed several buildings at the PDO: a dormitory for female pupils from other regions who no longer have to sleep on the floor in empty classrooms at night; a kitchen for school meals; a school clinic as well as a pavilion where goods produced at the school are sold. What are your plans for the future?

CHRISTIAN RUNGE: Our common goal is to expand the school, which ranges from pre-school (from 3 years) to high school (after the 10th school year), to create a central educational facility together with a boarding school and vocational training. Operating costs will be covered in part by the proceeds coming from the vocational businesses. **PORTAL:** How will that work?

CHRISTIAN RUNGE: Vocational training in carpentry has already been offered for a number of years. A retired master carpenter from Saarland has come many times over longer periods, and there are also monks who take over his post in his absence. This allowed us to save money on the newer buildings, since windows, doors and interior furnishings were produced in our own workshop. At the end of the year we will start a training course for carpenters that also includes calculation and computer lessons. A new building is being constructed for the carpentry workshop. Hörmann KG has assumed the costs for the first construction phase. Once this system has proven itself, we will then extend training to include other occupations such as mason, painter and electrician.

PORTAL: What is the reaction of the local authorities to these plans?

CHRISTIAN RUNGE: We have little contact with the local authorities. We submit the construction plans for the new buildings, but regulations state that authorisations do not have to be obtained for buildings on cloister property. We would like more support in areas such as import authorisations for containers with donated goods – for example used computers

or a dentist's chair for the school clinic. Unfortunately, we are currently not making any progress in that area. And we are still looking for architects to support further expansion of the school. For us a trusting, successful co-operation with U Nayaka is important. More information about our work is available on our web page. You can also download a 30-minute film about our work (in German).

7300 pupils currently attend the Phaung Daw Oo school in Myanmar.



Finland, the educational wonderland? For educational specialists and policymakers, this northern European nation has long been a role model for pupil performance, independent learning and strategic advancement. All the while, the "mentor's mentor" was Germany – namely the former GDR. Finnish architect and school expert Päivi Kataikko took a closer look at the Finnish school system for PORTAL, examining the question of what other countries could learn from this Scandinavian nation.

When Finland wanted to reorganise its school system in the 1970s and introduce contemporary school forms, it first looked to other countries for possible role models. The neighbouring Nordic countries were gripped by similar thoughts of reform, but still did not have any practical experiences from which Finland could have benefited. The school systems in most Western and Middle-European countries were no different than the system that Finland was seeking to reform and the educational system of the all-powerful Soviet Union was ruled out for political reasons. Then the Finnish educational specialists struck gold in the former GDR: The school system there appeared extremely promising and was adapted to the conditions in Finland. Today, 30 years later, educational specialists and policymakers from around the world make the journey to Finland to analyse the success of the Finnish educational system. In view of the numerous visitors from Germany, Finnish educational experts tend to wonder: How would schools in Germany have developed if the system from the GDR had been adopted following the reunification in 1990, as Finland had done back in the 1970s? Today, Finnish schools are "community schools for holistic learning". Until the ninth school year, all Finnish pupils attend the same type of school, giving them the opportunity to acquire the same knowledge. An early differentiation in school types and educational opportunities, as is the case in Germany with its general-education secondary schools (grades 5-9), grammar schools or schools for special education, does not take

place. Pupils decide on the course of their further school career only after the ninth or tenth grade. They choose between completing the upper grammar school grades or basic vocational training, which can, however, also be completed with a higher education entrance qualification. Most pupils are usually able to take responsibility for making their own decision on this question at around the age of 15 or 16.

Architectural training for all

For some time now, Finland has also been regarded as a pioneer in architectural education and providing knowledge of architecture-related culture. In the Finnish constitution, every citizen has the basic right to a healthy environment, and he or she is also required - to a certain extent in return - to assume responsibility toward the environment and common cultural heritage. But the citizens must also be capable of doing so. Therefore, architecture has been a mandatory component in art classes since 1993, and, in the meantime, various topics in architectural culture are increasingly finding their way into the syllabi of other subjects (History, Geography, Biology or Social Studies). When the goal is to teach children to interact responsibly with their constructed environment and provide them with a well-founded understanding of architectural culture, the direct environment, i.e. their schools, cannot be neglected. For this reason, planning and design of school buildings in

PÄIVI KATAIKKO

Born in 1964 in Hamina, Finla

1985–1989	studied architecture in Lahti and Helsinki, Finland	Si
1989–1996	architect in Sweden, Holland and	01
	Germany (at various offices)	
1999–2000	academic assistant at the University	
	of Dortmund, Faculty of Architecture	Si
	and Civil Engineering, Chair for Urban	
	Design	
Since 2000	Managing Director of RE.FLEX	
	architects_urbanists	
Since 2002	academic assistant at the University	
	of Dortmund, Faculty of Land Use	
	Planning, Department of Urban	

Design and Planning;

 2004 co-founder and member of the international network for architectural education PLAYCE (www. playce.org)
2005 co-founder and chairperson of the non-profit association JAS – Jugend Architektur Stadt

(www.jugendarchitektur-stadt.de)



Finland has been conducted with great care in recent years. New educational findings, different teaching and learning methods and sustainable property planning all lead to new room programmes and planning procedures for building schools. In today's classrooms, educators are increasingly letting go of classic face-to-face teaching methods and encouraging independent, creative learning. Schools also require flexible classrooms of different sizes for classes in small groups and remedial education, individual tutoring and independent work, as well as spaces for large classes. Entrances, break areas and libraries must be able to be used for a variety of purposes. In the context of a full-time school day, the entire school is currently becoming an influential learning and living space which provides children with shelter, orientation and a comfortable atmosphere.

From kindergarten to assisted living quarters

Today, both pupils and teachers work differently. Whereas in the 1980s they still mainly prepared their lessons at home, today they do this increasingly at school. Like their pupils, their on-site work times are also becoming longer. This means schools not only need large classrooms, but also flexible team and conference rooms and, above all, fully fledged workspaces for their teachers.

The large number of new demands results in schools co-operating with each other more strongly than in the past. Different schools create alliances for the common use of their rooms or other resources. They also form partnerships with other public or cultural institutions with the result that the school building is also open evenings, on the weekend or during the holidays for other users. Schools are no longer exclusively educational establishments, but are multifunctional buildings. This desire to retain the greatest amount of flexibility possible has been taken so far that, in the face of demographic change, the first kindergarten buildings in Finland are already being conceived that can be converted into assisted living facilities for the elderly in the future with only a few changes.

All of these factors make designing and planning schools extremely demanding and the planning cannot be left to the

architect alone. Finnish schools are planned in a process of intensive co-operation between architects, education experts, pupils and the local community as the contractor. In addition, during the planning phase the citizens of the neighbourhood are integrated through periodic public presentations and their suggestions are included in the planning as far as possible. The result of this intensive and of course not always problem-free process, which also demands a different occupational definition on the part of architect: a well-running, open school, offering the best possible solution for the needs of its different groups of users. Many of these new schools also demonstrate new spatial principles and atmospheres that were not included in our old textbooks on school architecture. This currently makes a glance at the Finnish schools very promising.

Some things have also changed for Finnish teachers and their training since the 1980s: Teacher training college in Viikki, from ARKHouse Architects



UNIVERSITY IN BRIXEN

At first glance, the new building for the faculty of education in Brixen appears quite sober in the midst of the lively historical centre. However, upon entering the building designed by Kohlmayer Oberst Architekten, one discovers its links to the neighbourhood. The diverse interior with its "alleys" and "squares" is indeed similar to the structure of a town.

The Italian city of Bressanone (Italian for Brixen) lies 40 kilometres north of Bolzano in South Tyrol's Eisacktal. Despite being the third-largest city in South Tyrol, Brixen is still manageable in size with its 18,000 residents. The small city with little traffic is known as a tourist location due to its mild climate and beautiful landscapes. Yet Brixen also has an educational tradition: the renowned local university for theology and philosophy was founded in 1607, making it Tyrol's oldest university establishment. Since 2001, Brixen is recognised as a "fully fledged"university city: The Free University of Bozen-Bolzano, first founded in 1997, opened a new branch of its education faculty here and students have been strolling through the narrow alleys of the historic centre ever since. At the periphery of this maze

of alleyways, Kohlmayer Oberst Architekten from Stuttgart designed and constructed the new building of the faculty of education. Their design won a competition held in November 1998 for this project. On the grounds of the central bus station, which can be seen from the palace, they designed a four-storey structure with a quadratic floor plan for 1700 students and teaching staff. With a floor area of over 20,000 square meters, it stands in sharp contrast to the narrow structures of the historic centre. The delicately structured facade of the free-standing building, composed of alternating windows and translucent glass surfaces, lends a fine structure to the massive building.

Deep frames and smart corner solutions bestow the homogenous structure with a plasticity despite its four identical faces. The ground level, conceived as an arcade, overcomes the leap in dimensions between the building and its surroundings by opening it up to the city and drawing in both students and pedestrians. The interior of the new building is divided into two spaces: a central core where often frequented and, in part, public spaces such as the foyer, lecture rooms, the auditorium and library are located, and a surrounding ring containing seminar rooms and administrative areas. While the core composes the building's communicative centre, the spaces in the outer ring exude a quiet, concentrated atmosphere. Only the numerous views of the city and mountain landscapes, framed by the box-like elements of the facade, can distract students from their work. This area is accessed through a glass "cloister" surrounding the centre, which offers interesting views of the four inner courtyards. A generous two-flight staircase, from which hallways branch off to the different levels, is in the centre of the building.

Transoms and translucent glass walls allow daylight to reach far into the building's interior and illuminate these "alleys".

The weight of the concrete ceilings is distributed onto four solid stairwells at the corners of the building and a few hidden, lean supports in the partition walls. This enables a free division of the seminar and administrative rooms in the outer building ring and the facade was also detailed with filigree. Two generous rooftop terraces on the third floor create a quiet space amidst the daily activity – framed by the outer building ring the only view they permit is of the surrounding mountain range.



A facade of windows and translucent glass surfaces creates light, cell-like divisions in the large construction (above).

In the stairwell, double-leaf fire doors from Hörmann provide for safety and also aid in orientation (below left).

During the evening, the interior illumination of the building brings the filigree facade to the forefront. Individually controllable roller blinds control the amount of daylight that is let in (below right).

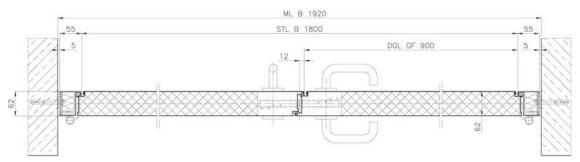






The institute's large lecture rooms are located in the highly frequented area of the building's inner core. STS steel fire doors aid in the quick evacuation of the building in the case of a fire (above). Sectional view of a fire door (below).





The large lecture hall has a clear view to both the interior and exterior. In addition to the building architecture, architects also designed all the interior furnishings themselves (above). The arcades on the ground floor bridge the gap between the new building and the neighbourhood. With their concrete finish, escape doors from Hörmann are hardly distinguishable from the light-coloured facade (below).





CONTRACTOR Autonomous Province of Bolzano, South Tyrol Building authority, East

DESIGN Kohlmayer Oberst Architekten Stuttgart

LOCATION Bahnhofstraße 16, Brixen

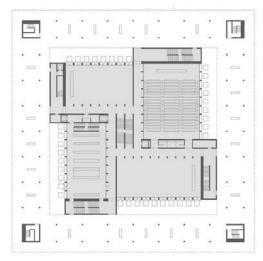
GROSS FLOOR AREA Approx. 23,500 m≤

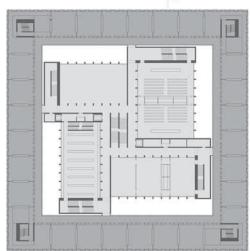
PHOTOS

HÖRMANN PRODUCTS Single and double-leaf flush-fitting STS steel fire doors, some with a concrete finish.

Fully glazed hallways and rooms create interesting views, particularly of the two rooftop terraces on the third floor (above). Ground floor (below left) and first floor (below right).







LIBRARY AND LECTURE BUILDING AT BAUHAUS UNIVERSITY, WEIMAR

The library collection of the Bauhaus University in Weimar can finally be presented in a central location in a new building from Meck architekten and Stephan Köppel. Additionally, the linear, double-winged structure also produces a strong urban architectural effect: It divides the former brewery grounds into a series of clear, small-scale plazas.

For students beginning their studies at Bauhaus University in Weimar, at least orientation within the city is easy: A large number of the university locations lie along a clear urban axis – starting with the International Meeting Centre at the southern end of the Belvederer Allee continuing up to the office and laboratory buildings of the faculty for civil engineering toward the northwest in Coudraystrasse. Until recently, an exception was the main library, which was located far from this axis in the Weimarplatz. In addition, there was not even enough space for the entire book and media collection, which then had to be divided into diverse archives all over the city. The university decided to construct a new library building to shift the library more toward the centre of the university and bring its collections together in one location.

The premises of a former brewery in the city centre was ideal for the construction site. Thanks to its V-shaped form, the new building divides the large area into a series of smaller plazas and inner courtyards, which are connected to each other by stairs and pathways. For this reason, the architects referred to the new building as the "perfect fit for a well-planned city". Together with the existing buildings on the east side of the block, the lean wing of the new building forms a small, hidden inner courtyard.

The library's office and administrative rooms are situated in this part of the building. The actual library and a large lecture hall are located in the larger west wing. In regard to urban planning and architecture, this wing faces an open, urban plaza in the centre of the block. From this perspective, the three-storey structure should look like a giant book shelf as envisioned by the architects: The shelf is enveloped by a solid concrete "band" – like the frame of a shelf – and opens on the longitudinal side towards the plaza with a large glass facade. The floor levels visible through the glass facade form the "shelves", while the rows of stacks standing on them appear from afar to be books placed in the giant bookcase.

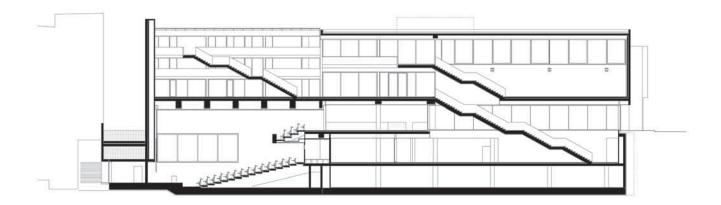
The closed facade sections are meant to be reminiscent of the historic timber-framed buildings in the area: Their monolithic concrete surfaces have been sanded and spackled to maintain the visibility of the lively structure and the facade surfaces create the impression of taut skin. In accordance with the diverse use of the space, a difference in the interior design of the two buildings can be seen. In the administrative wing and a central foyer, the materials were limited to bare floors, painted concrete and colours in a minimalist style. The library is completely different: Based on the new study centre of the worldfamous Anna Amalia library in Weimar, which is placed in a massive structure as a wooden corpus, the interior of the library, as well as the lecture room in the basement of the west wing, were fully panelled in oak. Through the use of different construction materials, all areas of the building are flooded with light and retain a pleasant, open atmosphere provided by the large number of glass surfaces in both the interior and on the facade.



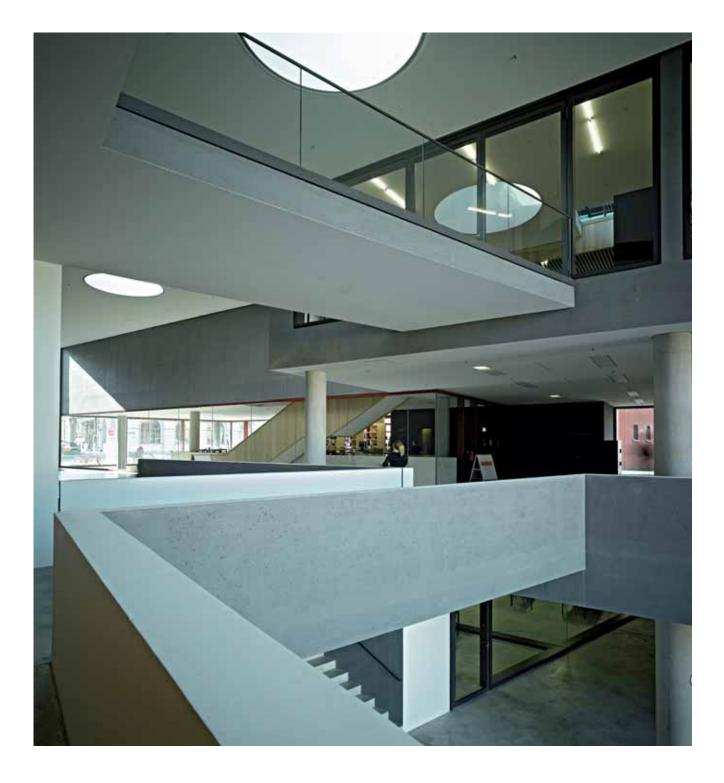
The levels and rows of stacks in the library are visible from the exterior of the glazed west facade (left). Together with the surrounding buildings holding the collections, the west wing frames an area in the interior of the grounds (right). Cross-section (below).







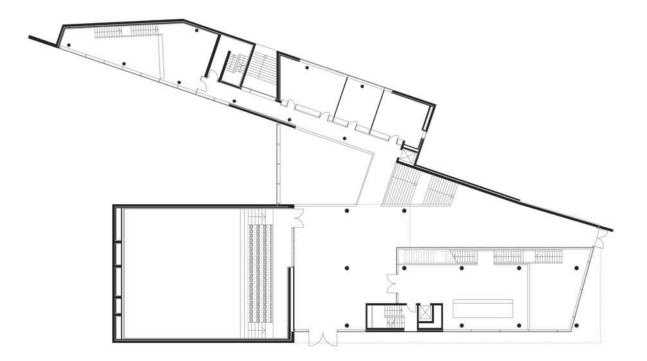
The east and west wings are connected by narrow bridges in the central foyer. Although both buildings stand in sharp contrast to each other through their different materials, the large glass partitions create interesting views of the interior.



Reminiscent of the Anna Amalia library in Weimar: The surfaces of the west wing are made of oak (left). Even the large lecture hall in the basement is fully panelled in oak (right). Ground floor layout (below).







CONTRACTOR

Free State of Thuringia, represented by the state building authority in Erfurt

DESIGN Andreas Meck (meck architekter and Stephan Köppel (phases 1-4)

LOCATION Steubenstraße 6, Weimar

CONSTRUCTION COSTS 12 million euros

MAIN USEFUL AREA 4.405 m≤

SECONDARY USEFUL AREA 1,130 m≤

ENCLOSED SPACE 32,577 m≥

PHOTOS Stephan Falk / baubild / Hörmann KG

HÖRMANN PRODUCTS

Single and double-leaf steel fire doors T30 H3, H3D; single and double-leaf steel fire doors T90 H16; single and double-leaf steel doors D45

FITTING PARTNER

A view of the southern entrance shows the minimalist material concept of the east wing. The surfaces here are pared down to bare floors and painted concrete.



LABORATORY BUILDING FOR MEDICAL GENOME RESEARCH IN BERLIN-BUCH

With a shared laboratory building the Max Delbrück Center for Molecular Medicine and the Leibniz Institute for Molecular Pharmacology wanted to bring together the research areas of the two institutions for their mutual benefit. The laboratory building created by Staab Architekten fulfils the necessary requirements and makes a mark in the somewhat lacklustre campus of Berlin-Buch.

At the beginning of the past century, the grounds of today's Berlin-Buch campus were designed as central cemetery, yet never used for this purpose. The lush treecovered landscape still sculpts the present-day science park.

Individual buildings shimmer between the tree trunks and artwork lines the paths. A pleasant ambience prevails – the architectural mixture can only be imagined at first glance.

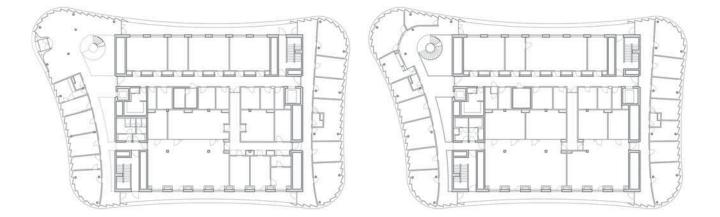
To the east lies a jumble of clinic buildings from the 1930s, to the west the mammoth research buildings from the 1970s, with no proportional relationship whatsoever to their neighbours. Various new buildings from the past 15 years are grouped between the two poles. The grounds can be likened to a patchwork guilt, with neither an urban-design concept nor an architectural thread to unite them. Even the architecture of the laboratory building for medical genome research follows its own rules. The building is located at the end of a main traffic axis and is nestled in the surrounding forest. Its subtly curving, but nearly symmetrical form is only more pronounced at the northern "corner". Thus the main entrance there is subtly accentuated. The entrance area is accorded sufficient space with a free-standing, sculpted and curved steel staircase. In contrast to what one would infer from an initial glance at the curved facade, the interior of the building retains a very clear structure. The centre and bulk of the building is formed by a heavy, solid five-storey concrete core, which protrudes

from the outer part of the building by one storey. This is where the laboratories are housed. Air spaces separate the cube at the entrance side from the surrounding casing and allow the core to act as an independent space. The free space is illuminated by spherical lamps which appear to be floating. In the upper stories, only a few walkways lead to the interior of the laboratory complex. The core can be reached through red doors. The halls leading past the laboratory rooms through the building complex are also completely in red. The rigid orthogonal layout of the labs creates a triad in which the rooms are situated in an extremely compact arrangement. Short paths facilitate communication between the researchers. The office spaces - originally planned as open office spaces, but now divided into separate cubicles at the contractor's request - can be found on the front side of the light, four-storey casing around the core. High, overlapping glass panels form the facade. Narrow ventilation slots have been integrated in the set-offs between these fixed windows and can be opened as needed. The longitudinal sides of the casing narrow towards the core to form escape balconies. Due to costs and to the regret of the architects, a vertically structured facade could not be built. Instead, the perforated facade of the laboratory core takes centre stage. This is unfortunate, since the interrupted facade creates the false impression that the glass facades on the sides are only added-on fronting instead of a protective casing.



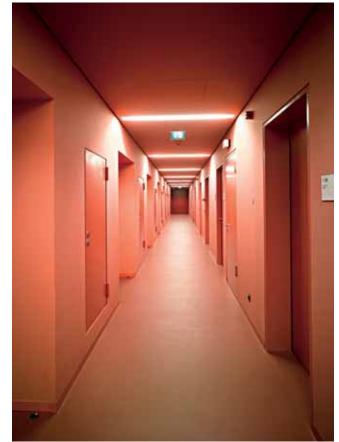
The glass facades of the front side of the building hold the balustrades of the balconies much like a clamp. However, the massive concrete block of the labs dominates the view of the longitudinal sides (above). Layout of the ground floor and the first storey (below).



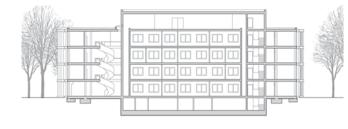


Spherical lamps "swarm" like giant fireflies in the air around the steel staircase (left).

Red floor, red floor coverings, red walls and red doors from Hörmann create a uniform colouring in the laboratory halls (right). Sectional views of the lab wing and the casing (below left). Site plan (below right).











The narrow ventilation hatches provide natural ventilation in the foyer and the work spaces (above).

The red floors from the halls can also be found in the laboratory rooms (below left).

The spiral staircase of black painted sheet steel and concrete block steps dominates the free space between the office and laboratory areas (below right).







CONTRACTOR Max Delbrück Center for Molecular Medicine, Berlin Leibnitz Institute for Molecular Pharmacology, Berlin

DESIGN Staab Architekten, Berli

COMPLETION 2006

LOCATION Robert-Rössle-Straße, Berlin

GROSS FLOOR AREA 7,635 m≤ **UMBAUTER RAUM** 29,179 m≥

PHOTOS Werner Huthmacher, Berlin (p. 24 above/below right) Stefan Meyer, Berlin (p. 24 below left) Stephan Falk / baubild / Hörmann KG

HÖRMANN PRODUCTS

Single and double-leaf steel fire doors T30 H3D; single and double-leaf steel fire doors T90 H16; single and double-leaf steel doors D45

Recessed red walls distinguish themselves from the exposed concrete of the core and identify the laboratory entrances. The dynamic, bold balconies connecting to the office rooms form a contrast to the heavy core and allow for the creation of attractive free space.



PARK AND WIELAND SCHOOL IN WEIMAR

A compact new building has significantly expanded the spatial area of two school buildings from the 19th century in the centre of Weimar. It is not readily apparent how much additional room was created, since a large part of the new space was hidden by architect Ferdinand Heide in the true sense of the word.

Lack of space is probably an unavoidable consequence, as the currently growing demand for schools to offer fullday services for children and youth starts to be put into practice – ultimately such a school has to be more than an educational institution, and offer a "living space" with interesting leisure activities. Park school and Wieland primary school, two public schools in the city centre of Weimar also had to struggle with space problems: the two neighbouring schools both offer an all-day, open array of homework tutoring, snacks, sports, music and other activities.

During a comprehensive renovation project, the historic buildings from the 19th century was expanded by an added building which considerably improves the capacity of both schools – by both a regular above-ground structure and by transferring part of the space below the ground.

According to the architect's concept, the part of the new building which is visible above the ground has been conceived to fit in with the existing historical building as much as possible in terms of dimension, position and design. As an elegantly simple, compact extension, it connects with a side wing of the Wieland school at the same width and height as the existing building and extends it linearly towards the northwest. In its urban planning context, the inner courtyard between the Park and Wieland school received a more pronounced enclosure. The facade colour corresponds to the solid plastered building in the earth tones from the existing structure. The form and colour of the new three-storey structure, as well as the proportions and arrangement of openings on the facade, are oriented towards the older building: Large-format, flush metal frame windows with a strict horizontal arrangement continue the clear geometry of the facade for the existing building in the new structure. Nevertheless, a glass connection bridge extending the full height of the building makes a clear optical distinction between the old and new structures.

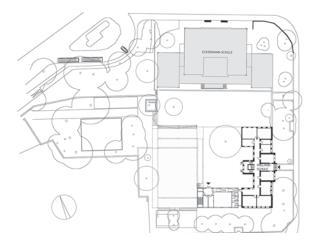
The hallways of the old structure were continued straight on in the new building, creating a transition between both buildings at the same level through the connection bridge and without any detours. Several classrooms, as well as sanitary facilities for the primary school, are situated in both of the upper levels in the new structure. On the ground floor, there is a new cafeteria with an adjacent kitchen for preparing after-school meals, a library and a room for the after-school staff. A very different approach was taken for the required gym. The school grounds belong to a green area in the city and thus could not lose their function as a tract of fresh air nor impede it visually through an oversized construction. This is why Ferdinand Heide simply placed the planned sports area underground. The additional costs involved were set off by the fact that the existing subsoil was not capable of bearing weight and a normal gym would have required an elaborate pile foundation. The two-storey gym is accessed through the entranceway of the adjacent above-ground structure and natural lighting, as well as ventilation, is provided by large overhead transom light strips on the ceilings.

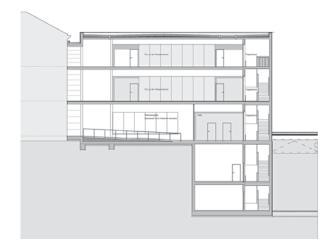


The halls play an important part in the architectural concept: The new building expands on the layout of the existing structure and extends the hallways straight on at the same level, resulting in an interior unity of the new and old buildings (above left and right). Site plan (below left) and longitudinal section (below right).









CONTRACTOR City of Weimar, building authority

DESIGN Ferdinand Heide Architekt BDA, Frankfurt am Main

LOCATION

CONSTRUCTION COSTS

GROSS FLOOR AREA New building 2,664 m≤

USEFUL AREA New building 2,664 m≤

PHOTOS Michael Miltzow, Bildwerk Photo design, Weimar (p. 27, p. 28 right), Stephan Falk / baubild / Hörmann KG (p. 28 left, p. 29)

HÖRMANN PRODUCTS Single and double-leaf steel fire doors T90 H16; single-leaf steel smoke-tight doors S/RS - 100 S; double-leaf steel smoke-tight doors S/RS - 200 S; Steel smoke-tight glazing S/RS - 300 S

29 HORMANN

With its green spaces and trees, the school grounds are part of the city's "Lotte-Kirschbachtal" green area.

The added structure visible above the ground also includes a large underground gym, whose roof lies at courtyard level and serves as a free area for playing.

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Topics in the Next Issue of PORTAL: **Buildings for Industry and Commerce**

It used to be that industrial construction led a Cinderella-like existence in the field of architecture. But times have changed and more and more industrial companies are beginning to define themselves through the architecture of their production plants and administrative buildings. Even medium-sized and small companies are following in the footsteps of large industrial contractors who commissioned the construction of what were once regarded as masterpieces such as AEG turbine hall in Berlin by Peter Behrensí or Fritz Schupp's Zollverein colliery in Essen. Find out more about the balancing act between profitability and appearance in contemporary industrial architecture in PORTAL 11.



Pramtal Start-Up Centre; architects: Spittelwiese Architekten, Linz

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