

BIRD'S EYEVIEW 4



modul
is time

KAUFMANN
BAUSYSTEME

constructively brave

TIME FOR MORE MOVEMENT IN SPACE.

Time Distribution Is Shapeable.

The construction industry is evolving rapidly, with traditional building methods being replaced by innovative techniques. One of these techniques has gained significant popularity in recent years: modular construction. The modular method offers several advantages over conventional building processes. One of the main benefits is cost savings – derived from a combination of factors including reduced material use, less labor, and less time.

A further decisive advantage of modular construction is time savings. Since modules are manufactured off-site, the building process can proceed simultaneously with site preparation – significantly shortening the overall construction period. The high degree of prefabrication enables straightforward assembly and disassembly; individual components can be installed at the selected location in a very short time, allowing earlier occupancy. This leads to substantial cost savings, especially for buildings where time is a critical factor. And where isn't it?

Modular construction saves time.

From the very first step to the very last. Industrially prefabricated modules are

produced in a manufacturing facility under controlled conditions with a high degree of automation – coordinated with precisely sequenced craft operations. Module production is independent of weather conditions, resulting in a faster and more reliable construction schedule. On site, modules are simply installed, connected, and commissioned – significantly accelerating the building process compared to other methods. The combined efficiency of prefabrication and on-site assembly can dramatically shorten the overall build.

While modules are being produced in the factory, foundations and other preparatory work can proceed simultaneously on site – leading to better time planning and utilization. Modular construction requires fewer skilled tradespeople and can therefore be executed efficiently even in conditions of labor shortage.

Der Modulbau kann die Bauzeit im Vergleich zu conventional methods. Module installation enables a faster handover of keys – and therefore faster occupancy of the building. Modular construction can significantly reduce build time especially for complex projects such as schools, daycare centers, or office buildings. Industrial prefabrication and the high degree of completion also reduce site setup requirements and construction waste – contributing further to time savings.

Time is perhaps the scarcest resource of the 21st century, and at the same time the least acknowledged in the discourse about its significance as an economic and ecological factor. We often treat it as though it were purely a private matter. Yet time can systematically create room for opportunity. Because time is a truly decisive competitive advantage. It determines whether entrepreneurs bring an idea to market maturity, it is the invisible framework within which economic potential is created. Capital can, in some circumstances, be rebuilt – but lost time is irretrievable.

One of the most important promises of new technologies is to save us time – enabling us to communicate, produce, and organize more efficiently. Successful companies know: digitalization creates efficiency, and efficiency creates time. The challenge lies not only in gaining time, but in deploying it productively.

Christian Kaufmann
Managing Partner

WITH EVERY MINUTE INVESTED IN GOOD PLANNING, YOU GAIN DAYS.

Planning projects with modular construction is characterized by a high degree of planning certainty and efficiency. Industrial prefabrication of modules eliminates the need for complete detail planning of every component, focusing planning effort primarily on the connections and arrangement of modules. This leads to a shorter construction period and enables flexible adaptation to individual needs and requirements.



Concept and Design

Collaborative planning with the owner or user to define the individual requirements and intended uses of the building



Detailed Module Planning

Design and detailed planning of the modules themselves — with focus on connections, joints, and integration into the overall building
Planning of building services such as electrical, plumbing and heating within the modules
Consideration of transport dimensions and installation requirements of the modules



Foundation and Site Planning

Design of the foundation to support the modules and provide a safe, stable base
Site planning to effectively transport, install, and connect the modules
Consideration of level differences and integration of the modular construction into the existing building



Connection and Joint Planning

Design of connections between modules to ensure a stable and durable structure
Consideration of seals, waterproofing, and thermal insulation at connection points
Planning of connection points for building services such as electrical, water, and drainage



Construction-Phase Planning

Quality control of modules prior to installation
Adaptation of plans to specific project conditions and individual requirements
Coordination of all parties before, during, and after installation



Advantages of Modular Construction in the Planning Phase:

High planning certainty, as factory prefabrication enables precise and reliable planning
Increased efficiency through industrial prefabrication, which shortens build time and reduces costs
Flexibility, as modular buildings can easily be extended or reconfigured to meet changing needs
Sustainability, as modular buildings can be sustainably constructed and reused
Quality through industrial production to high standards

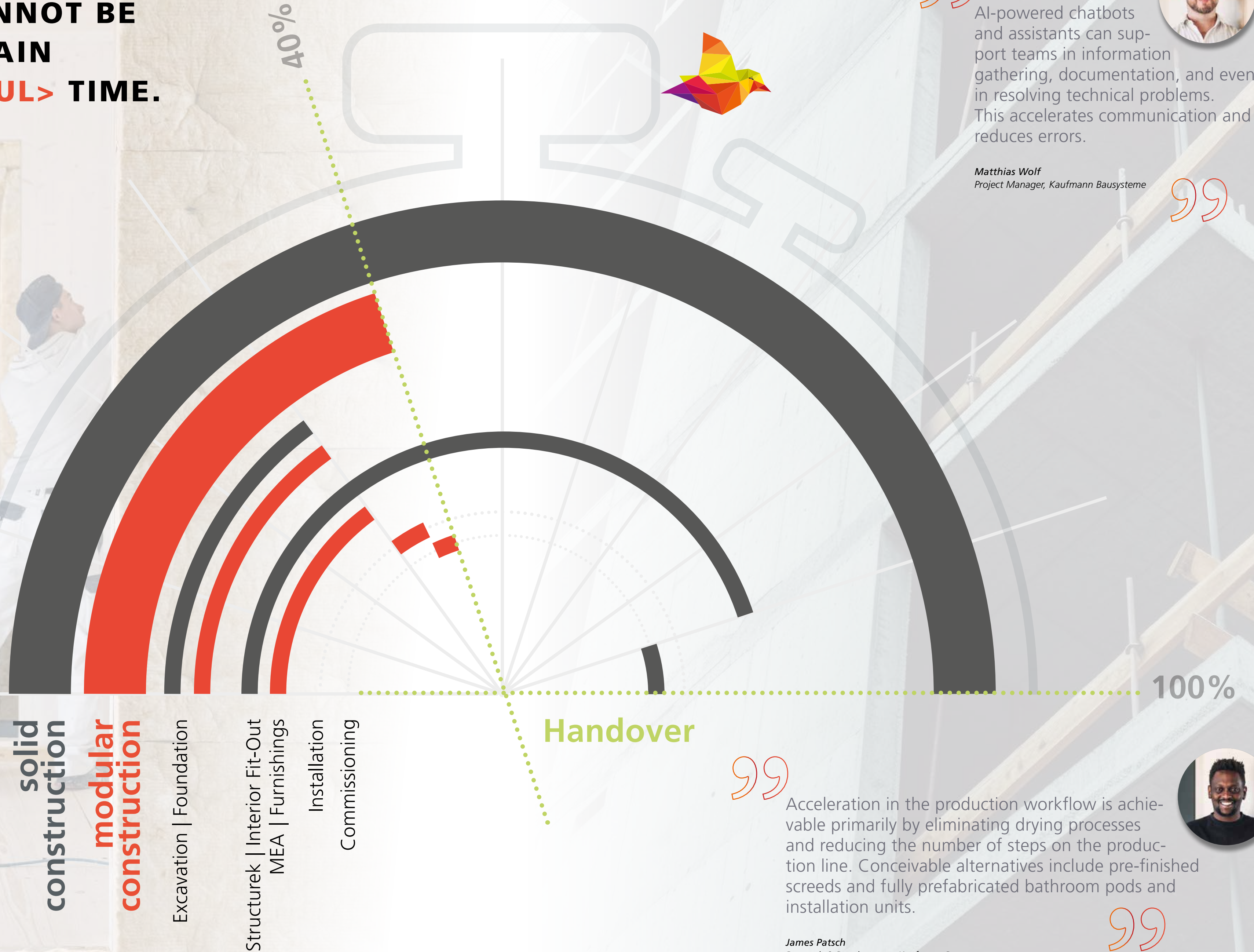
Summary:

Planning projects with modular construction is an efficient and sustainable method for constructing buildings. Modular construction enables flexible, cost-effective planning that meets the needs of the owner and the individual project.



LOST TIME CANNOT BE RECOVERED GAIN

<TIME IS MODUL> TIME.



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AI-powered chatbots and assistants can support teams in information gathering, documentation, and even in resolving technical problems. This accelerates communication and reduces errors.



Matthias Wolf
Project Manager, Kaufmann Bausysteme

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Acceleration in the production workflow is achievable primarily by eliminating drying processes and reducing the number of steps on the production line. Conceivable alternatives include pre-finished screeds and fully prefabricated bathroom pods and installation units.



James Patsch
Research & Development, Kaufmann Bausysteme

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INVESTMENT IN A LANDMARK PROJECT WITH STRONG BIODIVERSITY: VILLE CAMPUS ERFTSTADT



Ville Campus, Erftstadt (D)

Owner
Ville Campus Grundbesitz GmbH

Architect
green! Architects

Service
General Contractor

Data
GFA: 227,200 sq ft
No. of modules: 530
Construction period: 18 months

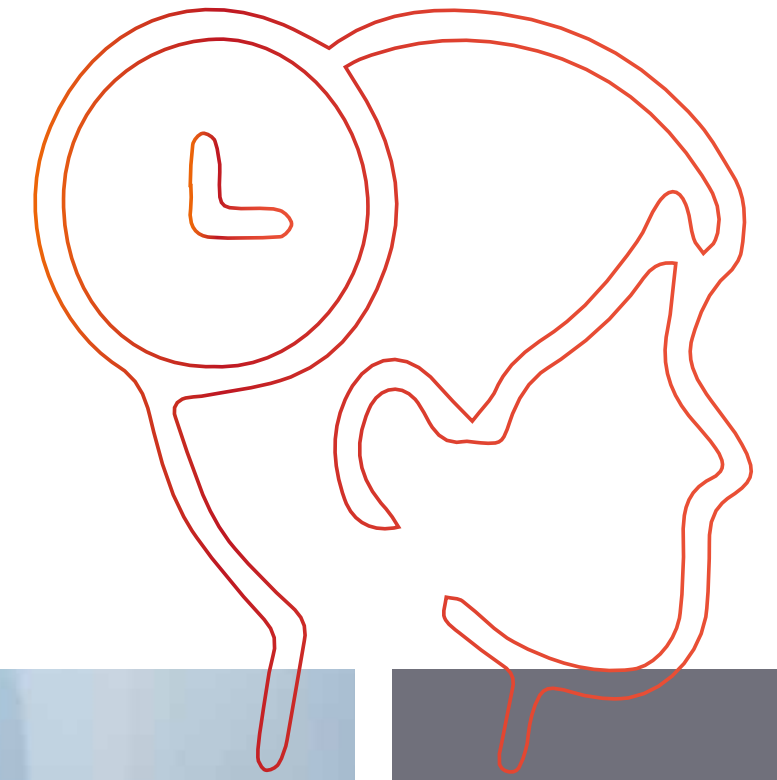
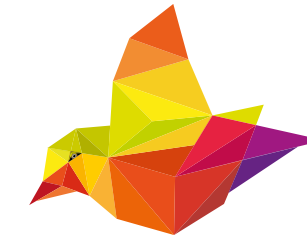
Ville Campus Erftstadt – Education, Housing, and Sustainability in One

In Erftstadt, a forward-looking educational campus is taking shape, combining ecological responsibility with contemporary architecture. Planned are 530 student apartments in sustainable timber modular construction, as well as a multi-story timber element building for seminars, research, and development. 530 student apartments in timber modular construction and a timber hybrid building with seminar rooms will be created in Erftstadt. Ville Campus Erftstadt stands for an exemplary ecological approach and a holistic planning philosophy aimed at creating a new, forward-looking place for the people and the environment of the city of Erftstadt. The educational campus is an ecological and

fully accessible building ensemble conceived according to the Cradle to Cradle® principle. The multi-story timber hybrid building is designed for flexible use and intended for educational, research, and/or development institutions. Two multi-story residential buildings are planned in sustainable timber modular construction. The timber building ensemble, together with the biodiversity-enhancing open space concept incorporating rainwater retention and infiltration by landscape architects Greenbox, will create a sustainable and ecological landmark project for the city of Erftstadt.

Student Residences as Yield Drivers for Investors.

For investors and operators, the challenge is to close the gap between affordability and added value as effectively as possible, in order to ultimately offer students an attractive proposition. Timber modular construction supports investors and operators in developing the right product for this younger generation, amid growing awareness of climate and sustainability issues. The advantage of faster commissioning – through dramatically reduced construction time and demanding quality of workmanship – creates clear added value.



We See Planning as Digital Thinking for Efficient Execution.

The modular planning process differs from conventional construction in one fundamental respect: timing. For timber modular construction, key decisions are made very early. The key to planning success is that an experienced team of architects and specialist engineers from KAUFMANN BAUSYSTEME is engaged at an early project stage, working collaboratively to develop an optimized building and provide the owner with cost certainty from the outset.

Based on the architectural and engineering design, we generate a 3D model and digitize every individual module. Using QR codes, we track each module from prefabrication through installation, documenting every step through final inspection – ensuring complete information transparency even after the building is commissioned.

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Time and quality are the decisive factors for us in realizing the Ville Campus. With Kaufmann Bausysteme's timber modular construction method, we gain valuable time – in planning, in execution, and at completion. The high degree of prefabrication delivers quality, schedule certainty, and cost certainty. This allows us to create urgently needed residential and educational space significantly faster while building sustainably at the same time. Added to this are high staff flexibility and short decision-making chains, which work exceptionally well. It is precisely this combination of speed, precision, and responsibility that convinced us.

Markus Mertens
Managing Director, Markus Mertens Vermögensverwaltung



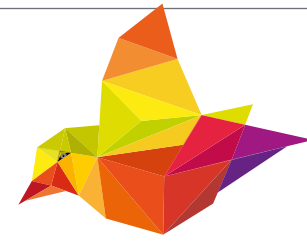
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Markus Mertens Vermögensverwaltung GmbH maps processes along the entire value chain in real estate transactions. Over the past 30 years, the establishment of profitable property holding companies across the German-speaking region has created a high-yield investment model for equity partners. www.markusmertens.com



THE CONSTRUCTIVE HAS A POWERFULLY PRODUCTIVE SIDE

Following our successful Luisenblock-West project in Berlin with 460 timber modules, we are setting new benchmarks in Rostock-Lichtenhagen: for the Federal University of Applied Administrative Sciences, we produced over 1,000 timber modules – directly at our newly established facility in Rostock.



As general contractor, we are responsible for the entire planning, production, and installation of the sustainable campus, which comprises a university building and two residential bar buildings. Our concept stands out for its sustainability, flexibility, and capacity to build quickly and efficiently.

On-site production in Rostock allows us to minimize transport distances and deliver modules to the construction site precisely on schedule. With this record-breaking project, we once again demonstrate our expertise in timber modular construction and our commitment to delivering sustainable, innovative solutions for modern educational buildings.

“We complete eight modules a day,” says Cathleen Gehrke, Project Manager SBL Rostock, underlining the time advantage of modular construction, which accelerates the build process by up to 50%. The project being delivered by SBL Rostock on behalf of the federal government is indeed highly ambitious.

The central university building is 130 m long and 52 m wide – it will contain will contain 24 lecture rooms, two auditoriums including a main auditorium, 48 group workrooms, and a 3,230 sq ft library, as well as a cafeteria with 400 seats.

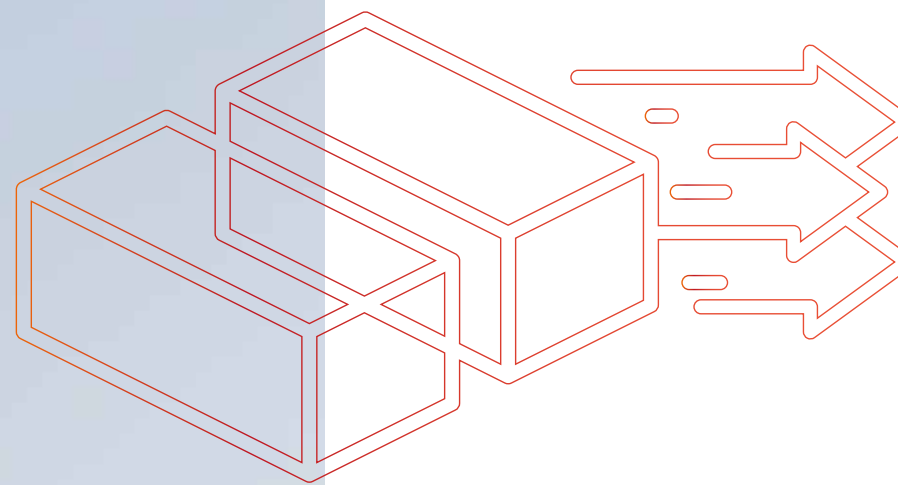
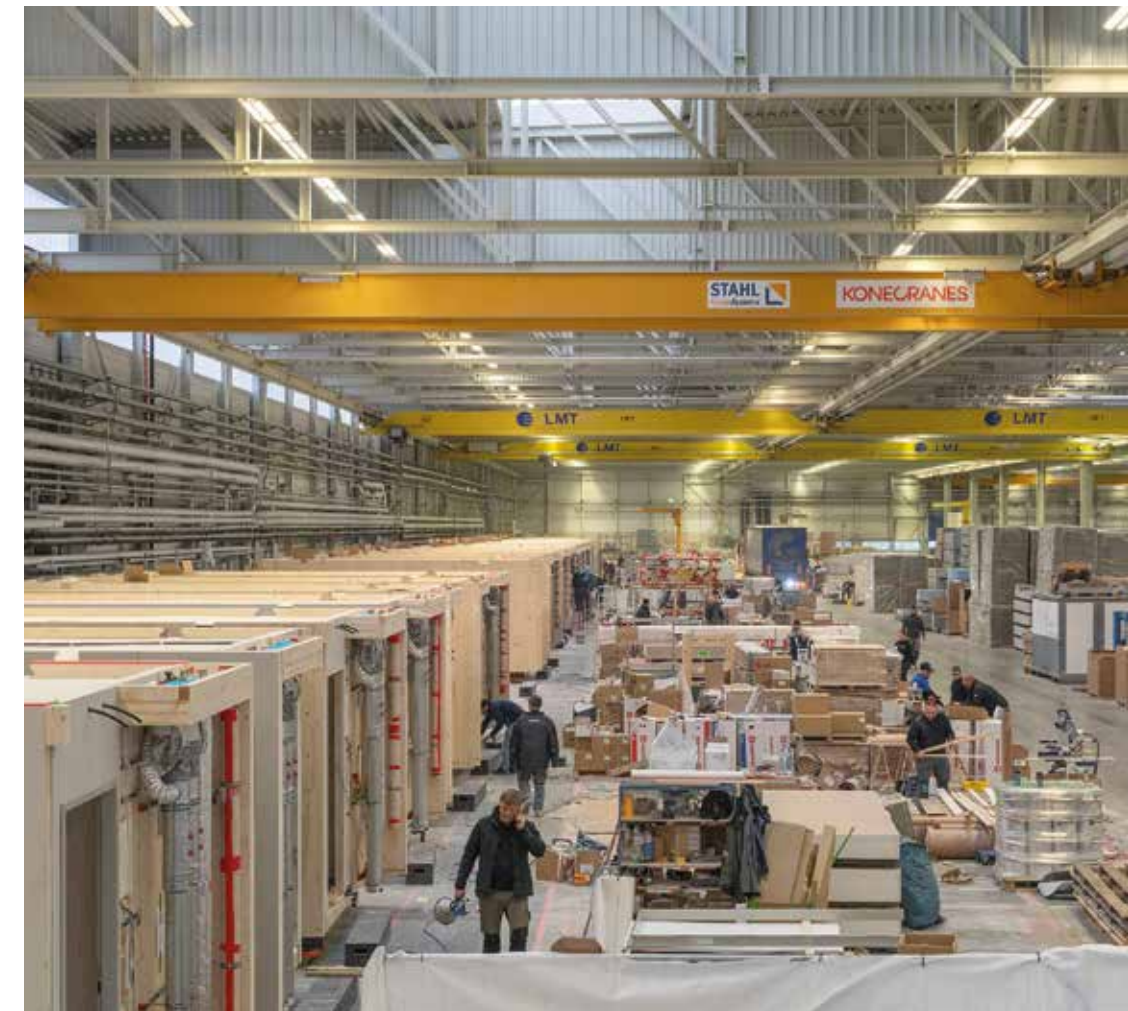
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Bereits seit dem Wettbewerblichen Dialog – Kaufmann Bausysteme actively co-developed our requirements as the client on behalf of the Federal Republic of Germany and translated them into a convincing solution. From structural timber engineering to over 1,000 timber modules for seminar, office, and residential units, the Customs University Campus in Rostock-Lichtenhagen has been realized to an outstanding standard – architecturally, functionally, and in terms of quality – on time, within budget, and in smooth collaboration with all project participants.



Carmen-Alina Botezatu
Head of State Building and
Real Estate Authority Rostock

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HVR Rostock

Owner
State Building and Real Estate Authority,
Rostock

Architect
Sauerbruch Hutton
Gesellschaft von Architekten mbH

Developer
Kaufmann Bausysteme GmbH with PRI-
MUS developments GmbH

Data
Gross floor area: 550,900 sq ft²
1,000 timber room modules

TIMES ARE CHANGING — IN CONSTRUCTION THEY ARE GETTING SHORTER.

The Timber Modular Compartment Schools (HOCOMP) were designed to rapidly meet the demand for school places in Berlin.

This project involves a series of timber compartment schools. A building series of two school types is being realized – an elementary school and an integrated secondary school – each constructed together with a gymnasium on different sites across Berlin. The underlying concept for both school buildings is based on a modular building complex in which individual volumes or wings are assembled in different configurations through rotation and mirroring, generating overall building forms with varying footprints and orientations – adaptable to different site geometries and conditions.

The three-story HOCOMP elementary school is constructed in timber modular construction with an extensive green roof. The rooms are created using room module cells with a prefabrication degree of up to 90%. Serial production takes place at our facility in Berlin-Köpenick. After completion of ground-

works and foundation measures, the prefabricated modules are delivered to site and installed. All built-in elements such as windows, doors, building services, and lighting are installed in the factory. Prefabricated facade elements are then installed simultaneously with interior fit-out and landscaping works.

Timber is the defining design feature of this building.

The surfaces are robust, easy to maintain, and have a positive effect on the indoor climate and learning environment. The classrooms are arranged as compartments, forming open learning areas with team and homeroom spaces that enable state-of-the-art teaching and learning conditions. Photovoltaic systems and green roofs are installed on the school buildings and gymnasiums. All buildings also receive a hybrid ventilation system with heat recovery.

The building wings form individual functional units. Each school building is divided into a volume containing the teaching areas and compartments, and a volume housing the multipurpose room, specialist classrooms, and administration. A central staircase acts as the hinge and connection point, opening under a generous canopy onto a forecourt and the public street.

The 4+3-stream integrated secondary school was developed as a 4-story timber modular building with a metal facade. It provides capacity for 25 classes (705 students), all specialist classrooms required for a secondary school, as well as administrative and inclusion spaces. The 3-stream elementary school was developed as a 3-story timber modular building with a timber facade.

HOCOMP

Landsberg-Bisamstraße, Berlin

Owner

Senate Department for Urban Development & Housing, Berlin

Architect

nkbak, Frankfurt am Main

General Contractor

Kaufmann Bausysteme GmbH

Data

Gross floor area: 130,900 sq ft²

316 timber room modules

Construction period: 12 months

This elementary school type provides capacity for 18 classes (468 students) including all required supplementary spaces. Both school buildings feature a generous two-story cafeteria. A modern pedagogical concept is enabled by the organization of learning areas into individual compartments. Usable corridor zones with generous glazing toward the classrooms support flexible, cross-room teaching and offer high-quality spaces for breaks.

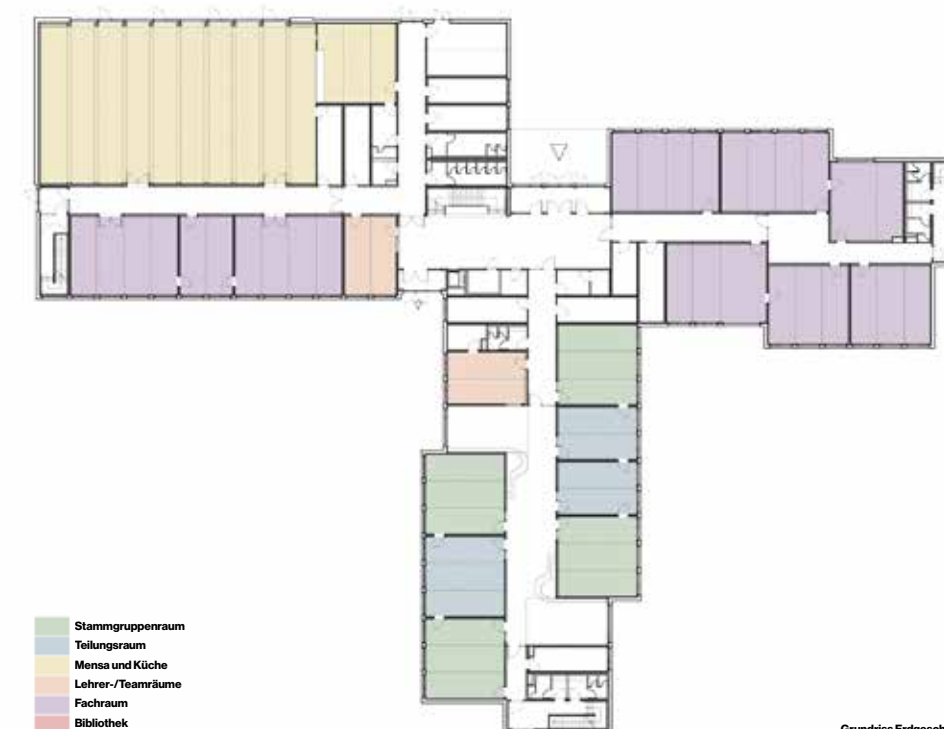
The gymnasiums are built as two-story, triple-divisible halls in timber system construction. In addition to the main hall and all ancillary spaces, the gymnasium includes a multipurpose room and a spectator gallery. Beyond school use, the gymnasium is also made available for local sports clubs in the respective urban neighborhoods.

The load-bearing above-ground structure of the buildings is constructed entirely from timber. Together with the targeted high energy standard (BEG KfW EH40) and a BNB Silver certification, the project

makes a significant contribution to CO₂ reduction and sustainable construction. All buildings are designed to be fully barrier-free.

Functional Educational Units

With over 30 completed school projects, Kaufmann Bausysteme sets standards in the development of forward-looking educational facilities in Berlin.



Grundriss Erdgeschoss



THE FUTURE OF CONSTRUCTION IS ALREADY PREFABRICATED

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The new understanding of added value increasingly refers to the added value of services. This is also connected to the fact that the nature of work has changed. In the past, manual labor was almost exclusively responsible for added value; in recent years it is intellectual work that we associate with value creation. New technologies have led to increasing emphasis on knowledge work. Today in business, “a gain in value created by a company” is called added value — meaning more than just the purely monetary understanding of the term. It is the sum of professional and personal values.”

Lorenz Nagel



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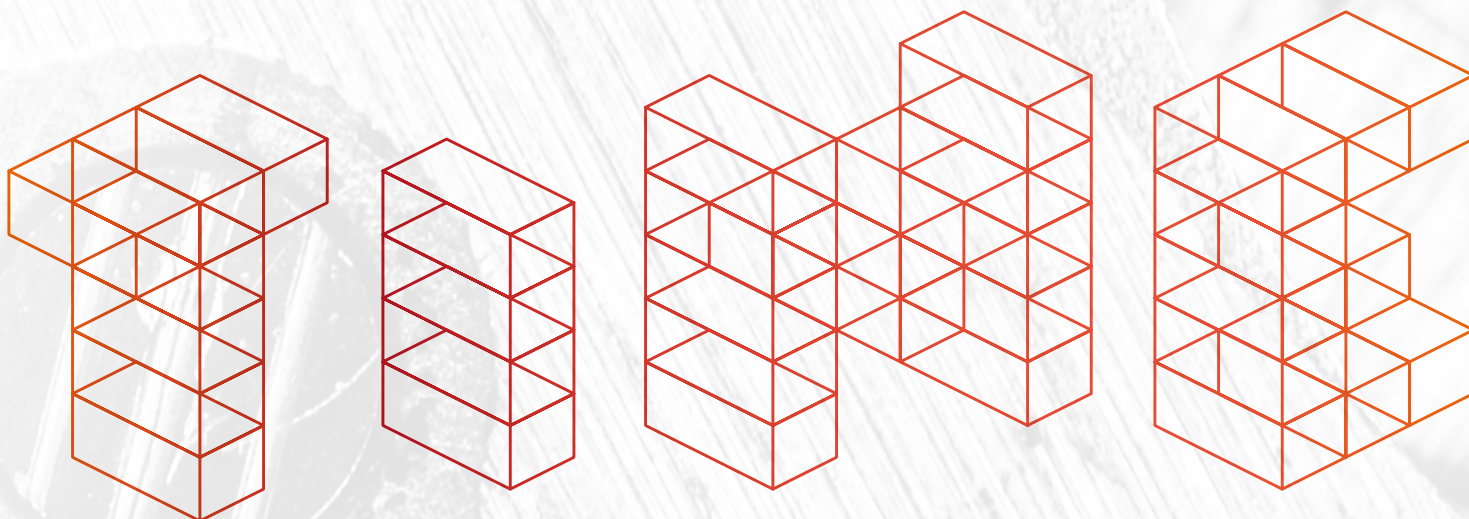
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Globalization, digitalization, and high-tech innovations are driving ever faster-paced technical developments in the construction industry. At the same time, there is a discernible trend toward returning to natural materials and simple functionality. Simple construction can mean sustainable, ecological building – a focus on proven building systems and natural materials. Central to this are effective structural solutions and a reduced architectural language. Simple yet individually adaptable building forms respond to acute demand or prevailing economic conditions.

Andreas Krawczyk



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**KAUFMANN
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