



CAMPUS DAYCARE CENTRE: FOR HEALTHY PLAY

A huge glazed front stretching from floor to roof provides a view deep into the interior of the Campus daycare centre. Bright rooms, smooth wood surfaces and plenty of room for kids to play, explore and romp in are what characterise this new daycare centre in Gescher in northwestern Germany near the Dutch border.

The initiator of this project was Christoph Pliete, chairman of the board of d.velop AG, an internationally active IT firm. The centre's hours are specially geared to the needs of working parents; Pliete initially had his own staff in mind, wishing to help them achieve a good work-life balance.

Today the children of d.velop employees have priority, but the Campus Daycare Centre is basically also open to the offspring of other families living in Gescher.



Key Project Data



Campus Daycare Centre, KfW Efficiency House 55

Timber construction with four rectangular units around a central structure

Built in

Dec. 2018 - Aug. 2019

Builder-owner

CP-Immobilien

General contractor / timber construction

Tenhumberg Objektbau/ Tischlerei Zimmerei www.tenhumberg.de

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Wood at its best



Intriguing architecture with wood boxes

The building comprises four rectangular units arrayed around a roughly six-metre-high central section topped by a cantilevered roof protruding out by three metres.

The tall structure in the middle serves as the entrance, delighting arriving children, parents and staff with lovely visible OSB surfaces on its walls and ceilings while also doubling as a workshop for the children. From here, there is access to a free play area in back and the lateral units, which are used as group rooms.



Materials and colours chosen to instil wellbeing

The choice of timber and engineered wood products, and specifically SWISS KRONO **MAGNUM**BOARD® OSB and SWISS KRONO OSB/3 EN 300, for building the centre was no accident. In HOMERA, a meta-study conducted by the Technical University of Munich, researchers looked at more than 40 individual studies to learn how the use of wood affects buildings' indoor climate and the people who use them. They concluded that timber and engineered wood products pose absolutely no health hazards; in fact, the opposite is true: they actually improve human wellbeing.

Hardly any other material has been shown to contribute so greatly to a balanced indoor climate. Among other things, this is due to the moisture-regulating properties of SWISS KRONO OSB. Produced using thinnings from sustainably managed forests and formaldehyde-free binders, it creates a comfortable atmosphere in which children feel good and are free to spontaneously explore their surroundings.

Key Project Data



Architects

Bock Neuhaus Partner, project leader: Melanie Himmelberg, <u>www.bock-</u> neuhaus-partner.com

Colour concept: Dorothea Geyer

www.geyerfarbkonzepte.com

Structural calculations, thermal insulation, fire protection

WSW Ingenieure www.wsw-ingenieure.de

Prefabricated MAGNUMBOARD® elements

MMD Magnumboard Manufaktur Deutschland www.magnumboard.com

Blower door test result

Air exchange rate of 0.49 1/h at 50 pascals above and below atmospheric pressure



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Wood at its best



Prefabricated construction for fast completion

The peripheral units were prefabricated from SWISS
KRONO OSB/3 EN 300 using timber frame techniques and transported to the construction site along with larch wood casings. The two six-metre-high walls of the central structure consist of SWISS KRONO MAGNUMBOARD®
OSB. The cantilevered roof comprises 18-metre-long hollow-box elements, also made of SWISS KRONO MAGNUMBOARD® OSB; various calculations had shown that in terms of both weight and structural strength, this was clearly the best possible approach for implementing a roof with such large spans between supports.



Owing to extensive prefabrication of the individual components, it was possible to complete the project in just eight months. The earthmoving work began in December 2018, and the centre was ready to welcome the first children for the 2019/2020 school year in August 2019.



Key Project Data



SWISS KRONO OSB products used

Exterior walls of peripheral units:

Approx. 1,100m² of SWISS KRONO OSB/3 EN 300, 15mm

Box beams:

Approx. 980m² of SWISS KRONO OSB/4 BAZ, 25mm

Central unit:

Approx. 261m², 12 wall elements of SWISS KRONO **MAGNUM**BOARD® OSB, 175mm (7x2mm) and approx. 490m² of SWISS KRONO **MAGNUM**BOARD® OSB roofing, 175mm (7x25mm)

CO₂ sequestered in building About 305m³ of timber and engineered wood (incl. SWISS KRONO OSB, SWISS KRONO MAGNUMBOARD® OSB, glulam, three-ply sheets, external cladding, solid construction timber), for about 305 tonnes of sequestered CO₂

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Wood at its best



Serving you:



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SWISS KRONO OSB is a versatile high-tech building material with a long list of persuasive benefits for cost-effective, eco-friendly construction.



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Freedom of design, healthy living and fast construction: prefabricated modules made with SWISS KRONO OSB give you all this and more. What else could you possibly want?



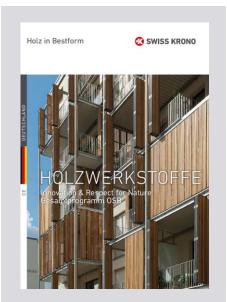
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SWISS KRONO OSB is a family of fascinating contemporary building products which are made from renewable raw materials and give most people a feeling of comfort and wellbeing.







All brochures can be downloaded in PDF format from our <u>website</u>.



SWISS KRONO PLANNING APP

This digital planning tool for architects, engineers and users, available in English and German, is the successor to the successful "Timber Frame Construction Handbook". Everyday work is facilitated by diverse filters, calculators and downloads.

Optimised for desktop computers and tablets: timberplanner.com