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KLOBOUCKÁ LESNÍ HQ

Posted on March 28, 2023 by martabuges



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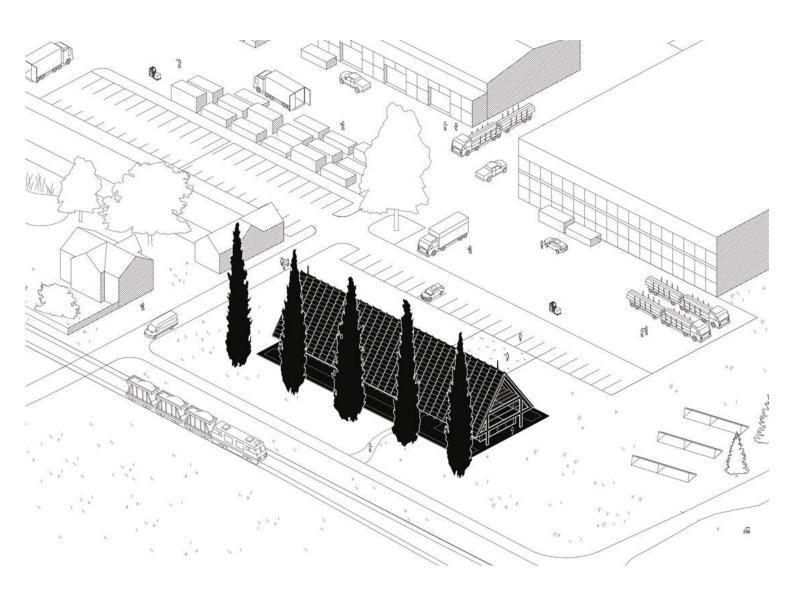
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Kloboucká lesní company is continuously paving the way towards sustainable forestry – finding inspiration in the ways of our ancestors, but also exploring new technologies and possibilities. In a field that is not commonly associated with innovation or bravery, the company identifies as progressive and creative, and their new headquarters will represent these values. With its various activities, the mission of Kloboucká lesní is to demonstrate the potential of sustainable construction using a holistic environmental approach and cutting-edge technology.



Due to a major shift in the climatic conditions of our planet, the wood industry has recently been going through turbulent changes. Therefore, the new company headquarters has to be flexible and ready for future developments and change. We propose a place for creative work, research and innovation. The main load-bearing structure forms a modular shell for the building, leaving the interior space free and adjustable, including contingencies for unexpected growth.

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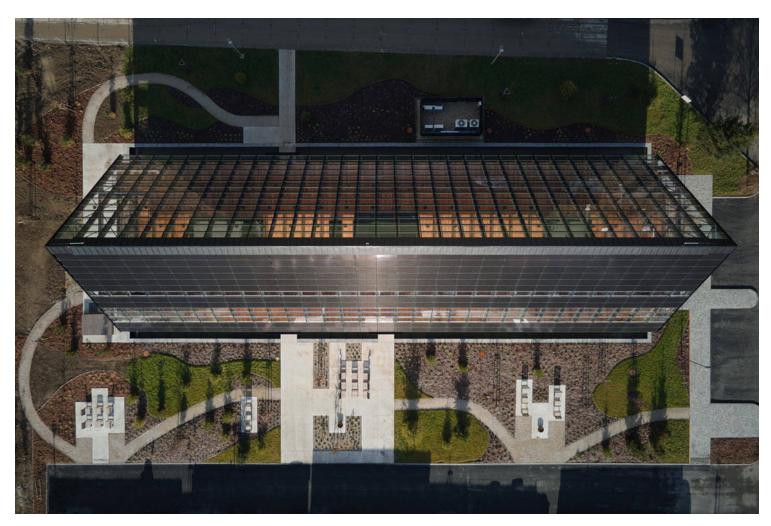


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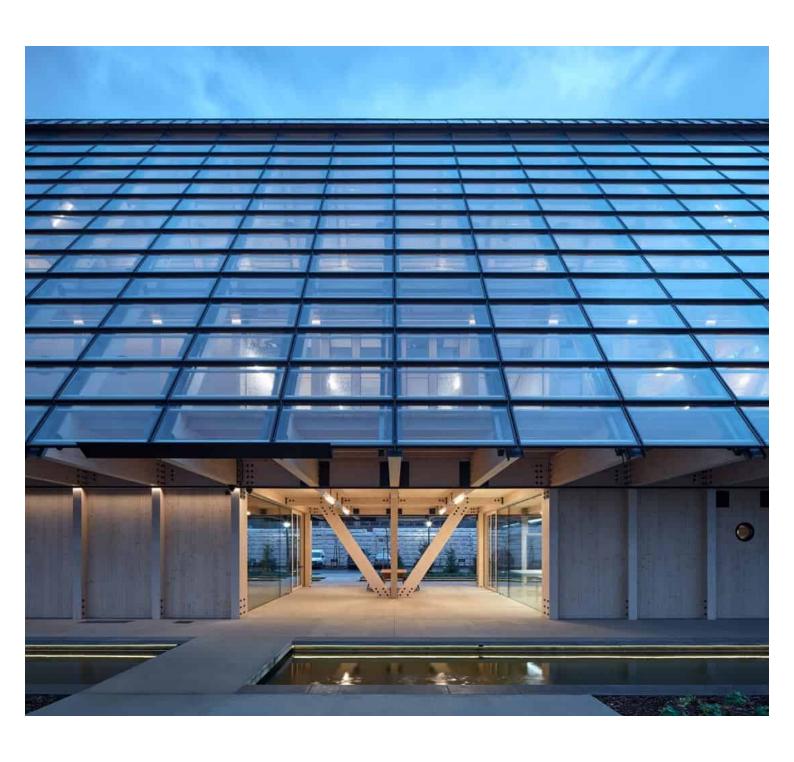
The building design shows the way for future construction projects: environmentally responsible, simple and modest, but equipped with cutting-edge technology – and placed in a natural setting surrounded by vegetation and water. The load-bearing structure is made exclusively from timber, a material that is produced on-site in the Kloboucká lesní production hall located only 100 meters away. Wood is the oldest and the simplest of materials, but the production process is very modern. As a flagship product of the company portfolio, glued laminated timber was used for the building frame. Repeated many times, the traditionally shaped frame forms an elongated and elegant volume.

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A prominent location was chosen for the headquarters inside the factory compound. The north-facing façade is oriented toward the town and the visitors' entrance. The volume of the building conceals other industrial halls of the compound, while a beautiful backdrop of the Pláňavský ridge can be seen in the distance.

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Construction

The load-bearing structure uses a glued laminated timber frame, a concrete core and steel bracing. There are several types of façade cladding, filling each span of the frame according to the interior spatial and programmatic organization. The modular structure provides a great variability of use, even in case of future changes of function. The wooden structure is made predominantly from glued laminated timber manufactured only about 100 meters from the site. This timber comes predominantly from the surrounding forests. Both color and grain of the wood were considered when picking the best lumber and therefore the best forest for felling.

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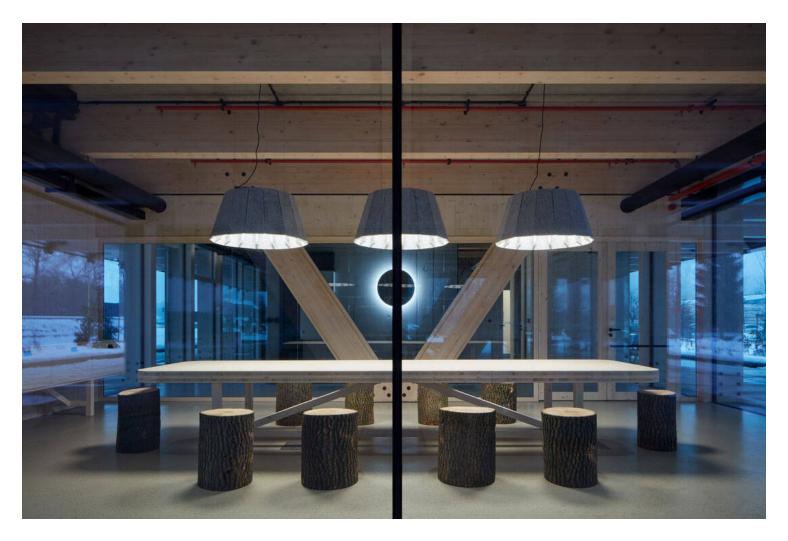
Interior

Behind the rather traditional shape of the building with a gable roof, there are many contemporary technological solutions that correspond to today's modern times. The design places great emphasis on the wellbeing of the employees, which is ensured by the quality working environment in the interior and the variety of covered outdoor living terraces that permeate the entire building.

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Environmental Solutions

Truly environmentally conscious building is far more complex than it seems. It doesn't matter whether we wrap a house in styrofoam. What makes a building sustainable isn't the thermal insulation standards, but rather where we build it and how we use it. It is important to appreciate that there really are issues beyond just direct energy requirements. There is a whole set of actions and energy inputs generated during the manufacturing and transport of the individual building parts. Then, there is the question of the proper use of the building during its lifespan; and, last but not least, there needs to be a thorough consideration of what happens at the end of this lifespan.

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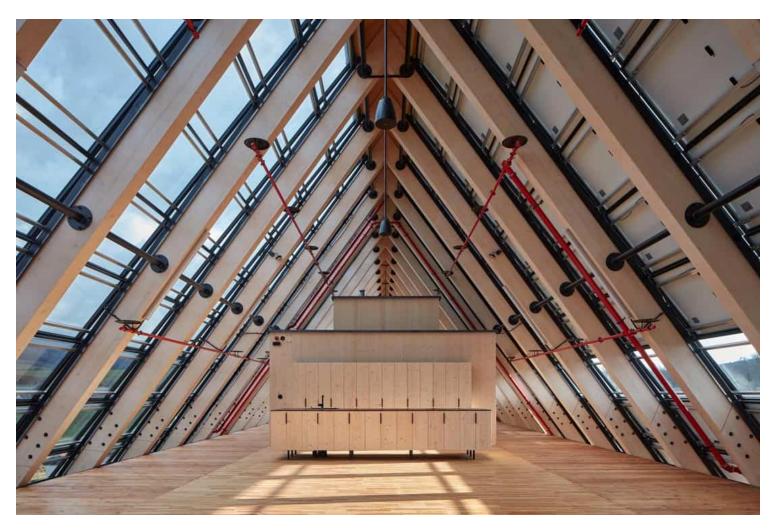
This sort of thinking comes naturally for Kloboucká lesní: having control over the whole process, ensuring quality, supervising each production phase, considering not just profitability but primarily sustainability... It is not just about processing and selling wood; it is a complex pursuit. Let's call it forest care. At the beginning there is a seed, at the end a house. The system cannot be separated into individual parts; the parts can't exist on their own.

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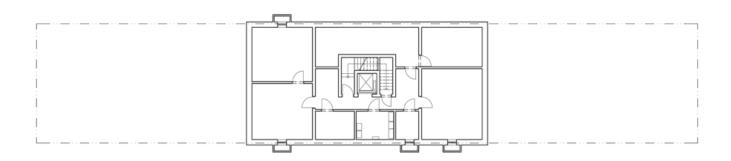
The building is a combination of contemporary technical solutions and common sense. The building's PV array produces enough energy to meet its requirements. The building has battery storage with a total capacity of 72 kW. The surplus is directed to cover the energy requirements of the company's production. In fact, the majority of all electronic equipment in the compound uses solar power at the moment. The headquarters' solar panels also double as roofing material. Glass panels cover the northern part of the roof to let more light into the attic space.

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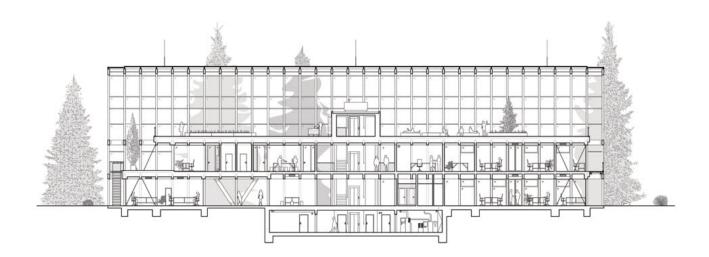
Rainwater roof runoff is stored in open ponds and used for irrigation and for cooling during the summer months. By reflecting the diffused daylight, the water surface also helps to bring light deeper into the building.





The source for heating of the building and the whole area is the central boiler house, where the main fuel is wood chips produced on site. This makes the site completely independent of any other fuel source. The added value is that it is a completely ecological source.

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