# WOOD, HEART AND BRAIN

**Building with brains. For binderholz this means: our hearts belong to wood! Because there is no other material that is smarter, more sustainable, more environmentally friendly. The Austrian company is demonstrating this at its new "nerve centre" in Hallein, using state-of-the-art sensor technology. The "TimberBrain" designed by the architectural firm Huber-Meixner & Partner is a combination of wood, heart and brain.**

Humidity, room temperature, timber emissions, heat flow in the walls, air flow in the rooms: more than 100 sensors carry out meticulous monitoring of a wide range of parameters in the new binderholz office building in Hallein. After all, the company is also hoping to use the scientific data to substantiate its long-held belief: wood is the building material of the future! A network of neural pathways converge in the control centre, demonstrating how intelligent building with wood can be - the choice of name could not have been more appropriate: "TimberBrain" is the name of the four-storey office building in which the planners from the local architectural firm Huber-Meixner & Partner and binderholz have jointly invested a great deal of brainpower.

## Sensible

binderholz builds on wood and builds with wood: the company, which has matured from a small Zillertal sawmill to an internationally sought-after producer of wooden building components, is extremely committed to finding solutions that are in harmony with nature and with the users. Only wood is used, nothing else - wood that can also be used 100% beyond the life cycle. This single-material philosophy is also reflected in TimberBrain, along with the commitment to the circular economy. The load-bearing exterior walls of the office building were made using 23.4 cm thick BBS thermo wall components. "With no additional thermal insulation", as reiterated by the architects Oliver Meixner and project manager Tamara Alt. This contradicts the legal regulations, even requiring a special local authority exemption - and yet it has proved so successful that the project was able to be submitted with confidence for the "State Award for Sustainable Building. Despite the "thin" wooden walls, the building is always at the perfect temperature, due to its biomass

## Products used



Lignovit Interior UV 100



Pullex Silverwood



Aquawood Intermedio DQ



Aquawood Natureffekt

heating (the final stage of the wood life cycle) and an innovative heating and cooling system in the ceiling canopy. During construction, on the other hand, the BBS wall components were playing to their strengths: Who else could claim to have put up a four-storey building with more than 1,000 square metres of usable space in just 12 (!) working days? It only took a few minutes for the largest component, a 7.3 by 13.5 metre wall weighing "only" eleven tonnes, to be lifted into place by the mobile crane. The time saved by using prefabricated components, the light weight and stability all speak unequivocally in favour of wood as a building material.

# Sensual

As well as all the benefits of wood shown by the technical information, there is no ignoring the human aspect in timber construction. Wood is sensual, creates a comfortable feeling of space - and it is simply beautiful. Binder has emphasised this beauty with an ingenious coating concept: A coat of Pullex Silverwood paint from ADLER provides discreet protection for the planed larch facade. The Altgrau (Old Grey) shade will transition over time from a subtle brown to a natural grey. On the other hand, the polished spruce interior elements were finished with ADLER Lignovit Interior UV100 in a bright white tone (Großglockner and Montblanc) and protected against discolouration in the long term. This coating was also used for the furniture, and the colour coating cycle was precisely matched for the spruce windows - a perfect example of the ADLER Color Synergy service. The TimberBrain now offers pleasant workspace for 120 employees, who put their hearts and brains to use in devising further applications for wood as a hyper-material for construction.

# Title