Ecology, sustainability and an environmentally friendly use of natural resources play a role in public and municipal buildings that is just as crucial as the factors of quality, time and cost. binderholz stands for a sustainable, intelligent use of the raw material of wood and acts according to the zero waste principle. Timber harvesting that is 100% sustainable and the production of green energy in proprietary biomass combined heat and power stations are part of this approach, as are the production of biofuels from by-products and our broad range of solid timber products and construction solutions, which are all recoverable to a large extent and allow for ecological recycling.

Numerous reference projects throughout Europe provide evidence that binderholz construction solutions in the public-municipal sphere meet all specific regional requirements and can be easily and economically adapted. Applications range from kindergartens, schools and universities to student dormitories, senior residences and care homes to administrative buildings and public housing.
A new school with a focus on a healthy learning atmosphere was built in the small Norwegian municipality of Os, south of Bergen. Constructed with binderholz CLT BBS, binderholz glulam and binderholz solid wood panels, the new building is not only intended to provide a premium educational space for some 420 students, but also to play a pioneering role in terms of sustainability. Wood plays a central role in all areas with exposed walls, beams and joists, it has a lasting impact on the feeling of space.
The University of Newcastle’s 'Q-Building' is located in the Honeysuckle district. It has become the second home for students of creative subjects. The four-storey, exceptionally sustainable and innovative building was officially opened on 7 October 2022. It boasts a unique solid wood design and is the first wooden multi-storey building built in Newcastle.
'Centre de Compétences' Training Centre
Bettembourg | Luxembourg

The structure consists of two identical buildings that each comprise one office, seminar rooms, a roofed yard and a manufacturing hall. A sustainable building method was the main focus during design and construction of this training centre. A total of 100 m³ of binderholz CLT BBS were used.

Photos: © architecture & urbanisme21
The superstructure consists of binderholz CLT BBS walls combined with supports and beams made of glulam. The binderholz CLT BBS walls act as vertical cantilever beams combined with tension and shear connectors on the first floor and the ground floor. A total of 700 m³ of binderholz CLT BBS were used.
To account for the sustainability aspect, the steel construction was supplemented with wood. 7,000 m² of 3 layer solid wood panels which were mounted directly to the steel construction are responsible for the unique atmosphere inside. The façade was clad in 1,300 m² of 3 layer solid wood panels, lending the building an air of solid, traditional wood construction, combined with modern style.

Photos: © FG + SG Architectural Photography, binderholz
The building was constructed in skeleton construction with supports and beams as well of glulam GLT and beams as well as binderholz CLT BBS ceilings. On the lowest and top floor, timber-frames made of BSH were used. The roof features an impressive, curved shape and was made of 125 elements of binderholz CLT BBS.
Two key aspects were important in this context: the simplicity of the conversion of the entire building and a short construction time. A total of 105 m$^3$ of glulam and 2,500 m$^2$ of 3-layer solid wood panels were processed during a construction period of only a few months.
Macquarie University Clinical Education Building
New South Wales | Australia

For columns and beams glulam made of European spruce wood was used. All load-bearing walls including the elevator shafts are made of binderholz CLT BBS.
In total, the construction work was completed in just 14 months. The high degree of prefabrication and the quick assembly of the CLT BBS elements played a key role in the rapid implementation.
The special feature of this is that the new childcare center building (except for the earth-touching components) was built entirely from solid wood. The interior and exterior walls and ceilings are made of binderholz CLT BBS. A total of 220 m³ CLT BBS was mostly installed in residential visible quality.
The new residence of the University of Arkansas offers space for more than 700 students on nearly 200,000 m² and demonstrates the University’s commitment to sustainable construction. The solid wood construction consists of a total of 3,200 m³ binderholz CLT BBS and 1,100 m³ GLT glulam.
Residential- and Activity Center Bergheim
Halden | Norway

In the Norwegian municipality of Halden, the country’s largest residential and activity centre for people with dementia was opened on 1st April 2019. The solid wood building has a floor area of 11,000 m². A total of 2,400 m³ binderholz CLT BBS, of which 700 m³ were in visible quality, and 100 m³ GLT glulam were installed.

Photos: © Solid
Parish House 'Pastorie van Meuzegem'
Wolvertem | Belgium

After years of vacancy, the heritage listed former parish house of Meuzegem was extensively restored and extended by a new wing in solid wood construction. A total of 50 m³ binderholz CLT BBS in residential visible quality, 10 m³ GLT glulam in visible quality and profiled wood of larch for the exterior façade were used.

Photos: © binderholz
The University of Arkansas’ Library Storage Building, covering over 2,500 m² and made of binderholz CLT BBS, was completed in September 2018 and, when fully utilised, will contain some 1.8 million publications. The complete building was constructed in only 6 months. The building consists of 230 m³ GLT glulam and 735 m³ CLT BBS.
The GSK - Carbon Neutral Laboratory for Sustainable Chemistry
Nottingham | Great Britain

1,420 m³ binderholz CLT BBS were used for the wall elements as well as for the roof and ceiling elements.

Green Facts Wood = CO₂ store | Wood = sustainable | Wood = environmentally recyclable | Wood = solar energy store

Photos: © b&k structures
The students now come into daily contact with structural timber construction, thanks to the new building and core renovation. A total of 86 m³ of GLT glulam and 660 m³ of binderholz CLT BBS was installed over both construction phases. In addition, 17.5 m³ of profiled wood were used for the façade slats.

Photos: © Holztechnikum Kuchl
Architects Toyo Ito & Associates were commissioned by the Technical University of Nanyang to design a new sports centre, and thus Asia’s largest glulam construction, clad in 3-ply solid wood panels.
Further projects can be found at www.binderholz.com/en-us/mass-timber-solutions