

binderholz ■

WOOD IN THE CITY | RESIDENTIAL BUILDINGS □

MASS TIMBER SOLUTIONS

Residential buildings

Residential buildings constitute one of the greatest challenges in structural engineering. Quality, time and costs are the most important decision criteria. Every client weights them differently, and all three criteria directly and mutually interact with one another.

binderholz has tested more than 130 design superstructures for walls, ceilings and roofs in order to enable unerring assessments and planning reliability regarding all three. The results are available to planners and architects in the Solid Timber Manual 2.0. You can find all the important key figures for each of the tested and certified superstructures here - from the data for fire, noise and heat protection to structural performance and ecological parameters.

Another strength of binderholz construction solutions is a high degree of prefabrication available on request. It shortens building times considerably while always maintaining high quality. In addition, the comparatively slim solid timber constructions have a very economical ratio in terms of gross and net living space. This is a fact that is increasingly gaining in importance in terms of cost, in particular in urban spaces.

Economical hybrid solutions can also be implemented, which unite traditional construction methods with the advantages of solid timber construction through the intelligent combination of solid timber with other building materials such as concrete, steel and glass.

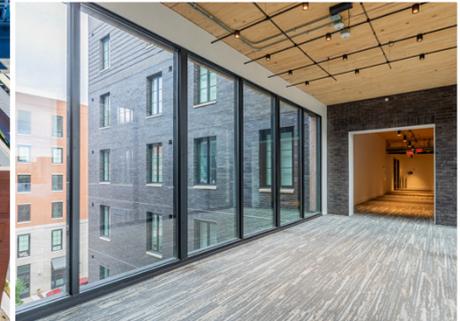
The warm surfaces of visible solid timber components, usually in the area of ceilings and roofs, and the outstanding properties of the wood substance as a storage for heat and moisture ensure a well-balanced living climate.



110 & 111 Ann Street

Savannah | USA

Encompassing 39,000 m², the 6-storey Ann Street Lofts feature 390 flats and were built using 4,200 m³ of binderholz CLT BBS and 950 m³ of binderholz glulam. Pre-installation of steel parts included, the solid wood elements were supplied directly from our plants. These residential buildings mark the first buildings in South-West Georgia | USA built from CLT BBS.



INTRO

Cleveland | USA

Boasting 297 living units thereof 10 penthouses, the 9-storey residential building and integrated shopping centre was built in Cleveland, Ohio, marking the largest solid wood construction project in the U.S. A total of 5,650 m³ of binderholz CLT BBS and 1,500 m³ of glulam from sustainable forestry were used. The entire transport of the solid wood elements was realised by rail from the production plants to the port of Amsterdam.



Residential Naturquartier Weissache

Kufstein | Austria

Catering to the market, Naturquartier not only offers family flats, but also many smaller units. One thing that all of them have in common, however, is one wooden wall was left exposed, showing off its natural material. In every flat, the ceiling and at least one wooden wall was realised in binderholz CLT BBS in residential visual quality.



Residential building 'Haus auf Stelzen', Tillystrasse Regensburg | Germany

For the new development, the client Bayerische Staatsforsten is using an area in a central location in Regensburg that had previously been used exclusively as an employee parking lot. The walls were made of binderholz CLT BBS elements in residential view quality and the ceilings of glulam ceiling elements with a polished surface.



Riverside Residential Estate

Kapfenberg-Diendlach | Austria

The architect has designed seven simple five- and six-storey buildings in technically identical form in wood construction. For this purpose, 1,660 m³ of binderholz CLT BBS were processed.



Residential complex Vallén

Växjö | Sweden

This residential complex contains a total usable area of 8,016 m² divided into 172 apartments. Using 4,200 m³ binderholz CLT BBS and 600 m³ glulam elements, it was possible to complete the project in a short time.



Quartier Prinz-Eugen-Park

Munich | Germany

The largest contiguous timber construction settlement in Europe with around 600 apartments in wood or wood hybrid construction has been created in the district of Oberföhring. binderholz products were used for a total of six construction sites. The building types were constructed with wooden frame walls and solid wood ceilings made of binderholz CLT BBS.



Residential building Linzer Strasse

Vienna | Austria

During the compaction in Linzer Strasse, the decision was made on a modern new building made of binderholz CLT BBS, instead of mere refurbishment and expansion of the old stock. This enabled an optimal combination of apartments and office space and is set to be an inspiration for follow-up projects in solid wood construction.



Residential Building Extension in Museumstrasse Innsbruck | Austria

A total of 432 m³ binderholz CLT BBS in non-visible quality were used for this purpose. One of the advantages of binderholz CLT BBS is that the elements can be machined and delivered just-in-time to the construction site. As a result, the need for storage space on site can be reduced to a minimum. The elements only need to be assembled on the construction site, which guarantees rapid implementation.



Residential building 'Quartier WIR' in Weissensee

Berlin | Germany

As a support system, they chose a skeleton construction made of CLT, supports and girders made of beech, as well as ceilings made of binderholz CLT BBS, while the outer walls consist of wooden frame elements prefabricated complete with windows and cellulose insulation.



binderholz Lakehouse apartment block

Liekka | Finland

The timelessly traditional two-storey building was constructed using 27.6 cm thick CLT BBS thermal elements, with particular attention being paid to quality, environmental friendliness and sustainability.



Residential building Lynarstrasse

Berlin | Germany

From the first floor everything is made of wood except for the connecting staircase. The entire building is barrier-free and has two lifts, which are embedded in a wooden shaft. The load-bearing walls consist of binderholz cross-laminated timber CLT BBS XL elements in non-visible view, the ceilings of 1.300 m³ CLT BBS 125 in visible quality, the beams and supports are made of glulam, and the outer wall is made of a wooden frame stand construction with a rear-ventilated Douglas fir façade.



Dalston Lane

London | Great Britain

4,500 m³ of binderholz CLT BBS are used in 9 of the total of 10 floors.
The well-known London architect Andrew Waugh describes the CLT BBS he used as the 'solid construction material of the future.'



Living in the Park

Mondsee | Austria

The walls and ceilings of this property were constructed using binderholz CLT BBS. The walls use BBS XXL and the ceilings BBS 125 elements, both visible quality with a planed surface. The special production of the BBS XXL panels, measuring up to 3.5 m x 22.0 m, means that they can be produced without finger-jointing in the top layer.



Wirtsgründe apartment block

Flauring | Austria

In terms of the buildings' timber construction, the horizontal structural elements were designed in binderholz CLT BBS and the vertical elements have a post and mullion design. The construction method conforms to the state of Tyrol's passive house criteria and is constructed in timber from the ground floor up. The opportunities presented by prefabricating the timber construction are demonstrated by the wall and ceiling elements used in the design. The external wall elements were supplied and assembled with built-in windows and timber façade formwork already fitted.



Wenlock Road

London | Great Britain

The architects Hawkins/Brown were commissioned by Regal Homes to build Europe's tallest hybrid cross-laminated timber high-rise building, and binderholz Bausysteme jointly with X-LAM Alliance delivered Austrian wood and know-how to Great Britain. Regal Homes was awarded planning permission for a 10-storey residential building in London using a hybrid construction of BBS and steel with a usable space of 6,750 m², thereby setting new standards in solid timber construction.



Residential Building in Breitenfurter Strasse

Vienna | Austria

In conjunction with the developer, the architects prepared a strategy. “Our ambition was to plan the residential building to accommodate as well as possible the extant property and the local surroundings, while taking into account all the requirements stipulated by the client. Our focus was not on the timber construction.” In combination with the structural possibilities of binderholz CLT BBS, this strategy was successful, and the firm was awarded.



Further projects can be found at www.binderholz.com/en-us/mass-timber-solutions



Borgafjellet Primary School
Os | Norway



INTRO
Cleveland | USA



binderholz office building
in Baruth | Germany



Train station and town hall 'Stadshus'
Växjö | Sweden



Quartier Prinz-Eugen-Park
Munich | Germany



Hotel MalisGarten
Zell am Ziller | Austria



Seethalerhuette
at the Dachstein | Austria



Coffee Production Plant Johannson
Vestby | Norway



Single-family house
Uderns | Austria



Water Park Rulantica
Rust | Germany

binderholz ■

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