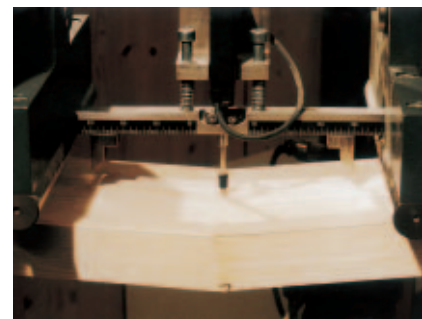


	BS11	BS16	BS18
Wood/Lumber species	Spruce		
Glulam quality class per DIN 1052/EC 5	BS11/GL 26 h normal standard quality	BS16/GL 34 h quality to cope with greatest possible amount of stress, can only be manufactured with machine-sorted lamellas	BS18/GL 36 c quality to cope with the greatest possible amount of stress, can only be manufactured with machine-sorted lamellas
Manufacture	in accordance with ÖNORM B 4100-2 and DIN 1052-1/A1 and EN 386		
Finger jointing	in accordance with EN 385, DIN 68140-1		
Wood/Lumber moisture	8-12%		
Grading	machine version in accordance with ÖNORM/DIN 4074		
Grading class per DIN 4074/EN 338	MS 10/C 24	MS13/C 35	MS 17/C 40
Lamella Thickness	40 mm		
Bending admissible σ_B [N/mm ²]	11	16	18
Tension admissible $\sigma_{Z\parallel}$ [N/mm ²]	8,5	11	13
Modulus of elasticity [N/mm ²] (Young's Modulus)	11.000	13.000	14.000
Gluing	Melamine formadehyde resin, light, non darkening joints, in acc. with DIN 68140, EN 302, EN 301 Type 1, weather proof in acc. with services class I and II		
Surface Quality	surfaced on four sides, chamfered, visual quality	surfaced on four sides, chamfered, visual quality	surfaced on four sides, chamfered, visual quality
Dimensions in stock	on request	on request	on request
Other dimensions	Breath 6 - 26 cm Height 12 - 128 cm	Breath 10 - 26 cm Height 12 - 128 cm	Breath 10 - 26 cm Height 12 - 128 cm
Lenght	max. 18 m		
Packaging	in packets, foiled if required		
Internal quality-control	Delamination in acc. with EN 391, finger joint strenght in acc. with EN 408/DIN 68140-1		
Inspection report	European Standard EN 386, glue license approval A in acc. with DIN 1052-1/A1 (10/96), ÖNORM B 4100-2 (12/97), machine sorting in acc. with ÖNORM DIN 4074 JAS	European Standard EN 386, glue license approval A in acc. with DIN 1052-1/A1 (10/96), ÖNORM B 4100-2 (12/97), machine sorting in acc. with ÖNORM DIN 4074 Ü-certificate for BS16 and BS18 JAS	European Standard EN 386, glue license approval A in acc. with DIN 1052-1/A 1 (12/97), maschine sorting in acc. with ÖNORM DIN 4074 Ü-certificate for BS16 and BS18 JAS
External monitoring	FMPA (Stuttgart); Holzforschung Austria (Vienna); NTI (Oslo, Norway)		



test of finger joint

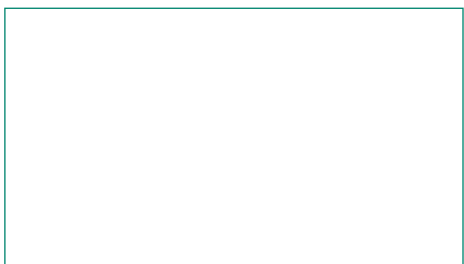
BINDER quality management

quality

Raw materials used: selected, mountain lumber taken from the best areas
 Drying: kiln-dried
 Self-monitoring is carried out in the company's own laboratory
 External monitoring is carried out twice a year by Holzforschung Austria (an international accredited institution) and by FMPA in Stuttgart; JAS monitoring is carried out by NTI in Oslo, Norway
 Each Glulam is quality-stamped with the firm's code, the particular year, internal production number, BSH grade and sorting type
 Staff regularly attend detailed instructions and continuation courses

BINDER HOLZ®

Franz Binder Ges.m.b.H.
 Brettschichtholzwerk
 A-6200 Jenbach/Tirol, Tiwagstraße 3
 fon +43.5244.601-0 fax 601-31
 www.binderholz.com mail:jenbach@binderholz.com



Glulam



Binder Glulam

Lumber is one of the oldest building materials used by man and laminated lumber has been used as a derived lumber product for more than 100 years. Experiences in the area of glued lumber construction in recent decades, the versatility to be found in the architectural and structural areas of use, a very diverse product range, the quality assured by independent inspection institutes, highly developed technical operating processes and regular improvements in the glue used have, particularly in recent years, resulted in a huge increase of laminated lumber utilisation.

Wherever wide, open surfaces make strong visual, architectural and static demands, and wherever strong claims are made with regard to elegance, appearance, people's well-being and economy, laminated lumber is increasingly being used in construction and renovation.

The use of modern technology (automatic, visual inspection as well as machine version strength tests) and industrial production have meant that the derived lumber product that is laminated lumber is now available to an increasing number of users and is being used in a number of new areas. A change has also taken place in people's minds and nowadays ecological and natural building materials are at the very least an option.

As a family-run business with over 40 years of experience in the area of lumber, and as a company that combines tradition and reliability with high-tech solutions, **BINDER** has given itself the task of processing sawn lumber in order to create intelligent products. BS 11, BS 16 and BS 18 Glulam, as well as wall and ceiling elements in the required dimensions, are some of the products in question. All products are subject to the strict standards DIN 4074, DIN 1052-1/A1 and the European standard EN 386 as well as ÖNORM B 4100-2. The FMPA (Otto Graf Institute) and Holzforschung Austria (an accredited institution) ensure that these standards are observed. **BINDER** also possesses the certified "Ü" symbol ("Ü-Zeichen") for the highest strength classes, BS 16 and BS 18.





A comparison of Glulam with other building materials

BINDER Glulam

- is a high-grade, aesthetic derived lumber product with a unified appearance
- can be simply, easily and rapidly processed (cut, milled, drilled, sanded) with tools commonly used in lumber processing (no special tools are needed)
- is kiln-dried (this means that there is very little swelling, contracting or cracking) so that the dimensions and length are as accurate as they can be
- can be reused and recycled at no additional cost
- has a strong load-bearing capacity even though the lumber itself is not heavy (relation of lumber weight to load-bearing capacity)
- is heat and sound-absorbing
- is lighter than steel although it has the same bearing capacity
- offers new ecological perspectives



BINDER Glulam

- has a strong surface quality
- is stronger compared to traditional solid lumber (no restriction on cross section dimensions, no dispersion of strength characteristics)
- displays an exceptional burning behaviour (bearing capacity more durable compared with that for reinforced concrete)
- has strong visual characteristics due to use of graded sawn lumber (constant appearance)
- has cost benefits compared with traditional building materials (smaller dimensions required, is easy to handle)
- has exceptional insulating characteristics (lumber has the strongest bearing capacity of all insulating materials)
- behaves favourably when it comes into contact with corrosive chemicals
- reacts favourably during earthquakes compared with reinforced concrete and tiles



Unlike concrete, BINDER Glulam

can absorb both tensile and compressive forces.

Use of BINDER Glulam diminishes

wall and ceiling sections and optimates the relation between the building material sections and the usable space of a building.

Due to the short assembly times involved, BINDER Glulam makes

economical construction possible (usual drying times for ceiling, walls and plaster do not apply, prefabrication is possible).

benefits

Benefits involved in using Glulam

Thanks to the most modern drying, sorting, gluing and pressing methods the following benefits compared with solid lumber and other building materials are now available:

- Strength
- Stability of shape (virtually no cracks)
- Clearly defined materials characteristics
- Dimensional stability
- Economical