



GRUPO SIERO

Sweet chestnut

GLULAM BEAMS



GLULAM BEAMS

This is the building material which best suits the load requirements, formal stability and aesthetics. Beams have a maximum moisture content of 12%, so they do not suffer from contraction, movements or cracks.

Glued laminated beams have higher strength and stiffness than solid beams of the same species, allowing you to create large spans without supports, using at the same time thinner building elements.



Product features according to CE certificate of conformity in agreement with ETA 13/0646 with No. 0672-CPD-I 14.21.57 (MPA Stuttgart-Otto Graf Institute)

Wood species: Sweet chestnut (*Castanea sativa* Mill.)

Type of adhesive in accordance with EN 301: Type1

Class of formaldehyde emission: E1

Fire reaction: Ds2-d0

Durability against biological attack: 2

Service classes: 1 and 2

Bending strength: 30 N/mm²

Tensile strength: 20 N/mm²

Compression strength: 45 N/mm²

Shear strength: 5 N/mm²

Modulus of elasticity: 13000 N/mm²

Shear modulus: 810 N/mm²

Rolling shear modulus: 65 N/mm²

Density: 540Kg/m³


APPLICATIONS


Any type of construction, industrial, commercial, homes, renovation... And a perfect solution for singular buildings.



Musée des vallées cévenoles (Saint Jean du Gard)

Width/Height	80	100	120	140	160	180	200	240	280	300	320	360	400
50													
60													
70													
80													
90													
100													
120													
140													
160													
180													
200													
220													

 Standard sections for minimum orders

 Standard sections available in stock in 13,500mm long



Musée des vallées cévenoles (Saint Jean du Gard)



Musée des vallées cévenoles (Saint Jean du Gard)

SECTIONS RECOMMENDED FOR SWEET CHESTNUT GLULAM BEAMS*

Beam mounted, straight bending with a uniformly distributed load.
Maximum arrow: 1/300 of the load.

Starting data

Sweet chestnut glulam beam

Service Class: 1 Slope: 0%

Span: Distance between articulated points (m)

Q= service overload (kg/m)

Maximum section – 200x400 m

Span (m)	0,5	0,75	1	1,25	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6
Q (kg/m)	100	150	200	250	300	400	500	600	700	800	900	1000	1100	1200
Length (m)	Minimum section: b x h (mm ²)													
2,0	70x100	70x100	70x100	70x120	70x120	80x140	80x140	80x140	80x160	80x160	80x180	100x160	100x180	100x180
2,5	70x120	70x120	80x120	80x140	80x140	80x160	80x180	80x180	80x200	100x180	100x200	100x200	100x220	100x220
3,0	70x140	80x140	80x160	80x160	80x180	80x200	80x200	100x200	100x220	100x220	100x240	100x240	100x260	100x300
3,5	80x140	80x160	80x180	80x200	80x200	100x200	100x220	100x240	100x240	100x260	100x260	100x280	100x300	100x320
4,0	80x160	80x180	80x200	100x200	100x220	100x240	100x260	100x260	100x280	100x300	100x300	100x320	100x340	120x340
4,5	80x180	80x200	100x220	100x220	100x240	100x260	100x280	100x300	100x320	100x340	100x340	100x360	120x340	120x360
5,0	80x200	100x220	100x240	100x240	100x260	100x300	100x320	100x340	100x360	100x380	120x360	120x380	120x380	140x380
5,5	100x200	100x240	100x260	100x280	100x300	100x320	100x340	100x360	120x360	120x380	120x400	140x380	140x400	160x400
6,0	100x220	100x260	100x280	100x300	100x320	100x360	100x380	120x380	120x400	140x400	140x400	160x400	180x400	200x400
6,5	100x240	100x280	100x300	100x320	100x340	120x360	120x380	120x400	140x400	160x400	180x400	200x400		
7,0	100x260	100x300	100x320	100x340	100x380	120x380	140x400	160x400	180x400	200x400				
7,5	100x280	100x320	100x340	100x360	120x380	140x400	160x400	200x400						
8,0	100x300	100x340	120x340	120x380	120x400	160x400	200x400							
8,5	100x320	100x360	120x360	120x400	140x400	200x400								
9,0	100x340	120x360	120x400	140x400	180x400									
9,5	100x360	120x380	140x400	160x400	200x400									
10,0	120x360	120x400	160x400	200x400										
10,5	120x360	140x400	180x400											
11,0	120x380	160x400	200x400											
11,5	140x380	180x400												
12,0	160x380	200x400												
12,5	180x380													
13,0	200x400													

Values in this table are valid as long as all starting data conditions are fulfilled. For other cases, a structural calculation check is necessary.

*Calculations performed as shown in the CTE-DB-SEM, with characteristic values according to the Otto Graf certificate)



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gestión forestal
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