EN

HASSLACHER NORICA TIMBER

From **wood** to **wonders.**

Glulam

HASSLACHER GLT according to ANSI A190.1.
Strength classes according to EN 14080.

01 Overview

Product standard/certification

ANSI A190.1, Standard for Wood Products – Structural Glued Laminated Timber
EN 14080 Timber structures – Glued laminated timber and glued solid timber

Cross sections

Depth: 3⅛ - 50½ in. (80 - 1280 mm)
Width: 3⅛ - 11⅞ in. (80 - 280 mm)
Length: up to 88¾ ft. (up to 27 m)

Strength classes

Reference Design Values for Hasslacher GLT [(a)]

Glulam Grade	Bending About X-X Axis (Loaded Perpendicular to Wide Faces of Laminations)				Axially Loaded		Fasteners
	Extreme Fiber in Bending [(b)] (psi)	Compression Perpendicular to Grain (psi)	Horizontal Shear (psi)	Modulus of Elasticity (10^6 psi)	Tension Parallel to Grain (psi)	Compression Parallel to Grain (psi)	Specific Gravity for Fastener Design
	F_{bx}	$F_{c\perp x}$	F_{vx} [(c)]	$E_{x\,app}$	F_t	F_c	G
GL 24h	1.650	430	240	1.7	1.350	1.850	0.42
GL 28h	1.950	430	240	1.8	1.550	2.150	0.46
GL 28c	1.950	430	240	1.8	1.350	1.850	0.42
GL 32h	2.200	430	240	2.1	1.750	2.450	0.49
GL 32c	2.200	430	240	2.0	1.350	1.850	0.44

(a) For members stressed primarily in bending. Tabulated design values are for normal load duration and dry service conditions.

(b) HASSLACHER GLT is produced only with balanced layups, therefore F_{bx} is the same for positive and negative bending.

(c) The design values for shear (F_{vx} and F_{vy}) shall be decreased by multiplying by a factor of 0.72 for non-prismatic members (e.g., members with varied cross section along their length), notched members, and for all members subject to impact or cyclic loading. The reduced design value shall be used for design for members at connections that transfer shear by mechanical fastener. The reduced design value shall also be used for determination of design values for radial tension and torsion.

Wood species

Norway Spruce

Certification

The current certificates are available in the download area of our website at hasslacher.com.

Sustainability

The HASSLACHER group believes in careful use of wood as a resource. Our raw materials come from sustainable and controlled forestry. Our locations are certified according to the strict PEFC standards.

PEFC
PEFC/06-32-12
Promoting Sustainable Forest Management
www.pefc.org

02
Technical data

Bonding

Melamine resin adhesive with bright glue line, adhesive type I according to EN 301 approved for bonding loadbearing and non-loadbearing timber components, both indoor and outdoor.

Lamella thickness

Maximum lamella thickness: 1¾ in. | 45 mm

Moisture content

12 % ± 2.5 %

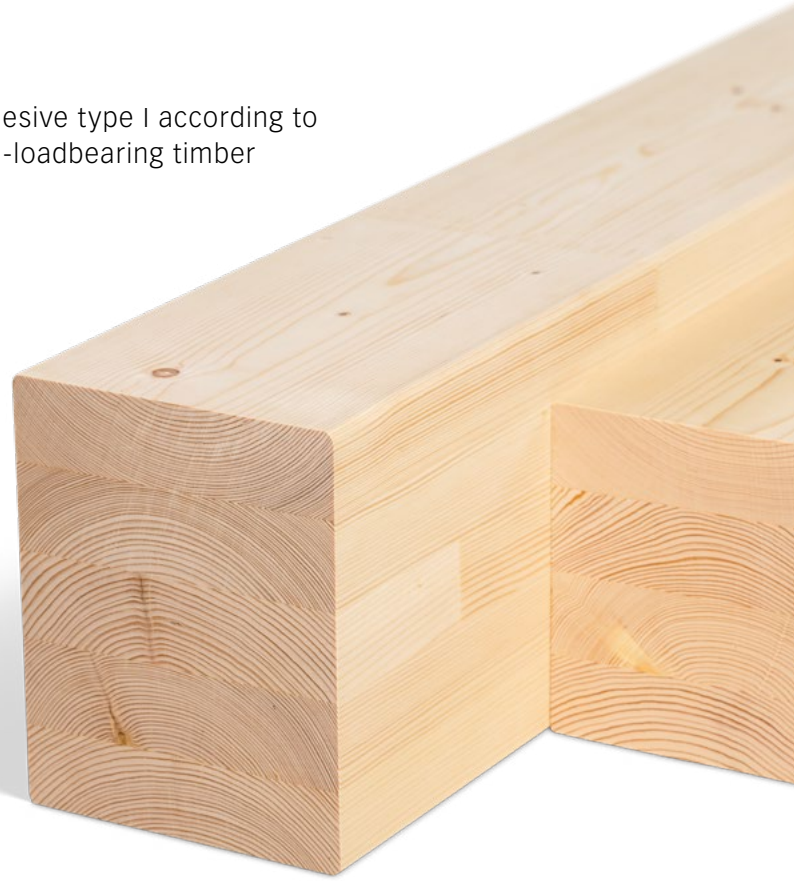
Density

For Norway Spruce approximately
26 lbf/ft³ | 420 kg/m³ to
31 lbf/ft³ | 500 kg/m³ in average.

Shrinkage and swelling behaviour

Perpendicular to the grain direction
$\alpha_{u,90}$ = 0.24 % per 1 % change in moisture content

Parallel to the grain direction
$\alpha_{u,0}$ = 0.01 % per 1 % change in moisture content



Dimensional tolerances

Maximum deviations from nominal sizes for glued laminated timber in accordance to EN 14080

Possibilities for further processing

CNC processing
Surface finish, such as paint and varnish
Installation of steel parts

Dimensional tolerances

		Maximum deviations
Width of cross section	for all widths	±1/13 in. | ±2 mm
Height h of cross section	$h \leq$ 15¾ in. | 400 mm	+1/16 in. | +4 mm to –1/13 in. | –2 mm
	$h >$ 15¾ in. | 400 mm	+1 % to –0.5 %
Maximum deviation of the angles of the cross section from the right angle		1:50
Length l of a straight member	$l \leq$ 79 in. | 2 m	±1/13 in. | ±2 mm
	6½ ft. | 2 m ≤ $l \leq$ 65 ft. | 20 m	±0.1 %
Longitudinal warping measured as the maximum gauge over a length of 6½ ft. | 2.0 m disregarding precamber		1/6 in. | 4 mm

HASSLACHER
NORICA TIMBER

From **wood** to **wonders.**

HASSLACHER group
Feistritz 1 | 9751 Sachsenburg | Austria
T +43 4769 22 49-0 | F +43 4769 22 49-129
info@hasslacher.com | hasslacher.com

HNT PF Brettschichtholz BSH Glulam ANSI EU NTC 20260513

UPPERCUT.at | Foto: © JOST&BAYER