EN

HASSLACHER NORICA TIMBER

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

Product Overview

HASSLACHER Product Overview

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Vision

We are a family-owned company with regional roots and global ambitions. We specialize in optimized and integrated solutions using wood as a renewable resource. Our customers value the highest level of quality that we provide. We continually support our customers with a philosophy of innovation and expertise to meet their requirements in modern timber construction. We are backed by sustainable solutions and materials with our state-of-the-art production and digital technologies.

We produce sustainably and efficiently, creating value and striving for continuous success at every turn. Together with our employees, we are making a conscious contribution to our future. We are motivated by our love of nature, especially the forests where our product is grown.

Mission

We are a global leader in innovative and efficient solutions for modern timber construction. Our group of companies is diversified and vertically integrated, with a substantial portfolio of projects using renewable materials. We are market leaders in modern timber construction with a reputation for quality and reliability. We have a proud heritage and a sustainable philosophy, duly reflected in our employee satisfaction. Our efficient and high-quality production techniques make us a reliable partner with the best customer service and logistical support in the industry.

ers.

Our skilled employees are the core of our success, going above and beyond to uphold our reputation. Our team is customer-focused and shows constant determination and dedication. As a family-oriented enterprise, we are united by our love of nature, making a positive contribution to society and a commitment to long-term, successful growth. We are driven by our passion, curiosity and desire for innovation.

Always true to our motto: „From **wood** to **wonders.**“

Location

Austria

- Sachsenburg
- Stall im Mölltal
- Hermagor
- Preding
- Rennweg am Katschberg
- Nikolsdorf
- Rangersdorf

Slovenia

- Bohinjska Bistrica

Germany

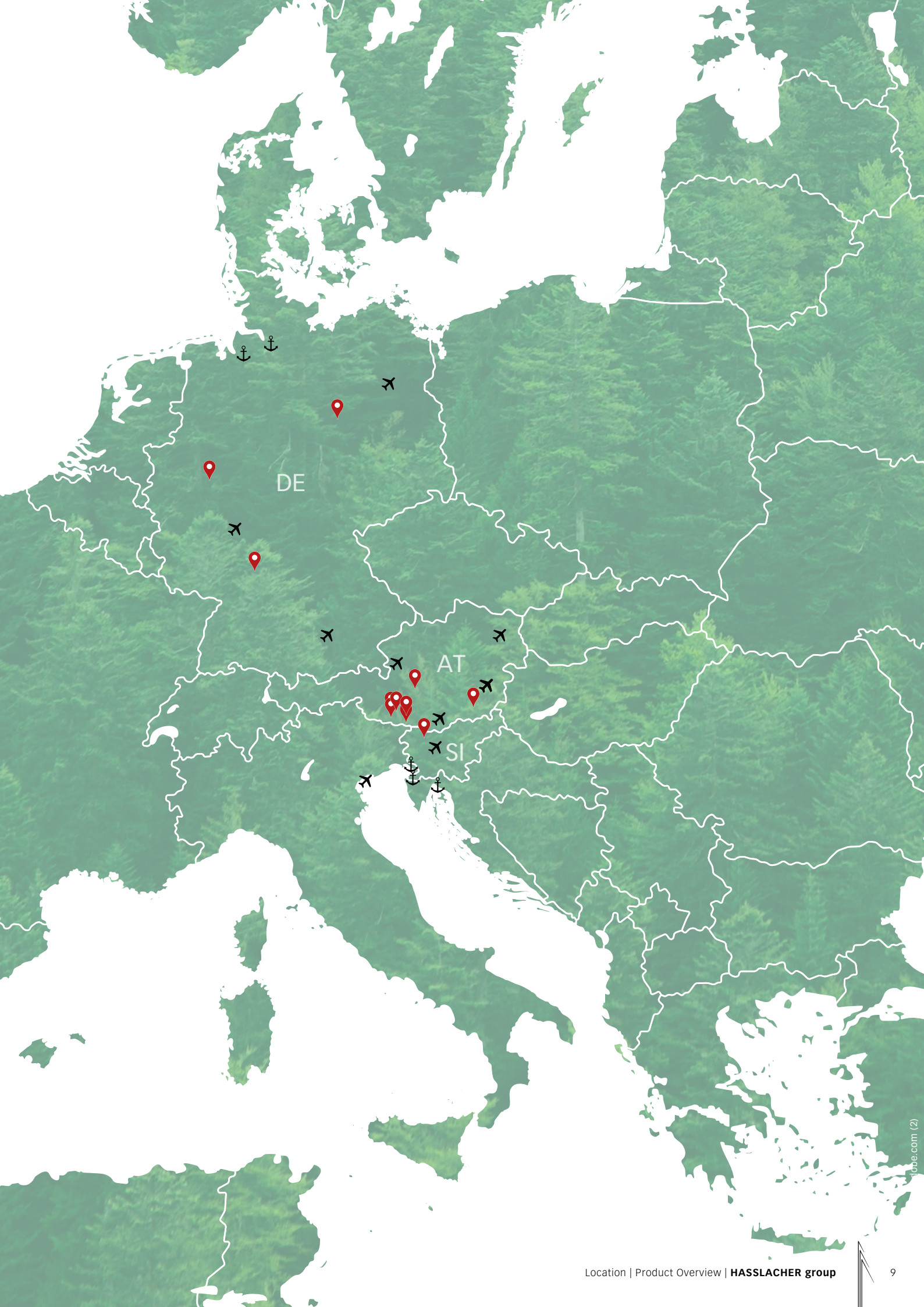
- Kleinheubach
- Magdeburg
- Schmallenberg

Spain

- Ea
- Legutio

AT | Klagenfurt, Graz, Salzburg, Vienna; **IT** | Venice;
DE | Munich, Frankfurt, Berlin; **SI** | Ljubljana; **ES** | Bilbao;

DE | Hamburg, Bremerhaven; **IT** | Trieste; **SI** | Koper; **HR** | Rijeka; **ES** | Bilbao;


DE
AT
SI

HoHo
Vienna | AT

EN

HASSLACHER NORICA TIMBER

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

Cross Laminated Timber

The building material of the future.

Cross Laminated Timber
Overview

Product standard

ETA-12/0281

Surface qualities

Excellentsurface
Visual quality
Industrial visual quality
Industrial quality

On request, cover lamellas can also be edge bonded.

Cross sections

	Large size	Standard size
Thickness:	80 mm to 400 mm	90 mm to 280 mm
	60 mm on request	60 mm and 80 mm upon request
Width:	up to 3.20 m	1.25 m
Length:	up to 20 m	up to 24 m

Strength classes

CL26E11.8
CL36E14.7

Wood species

- Spruce/fir
- Pine
- Larch
- Swiss stone pine, fir, hardwoods (on request)

Certificates

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER Group stands for a 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

Product range

Panel lay-ups

Type	Thickness (mm)	Layers	Panel lay-ups mm							Width (m)	Length (m)	Mass (kg/m²)
BSP 60	60	3		20	20	20				**2.20 – 3.20 m**	**up to 20 m**	27
BSP 80	80	3		20	40	20						36
BSP 90	90	3		30	30	30				none Standard widths	The type and orientation of the layers define the recommended maximum length of the panels for reasons of	41
BSP 100	100	3		30	40	30						45
BSP 120	120	3		40	40	40						54
BSP 100	100	5	20	20	20	20	20			no modular dimensions		45
BSP 120	120	5	30	20	20	20	30					54
BSP 140	140	5	40	20	20	20	40					63
BSP 160	160	5	40	20	40	20	40					72
BSP 180	180	5	40	30	40	30	40				transport and installation.	81
BSP 200	200	5	40	40	40	40	40					90
BSP 200	200	7s / 7ss	30	30	30	20	30	30	30			90
BSP 210	210	7s / 7ss	30	30	30	30	30	30	30			95
BSP 220	220	7s / 7ss	40	40	20	20	20	40	40			99
BSP 240	240	7s / 7ss	40	40	20	40	20	40	40			108
BSP 260	260	7s / 7ss	40	40	30	40	30	40	40			117
BSP 280	280	7s / 7ss	40	40	40	40	40	40	40			126
BSP 300	300	8s / 8ss	40	40	30	40 + 40	30	40	40			135
BSP 320	320	8s / 8ss	40	40	40	40 + 40	40	40	40			144

Due to the density's natural variability, the quantified masses my vary up to ±15 %.
ss: Outer layers consist of 2 longitudinal layers (l)
BSP 60 mm and other panel thicknesses or special lay-ups on request.

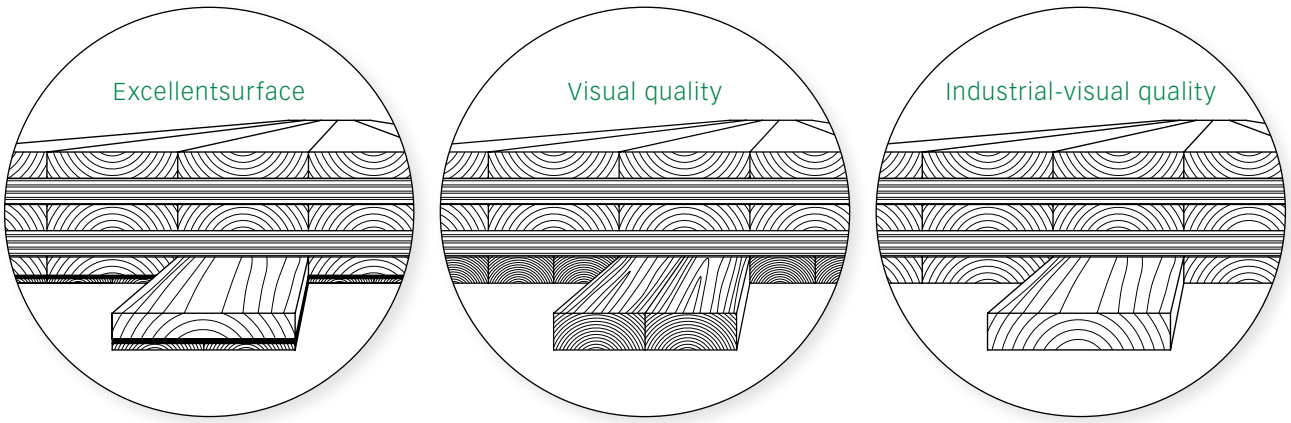
Standard size panel lay-ups

Type	Thickness (mm)	Layers	Panel lay-ups mm							Width (m)	Length (m)	Mass (kg/m²)
BSP 60	60	3s		20	20	20				**Standard width** 1.25 m	up to 24 m	27
BSP 80	80	3s		30	20	30						36
BSP 90	90	3s		30	30	30				Widths below 1.25 m can be cut	The type and orientation of the layers define the recommended maximum length of the panels for reasons of	41
BSP 100	100	3s		30	40	30						45
BSP 100	100	3s		40	20	40						45
BSP 120	120	5s		40	40	40						54
BSP 100	100	5s	20	20	20	20	20					45
BSP 120	120	5s	20	30	20	30	20					54
BSP 140	140	5s	40	20	20	20	40					63
BSP 160	160	5s	40	20	40	20	40					72
BSP 180	180	5s	40	30	40	30	40				transport and installation.	81
BSP 200	200	5s	40	40	40	40	40					90
BSP 220	220	7ss	30	30	35	30	35	30	30			99
BSP 240	240	7ss	40	40	20	40	20	40	40			108
BSP 260	260	7ss	40	40	30	40	30	40	40			117
BSP 280	280	7s / 7ss	40	40	40	40	40	40	40			126

Due to the density's natural variability, the quantified masses my vary up to ±15 %.
ss: Outer layers consist of 2 longitudinal layers (l)
BSP 60 mm and 80 mm and other panel thicknesses or special lay-ups on request.

Cross Laminated Timber
Quality description

Characteristics	Excellentsurface	Visual quality
Description	Consists of finger-jointed lamellas, whereby the cover lamellas have a special lay-up including a cross layer. Wood grain and texture result in a very homogeneous appearance. Appearance of gaps is remarkably lessened. Repairs through wood patches are permissible.	Consists of finger-jointed lamellas of a single wood species, which have a homogeneous appearance in texture and grain. Field of use: Exposed floors in the luxury market. Growth-related features occur in reduced form. Non-conforming growth-related features may be repaired through wood patches.
Wood species for the cover layer	On request, various soft- and hardwood species are available.	On request, spruce, larch, pine, fir and hardwood.
Surface	Sanded	Sanded
Gap width on delivery	Up to maximum of 1 mm	Up to maximum of 1 mm
Knots	Sound knots, isolated black knots are permissible, edge knots and falling knots of up to 10 mm are permissible	Sound knots, isolated black branches are permissible, edge knots and falling knots of up to 15 mm are permissible
Pitch pockets	are permissible up to 3 mm x 50 mm (or the equivalent in mm²).	are permissible up to 5 mm x 70 mm (or the equivalent in mm²).
Patches	Permissible	Permissible
Blue stains and red stripes	Slight discolourations of less than 5 % are permissible, which are predominantly balanced out.	Slight discolourations covering 5 % of the surface area are permissible
Insect infestation	Not permissible	Not permissible
Ingrown bark	Not permissible	Not permissible
Piths	Widely free form ingrown bark	Permissible
Cracks	A crack width up to 1 mm are permissible	Up to 1 mm are permissible
Compression wood	which are predominantly balanced out	Up to 40 % of the surface area
Soft rot	Not permissible	Not permissible
Mistletoe	Not permissible	Not permissible
Wood moisture content	Maximum 10 % ± 2 %	Maximum 10 % ± 2 %
Board thicknesses	Specific lay-up of the cover lamella	19 mm to 45 mm
Board widths	80 mm to 200 mm; only boards with identical widths are used in the cover layer.	80 mm to 200 mm; only boards with identical widths are used in the cover layer.
Type of cutting	The cut is heartwood-free	Centre boards
Scope of application	The specified surface qualities are only valid for the outer layer(s), and thus not applicable to the cross laminated timber's narrow faces. The indicated surface qualities are valid upon delivery. Crack and gap formation may occur in use, in particular at extreme climatic conditions.	
Sanded surface	The surfaces are sanded or calibrated up to a panel width of 3.20 m, or a panel thickness of 300 mm. In dependence of the panel format or on the cover layer's orientation the element may be sanded perpendicular to grain direction.	
Edge bonding	Edge-wise bonding of the boards of the longitudinal cover layer on request.	



Characteristics	Industrial-visual quality	Industrial quality
Description	Surfaces consist of a single wood species; colour differences, wood grain and texture are categorically less relevant. Used as to cover industrial hall constructions. Non-conforming growth-related features may be repaired by means of wood patches. Industrial quality possible on request.	No visual requirements at all; the surface is assumed to be covered with additional materials. Various wood species are possible for cover layer.
Wood species for the cover layer	Spruce/fir, pine	Spruce/fir, pine
Surface	Sanded	Calibrated
Gap width on delivery	Up to maximum of 2 mm	Up to maximum of 3 mm
Knots	Sound knots, black knots of up to 20 mm are permissible, broken edge knots and falling knots up to 25 mm permissible.	Restrictions are in accordance to the corresponding strength grading
Pitch pockets	Are permissible up to 6 mm x 80 mm (or the equivalent in mm^2).	No restrictions
Patches	Permissible	Permissible
Blue stains and red stripes	Discolouration covering up to 10 % of the surface area is permissible	No restrictions
Insect infestation	Not permissible	Worm grooves of up to 2 mm of diameter are permissible
Ingrown bark	Permissible if isolated	Permissible
Piths	Permissible	Permissible
Cracks	Up to 3 mm are permissible	Restrictions are in accordance to the corresponding strength grading
Compression wood	Restrictions are in accordance with the corresponding strength grading	Restrictions are in accordance with the corresponding strength grading
Soft rot	Not permissible	Not permissible
Mistletoe	Not permissible	Not permissible
Wood moisture content	Maximum 12 % ± 2 %	Maximum 12 % ± 2 %
Board thicknesses	19 mm to 45 mm	19 mm to 45 mm
Board widths	80 mm to 240 mm; boards with varying widths in one layer are possible.	80 mm to 280 mm; boards with varying widths in one layer are possible.
Type of cutting	No restrictions	No restrictions
Scope of application	The specified surface qualities are only valid for the outer layer(s), and thus not applicable to the cross laminated timber's narrow faces. The indicated surface qualities are valid upon delivery. Crack and gap formation may occur in use, in particular at extreme climatic conditions.	
Sanded surface	The surfaces are sanded or calibrated up to a panel width of 3.20 m, or a panel thickness of 300 mm. In dependence of the panel format or on the cover layer's orientation the element may be sanded perpendicular to grain direction.	
Edge bonding	Edge-wise bonding of the boards of the longitudinal cover layer on request.	

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Glued Laminated Timber

The engineered timber beam.

Glued Laminated Timber
Overview

Product standard/certification

EN 14080

Surface qualities

Visual quality
Industrial quality

Cross sections

Heights:	80 to 1,280 mm in 40 mm steps Special components up to 4,000 mm are possible
Widths:	80 mm to 280 mm in 20 mm steps Any desired extension is possible through block bonding
Lengths:	up to 27 m; or up to 42 m as special components

Strength classes

GL24h GL24c	up to a beam width of 280 mm
GL28h GL28c	up to a beam width of 280 mm
GL30h GL30c	up to a beam width of 240 mm
GL32h GL32c	up to a beam width of 200 mm

Other strength classes available on request

Wood species

- Spruce/fir
- Larch
- Pine
- Other wood species on request

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER Group stands for a 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

Quality description

Characteristics	Visual Quality	Industry Quality
General	Optimised for a visible use, e.g. as visible rafters and beams for carports and upscale residential areas. All knots are sound knots and knotholes are patched. The occurrence of blue stains, red stripes and/or pitch pockets is minimised. The cracks are minimised and hardly any heart centre is present due to core-free cutting. A homogeneous appearance is aspired.	Optimised for a non-visual use. Discolouration such as blue stain, nail-proof brown and/or red stripes are permitted. Fallen-out knots and pitch pockets may casually occur. For loadbearing and non-loadbearing use in engineered timber structures with lower aesthetic requirements.
Black knots	Permitted, provided that they do not fall out	Permitted
Falling knots	Permitted up to approximately 20 mm, sound knots are permitted	Permitted
Wane	Not permitted	Not permitted
Rotten areas	Not permitted	Not permitted
Pith	Permitted	Permitted
Pitch pockets	Permitted up to approximately 5 x 50 mm, larger pockets must be patched	Permitted
Insect infestations	Not permitted	Permitted up to a diameter of 2 mm
Red stripes	Up to approximately 5 % of the surface	Permitted
Blue stain	Up to approximately 5 % of the surface	Permitted
Planing quality	Rough areas are not permitted. Planer marks up to a length of 10 mm and a depth of 1 mm are permitted	Rough areas and planer marks are permitted
Cracks	Permitted up to a depth of 1/6 of the component width (per side); as long as the required static loadbearing capacity is not impared	Permitted up to a depth of 1/6 of the component width (per side); as long as the required static loadbearing capacity is not impared
Scope of validity	The specified surface qualities are valid at time of delivery.	

Glued Laminated Timber
Straight beams
Standard packing units

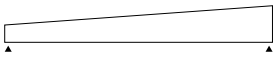
Packaging units

Height in mm	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³
	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm
1,280	2.5	5.5	3.1	6.9	1.9	4.1	2.2	4.8	1.2	2.8	1.4	3.1	1.6	3.5	1.9	4.1
	4	128 x 32	**4**	128 x 40	**2**	128 x 24	**2**	128 x 28	**1**	128 x 16	**1**	128 x 18	**1**	128 x 20	**1**	128 x 24
1,240	2.4	5.4	3.0	6.7	1.8	4.0	2.1	4.7	2.4	5.4	1.4	3.0	1.5	3.3	1.8	4.0
	4	124 x 32	**4**	124 x 40	**2**	124 x 24	**2**	124 x 28	**2**	124 x 32	**1**	124 x 18	**1**	124 x 20	**1**	124 x 24
1,200	2.3	5.2	2.9	6.5	1.7	3.9	2.0	4.5	2.3	5.2	1.3	2.9	1.5	3.2	1.7	3.9
	4	120 x 32	**4**	120 x 40	**2**	120 x 24	**2**	120 x 28	**2**	120 x 32	**1**	120 x 18	**1**	120 x 20	**1**	120 x 24
1,160	2.3	5.0	2.8	6.3	1.7	3.8	2.0	4.4	2.3	5.0	1.3	2.8	1.4	3.1	1.7	3.8
	4	116 x 32	**4**	116 x 40	**2**	116 x 24	**2**	116 x 28	**2**	116 x 32	**1**	116 x 18	**1**	116 x 20	**1**	116 x 24
1,120	2.2	4.8	2.7	6.0	1.6	3.6	1.9	4.2	2.2	4.8	2.4	5.4	1.4	3.0	1.6	3.6
	4	112 x 32	**4**	112 x 40	**2**	112 x 24	**2**	112 x 28	**2**	112 x 32	**2**	112 x 36	**1**	112 x 20	**1**	112 x 24
1,080	2.1	4.7	2.6	5.8	1.6	3.5	1.8	4.1	2.1	4.7	2.4	5.2	1.3	2.9	1.6	3.5
	4	108 x 32	**4**	108 x 40	**2**	108 x 24	**2**	108 x 28	**2**	108 x 32	**2**	108 x 36	**1**	108 x 20	**1**	108 x 24
1,040	2.0	4.5	2.5	5.6	1.5	3.4	1.8	3.9	2.0	4.5	2.3	5.1	1.3	2.8	1.5	3.4
	4	104 x 32	**4**	104 x 40	**2**	104 x 24	**2**	104 x 28	**2**	104 x 32	**2**	104 x 36	**1**	104 x 20	**1**	104 x 24
1,000	1.9	4.3	2.4	5.4	1.5	3.2	1.7	3.8	1.9	4.3	2.2	4.9	2.4	5.4	2.9	6.5
	4	100 x 32	**4**	100 x 40	**2**	100 x 24	**2**	100 x 28	**2**	100 x 32	**2**	100 x 36	**2**	100 x 40	**2**	100 x 48
960	1.9	4.1	2.3	5.2	1.4	3.1	1.6	3.6	1.9	4.1	2.1	4.7	2.3	5.2	2.8	6.2
	4	96 x 32	**4**	96 x 40	**2**	96 x 24	**2**	96 x 28	**2**	96 x 32	**2**	96 x 36	**2**	96 x 40	**2**	96 x 48
920	1.8	4.0	2.2	5.0	1.3	3.0	1.6	3.5	1.8	4.0	2.0	4.5	2.2	5.0	2.7	6.0
	4	92 x 32	**4**	92 x 40	**2**	92 x 24	**2**	92 x 28	**2**	92 x 32	2	92 x 36	**2**	92 x 40	**2**	92 x 48
880	1.7	3.8	2.1	4.8	1.3	2.9	1.5	3.3	1.7	3.8	1.9	4.3	2.1	4.8	2.6	5.7
	4	88 x 32	**4**	88 x 40	**2**	88 x 24	**2**	88 x 28	**2**	88 x 32	**2**	88 x 36	**2**	88 x 40	**2**	88 x 48
840	1.6	3.6	2.0	4.5	1.2	2.7	1.4	3.2	1.6	3.6	1.8	4.1	2.0	4.5	2.4	5.4
	4	84 x 32	4	84 x 40	**2**	84 x 24	**2**	84 x 28	**2**	84 x 32	**2**	84 x 36	**2**	84 x 40	**2**	84 x 48
800	1.6	3.5	1.9	4.3	1.2	2.6	1.4	3.0	1.6	3.5	1.7	3.9	1.9	4.3	2.3	5.2
	4	80 x 32	**4**	80 x 40	**2**	80 x 24	**2**	80 x 28	**2**	80 x 32	**2**	80 x 36	**2**	80 x 40	**2**	80 x 48
760	1.5	3.3	1.8	4.1	1.1	2.5	1.3	2.9	1.5	3.3	1.7	3.7	1.8	4.1	2.2	4.9
	4	76 x 32	**4**	76 x 40	**2**	76 x 24	**2**	76 x 28	**2**	76 x 32	**2**	76 x 36	**2**	76 x 40	**2**	76 x 48
720	1.4	3.1	1.7	3.9	1.0	2.3	1.2	2.7	1.4	3.1	1.6	3.5	1.7	3.9	2.1	4.7
	4	72 x 32	**4**	72 x 40	**2**	72 x 24	**2**	72 x 28	**2**	72 x 32	**2**	72 x 36	**2**	72 x 40	**2**	72 x 48
680	1.3	2.9	1.7	3.7	1.0	2.2	1.2	2.6	1.3	2.9	1.5	3.3	1.7	3.7	2.0	4.4
	4	68 x 32	**4**	68 x 40	**2**	68 x 24	**2**	68 x 28	**2**	68 x 32	**2**	68 x 36	**2**	68 x 40	**2**	68 x 48
640	1.2	2.8	1.6	3.5	0.9	2.1	1.1	2.4	1.2	2.8	1.4	3.1	1.6	3.5	1.9	4.1
	4	64 x 32	**4**	64 x 40	**2**	64 x 24	**2**	64 x 28	**2**	64 x 32	**2**	64 x 36	**2**	64 x 40	**2**	64 x 48
600	2.3	5.2	2.9	6.5	1.7	3.9	2.0	4.5	2.3	5.2	2.6	5.8	2.9	6.5	3.5	7.8
	8	120 x 32	**8**	120 x 40	**4**	120 x 24	4	120 x 28	**4**	120 x 32	**4**	120 x 36	**4**	120 x 40	**4**	120 x 48
560	2.2	4.8	2.7	6.0	1.6	3.6	1.9	4.2	2.2	4.8	2.4	5.4	2.7	6.0	3.3	7.3
	8	112 x 32	**8**	112 x 40	**4**	112 x 24	**4**	112 x 28	**4**	112 x 32	**4**	112 x 36	**4**	112 x 40	**4**	112 x 48
520	2.0	4.5	2.5	5.6	1.5	3.4	1.8	3.9	2.0	4.5	2.3	5.1	2.5	5.6	3.0	6.7
	8	104 x 32	**8**	104 x 40	**4**	104 x 24	**4**	104 x 28	**4**	104 x 32	**4**	104 x 36	**4**	104 x 40	**4**	104 x 48
480	1.9	4.1	2.3	5.2	1.4	3.1	1.6	3.6	1.9	4.1	2.1	4.7	2.3	5.2	2.8	6.2
	8	96 x 32	**8**	96 x 40	**4**	96 x 24	**4**	96 x 28	**4**	96 x 32	**4**	96 x 36	**4**	96 x 40	**4**	96 x 48
440	1.7	3.8	2.1	4.8	1.3	2.9	1.5	3.3	1.7	3.8	1.9	4.3	2.1	4.8	2.6	5.7
	8	88 x 32	8	88 x 40	**4**	88 x 24	**4**	88 x 28	**4**	88 x 32	**4**	88 x 36	**4**	88 x 40	**4**	88 x 48
400	2.3	5.2	2.9	6.5	1.7	3.9	2.0	4.5	2.3	5.2	2.6	5.8	2.9	6.5	3.5	7.8
	12	120 x 32	**12**	120 x 40	**6**	120 x 24	**6**	120 x 28	**6**	120 x 32	**6**	120 x 36	**6**	120 x 40	**6**	120 x 48
360	2.1	4.7	2.6	5.8	1.6	3.5	1.8	4.1	2.1	4.7	2.4	5.2	2.6	5.8	3.1	7.0
	12	108 x 32	**12**	108 x 40	**6**	108 x 24	**6**	108 x 28	**6**	108 x 32	**6**	108 x 36	**6**	108 x 40	6	108 x 48
320	1.9	4.1	2.3	5.2	1.4	3.1	1.6	3.6	1.9	4.1	2.1	4.7	2.3	5.2	2.8	6.2
	12	96 x 32	**12**	96 x 40	**6**	96 x 24	**6**	96 x 28	**6**	96 x 32	**6**	96 x 36	**6**	96 x 40	**6**	96 x 48
280	2.2	4.8	2.7	6.0	1.6	3.6	1.9	4.2	2.2	4.8	2.4	5.4	2.7	6.0	1.6	7.3
	16	112 x 32	**16**	112 x 40	**8**	112 x 24	**8**	112 x 28	**8**	112 x 32	**8**	112 x 36	**8**	112 x 40	**8**	112 x 48
240	2.3	5.2	2.9	6.5	1.7	3.9	2.0	4.5	2.3	5.2	2.6	5.8	2.9	6.5	3.5	7.8
	20	120 x 32	**20**	120 x 40	**10**	120 x 24	**10**	120 x 28	**10**	120 x 32	**10**	120 x 36	**10**	120 x 40	**10**	120 x 48
200	2.3	5.2	2.9	6.5	1.7	3.9	2.0	4.5	2.3	5.2	2.6	5.8	2.9	6.5		
	24	120 x 32	**24**	120 x 40	**12**	120 x 24	**12**	120 x 28	**12**	120 x 32	**12**	120 x 36	**12**	120 x 40		
160	2.2	4.8	2.7	6.0	1.6	3.6	1.9	4.2	2.2	4.8						
	28	112 x 32	**28**	112 x 40	**14**	112 x 24	**14**	112 x 28	**14**	112 x 32						
120	2.3	5.2	2.9	6.5	1.7	3.9										
	40	120 x 32	**40**	120 x 40	**20**	120 x 24										
Width in mm	80		100		120		140		160		180		200		240	

260 mm and 280 mm widths are available on request. Can be expanded by block bonding if desired. Heights up to 4.000 mm are possible

Special components

Product portfolio



Single tapered beams

Beam length: up to 40 m
Width: 80 to 280 mm
Block bonding: >280 mm
possible on request
Heights: up to 4,000 mm

Curved beams or pre-cambered parallel beams

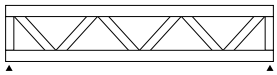
Beam length: up to 40 m
Width: 80 to 280 mm
Block bonding: >280 mm
possible on request
Heights: up to 4,000 mm

Double-tapered or pitched cambered beams

Beam length: up to 40 m
Width: 80 to 280 mm
Block bonding: >280 mm
possible on request
Heights: up to 4,000 mm

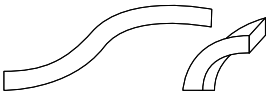
Fish beams

Beam length: up to 40 m
Width: 80 to 280 mm
Block bonding: >280 mm
possible on request
Heights: up to 4,000 mm



Trussed girders

Span lengths: >40 m
Width: 80 to 280 mm
Block bonding: >280 mm
possible on request
Heights: >4,000 mm are possible



Free forms

Lengths: up to 40 m
Widths: up to 280 mm
Block bonding: >280 mm
possible on request
Heights: up to 4,000 mm

Glued Laminated Timber
Further processing

Advantages

- High precision with optimal material utilisation
- Versatile machining options due to modern technology
- Ongoing development through regular and continuous quality control
- Professional support during the planning phase
- Consultation and services provided by qualified master carpenters
- Rapid and cost-efficient assembly on the construction site thanks to a high level of prefabrication

Further processing – Special components

Portal Machining Centre		CMS Hermagor	MAKA BC 570 Kleinheubach
Component dimensions and axes.	X-axis (longitudinal direction) Y-axis (transverse direction) Z-axis (vertical stroke) C-axis (rotation) B-axis (panning)	42 m 5.80 m 1.25 m 360° ± 110°	35 m or 41 m up to 4.80 m uo to 1.60 m 360° ± 105°
Precision		±2 mm to 40 m length	±2 mm to 40 m length
Spindle speed		Continuously variable from 0 to 10,000 rpm	Continuously variable from 0 to 12,000 rpm
CNC controller		NUM 1,060W	BWO 920
Online program transfer		CAD/CNC-Working Space	NC Codes from the CNC- Production Control
Workpiece measurement		Renishaw - Services	no services available
Workpiece positioning		Supported by laser	Supported by laser
Automatic changing of tools		Circular magazine with 16 tools Rotary magazine with 2 saw blades max. 750mm	20 tools saw blade max. 800mm
Workpiece fixation		Using vacuum working blocks and single vacuum units	Using flexible vacuum units and hydraulic clamp cylinders
Import formats		*.btl | Direct control of the portal system	NC Codes generated by post - processors. AlphaCam: CAD-Import: Acis, dwg, dxf, IGES, Inventor, Rhino, Step LignoCam: *.btl-Files

IT Interfaces | Import Formats

2D/3D-DXF (*.dxf) | 2D/3D DWG (*.dwg) | ACIS (*.sat) IFC (*.ifc) | STEP (*.stp) (*.ste) (*.step) | DSTV (*.stp)	Inventor (*.ipt) (*.iam) (*.3ds) (*.fbx) (*.jt) (*.mwf) (*.dgn) cadwork (*.2d) und (*.3d)

Further processing – Machining capabilities

5-axis CNC machining	Hundegger K3 5-axis 900, Hundegger K2i 5-axis 900 and Hundegger Robot 1,280
6-axis CNC machining	Hundegger K2-Industry 1,280 and Hundegger Robot 1,250
Component dimensions	Length: up to 27 m Height: up to 1,280 mm Width: up to 280 mm

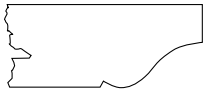
IT Interfaces | Import Formats

(1)	*.bvn, *.bvx | Direct control of the systems
(2)	From SEMA 3D, Dietrich's 3D-CAD/CAM and cadwork *.bvn, *.bvx files are created.
(3)	2D/3D *.dxf, *.dwg, *.sat (ACIS) files can be converted into machine files at an extra charge.

Further Processing – possibilities and examples

Rafter and Purlin profiles

Profile 1



Profile 2

Profile 3

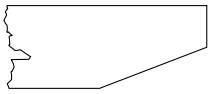
Profile 4

Profile 5

Profile 6

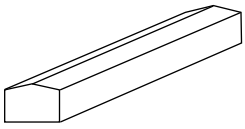
Profile 7

Profile 8

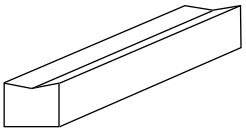


Valley and hip rafter

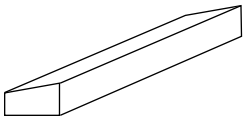
Hip rafters



Valley rafters

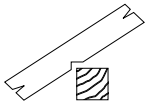


Tapered form

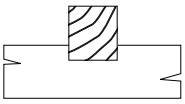


Carpentery joints

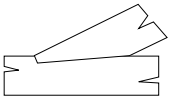
Rafter notch



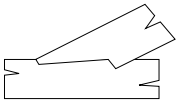
Cross cogging



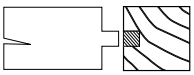
Stepped joint



Double stepped joint

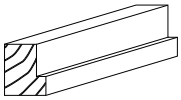


Tenon

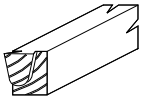


Forked support

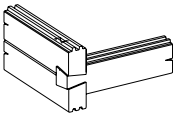
Rebate



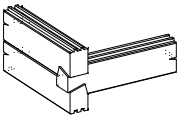
Dovetail joint



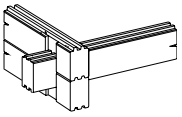
"Tiroler Schloss" corner joint



Dovetail



Log house



EN

HASSLACHER
NORICA TIMBER
From **wood** to **wonders.**

HASSLACHER Glulam Ceiling

The high-performance ceiling system.

HASSLACHER Glulam Ceiling
Overview

Product standard/certification

EN 14080

Surface qualities

Visual quality
Industrial quality

Cross sections

Heights:	60 to 280 mm in 20 mm steps
Widths:	400 mm to 1,280 mm (steps depend on the width of the used raw lamellas)
Lengths:	up to 27 m

Post-processing

possible up to 1,280 mm

Strength classes

GL24h, GL28h in accordance to EN 14080
(higher strength classes are available on request)

Wood species

- Spruce/fir
- Other wood species on request

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER group stands for a 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.

Quality description

Characteristics	Visual Quality	Industrial Quality
General	Optimised for a visible use, e.g. as visible rafters and beams for carports and upscale residential areas. All knots are sound knots and knotholes are patched. The occurrence of discolouration such as blue stains, red stripes and/or pitch pockets is minimised. The cracks are minimised and hardly any heart centre is present due to core-free cutting. A homogeneous appearance is aspired.	Optimised for non-visual use, e.g. for industrial and production buildings, farming buildings and roof structures, which are subsequently covered by planks. Discolouration such as brownness (nail-holding), blue stain, and/or red stripes are permitted. Fallen-out knots and pitch pockets may casually occur.
Black knots	Permitted, as long as they don't fall out	Permitted
Fallen-out knots	Permitted up to approximately 20 mm, sound knots are permitted	Permitted, the size depends on the strength classes
Wane	Not permitted	Permitted
Rotten areas	Not permitted	Not permitted
Pitch pockets	Permitted up to approximately 5 x 50 mm, larger pockets must be patched	Permitted
Insect infestation	Not permitted	Permitted up to a diameter of 2 mm
Discolouration	Up to approximately 5 % of the surface	Permitted
Planing quality	Rough areas are not permitted. Planer marks up to a length of 10 mm and a depth of 1 mm are permitted	Rough areas and planer marks are permitted
Cracks	Permitted up to a depth of 1/6th of the component width (per side). The required static load carrying capacity must not be impaired.	Permitted up to a depth of 1/6th of the component width (per side). The required static load carrying capacity must not be impaired.
Scope of validity	The specified surface qualities are valid at time of delivery.	
Information	In case of a low wood equilibrium moisture content, a corresponding gap formation between the individual elements has to be expected. In case of a high wood equilibrium moisture content, the elements can swell perpendicular to the layers' fibre direction.	

HASSLACHER Glulam Ceiling
Design and acoustic elements

Areas of use

- Offices and public buildings
- Schools and kindergartens
- Gyms
- Auditoriums and rehearsal rooms

Advantages

- Visually appealing interior architecture
- Enhancement of room acoustics
- Fast and easy assembly

Surface qualities

Visual quality
Industrial quality

Cross sections

Thicknesses:	80 mm to 280 mm in 20 mm steps
Widths:	200 to 1,200 mm in 40 mm steps
Lengths:	up to 27 m

Strength classes

GL24h, GL28h in accordance to EN 14080
Higher strength classes are available on request

Degree of openness

Approximately 20 % of the visible surface

Sound absorption coefficient

$\alpha_w = 0.10$

Joint formation

Tongue and groove

Element pattern

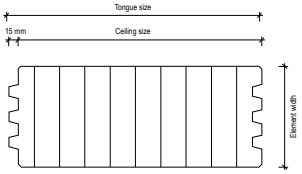
Element thickness: in 20 mm steps
Element width: in 40 mm steps
Net width = tongue size – 15 mm
Possible length up to 27 m

Thickness

60, 80 mm
100, 120, 140 mm
160, 180 mm
200, 220, 240 mm
260, 280 mm

Tongue and Groove

1 Tongue and groove
2 Tongue and groove
3 Tongue and groove
4 Tongue and groove
5 Tongue and groove



Tongue and groove, including longitudinal rebate

Element pattern

Element thickness: in 20 mm steps
Element width: in 40 mm steps
Net width = tongue size – 15 mm
Possible length up to 27 m

Thickness

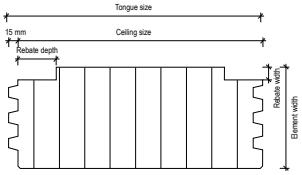
60, 80 mm
100, 120, 140 mm
160, 180 mm
200, 220, 240 mm

Rebate

Depth: 60 mm, width: 20 mm

Tongue and Groove

1 Tongue and groove
2 Tongue and groove
3 Tongue and groove
4 Tongue and groove



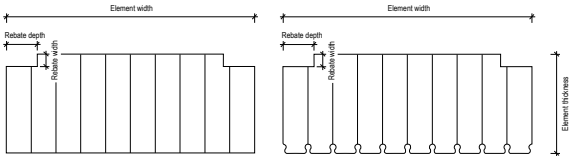
Longitudinal rebate

Element pattern

Element thickness: in 20 mm steps
Element width: in 40 mm steps
Net width = finished size
Possible length up to 27 m

Rebate

Depth: 50 mm
Width: 20 mm



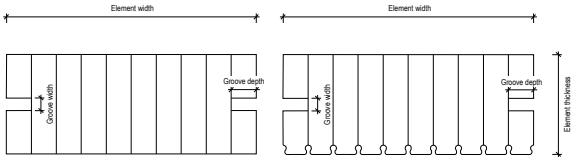
Single groove with loose tongue

Element pattern

Element thickness: in 20 mm steps
Element width: in 40 mm steps
Net width = finished size
Possible length up to 27 m

Groove

Depth: 40 mm
Width: 20 mm



Longitudinal rebate with single groove and loose tongue

Element pattern

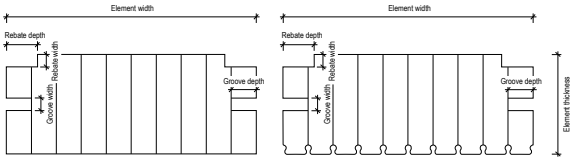
Element thickness: in 20 mm steps
Element width: in 40 mm steps
Net width = finished size
Possible length up to 27 m

Rebate

Depth: 50 mm
Width: 20 mm

Groove

Depth: 40 mm
Width: 20 mm



EN

HASSLACHER NORICA TIMBER

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

Glued solid timber Duo/Trio/Quattro

The dimensionally stable aesthete.

Glued solid timber DUO/TRIO/Quattro
Overview

Product standard/certification

EN 14080

Surface qualities

Visual quality
Industrial quality

Cross sections

Heights:	100 to 280 mm
Widths:	80 to 200 mm in 20 mm steps
Lengths:	Standard length: 13.5 m
	Special lengths: from 4 m up to 16 m

Other cross sections are available on request

Strength classes

C24
C30 (on request)

Wood species

- Spruce
- Other types of wood on request

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER group stands for a 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

Quality description

Characteristics	Visual Quality	Industrial Quality
General	Optimised for a visible use, e.g. as visible rafters and beams for carports and upscale residential areas. All knots are sound knots and knotholes are patched. The occurrence of discolorations such as blue stains, red stripes and/or pitch pockets is minimised. The cracks are minimised and hardly any heart centre is present due to core-free cutting. A homogeneous appearance is aspired.	Optimised for a nonvisual use. Discolorations such as blue stain, nail-proof brown and/or red stripes are permitted. Fallen-out knots and pitch pockets may casually occur. For loadbearing and non-loadbearing use in engineered timber structures with lower aesthetic requirements.
Black knots	Healthy knots	Permitted
Falling knots	Permitted up to approximately 20 mm, sound knots are permitted	Permitted
Pith	Lamellas are free of pith	Permitted
Wane	Not permitted	Not permitted
Rotten areas	Not permitted	Not permitted
Pitch pockets	Permitted up to approximately 5 x 50 mm, larger pockets must be patched	Permitted
Insect infestations	Not permitted	Permitted up to a diameter of 2 mm
Red stripes	Up to approximately 5% of the surface	Permitted
Blue stain	Up to approximately 5% of the surface	Permitted
Planing quality	Rough areas are not permitted. Planer marks up to a length of 10 mm and a depth of 1 mm are permitted	Rough areas and planer marks are permitted
Cracks	Depth: up to 50% of the component width Crack width: max. 3 mm Crack length: no restrictions	Depth: up to 50% of the component width Crack width: no restriction Crack length: no restriction
Scope of validity	The specified surface qualities are valid at time of delivery.	

Glued solid timber DUO/TRIO/Quattro
Product portfolio

Glued solid timber – package units

Height in mm	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³
Max.	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm
280					1.5 **8** TRIO	3.49 112 x 24							2.5 **8** QUINTO	5.82 112 x 40
260					1.4 **8** TRIO	3.24 104 x 24								
240	2.2 **20** DUO	4.99 120 x 32	2.7 **20** DUO	6.24 120 x 40	1.6 **10** DUO	3.74 120 x 24	1.9 **10** TRIO	4.37 120 x 28	2.2 **10** QUATTRO	4.99 120 x 32	2.5 **10** TRIO	5.62 120 x 36	2.7 **10** QUINTO	6.24 120 x 40
220	2 **20** DUO	4.58 110 x 32	2.5 **20** DUO	5.72 110 x 40	1.5 **10** DUO	3.43 110 x 24	1.8 **10** TRIO	4 110 x 28	2 **10** QUATTRO	4.58 110 x 32	2.3 **10** TRIO	5.15 110 x 36	2.5 **10** QUINTO	5.72 110 x 40
200	2.2 **24** DUO	4.99 120 x 32	2.7 **24** DUO	6.24 120 x 40	1.6 **12** DUO	3.74 120 x 24	1.9 **12** DUO	4.37 120 x 28	2.2 **12** QUATTRO	4.99 120 x 32	2.5 **12** TRIO	5.62 120 x 36	2.7 **12** TRIO	6.24 120 x 40
180	2 **24** DUO	4.49 108 x 32	2.5 **24** DUO	5.62 108 x 40	1.5 **12** DUO	3.37 108 x 24	1.7 **12** TRIO	3.93 108 x 28	2 **12** QUATTRO	4.49 108 x 32	2.2 **12** TRIO	5.05 108 x 36		
160	2.1 **28** DUO	4.66 112 x 32	2.6 **28** DUO	5.82 112 x 40	1.5 **14** DUO	3.49 112 x 24			2.1 **14** QUATTRO	4.66 112 x 32			200	
140	2.1 **32** DUO	4.66 112 x 32	1.9 **24** DUO	4.37 112 x 30	1.5 **16** TRIO	3.49 112 x 24	1.8 **16** DUO	4.08 112 x 28			180			
120	2.2 **40** DUO	4.99 120 x 32			1.6 **20** TRIO	3.75 120 x 24			160					
100	2.2 **48** DUO	4.99 120 x 32					140							
Width in mm	80		100		120									

Log house profile

Net size = nominal size – 15 mm
Tongue and groove joint

Thickness	80 mm	100–140 mm	160–180 mm	200–240 mm
Connection type	1 tongue-and-groove-joint	2 tongue-and-groove-joints	3 tongue-and-groove-joints	4 tongue-and-groove-joints

EN

HASSLACHER NORICA TIMBER

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

Structural finger jointed solid timber & GLT®

The beam with the character of solid timber.

Structural finger jointed solid timber & GLT®
Overview

Product standard/certification

EN 15497
ETA-13/0644

Tensile proof loading

ETA-13/0644
ON B 4125

Surface qualities

Visual quality
Industrial quality

Maximum cross sections

Heights:	60 to 300 mm in 20 mm steps
Widths:	50 mm to 160 mm in 20 mm steps
Lengths:	Standard 13 m
	Specific lengths from 2.5 m to 18.0 m are possible

Strength classes

C24, C24M

Wood species

Spruce/Fir
Pine

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER group stands for a 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

GLT® – Girder Longitudinally Tensiletested

Triple security

Which is completely tested, is the safest! Each individual GLT® – girder longitudinally tensiletested as well as its finger joint connections are tested under extreme conditions.

Safety step 1:
Quality grading

Specifically selected and certified sawn timber is produced in our sawmill, where it is technically dried and carefully pre-graded by our specialists.

Safety step 2:
High-Tech strength grading

Using state-of-the-art X-ray and laser technology, strength-relevant wood defects are detected and eliminated without any compromise.

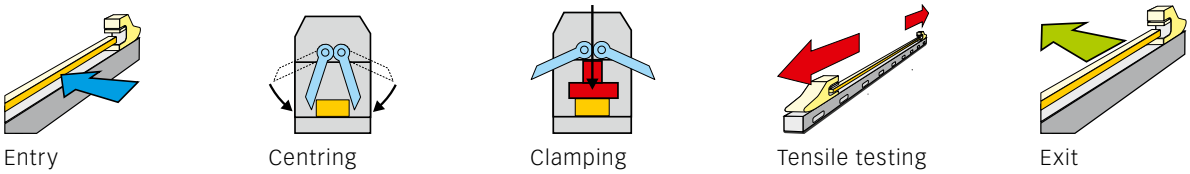
Saftey step 3:
Patented tensile test

In common, the strength of loadbearing components is only monitored on a random basis – not in case of GLT®. Here, each individual GLT®, without exception, is subjected to the patented tensile test procedure according to ON B 4125, thus ensuring a complete level of quality.

Advantages

- Safety in the finger joints' loadbearing behaviour
- Safety in the grading process
- The same design as glued laminated timber
- Up to 20% of material savings if compared to conventional solid construction timber
- Up to 15% in cost savings if compared to glued laminated timber

Tensile test procedure according to ON B 4125



Structural finger jointed solid timber & GLT®
Product portfolio

Spruce/fir – available cross sections and package units

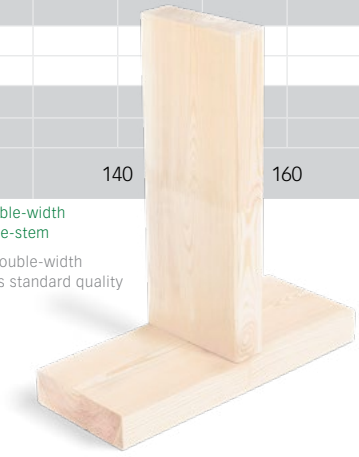
Height in mm	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³	t	m³
	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm	unit	cm
300			2.5	5.62	2.8	6.24	2.8	6.24						
			24	120 x 36	**20**	120 x 40	**16**	120 x 40						
280			2.4	5.24	2.6	5.82	2.6	5.82	2.4	5.24				
			24	112 x 36	**20**	112 x 40	**16**	112 x 40	**12**	112 x 36				
260			2.2	4.87	2.4	5.41	2.4	5.41						
			24	104 x 36	**20**	104 x 40	**16**	104 x 40						
240			2.0	4.49	2.2	4.99	2.2	4.99	2.0	4.49	2.4	5.24	2.2	4.99
			24	96 x3 6	**20**	96 x 40	**16**	96 x 40	**12**	96 x 36	**12**	96 x 42	**10**	96 x 48
220			2.3	5.15	2.6	5.72	2.6	5.72	2.3	5.15	2.7	6.01		
			30	110 x 36	**25**	110 x 40	**20**	110 x 40	**15**	110 x 36	**15**	110 x 42		
200	2.0	4.55	2.1	4.68	2.3	5.20	2.3	5.20	2.1	4.68	2.5	5.46	2.8	6.24
	35	110 x 35	**30**	100 x 36	**25**	100 x 40	**20**	100 x 40	**15**	100 x 36	**15**	100 x 42	**15**	100 x 48
180	2.2	4.91	2.3	5.05	2.5	5.62	2.5	5.62	2.3	5.05	2.7	5.90		
	42	108 x 35	**36**	108 x 36	**30**	108 x 40	**24**	108 x 40	**18**	108 x 36	**18**	108 x 42		
160			2.4	5.24	2.6	5.82	2.6	5.82	2.4	5.24	2.8	6.12	3.1	6.99
			42	112 x 36	**35**	112 x 40	**28**	112 x 40	**21**	112 x 36	**21**	112 x 42	**21**	112 x 48
140	2.3	5.10	2.4	5.24	2.6	5.82	2.6	5.82	2.4	5.24	2.8	6.12		
	56	112 x 35	**48**	112 x 36	**40**	112 x 40	**32**	112 x 40	**24**	108 x 36	**24**	112 x 42		
120	2.2	4.91	2.3	5.05	2.5	5.62	2.5	5.62	2.3	5.05				
	63	108 x 35	**54**	108 x 36	**45**	108 x 40	**36**	108 x 40	**27**	108 x 36				
100	2.3	5.01	2.3	5.15	2.6	5.72	2.6	5.72						
	77	110 x 35	**66**	110 x 36	**55**	110 x 40	**44**	110 x 40						
80			2.4	5.24	2.6	5.82								
			84	112 x 36	**70**	112 x 40								
60			0.9	1.9										
			108	112 x 36										
Width in mm	50		60		80		100		120		140		160	

Available exclusively in NSI quality and with a length of 13 m

Available exclusively in NSI quality and with a length of 5 m

NSI quality: produced of double-width
NSI select: produced of single-stem

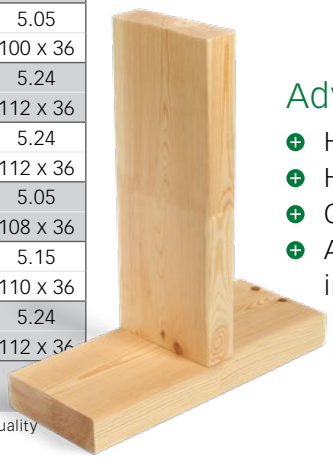
Cross section produced of double-width
Quality: maximum possible is standard quality



PINE

Height in mm	t	m³
	unit	cm
240	2.0	4.49
	24	96 x 36
200	2.1	4.68
	30	100 x 36
180	2.3	5.05
	36	100 x 36
160	2.4	5.24
	42	112 x 36
140	2.4	5.24
	48	112 x 36
120	2.3	5.05
	54	108 x 36
100	2.3	5.15
	66	110 x 36
80	2.4	5.24
	84	112 x 36
Width in mm	60	

Available exclusively in NSI quality



Advantages

- Higher durability than spruce
- High dimensional stability
- Cost-efficient
- Also available as pressure-impregnated modification

Areas of application

- Post and beam structures
- Timber frame constructions
- Rafters
- Supporting structures

Further Processing

Advantages

- High precision with an optimal material utilization
- Versatile machining options due to modern technology
- Ongoing development through regular and continuous quality control
- PProfessional support during the engineering phase
- Consultation and services provided by qualified master carpenters
- Rapid and cost-efficient assembly on the construction site thanks to a high level of prefabrication

Further Processing – Machining Capabilities

5-axis CNC machining	Hundegger K2i 450 (HPH)
Component dimensions	Length: up to 14.5 m Height: up to 450 mm Width: up to 280 mm

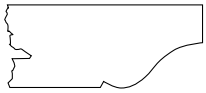
IT Interfaces | Import Formats

(1) *.bvn, *.bvx | Direct control of the systems
(2) From SEMA 3D, Dietrich's 3D-CAD/CAM and cadwork *.bvn, *.bvx files are created.
(3) 2D/3D *.dxf, *.dwg, *.sat (ACIS) files can be converted into machine files at an extra charge.

Further Processing – Possibilities and examples

Rafter and Purlin profiles

Profile 1



Profile 2

Profile 3

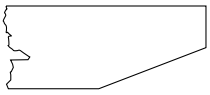
Profile 4

Profile 5

Profile 6

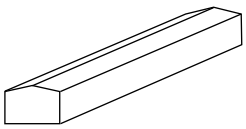
Profile 7

Profile 8

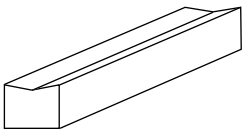


Valley and hip rafter

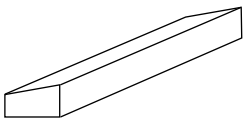
Hip rafters



Valley rafters

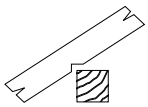


Tapered form

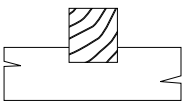


Carpenter joints and profiles

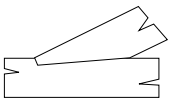
Rafter notch



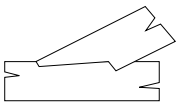
Cross cogging



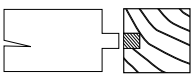
Stepped joint



Double stepped joint

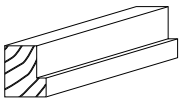


Tenon

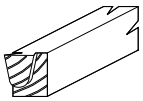


Forked support

Rebate



Dovetail joint



Structural finger jointed solid timber & GLT®
Quality description

Parameters	Visual Quality	Industrial Quality
Description	For loadbearing and non-loadbearing components in visual form, such as visible rafters, visible beams, etc.	For loadbearing and non-loadbearing components in non-visual form, e.g. as lightweight timber construction, covered rafters and purlins, etc.
Wood species	Spruce	Spruce (fir is also possible) or pine
Mistletoe infestation	Not permitted	Not permitted
Moisture content	Maximum of 18%	Maximum of 18%
Cut type	Separated at the core	Separated at the core
Bark embedding	Not permitted	To be treated as knots
Pitch pockets	Up to 5 mm wide, no clusters	Permitted
Surface	Smoothly planed and chamfered on all sides	Planed and chamfered on all sides, rough areas are permitted
Dimensional accuracy	Dimensional tolerance class 2 according to EN 336 has to be applied. In case of visual and standard quality, undersize of up to 2 mm is possible.	
Finishes	Trimmed square, dimensional accuracy of length according to EN 390	
Wane	Not permitted	Up to 10% of the cross section
Knots(1)	Up to 40% of the cross section's side(2)	Up to 40% of the cross section's side
Average annual ring width(3)	Up to 6 mm	Up to 6 mm
Grain slope	Up to 12 cm/m	Up to 12 cm/m
Shrinkage cracks	Crack width of up to 3 mm	Permissible crack depth of up to 50%
Edge cracks	Not permitted	Permitted
Lightning/frost cracks, ring shake	Not permitted	Not permitted
Blue stain	Not permitted	Permitted
Nailing stripes (red, brown)	Not permitted	Permitted
Red and white rot	Not permitted	Not permitted
Compression wood / redwood	Up to 40% of the surface	Up to 40% of the surface
Insect damage	Not permitted	Permissible up to a diameter of 2 mm
Scope of validity	The specified surface qualities are valid at time of delivery	

(1) A knot diameter of up to 40% of the cross section's height or width is permitted
(2) loose knots, falling-out knots, knocked-out and isolated knots with black rimmed knots are permitted up to 20 mm of the knot diameter
(3) The average annual ring width according to EN 1310 is applicable. Thereby, an area of 25 mm around the pith is not taken into account. For reasons of inevitable grading errors and variability of moisture content within the cross sections, the requirements and grading criteria specified in the table must be complied in 95% of the supplied pieces. In case of mechanical grading, related parameters are according to EN 14081. Therefore, deviations from the ones shown in the table may occur.

EN

HASSLACHER NORICA TIMBER

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

Surfaced timber

Versatility in indoor and outdoor areas.

Surfaced timber
At a glance

Areas of application

- Wall claddings
- Ceiling panelling
- Parquet floors
- Prefabricated façade elements
- Decking boards
- Swimming pier surfaces
- Soffits
- Privacy screen
- Wood applied in the garden

Fields of use

- Indoors – walls and floors
- Façades
- Terrace
- Supporting structures

Advantages

- Pleasant and comfortable room climate
- Thermal insulation and heat storage
- Easy workability
- Optimised sound insulation and room acoustics
- High fire and chemical resistance
- Positive impacts on climate protection through storage of carbon dioxide (CO_2)
- Ecologically sustainable materials
- Aesthetic and visually appealing
- A pleasant and natural feel

Overview

Product standard/certification

- ÖNORM B 3020 — Profiles for wood panelling and cladding
- ÖNORM EN 13990 — Wood flooring – Solid softwood floor boards
- ÖNORM EN 14342 — Wood flooring and parquet
- ÖNORM EN 14519 — Solid softwood panelling and cladding – Machined profile with tongue and groove
- ÖNORM EN 14915 — Solid wood panelling and cladding
- ÖNORM EN 15146 — Solid softwood panelling and cladding – Machined profiles without tongue and groove

Qualities

- A VEH — 100% A VEH
- AB TOP — min. 60% A VEH, max. 40% B VEH
- AB VEH — min. 30% A VEH, max. 70% B VEH
- AB US — min. 70% AB VEH, max. 30% B-Sort.
- B-Sort.
- Rough tongue and groove boards
- C

Cross sections

Thicknesses:	12.5 mm up to 100 mm
Widths:	25 mm up to 300 mm
Lengths:	Standard – 4 m; 2.0 to 5.1 m in dependence of each item

Wood species

Spruce/fir, pine, larch, thermally modified wood

Surface treatment and finishing

Vacuum/high pressure impregnation	Hazard class 3 (Standard) Hazard class 4 (on request)
Thermal modification	Thermal treatment Vaporization

Brushes
Further refinements, such as painting and coatings, are available on request

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER group stands for a 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.

Surfaced timber
Product portfolio

Surfaced timber's standard portfolio

	Profile		Wood species	Thickness (mm)	Width (mm)	Length (mm)	Quality	Piece/bundle
Facades	Edge-rounded Rhombus		EU Larch	19	96	4	AB-US	6
			EU Larch	19	116	4	AB-US	6
			EU Larch	19	146	4	AB-US	6
			EU Larch	25	65	4	AB-VEH	8
	Rhombus for invisible panel installations		EU Larch	24	68	4	AB-US	5
			EU Larch	24	115	4	AB-US	5
	Rhombus tongue and groove		EU Larch	24	95	4	AB-US	5
			EU Larch	24	115	4	AB-US	5
	C Chamfer profile		Thermo Spruce	19	146	4	AB-VEH	6
	CS Strip/ flooring chamfer		EU Larch	19	146	4	AB-US	6
			EU Larch	19	146	4	B-Sort.	6
			EU Larch	24	146	4	AB-US	5
	F Trapezoidal profile		EU Larch	19	146	4	AB-US	6
	Scale formwork		Spruce	25	146	4	AB-VEH	6
			EU Larch	25	146	4	AB-VEH	6
	D Curved log wall		Spruce	19	116	4	AB-US	6
			Spruce	24	116	4	AB-VEH	5
Smooth Sided Cladding + Construction Timber	AF Smooth-edged plank flooring		Spruce	19	45	2,5	AB-VEH	12
			Spruce	19	72	2,5	AB-VEH	12
			Spruce	19	96	3,0/4,0	AB-VEH	6
			Spruce	19	96	4	AB-US	6
			Spruce	19	116	3,0/4,0	AB-VEH	6
			Spruce	19	116	4	AB-US	6
			Spruce	19	146	3,0/4,0/5,0	AB-VEH	6
			Spruce	19	146	4	AB-US	6
			Spruce	19	170	4	AB-VEH	6
			Spruce	19	196	4	AB-VEH	6
			Spruce	24	146	4	AB-VEH	5
			Spruce	25	45	2,5	AB-VEH	10
			Spruce	35	35	2,5	AB-VEH	9
			Spruce	35	55	2,5	AB-VEH	8
			Spruce	45	45	3,0/4,0	AB-VEH	6
			Spruce	45	75	3,0/4,0	AB-VEH	4
			Spruce	70	70	4	AB-VEH	4
			Spruce	90	90	4	AB-VEH	2
			EU Larch	19	96	4	AB-US	6
			EU Larch	19	116	4	AB-US	6
			EU Larch	19	146	4	AB-US	6
			EU Larch	19	176	4	AB-US	6
			EU Larch	19	196	4	AB-US	6
			EU Larch	24	146	4	AB-US	5
			EU Larch	32	146	4	AB-US	4
			EU Larch	45	146	4	AB-US	3
	Wooden strips		Spruce	19	56	4	AB-TOP	12
			EU Larch	19	56	4	AB-VEH	12
Deckings	Finely grooved decking boards		EU Larch	25	144	4	AB-US	4
			EU Larch	33	144	4	AB-US	3
			Pressure-treated pine	25	144	4	AB-VEH	4

Surfaced timber's standard portfolio

	Profile		Wood species	Thickness (mm)	Width (mm)	Length (mm)	Quality	Piece/bundle
Deckings	Smooth decking with round edges		EU Larch	25	144	4	AB-US	4
			EU Larch	33	144	4	AB-US	3
			EU Larch	45	144	4	AB-US	3
			Termo-pine	26	118	3,9–5,1	AB-VEH	4
			Termo-pine	26	144	3,9–5,1	AB-VEH	4
	Standard decking		Siberian Larch	28	144	3,98	AB	4
	Thermo Decking Ash		Larch/Thermo Ash	28	144	6	A	4
	Terrace supporting construction		EU Larch	35	72	4	AB-US	6
			EU Larch	45	72	4	AB-US	4
			Pressure-treated pine	40	70	4	AB-VEH	6
	Mini Glulam		EU Larch	40	70	3,97	NSI	
			EU Larch	50	80	3,97	NSI	
			EU Larch	90	90	3,97	NSI	
			EU Larch	100	100	3,97	NSI	
			EU Larch	120	120	3,97	NSI	
Profiled Timber	F Trapezoidal profile		Spruce	12,5	96	3,0/4,0	AB-US	10
			Spruce	15	116	4	AB-US	7
			Spruce	19	116	4	AB-US	6
			Spruce	19	146	4	AB-VEH	6
			Spruce	19	146	4	AB-US	6
			Spruce	19	146	4	B-Sort.	6
			EU Larch	19	146	4	AB-US	6
	C Chamfer profile		Spruce	12,5	96	2,0/3,0/4,0	AB-US	10
			Spruce	15	116	3,0/4,0/5,0	AB-US	7
			Spruce	19	116	4	AB-US	6
			Spruce	19	146	4	AB-TOP	6
			Spruce	19	146	4	AB-VEH	6
			Spruce	19	146	4	AB-US	6
			Spruce	19	146	4	B-Sort.	6
			Pine	19	146	4	AB-VEH	6
			Pine	19	146	4	AB-US	6
	CS Strip/ flooring chamfer		Spruce	19	116	4	AB-VEH	6
			Spruce	19	116	4	AB-US	6
			Spruce	19	116	4	B-Sort.	6
			Spruce	19	121	3,0/4,0/5,0	AB-US	6
			Spruce	19	146	3,0/4,0/5,0	AB-VEH	6
			Spruce	19	146	4	AB-US	6
			Spruce	19	146	3,0/4,0/5,0	B-Sort.	6
			Spruce	19	171	4	AB-US	6
			Spruce	24	146	4	AB-TOP	5
			Spruce	24	146	4,0/5,0	AB-VEH	5
			Spruce	24	146	4	AB-US	5
			Spruce	24	146	4	B-Sort.	5
			Spruce	27	146	4	AB-VEH	4
			Spruce	27	146	4	B-Sort.	4
			Spruce	32	146	4	AB-VEH	4
			Spruce	32	146	4	AB-US	4
			Spruce	32	146	4	B-Sort.	4
			Spruce	32	171	4,0/5,0	AB-VEH	4
			Spruce	32	171	4	AB-US	4

Surfaced timber
Product portfolio

Surfaced timber's standard portfolio

	Profile		Wood species	Thickness (mm)	Width (mm)	Length (mm)	Quality	Piece/bundle
Profiled Timber			Spruce	32	171	4,0/5,0	B-Sort.	4
			Pine	19	146	4	AB-US	6
			Pine	24	146	4	AB-US	5
			EU Larch	19	146	4	AB-US	6
			EU Larch	19	146	4	B-Sort.	6
			EU Larch	24	146	4	AB-US	5
	Fire protection planks with keyway		Spruce	40	146	4,0/5,0	AB-VEH	3
			Spruce	40	146	4	B-Sort.	3
			Spruce	40	171	4	AB-VEH	3
			Spruce	40	171	4	B-Sort.	3
	Double tongue and groove fire protection planks		Spruce	40	146	4,0/5,0	AB-TOP	3
			Spruce	40	146	4,0/5,0	B-Sort.	3
	E Softline-Profil		Spruce	14	121	4	AB-US	7
			Spruce	15	116	4	AB-US	7
			Spruce	19	121	4	AB-US	6
			Spruce	19	146	4	AB-VEH	6
			Spruce	19	146	4	AB-US	6
			Spruce	19	146	4	B-Sort.	6
	O Wooden flooring		Spruce	19	116	4	AB-VEH	6
			Spruce	19	116	4	AB-US	6
			Spruce	19	116	4	B-Sort.	6
			Spruce	19	116	4	Rough tongue and groove boards	6
			Spruce	19	146	4	AB-US	6
			Spruce	24	146	4,0/5,0	AB-VEH	5
			Spruce	24	146	4	AB-US	5
			Spruce	24	146	4	B-Sort.	5
			Pine	19	116	4	AB-VEH	6
			Pine	19	116	4	AB-US	6
			Pine	19	146	4	AB-US	6
			Pine	35	146	4	AB-US	4
			EU Larch	19	116	4	AB-US	6
Battens	Wood Paneling Profile A3		Spruce	22	100	4	35 Select	5
			Spruce	22	120	4	35 Select	5
			Spruce	22	150	4	35 Select	5
			Spruce	24	73	4	B-Sort.	8
			Spruce	27	105	4	35 Select	4
			Spruce	30	73	4	B-Sort.	8
	Decking Battens		Spruce	23	48	4	III/IV	10
			Spruce	28	38	4	III/IV	12
			Spruce	28	48	4	III/IV	8
			Spruce	38	38	4	III/IV	9
			Spruce	38	48	4	III/IV	6
			Spruce	38	58	4	III/IV	6
			Spruce	38	78	4	III/IV	6
			Spruce	48	48	4	III/IV	4
			Spruce	48	58	4	III/IV	4
			Spruce	48	78	4	III/IV	4

Special profiles are available on request

EN

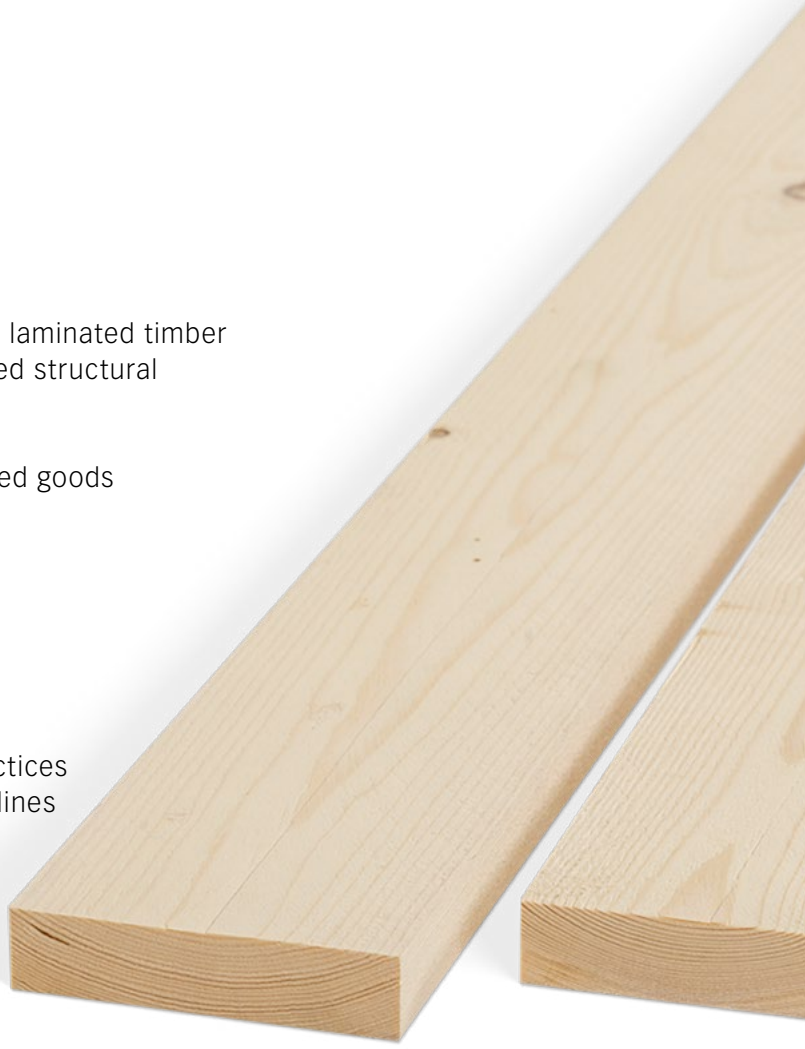
HASSLACHER NORICA TIMBER

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

Sawn timber

Sawn timber for manufacturers.

Sawn Timber
At a glance



Products

- Lamellas for glued laminated timber and cross laminated timber
- Lamellas for laminated beams and finger jointed structural timber, core-free or separated from core
- Rough lumber
- Vertical grain lumber, lamellas and finger-jointed goods
- Battens, larger battens and posts
- Square cut lumber
- Side boards for the packaging industry
- Random width side boards
- Sawmill by-products

Grading

- In accordance with Austrian Timber Trade Practices
- By arrangement and in accordance with guidelines
- Strength-graded in acc. with EN 14081

Advantages

- 100% natural and renewable raw material
- From sustainable forestry, no destructive exploitation
- CO_2 storage
- Recyclable and CO_2-neutral thermal usage
- The best structural properties with low self-weight
- Thermally insulating and therefore energy-saving building material
- Natural supplier of energy

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

Sustainability

The HASSLACHER group stands for a careful use of wood as a resource. Our raw materials come from sustainable and controlled forestry. Our operations are certified according to the strict PEF standards.

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

EN

HASSLACHER NORICA TIMBER

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

Pellets

Renewable energy supplied by nature.

Pellets
Technical data

Product standard

EN ISO 17225-2

Certifications

- DINplus certification programme for “Wood pellets for use in small furnaces”, certificate 7A120
- ENplus-A1 – European Pellet Council – ENplus Manual for the certification of wood pellets for heating purposes, certificate AT010

Characteristic values according to ENplus-A1

Diameter		6 mm	ISO 17829
Length	<	40 mm	ISO 17829
Water content	<	10 Ma%	ISO 18134
Ash content	<	0.70 Ma%	ISO 18122
M-strength	>	98 Ma%	ISO 17831-1
Fines content (<3.15 mm)	<	0.5 w%	ISO 18846
Calorific value	>	4.6 kWh/kg	ISO 18125
Bulk density	<	750 kg/m³	ISO 17828
Ash melting temperature	>	1,200° C	CEN/TC 15370-1

Storage

Store product in dry conditions. The pellets must be protected against moisture.

Application

Use only in approved and appropriate heating appliances in compliance with the manufacturer’s instruction and statutory regulations.

Packaging units

Bagged goods	15 kg/bag 72 bags/pallet equivalent to 1,080 kg/pallet
Big Bag	approx. 1,000 kg
Pump silo truck	3 to 25 t/delivery
Batches on truck	Up to 25 t/delivery

Certification

The current certificates are available in the download area of our website at HASSLACHER.COM.

EN plus A1 ISO 17225-2
AT010

EN

LIP BOHINJ

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

A **MEMBER** of **HASSLACHER** group

Formwork panels

The ecological, dimensionally stable solution for concrete surfaces.

Formwork panels
Product range

Panel sizes

Thickness 21 mm, 27 mm
Sizes 500 x 1,000 mm, 500 x 1,500 mm, 500 x 2,000 mm, 500 x 2,500 mm, 500 x 3,000 mm

Packaging units

- Every package is wrapped in a plastic hood (with UV filter).
- Other packaging units can be supplied upon request.

Thickness	Size (mm)	Units per package	m² per package
21 mm	500 x 1,000	2 x 50 units	50 m²
	500 x 1,500	2 x 50 units	75 m²
	500 x 2,000	2 x 50 units	100 m²
	500 x 2,500	2 x 50 units	125 m²
	500 x 3,000	2 x 50 units	150 m²
27 mm	500 x 1,000	40 units	20 m²
	500 x 1,500	40 units	30 m²
	500 x 2,000	40 units	40 m²
	500 x 2,500	40 units	50 m²
	500 x 3,000	40 units	60 m²

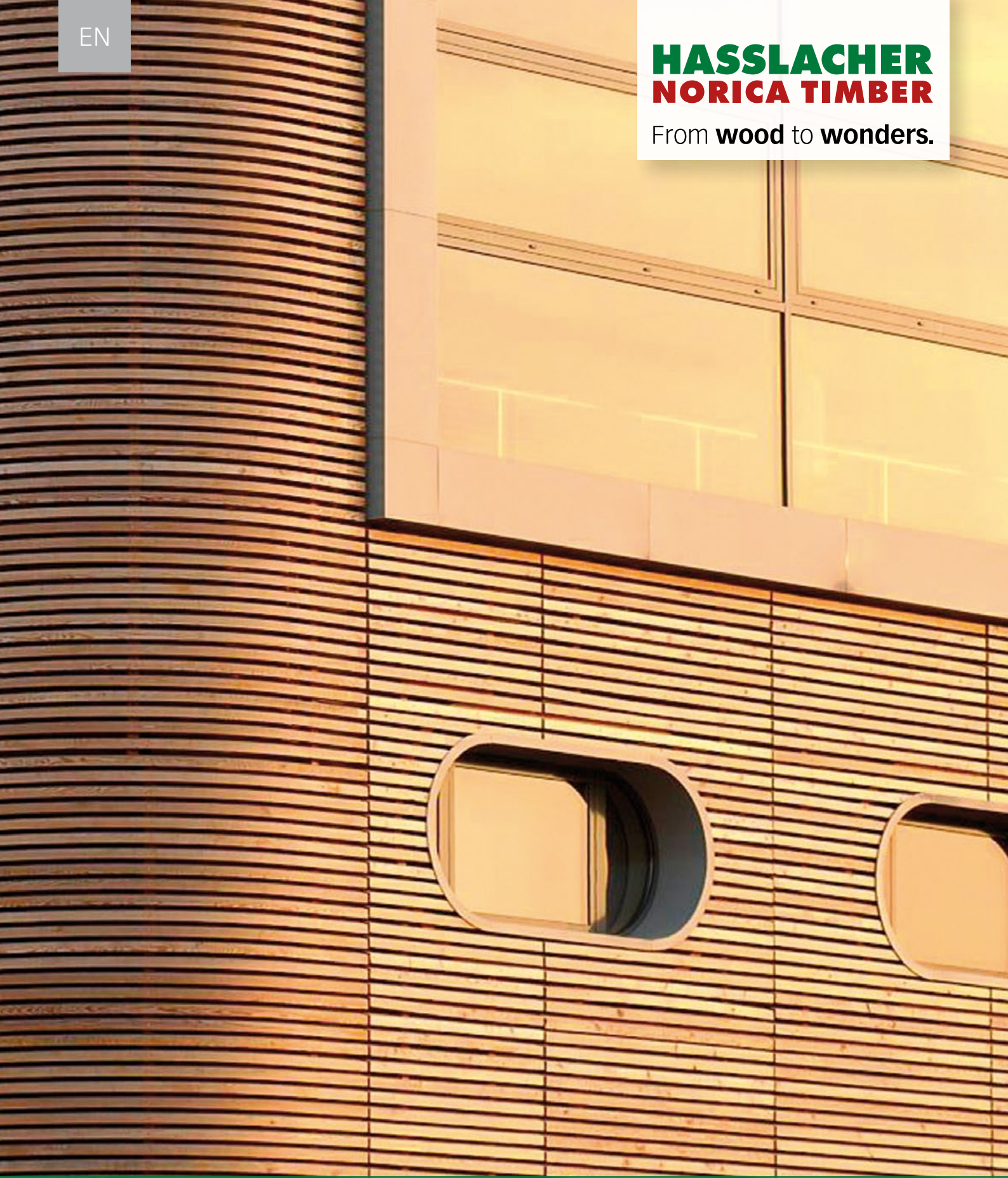
Truck transport

- Thickness 27 mm: 1,900 m² / truck (13.6 m)
- Thickness 21 mm: 2,300 m² / truck (13.6 m)

EN

HASSLACHER
NORICA TIMBER

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



Special products

For every challenge, a solution.

Special products
Terrace – Comfort plank

Advantages

- Minimised deformation due to bonding
- Vertical grain orientation minimises warping, with hardly any fibre separation
- Homogeneous appearance
- Easy installation due to invisible installation aid
- Larch wood for high durability
- High mechanical properties

Technical specifications

Wood species	Larch
Bonding	Melamine resin adhesive type I in accordance with EN 301, for loadbearing and non-loadbearing components indoors and outdoors. Quality assured according to EN 14080
Abmessungen	Thickness: 28 mm Width: 144 mm Length: 3,980 mm Special lengths possible on request.
Surface	Smooth V-notch Usable on both sides
Durability class	3 to 4 in accordance with EN 350-1
Fire behaviour	D_{fl}-s1
Packaging unit	147 pc/pack 84.35 m² 2.36 m³
Recommendation	For high durability, follow the planning, installation and care guidelines of the VEH (www.veuh.org [Association of the European Planing Mill Industry]).

Siberian larch

Terrace – Thermo plank

Advantages

- Outstanding surface appearance
- Vertical grain orientation of the base material minimises warping
- Layered structure that ensures hardly any deformations occur
- Easy installation due to invisible installation aid
- Larch wood for high durability
- High-quality, durable top layer of thermally-modified ash or thermally-modified birch
- The base material in larch can be used for static calculations

Technical specifications

Wood species	Base material: Edge glued larch Surface material: Thermally-modified ash, thermally-modified birch
Bonding	Melamine resin adhesive type I in accordance with EN 301, for loadbearing and non-loadbearing components indoors and outdoors. Quality assured according to EN 14080
Dimensions	Thickness: 32 mm Width: 144 mm Length: 6,000 mm Special lengths possible on request. Finger-jointed
Surface	Smooth
Durability class	Larch: 3 to 4 in accordance with EN 350-1 Thermally-modified ash: 2 in accordance with EN 350-1 Thermally-modified birch: 3 to 4 in accordance with EN 35
Fire behaviour	D_{fl}-s1
Recommendation	For high durability, follow the planning, installation and care guidelines of the VEH (www.veuh.org [Association of the European Planing Mill Industry]).

Top: Thermally-modified ash
Bottom: Thermally-modified birch

Special products
Mini Glued Laminated Larch Beams

Advantages

- Ideal for supporting structures and outdoor applications
- Planed and chamfered structural timber
- The layered structure ensures that hardly any deformations occur
- Larch wood for high durability

Technical data

Wood species	Larch
Bonding	Melamine resin adhesive type I in accordance to EN 301 for loadbearing and non-loadbearing components for both indoor and outdoor applications. Quality assured according to EN 391
Cross sections	50 mm x 80 mm; 60 mm x 100 mm; 90 mm x 90 mm Other cross sections are available on request
Lengths	2,970 mm; 3,970 mm; 4,970 mm Note: Not all lengths are available for all qualities and cross sections
Surfaces	Planed and chamfered
Qualities	Visual quality for visible applications in the garden area. Industrial quality is suitable for any type of supporting structure.
Durability class	3 to 4 according to EN 350-1

Quality description

Parameter	Industrial quality	Visible quality
Knots	Loose and dead (not intergrown) knots allowed	Intergrown knots, loose knots up to 20 mm diameter allowed
Wane	Up to 10% of the cross-cut side	Up to 5% of the cross-cut side
Slope of grain	No restriction	No restriction
Cracks	Permissible	Cracks up to 3 mm wide are permissible
Proportion of sapwood	Permissible	Up to 5% of the surface permissible
Rot	Not permissible	Not permissible
Blue stain, discolourations	Permissible	Up to 5% of the surface permissible
Moisture content	14% ±2%	14% ±2%
Ingrown bark	Permissible	Not permissible
Insect holes	Permissible up to 2 mm diameter	Not permissible
Pitch pockets	Permissible	Up to 3 mm wide and 50 mm length permissible
Rough areas	Planed and chamfered on all sides, rough areas are permissible	Planed and chamfered on all sides, rough areas around knots are permissible
Ends	Trimmed	Trimmed
Additional information	The surface qualities shown are applicable on delivery.	

Special products
Circular column

Advantages

- An architectural eye-catcher
- Aesthetic load-transferring component
- Attractive timber appearance
- High loadbearing capacity
- Weather-resistant

Technical data

Wood species	Larch, spruce and pine
Structures	Select columns: crosswise arrangement of the lamellas Standard columns: setup similar to that of glued laminated timber
Bonding	Melamine resin adhesive type I in accordance to EN 301 for loadbearing and non-loadbearing components for both indoor and outdoor applications. Produced and quality assured according to EN 14080
Dimensions	Diameter: From 80 mm to 320 mm in 20 mm increments Available up to 700 mm on request Length: Up to 8 m
Qualities	Select: Smooth, sound knots Visual: Similar to glued laminated timber visual quality Industrial: Similar to glued laminated timber industrial quality
Surfaces	Diameter: For planed surfaces 80 mm to 120 mm For sanded surfaces Diameter – 140 mm
Durability class	Larch: 3 to 4 according to EN 350-1 Spruce: 4 Pine: 3 to 4 (also applies to heartwood)
Fire behaviour	D-s2, d0
Packaging	Individually wrapped Wrapped in plastic film packs

HASSLACHER group product range

Sawn timber

Surfaced timber

Structural finger jointed solid timber & GLT®

Glued solid timber Duo/Trio

Glued laminated timber

Glulam ceiling

Cross Laminated Timber

Glued laminated timber special components

Special products

Pellets

Shuttering boards

Pallets & packaging solutions

HASSLACHER
NORICA TIMBER

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

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