

Genuine Timber Surfaces

Surface qualities for LIGNO® CLT und LIGNO Acoustic®

Surfaces for supporting elements

The Lignotrend manufacturing process is focused in producing cross-laminated timber elements with **high quality surfaces in genuine timber**.

Nearly all load-bearing Lignotrend elements can be supplied with a ready-finished surface. **No further interior completion** is then necessary on the timber component.

1-ply-panels are used for the visible layer of the elements, for which it is possible to choose between different timber qualities. Their visual appearance is described in this data sheet.

The surfaces contours and profiles can also be individually chosen. **Closed timber surfaces** and **acoustic profiles with gaps** are possible here. Directly behind the surface is a transversal layer, which is crucial for the crack resistance of the closed surface alternatives.

The surface of the acoustic profiles can be designed either very delicately as a slat profile or with wider strips in the form of a board profile. Behind the surface layer, efficient **acoustic absorbers are integrated** at the factory, which are made of natural wood fibres.

If partial areas of a component need to be made without absorbers to obtain a better noise direction, it is possible to produce an unobtrusive surface that has a minor absorption effect, but whose visual appearance matches the absorbing profiles.

Surfaces for acoustic panels

The slat profiles shown are also available as a surface for the LIGNO Acoustic light acoustic panels for creating a corresponding interior design by adding panels below or in front of the building's basic construction. Board profiles and closed surfaces, however, are not available on the panels.



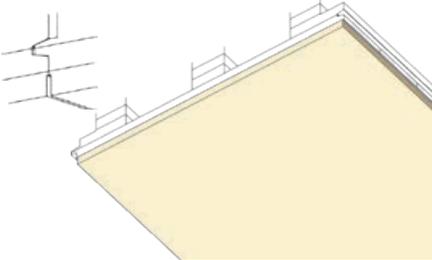
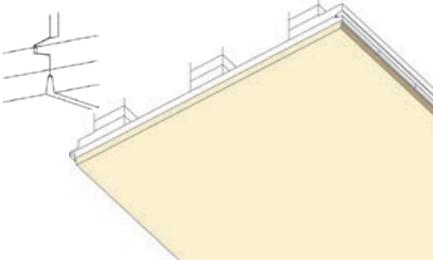
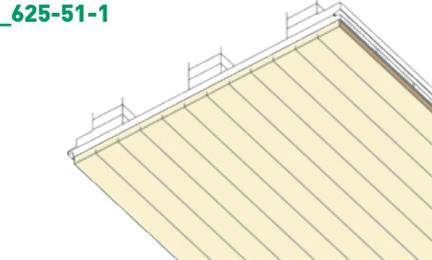
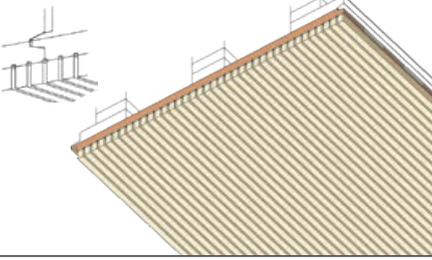
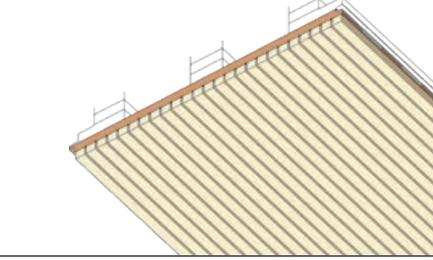
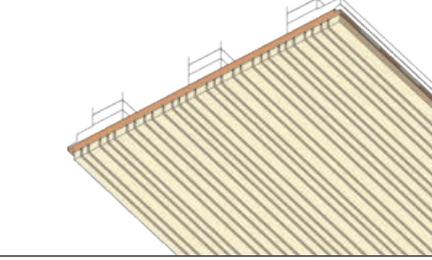
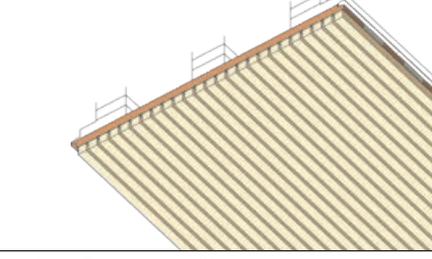
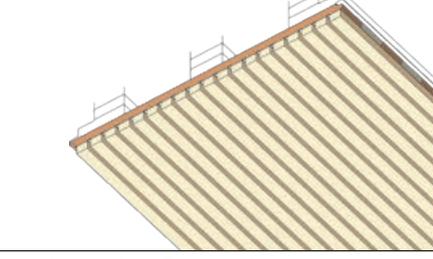
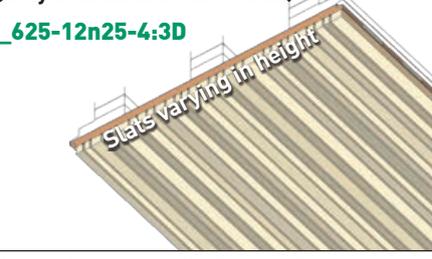
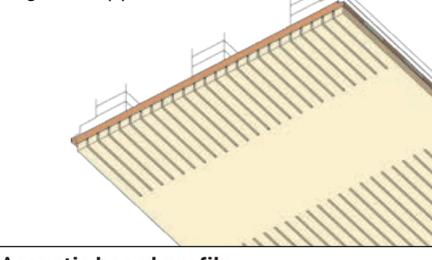
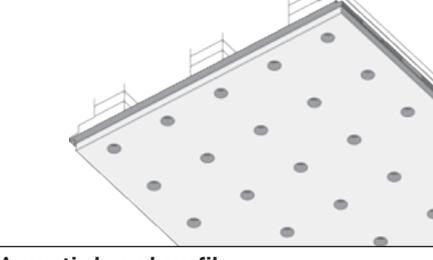
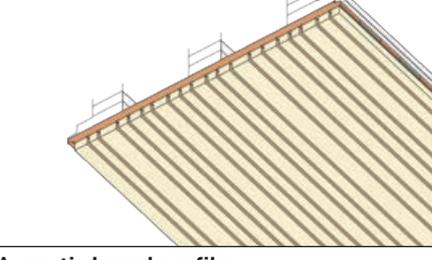
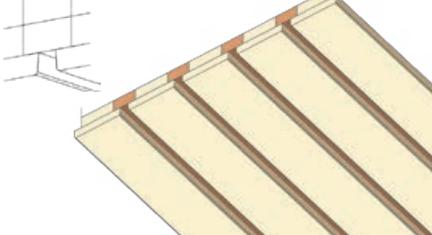
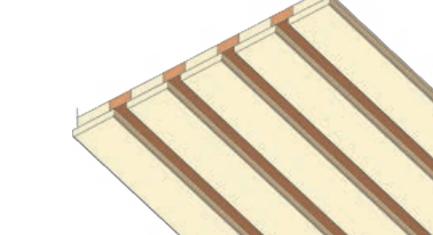
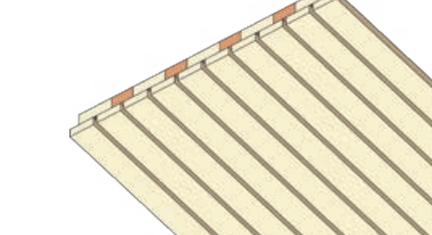
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Last revision on 15.04.2024
subject to modifications and amendments.

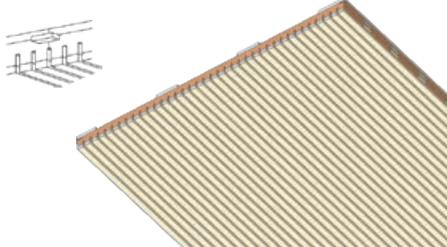
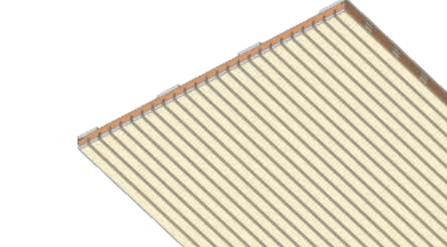
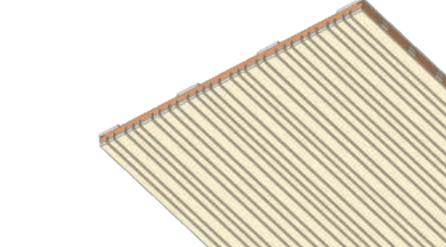
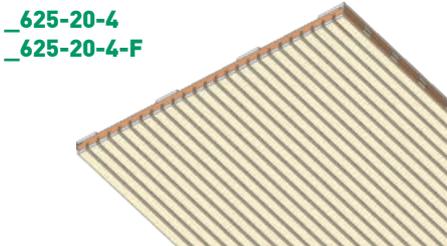
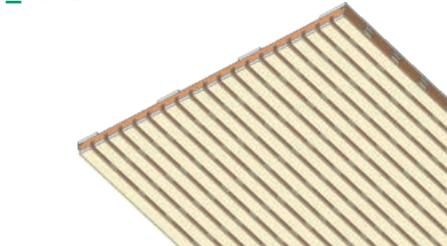


Profile versions for load-bearing cross-laminated timber elements

<p>Closed surface 4 mm butt joint, sharp edges</p> <p>_625-621-4</p> 	<p>Closed surface 8 mm butt joint, V-shaped</p> <p>_625-618-7</p> 	<p>Closed surface approx. 1.5 mm gap in surface 4 mm butt joint, sharp edges</p> <p>_625-51-1</p> 
<p>Acoustic slat profile 12 mm slat, 4 mm gap</p> <p>_625-12-4</p> 	<p>Acoustic slat profile 18 mm slat, 6 mm gap</p> <p>_625-18-6</p> 	<p>Acoustic slat profile "nature" 12 - 25 mm slat, 4 mm gap</p> <p>_625-12n25-4</p> 
<p>Acoustic slat profile 20 mm slat, 4 mm gap</p> <p>_625-20-4</p> 	<p>Acoustic slat profile 23 mm slat, 8 mm gap</p> <p>_625-23-8</p> 	<p>Acoustic slat profile "nature:3D" 12- 25 mm slat, 4 mm gap, Slats with up to 6 mm height offset (only available on softwood)</p> <p>_625-12n25-4:3D</p> 
<p>Option: Partial profile for types 625-12-4 and 625-18-6 Gaps not continuous across the length (e.g. on support)</p> 	<p>Special design: Perforation Hole pattern by agreement</p> 	<p>Acoustic slat profile "nature" 18 - 38 mm slat, 6 mm gap</p> <p>_625-18n38-6</p> 
<p>Acoustic board profile 105 mm board, 20 mm gap</p> <p>_625-105-20</p> 	<p>Acoustic board profile 95 mm board, 30 mm gap</p> <p>_625-95-30</p> 	<p>Acoustic board profile 54 mm board, 8 mm gap</p> <p>_625-54-8</p> 



Profile versions for acoustic panels

<p>Acoustic slat profile 12 mm slat, 4 mm gap _625-12-4</p> 	<p>Acoustic slat profile 18 mm slat, 6 mm gap _625-18-6</p> 	<p>Acoustic slat profile "nature" 12 - 25 mm slat, 4 mm gap _625-12n25-4</p> 
<p>Acoustic slat profile 20 mm slat, 4 mm gap without or with bevel _625-20-4 _625-20-4-F</p> 	<p>Acoustic slat profile 23 mm slat, 8 mm gap _625-23-8</p> 	<p>Acoustic slat profile "nature:3D" 12- 25 mm slat, 4 mm gap, Slats with up to 6 mm height offset (only available on softwood) _625-12n25-4:3D</p>  <p>Slats varying in height</p>
<p>Acoustic slat profile "nature" 18 - 38 mm slat, 6 mm gap _625-18n38-6</p> 		<p>Acoustic slat profile "nature" 22 - 40 mm slat, 4 mm gap _625-22n40-4 _625-22n40-4-F _625-22n40-4-F:3D</p>

Exact description of the technical properties

- ▶ [Technical data sheet for LIGNO Rippe, LIGNO Block, LIGNO Acoustic classic](#)
- ▶ [Technical data sheet for LIGNO Acoustic light](#)
- ▶ [Technical data sheet for LIGNO Acoustic Sport](#)

Silver Fir knotless, patterned _WTL, also impregnated as _WTL-i

Acoustic slat profiles

available on acoustic panels
and on load-bearing CLT elements



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-12n25-4:3D
(nature:3D)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



_625-23-8

Predestined for understated architectural design: The light timber of the Black Forest Silver Fir. It is processed in knotless quality: knots are cut out during production; the knotless sections are put together to make the high quality visible surfaces. The timber is cut in the so-called rift/semi-rift.

Because the Silver Fir does not contain any resin, its timber is ideally suited for interior surfaces. It comes from the Black Forest, from PEFC-certified sources.

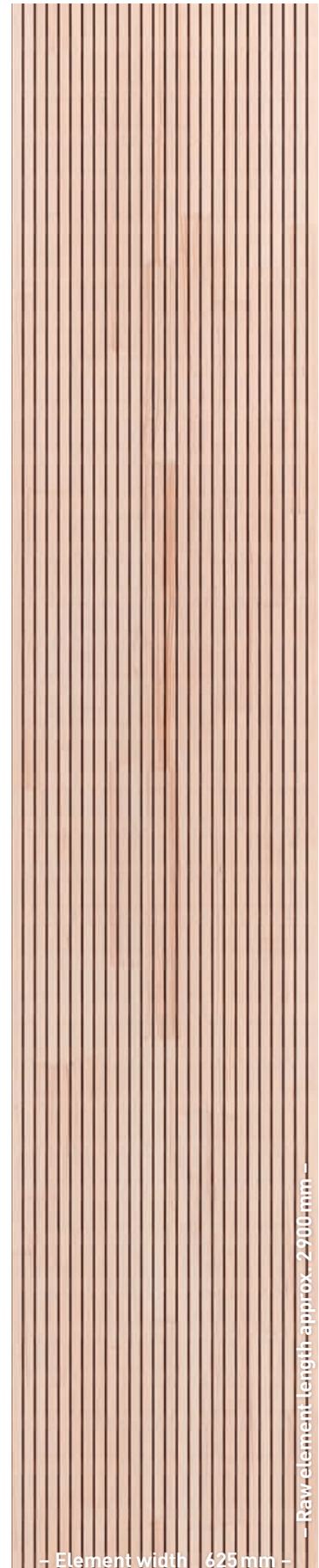
The 1-ply panels used for the WTL surface are made of knotless timber pieces, which vary considerably in terms of lightness. This creates a **patterned visual appearance**, which underlines the natural quality of the material.

Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly



— Raw element length approx. 2900 mm —

— Element width 625 mm —

Closed surfaces

available on load-bearing CLT elements



The currently most popular knotless grade combines natural vibrancy with design-oriented understatement.

OPTIMAL

Acoustic board profiles

available on load-bearing CLT elements



Options / information ▶ Page 29

-  Options: Textured brushing (standard), sanded, acoustic panels also rough sawn
-  Options: UV protective wood finish against darkening, for acoustic panels also final treatment with varnish/oil
-  Option: Flame retardant surface (only on acoustic panels and in selected configurations)



- Element width 625 mm -

- Raw element length approx. 2900 mm -

Silver fir knotless, economy _WTE

Acoustic slat profiles

available on acoustic panels
and on load-bearing CLT elements



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



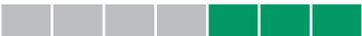
_625-23-8

Silver Fir economy **_WTE** is an affordable, almost **knotless quality with irregularities**, which are by many people are not recognised as obtrusive (e.g. with also somewhat larger lengthways cracks, knots, break-outs). Appropriate for surfaces with lower quality requirements, for example in side rooms or for ceilings at a great height.

Available for acoustic slat profiles, as a closed surface only in the profile **_625-51-1**.

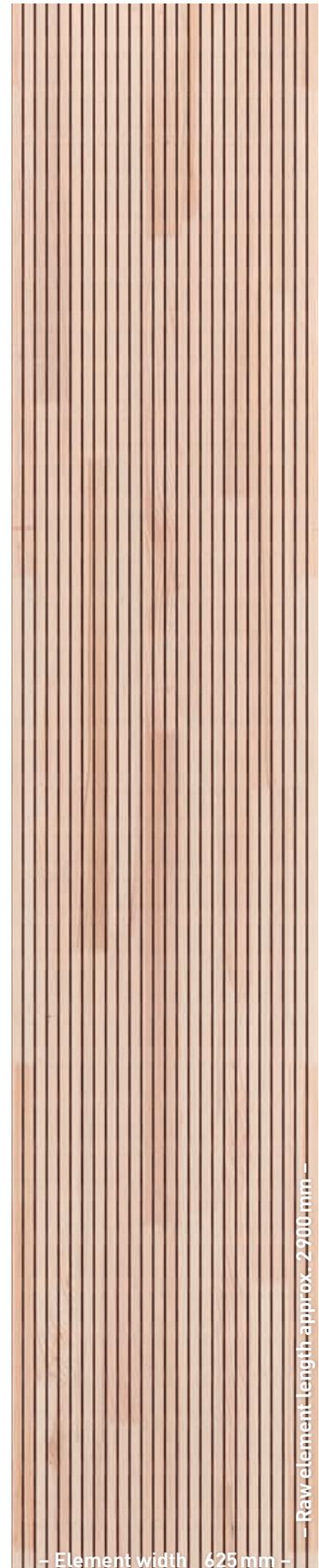
The manufacturing principle with finger joint lamellae basically corresponds to the **_WTL** surface.

Lighthness variation

slight  strong

Grain

fine  coarse, wavy or curly



— Raw element length approx. 2900 mm —

— Element width 625 mm —

Closed surfaces

available on load-bearing CLT elements



More patterned? For many applications, this grade with irregularities is adequate.

ECONOMY



Acoustic board profiles

available on supporting CLT elements



Options / information ▶ Page 29



Options: Textured brushing (standard), sanded, acoustic panels also rough sawn



Options: UV protective wood finish against darkening, for acoustic panels also transparent final treatment.

Coloured final treatment of _WTE not provided.

- Element width _625 mm -

- Raw element length approx. 2900 mm -

Silver Fir knotty _WT-ä

Acoustic slat profiles

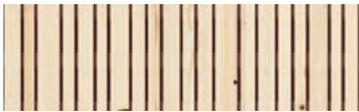
available on acoustic panels
and on load-bearing CLT elements



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



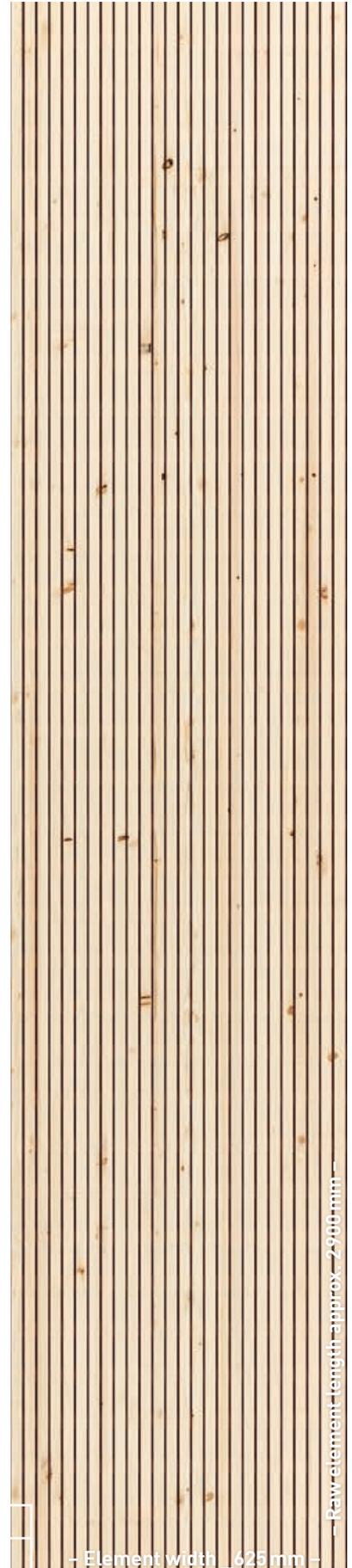
_625-18n38-6
(nature)



_625-18-6



_625-23-8



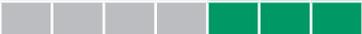
– Raw element length approx. 2900 mm –

The cheapest real wood quality **_WT-ä** is intended for applications where acoustics are important but large irregularities are not a problem. Grain and knot pattern, break-outs, wing knots etc. can occur. The very narrow lamellas have a continuous grain over the raw element length of approx. 3 m, i.e. the lamellas are not finger-jointed.

Lighthness variation

slight  strong

Grain

fine  coarse, wavy or curly

– Element width _625 mm –

Closed surfaces

available on load-bearing CLT elements



Acoustic board profiles

available on load-bearing CLT elements



Particularly favourable purchasing terms on load-bearing ceiling elements with NSi surface.

MAKE AN ENQUIRY!

Options / information ▶ Page 29



Options: Textured brushing (standard), sanded, acoustic panels also rough sawn



Options: UV protective wood finish against darkening, for acoustic panels also transparent final treatment.

Coloured final treatment of _WT-ä not provided.

– Element width _ 625 mm –

– Raw element length approx. 2900 mm –

Silver Fir knotless, continuous lamella _WTD

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



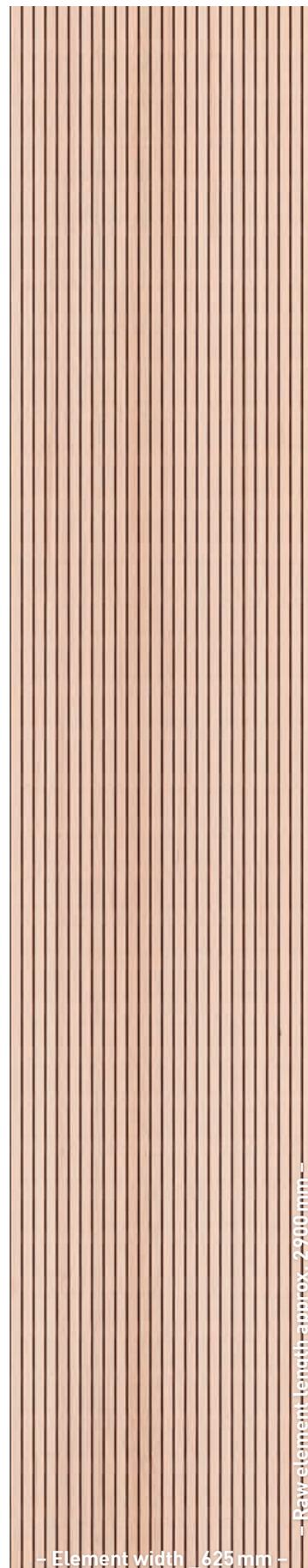
_625-18-6



_625-18n38-6
(nature)



_625-23-8



– Raw element length approx. 2900 mm –

– Element width 625 mm –

On the **_WTD** grade, the lamellae have a **continuous grain** along the raw element length of approx. 3 m, i.e. the lamellae are not finger joint. It has a similarly **patterned visual appearance** as **_WTL**.

Availability is limited, therefore **extended delivery times** are possible.

Lightness variation

slight strong

Grain

fine coarse, wavy or curly

Closed surfaces

available on load-bearing CLT elements



Acoustic board profiles

available on load-bearing CLT elements



Unlike on the other Silver Fir grades, the growth rings run across the length of nearly 3 m without a joint.

ELEGANT

Options / information ▶ Page 29



Attractive alternative for wall claddings with acoustic panels



Options: Textured brushing (standard), sanded, acoustic panels also rough sawn



Options: UV protective wood finish against darkening, for acoustic panels also final treatment.

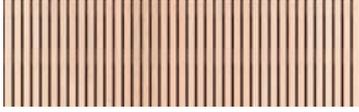
– Raw element length approx. 2900 mm –

– Element width _ 625 mm –

Silver Fir knotless, plain _WTS

Acoustic slat profiles

available on acoustic panels
and on load-bearing CLT elements



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



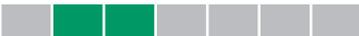
_625-23-8

The Silver Fir knotless, plain surface quality is something special: A small amount of particularly evenly coloured and fine grained timber can be obtained from the fir tree trunks, from which this refined grade is produced.

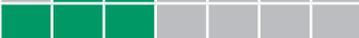
The 1-ply panels used for the **_WTS** visible surface are made of knotless timber sections, which vary less markedly in terms of lightness and are finer grained than is the case with **_WTL** grade. This therefore creates a **more serene visual appearance**.

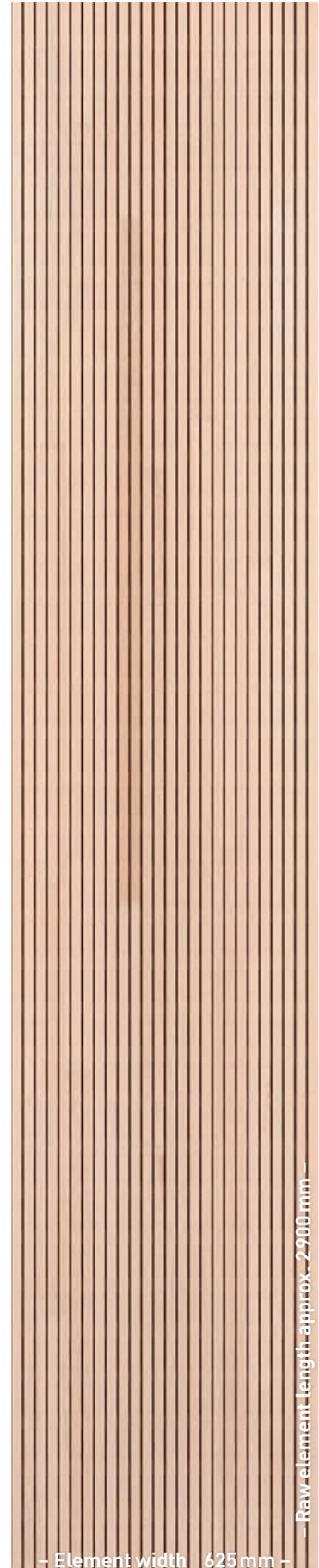
Availability is limited, therefore **extended delivery times** are possible.

Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly



— Raw element length approx. 2900 mm —

— Element width _625 mm —

Closed surfaces

available on load-bearing CLT elements



Acoustic board profiles

available on load-bearing CLT elements



Options / information ▶ Page 29



Options: Textured brushing (standard), sanded, acoustic panels also rough sawn



Options: UV protective wood finish against darkening, for acoustic panels also final treatment.

More affordable alternative for all-over final treatment: Poplar.

- Element width **_625 mm** -

- Raw element length approx. 2900 mm -

Douglas Fir (Oregon Pine) knotless _DO

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



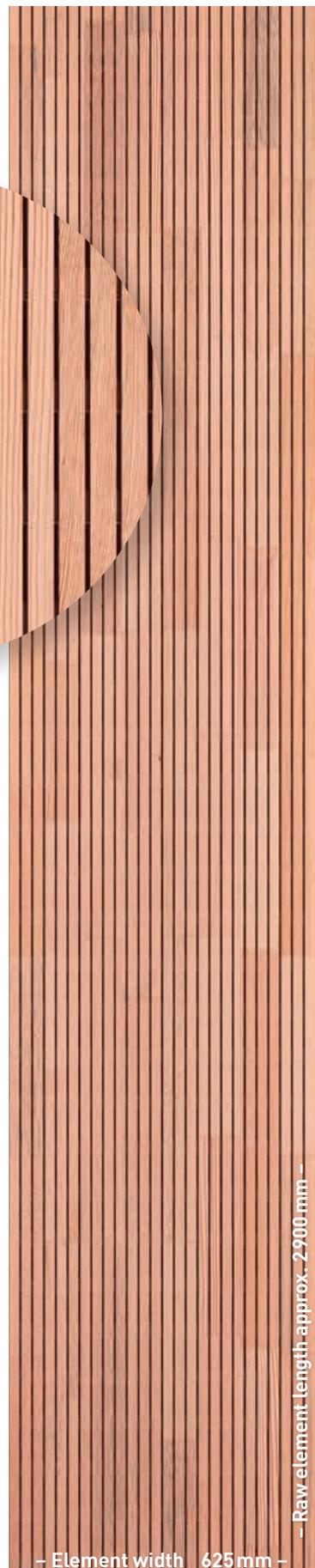
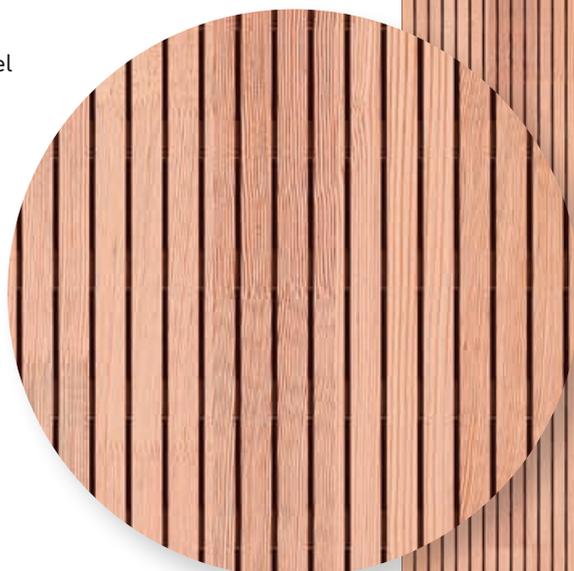
_625-18-6



_625-18n38-6
(nature)



_625-23-8



Closed surfaces

Version also possible without acoustic joints,
see Silver Fir patterned **_WTL**.

The 1-ply panels used for the **_DO** surface are made of knotless Douglas Fir timber sections, which vary in terms of lightness. The grain is evenly fine in this case. This therefore creates a **patterned visual appearance**.



Lightness variation

slight strong

Grain

fine coarse, wavy or curly

– Element width **_625 mm** –

– Raw element length approx. 2900 mm –

Spruce knotless, plain _FIS, also impregnated as _FIS-i

Acoustic slat profiles

available on acoustic panels
and on load-bearing CLT elements



_625-12-4



_625-20-4
_625-20-4-F



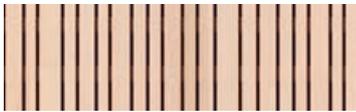
_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



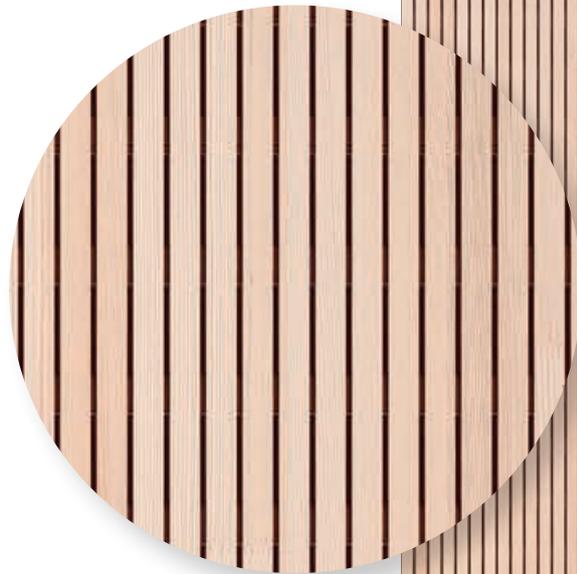
_625-18-6



_625-18n38-6
(nature)



_625-23-8



Closed surfaces

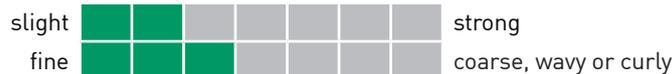
Version also possible without acoustic joints,
see Silver Fir patterned **_WTL**.

The surface quality Spruce knotless, plain is comparable with the **_WTS** grade, but has even less variation. This therefore creates a very **serene visual appearance**.

The 1-ply panels used for the **_FIS** surface are made of knotless Spruce timber sections.



Lightness variation
Grain



- Element width _625 mm -

- Raw element length approx. 2900 mm -

Spruce knotty (quality A) _FI-ä

Acoustic slat profiles

available on acoustic panels, on load-bearing CLT elements only not steamed version



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



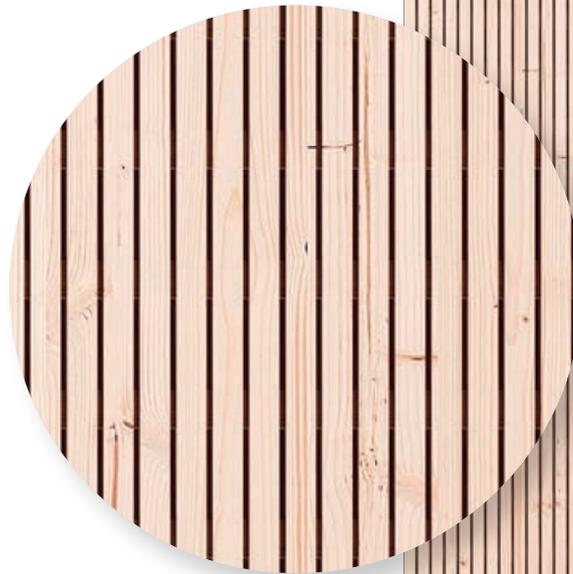
_625-18-6



_625-18n38-6
(nature)



_625-23-8



Closed surface

Version also possible without acoustic joints, see Silver Fir patterned **_WTL**.

Spruce is the classic among timber surfaces, used as it has grown.

The **even knot pattern** creates a homogeneous overall appearance for the structural element surface. On grade FI-ä, the lamellae have a **continuous grain** along the raw element length of approx. 3 m, i.e. the lamellae are not finger joint.

Due to the damaged wood situation, the procurement of the _FI-ä grade is currently (as of March 2021) very limited. The general availability must currently be clarified on a case-by-case basis; longer delivery times must be expected in any case.

Lightness variation

slight strong

Grain

fine coarse, wavy or curly

- Element width _625 mm -

- Raw element length approx. 2900 mm -

Hemlock Spruce, knotless _HE

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



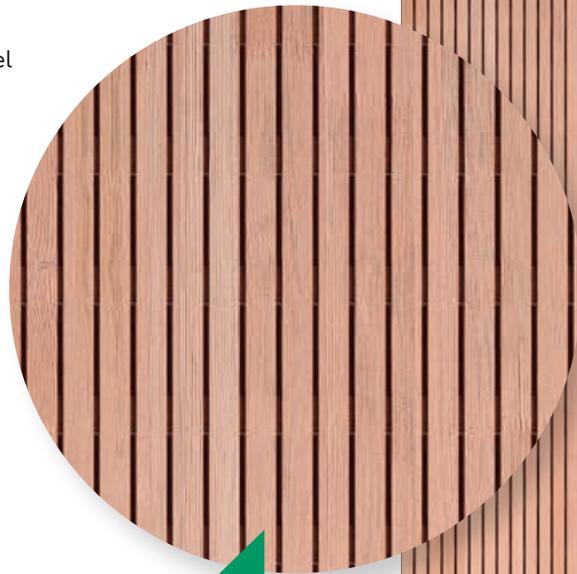
_625-18-6



_625-18n38-6
(nature)



_625-23-8



Thanks to a fine growth ring structure, the timber of the slow-growing hemlock spruce is harder than other types of softwood.

ROBUST

The 1-ply panels used for the **_HE** visible surface are made of knotless sections, which vary little in terms of lightness. Darker stripes may appear now and then. The grain is evenly **very fine**.



Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly

- Element width _ 625 mm -

- Raw element length approx. 2900 mm -

Pine knotless _KI

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



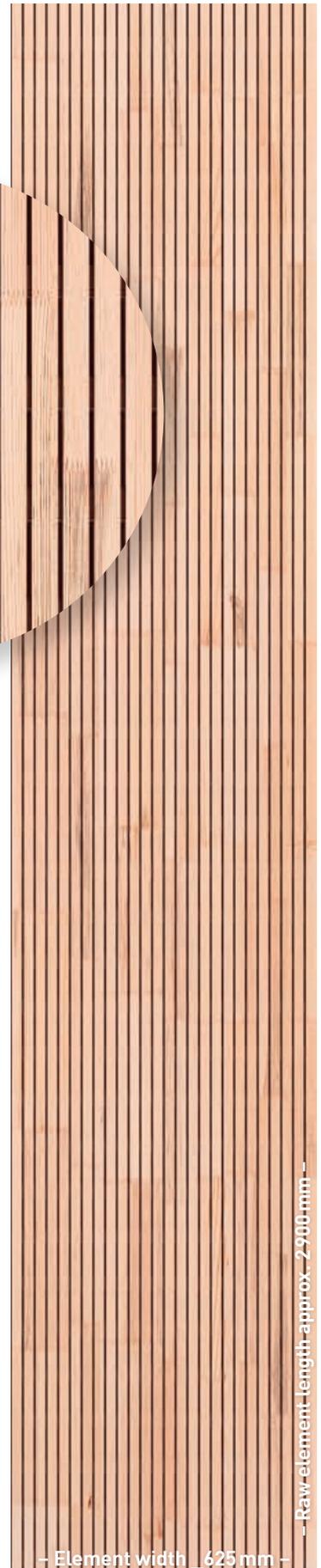
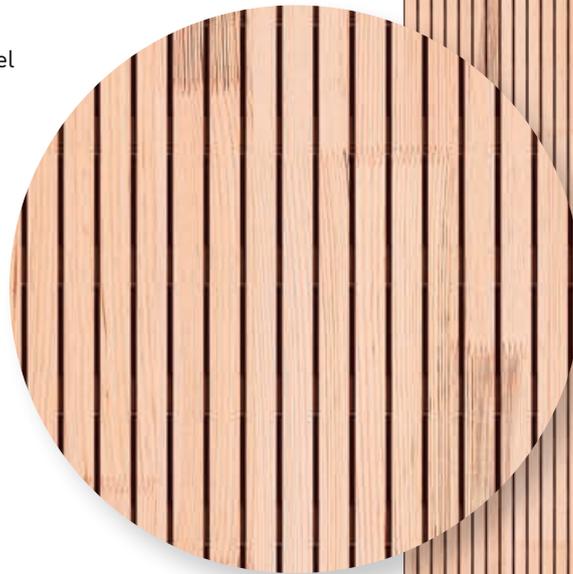
_625-18-6



_625-18n38-6
(nature)



_625-23-8



— Raw element length approx. 2900 mm —

The 1-ply panels used for the **_KI** surface are made of knotless sections, which vary in terms of lightness. Typical of Pine are lamella areas with dark spotty changes. The grain varies.



Lightness variation

slight strong

Grain

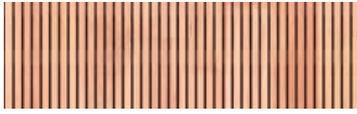
fine coarse, wavy or curly

— Element width **_625 mm** —

Larch knotless, European _LÄE

Acoustic slat profiles

available on acoustic panels,
on façade elements and
on load-bearing CLT elements



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



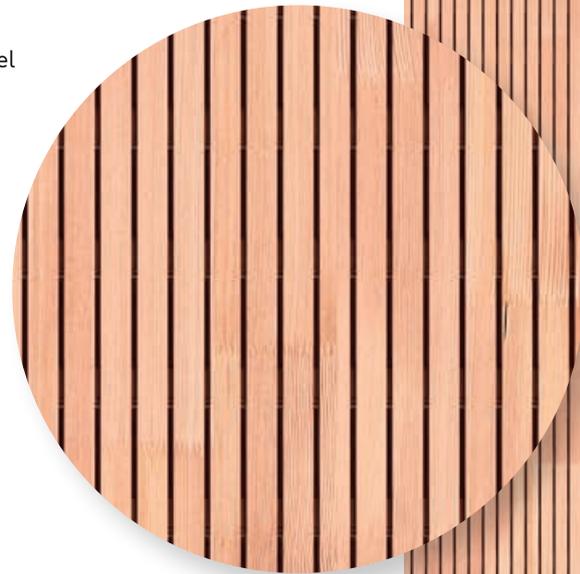
_625-18-6



_625-18n38-6
(nature)



_625-23-8



Closed surface

Version also possible without acoustic joints,
see Silver Fir patterned **_WTL**.

_LÄE

Lightness variation

slight



strong

Grain

fine

coarse, wavy or curly

- Element width _625 mm -

- Raw element length approx. 2900 mm -

Arolla Pine knotty _ZI-ä

Acoustic slat profile

available on acoustic panels
and on load-bearing CLT elements



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



_625-23-8



Balance and good sleep thanks to Arolla Pine in the bedroom: scientific research suggests a positive effect from Arolla Pine.

HEALTHY

Closed surfaces

Version also possible without acoustic joints, see Silver Fir patterned **_WTL**.

The profile **_625-12-4** in a knotty Arolla Pine surface is not a standard version and is only produced when expressly requested, as it is not possible to rule out knots from breaking out in narrow acoustic slats.

The Arolla Pine (also: Swiss Pine) is indigenous to the Alps. A positive physiological effect is attributed to its wood – it is supposed to ensure a healthy night's sleep, for example.

The 1-ply panels used for this surface are made of knotless Arolla Pine wood pieces, which vary in terms lightness and knottiness. This creates a very striking visual appearance, which underlines the natural quality of the material.

Typical of Arolla Pine wood are **dark knots** as well as the change between areas with predominantly large knots and those with medium-sized and smaller knots.



Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly



— Raw element length approx. 2900 mm —

— Element width _625 mm —

Maple knotless, European or Canadian _AHE oder _AHK

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



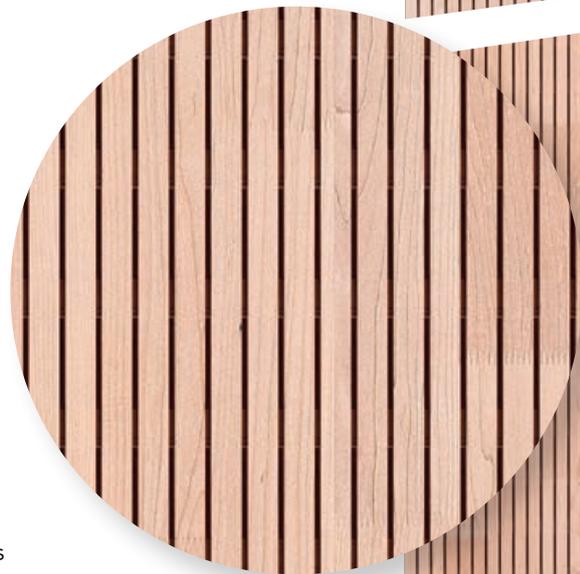
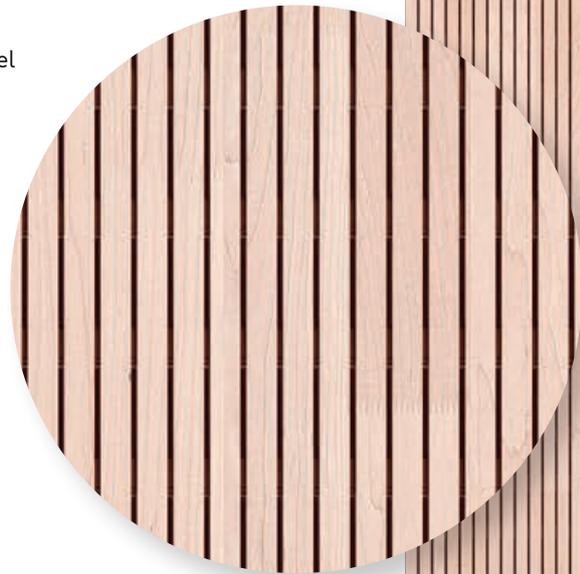
_625-18-6



_625-18n38-6
(nature)



_625-23-8



The **_AHE** surface consists of knotless pieces, which vary in terms of lightness. This therefore creates a **patterned visual appearance**.

Compared to **_AHE**, **_AHK** features less distribution in terms of lightness and looks more homogeneous overall.

_AHE

Lightness variation

slight strong

Grain

fine coarse, wavy or curly

_AHK

Lightness variation

slight strong

Grain

fine coarse, wavy or curly

- Element width **_ 625 mm -**

- Raw element length approx. 2900 mm -

Beech knotless _BU

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



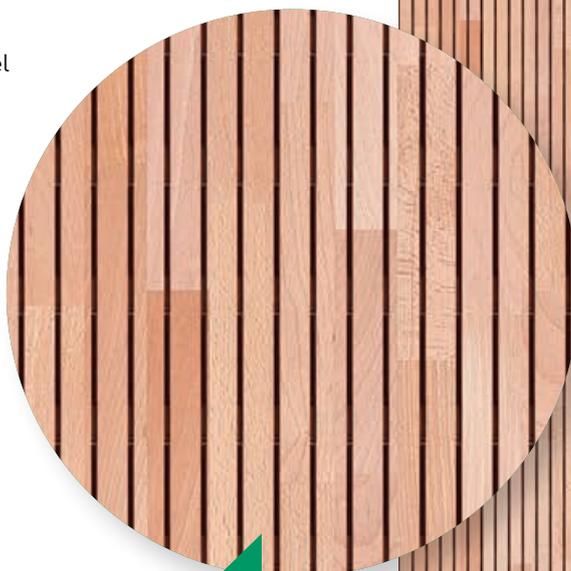
_625-18-6



_625-18n38-6
(nature)



_625-23-8



Beech wood is hard yet exudes warmth, is very robust, why is why it is also used to clad impact walls.

ROBUST



— Raw element length approx. 2900 mm —

— Element width _625 mm —

Surface made of knotless beech wood pieces with grain characteristic of this hard timber species. Visual appearance with lightness of varying distribution.



Lightness variation slight strong

Grain fine coarse, wavy or curly

Birch knotless _BI

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



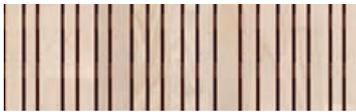
_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



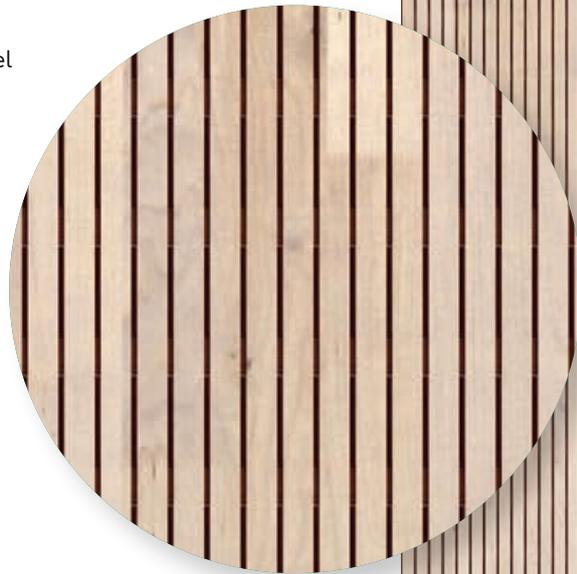
_625-18-6



_625-18n38-6
(nature)



_625-23-8



— Raw element length approx. 2900 mm —

The **_BI** surface consists of almost knotless pieces, which vary considerably, especially in the grain pattern. Despite not too variation in brightness, the uneven grain creates a patterned character for the surface.



Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly

— Element width _625 mm —

Oak knotless _EI

Acoustic slat profiles

available on acoustic panels
and on load-bearing CLT elements



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-12n25-4:3D
(nature:3D)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



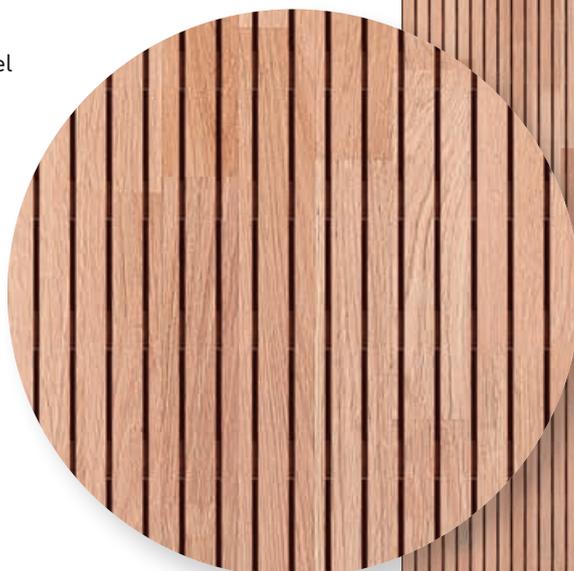
_625-18-6



_625-18n38-6
(nature)



_625-23-8



– Raw element length approx. 2900 mm –

Closed surfaces

Version also possible without acoustic joints,
see Silver Fir patterned **_WTL**.

Oak timber tends to develop stress cracks when subjected to surface machining.
A closed surface is possible under special production conditions – please get in touch with us.

In no way old-fashioned – oak is in vogue! This robust, refined element surface is also made out of knotless pieces of timber, which are connected, however, with a horizontal finger joint in such a way that the **lamella joints are recognisable as a fine, straight line**, not by the zigzag line of vertical finger joints.

This creates surfaces with a very high quality impression.



Lightness variation

slight strong

Grain fine coarse, wavy or curly

– Element width **_625 mm** –

Oak knotless, veneer (carrier impregnated) _EIF-i

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



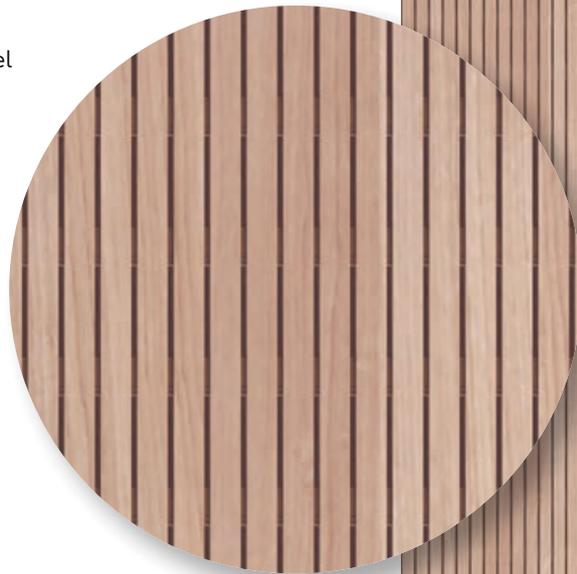
_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



— Raw element length approx. 2900 mm —

In order to obtain a flame retardant surface, a sliced veneer of oak is applied to a suitably impregnated carrier plate.

The veneer is very homogeneous across the element width, although differences in lightness may occur on the surface to adjacent elements.



Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly

— Element width _ 625 mm —

Ash knotless, plain _ESS

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



_625-23-8



– Raw element length approx. 2900 mm –

For this visible surface, single-layer boards are used in which the light-coloured trunk areas of the ash are predominantly lined up to create a **calm appearance**. The lamella sections are finger-jointed.

Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly

– Element width _625 mm –

Cherry knotless _KB

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



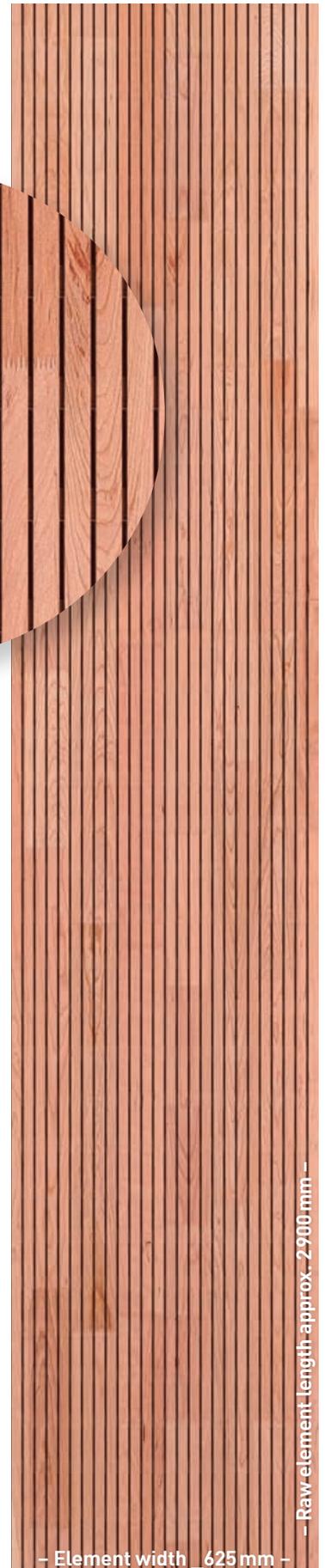
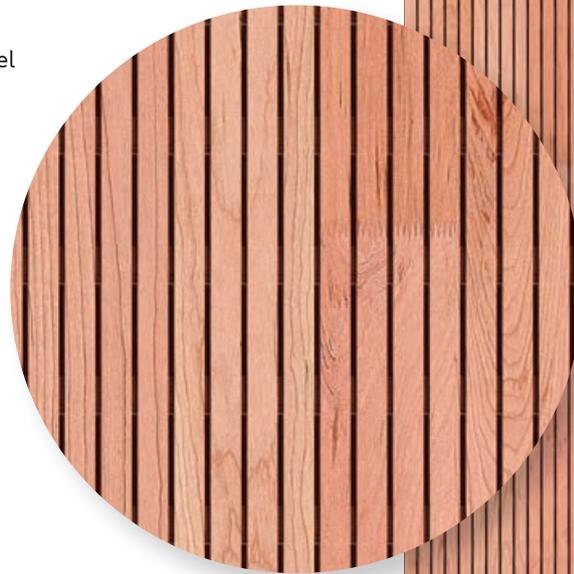
_625-18-6



_625-18n38-6
(nature)



_625-23-8



The surface made of cherry wood has a slight reddish tint, characteristically a homogeneous, **slightly veined grain**. The lamellae are finger joint lengthways.



Lightness variation

slight  strong

Grain

fine  coarse, wavy or curly

- Element width _625 mm -

- Raw element length approx. 2900 mm -

Walnut knotless, elegant (on request) _NAE

Acoustic slat profiles

available on acoustic panels



_625-12-4



_625-20-4
as a panel also with bevel
_625-20-4-F



_625-12n25-4
(nature)



_625-22n40-4 (nature)
only as panel,
also with bevel
_625-22n40-4-F



_625-18-6



_625-18n38-6
(nature)



_625-23-8



– Raw element length approx. 2900 mm –

– Element width _625 mm –

The visible surface of (American) walnut, patterned, consists of almost knotless sections of timber, which vary highly in terms of lightness. This therefore creates a **very patterned visual appearance**.

Compared to **_NAL** the European Walnut grade **_NAE** is much more homogeneous in terms of lightness.

_NAE

Lightness variation

slight strong

Grain

fine coarse, wavy or curly

Surface treatment

Texture

As standard, LIGNO genuine wood surfaces are slightly brushed. Brushing out soft growth ring parts makes them more resistant to scratches. The character of the texture depends on the type of wood.

A smooth, sanded finish is also available on request.

Acoustic panels are also available with a saw cut appearance.

Key:



Brushing makes an clearly noticeable texturing possible on the types of softwood marked with this symbol



Brushing is possible on these harder types of wood, yet the effect is weaker



Brushing is not possible on these surfaces

Primer for protection against light

Available for load-bearing cross-laminated timber elements and for acoustic panels.

A transparent UV protection primer **_buV** can be applied at the factory to prevent the wood surface from darkening. The glaze used is suitable for indoor use (non-toxic).

A final treatment – e.g. with a suitable varnish – should then be carried out if washing out cannot be ruled out. On ceiling or roof undersides, there is usually no need for this.

Final treatment

Only available for acoustic panels.

The LIGNO Akustik light acoustic panels can be supplied from the factory oiled or varnished in different ways. Note: The surface of oiled elements is textured as standard, when varnished it is not textured but sanded smooth (CH: slightly textured).

Detailed information about final treatment options:

► [Technical data sheet for LIGNO Acoustic light](#)

Examples:

- Oil or varnish transparent (matt)
- Oil or varnish pigmented white, e.g. **_bh-w10**, **_bh-w20** or **_bl-w10**
- Oil or varnish white, e.g. almost opaque **_bl-w20** and coloured **_bl-xy** (choice of colors according to RAL system)
- Chalked **_bl-w10k** (especially on oak)

Key:



Treatment is almost unlimited with these types of wood, details in the element data sheet or from the Lignotrend specialist adviser.



Treatment is possible or useful with restrictions with these types of wood. For example, possible breakouts rule out an opaque coat of paint.



For types of wood not marked with a symbol, the final treatment is usually not useful or possible due to other configuration options.

Flame retardancy

Available only for selected versions of the acoustic panels.

By using a suitably impregnated surface layer, LIGNO Acoustic light and Acoustic Sport panels can be produced with a flame retardant visible surface. Classification concerning reaction to fire according to DIN EN 13 501-1.

Classified panel version according to profile, element type and wood type

Classification	625-12-4	625-20-4	625-20-4-F	625-12n25-4	625-12n25-4:3D	625-22n40-4	625-22n40-4-F	625-22n40-4:3D-F	625-18-6	625-18n38-6	625-23-8	
Standard flammability	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	
Standard _D-s2-d0	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	□ ■	
fire retardant	625-12-4	625-20-4	625-20-4-F	625-12n25-4	625-12n25-4	625-18-6	625-18-6	625-18n38-6	625-18-6	625-18n38-6	625-23-8	
_C-s2-d0	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□	□	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	□ LIGNO® Acoustic light 3S-33_WTL-i 3S-33_FIS-i 3S-33{EIF-i	not possible	not possible
	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	■ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	not possible	
_B-s2-d0	□ LIGNO® Acoustic light 3G-33_WTL-i	□ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	□ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	□ LIGNO® Acoustic light 3G-33_WTL-i 3G-33_FIS-i	□ LIGNO® Acoustic light 3G-33_WTL-i	□ LIGNO® Acoustic light 3G-33_WTL-i	□ LIGNO® Acoustic light 3G-33_WTL-i	□ LIGNO® Acoustic light 3G-33_WTL-i	□ LIGNO® Acoustic light 3G-33_WTL-i	□ LIGNO® Acoustic light 3G-33_WTL-i	not possible	



without further surface treatment



with painted and oiled surface
HD-Lux spray paint / Biofa oil, UV-protection stain (only with normal flammable)

Notes:

- Flame retardant surfaces cannot be coated with UV protective glaze.
- Varnishing of surfaces possible, however no classification report is available at the moment.
- Elements with flame retardant surface may only be used in spaces where temperatures >15°C and relative humidity < 75 % are found during typical use.

Instructions for use

Details

Important instructions for use

The closed visible surfaces are designed for room humidities > 35 % – an indoor climate that is also healthy and comfortable for the users. At these levels, the likelihood of stress cracks in closed wood surfaces is very small. On elements with acoustic profiles, no stress cracks are expected to occur. To prevent cracks, the humidity level should not fall below 35 % therefore.

The recent air humidity can be directly concluded from the wood humidity (Keylwerth / Loughborough diagram). If, according to this, the air humidity has fallen below 35 % and a too low wood humidity has thus been reached, no guarantee for the freedom from cracks can be assumed.

Notes:

- Setting the exchange of air on ventilation systems too high can also lead to the air in the room drying out disadvantageously, particularly if the system is not equipped with moisture recovery.
- LED lights are optimal as recessed luminaires as their heat build-up is not so high and for elements with a closed surface, any drying out leading to cracks surrounding the opening is reduced. Fitting instructions provided by the luminaire manufacturers must be observed as a matter of principle!

Surface qualities in detail

	Page	Lamellae finger joint	Rift / Semi-rift cut	Curly / wavy spots	Shimmery wood rays	Growth flaws	Knots	Loose knots / knotholes	Ingrown bark or bark pockets	Resin pockets	Beetle holes (diam. approx. 1.5mm)	Blue stain / red stripe	Sapwood	Pith	Discolouration	Small cracks	Finger joint breakout	knotholes max. 1x20mm (w x l)	Comments
Silver Fir knotless, patterned _WTL	4	■	■	□	☒	□	□ < 4mm	☒	< 100x4 mm	☒	□	□	□	☒	□	□	□	□	
Silver Fir knotless, impregnated _WTL-i	4	■	■	□	☒	□	□ < 4mm	☒	< 100x4 mm	☒	□	□	□	☒	□	□	□	□	
Silver Fir knotless, economy _WTE	6	■	■	■	☒	■	■ < 30mm	☒	< 100x5 mm	☒	□	□	□	☒	□	□	■	■	more defects tolerated
Silver Fir knotty _WT-ä	8	☒	■	■	☒	□	■ < 25mm	■	< 50x1 mm	☒	□	□	□	☒	□	□	☒	■	more defects tolerated
Silver Fir knotless without joint _WTD	10	☒	■	☒	☒	□	□ < 4mm	☒	< 100x4 mm	☒	□	□	□	☒	□	□	☒	□	
Silver Fir knotless, plain _WTS	12	■	■	☒	☒	☒	□ < 4mm	☒	< 50 x 1 mm	☒	☒	☒	□	☒	☒	☒	☒	☒	limited availability
Douglas Fir knotless _DO	14	■	■	☒	☒	□	□ < 3mm	☒	< 50 x 1 mm	□ < 30x3 mm	□	□	☒	☒	■	□	□	□	
Spruce knotless, plain _FIS	15	■	■	☒	☒	☒	□ < 3mm	☒	< 50 x 1 mm	□ < 30x3 mm	☒	☒	□	☒	☒	☒	□	□	
Spruce knotless, plain, impregnated _FIS-i	15	■	■	☒	☒	☒	□ < 3mm	☒	< 50 x 1 mm	□ < 30x3 mm	☒	☒	□	☒	☒	☒	□	□	
Spruce knotty (A qual.) _FI-ä	16	☒	■	■	☒	□	■ < 25mm	■	< 50 x 1 mm	□ < 30x3 mm	□	□	□	■	□	□	☒	□	
Hemlock spruce, knotless _HE	17	■	■	☒	☒	□	□ < 3mm	☒	< 150 x 1 mm	☒	□	□	□	☒	□	□	□	□	
Pine knotless _KI	18	■	■	□	☒	□	□ < 6mm	☒	< 50 x 1 mm	□ < 30x3 mm	□	□	■	☒	□	□	□	□	
Larch knotless, European _LÄE	19	■	■	☒	☒	□	□ < 6mm	☒	< 50 x 1 mm	□ < 30x3 mm	□	□	□	☒	□	□	□	□	
Arolla pine (Swiss pine) knotty _ZI-ä	20	■	■	■	☒	□	■ < 25mm	■	< 50 x 1 mm	□ < 30x10 mm	□	□	■	■	□	□	□	□	
Maple knotless, European _AHE	21	■	□	■	■	■	□ < 6mm	☒	< 50 x 1 mm	☒	☒	☒	■	□	□	☒	□	□	
Maple knotless, Canadian _AHK	21	■	□	■	■	■	□ < 6mm	☒	< 50 x 1 mm	☒	☒	☒	■	□	□	☒	□	□	
Beech knotless _BU	22	■	■	□	■	□	□ < 3mm	☒	< 50 x 1 mm	☒	□	☒	□	□	□	□	□	□	
Birch knotless _BI	23	■	□	■	□	■	■ < 10mm	☒	< 50 x 2mm	☒	□	□	□	□	■	□	□	□	
Oak knotless _EI	24	■	■	□	■	□	□ < 6mm	☒	< 50 x 1 mm	☒	□	☒	□	□	□	□	☒	□	horizontal lamella joint
Oak knotless, veneer _EIF-i	25	☒	■	□	■	□	□ < 3mm	☒	☒	☒	□	☒	□	□	□	□	☒	□	impregnated carrier
Ash knotless, plain _ESS	26	■	■	■	☒	☒	□ < 3mm	☒	< 50 x 1 mm	☒	☒	☒	□	☒	☒	☒	☒	☒	
Cherry knotless _KB	27	■	□	■	☒	■	□ < 6mm	☒	< 50 x 3mm	☒	☒	☒	□	□	■	☒	□	□	
Walnut knotless, elegant _NAE	28	■	□	■	☒	□	□ < 6mm	☒	< 50 x 3mm	☒	☒	☒	□	□	□	☒	□	□	
Industrial quality NSi _Ind	32	■	□	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

The surfaces can feature repairs of timber defects performed at the factory, e.g. with patches for knots or resin pocket or with a wood filler.

Industrial qualities

Industrial quality NSi _Ind

Surface for the non-visible area, destined for cladding. Degraded panels from other qualities may be mixed in a consignment, e.g. knotty Spruce, Silver Fir or Larch. Larger longitudinal cracks, loose knots and breakouts are also possible. Instead of 1-ply panels, the surface may also consist of tightly laid individual boards.

(No illustration)

*Particularly favourable
purchasing conditions for
load-bearing ceiling
elements with NSi surface.*

ENQUIRE!

