

# OAK EUROPEAN NATURAL / 15 MM

## CHARACTERISTICS

- Tongue and groove all round, mini bevel all round, surface sanded with 150 grit, in accordance with EN standard 13629
- Standard finish: 2 x natural oiled
- Fixed lengths: 1753 mm, 2053 mm, 2653 mm
- FSC® (C074686) on request
- Wood moisture 9 % +/- 2 %



**Surface treatment**  
see extra datasheet

Thickness▼	Width►							137 mm	168 mm	Pcs./package
15 mm		●		●	●			●		8
15 mm				●	●●				●	8

● suitable installation ●● suitable for underfloor heating; in case of deviations of the room climate outside the optimal range joint formation or cupping to a small extent is to be expected ● = standard programme

**Packing:** 8 pcs./package

**DiBT:** building authority approval

**Cracks:** Occasional surface cracks are permissible (filled). Hairline cracks are occasionally permitted. Occasional head cracks are permissible when filled with putty.

**Bark pockets:** Occasional bark pockets up to a size of 1 cm<sup>2</sup> are permissible.

**Knots:** Sound knots are allowed in any number up to a maximum diameter of 1/6 board width. Dark knots up to a size of 8 mm are permissible. Small knot cracks and edge break-outs are

occasionally permissible. Loose or falling knots are not permissible.

**Discolouration:** Natural discolouration is permissible.

**Sapwood:** Sapwood at the edge up to 1/10 of the board width is permissible.

**Wood growth:** different grain patterns are permissible.

**Pith ray:** A pith ray with a length of 300 mm is occasionally permissible.

**Pest infestation:** Not permissible

## Extract from standard EN 13629:2020

Maximum deviation from nominal dimensions of the element at the time of initial delivery. Based on a reference wood moisture content of 9 %. Valid for planks with raw sanded surface.

**Length:** ± 2,0 mm

**Thickness:** ± 1,0 mm

**Longitudinal curvature horizontal up to 1 m:** 0,5 ‰ based on total length

**Longitudinal curvature horizontal from 1 m:** 2 ‰ based on total length

**Width:** ± 1,0 mm

**Transverse curvature:** ≤ 0,7 ‰

**Offset:** ≤ 0,3 mm

**Perpendicularity:** Max. 0,2 ‰ of the plank width

**Longitudinal curvature horizontal when glued:** 1 ‰ based on total length

**Longitudinal curvature vertical:** 0,5 ‰ related to length

### Declaration of performance for solid wood flooring for interior use

No. FW85510500: Surface oil-Kneho | Bending resistant floor elements - components wood flooring system 3 | EPH Desden -TPC No. W-12-010 | EN 14342 : 2013

No. FW85510001: Surface unfinished | Bending resistant floor elements - components wooden flooring system 4 | EN 14342 : 2013 EN 2013

No. FW85510200: Surface lacquer-Kneho | Bending-resistant floor elements - components wooden flooring system 4 | EN 14342 : 2013

Main features	Performance	Harmonised technical specification
Behaviour in fire	Cfl,-s1 spruce, beech, oak Dfl,-s1 other wood species	EN 14342:2013
Emission (content) of formaldehyde	E1	
Emission of (content of) pentachlorophenol	PCP ≤ 5 x 10-6n	
Emission of other dangerous substances	no performance requirement defined	
Breaking strength, sliding resistance, thermal conductivity	no performance requirement defined	
Natural durability against fungal infestation	according to EN 335	
Technical characteristics		
Thermal resistance m²K/W =0,09		Lambda value (thermal conductivity) λ-value = 0,17

Sorting is carried out by our experienced staff and according to fixed rules. However, occasional sorting errors cannot be entirely excluded. Provided that this does not affect more than 5 % of the order quantity, this does not constitute grounds for complaint. For wood as a natural product, differences in colour and structure are always a sign of guaranteed authenticity.

# OAK EUROPEAN NATURAL / 21 MM

## CHARACTERISTICS

- Tongue and groove all round, mini bevel all round, surface sanded with 150 grit, in accordance with EN standard 13629
- Standard finish: 2 x natural oiled
- Fixed lengths: 1753 mm, 2053 mm, 2653 mm
- FSC® (C074686) on request
- Wood moisture 9 % +/- 2 %



**Surface treatment**  
see extra datasheet

Thickness ▾	Width ►							137 mm	168 mm	198 mm	Pcs./package
21 mm		•	•	•	•	•	•	●			6
21 mm			•	•	••	••			●		6
21 mm			•	•						●	6

• suitable installation    •• suitable for underfloor heating; in case of deviations of the room climate outside the optimal range joint formation or cupping to a small extent is to be expected    ● = standard programme

**Packing:** 6 pcs./package

**DiBT:** building authority approval

**Cracks:** Occasional surface cracks are permissible (filled). Hairline cracks are occasionally permitted. Occasional head cracks are permissible when filled with putty.

**Bark pockets:** Occasional bark pockets up to a size of 1 cm<sup>2</sup> are permissible.

**Knots:** Sound knots are allowed in any number up to a maximum diameter of 1/6 board width. Dark knots up to a size of 8 mm are permissible. Small knot cracks and edge break-outs are

occasionally permissible. Loose or falling knots are not permissible.

**Discolouration:** Natural discolouration is permissible.

**Sapwood:** Sapwood at the edge up to 1/10 of the board width is permissible.

**Wood growth:** Different grain patterns are permissible.

**Pith ray:** a pith ray with a length of 300 mm is occasionally permissible.

**Pest infestation:** Not permissible

## Extract from standard EN 13629:2020

Maximum deviation from nominal dimensions of the element at the time of initial delivery. Based on a reference wood moisture content of 9 %.  
Valid for planks with raw sanded surface.

**Length:** ± 2,0 mm

**Thickness:** ± 1,0 mm

**Longitudinal curvature horizontal up to 1 m:** 0,5 ‰ based on total length

**Longitudinal curvature horizontal from 1 m:** 2 ‰ based on total length

**Width:** ± 1,0 mm

**Transverse curvature:** ≤ 0,7 ‰

**Offset:** ≤ 0,3 mm

**Perpendicularity:** Max. 0,2 ‰ of the plank width

**Longitudinal curvature horizontal when glued:** 1 ‰ based on total length

**Longitudinal curvature vertical:** 0,5 ‰ related to length

Declaration of performance for solid wood flooring for interior use

No. FW85510500: Surface oil-Kneho | Bending resistant floor elements - components wood flooring system 3 | EPH Desden -TPC No. W-12-010 | EN 14342 : 2013

No. FW85510001: Surface unfinished | Bending resistant floor elements - components wooden flooring system 4 | EN 14342 : 2013 EN 2013

No. FW85510200: Surface lacquer-Kneho | Bending-resistant floor elements - components wooden flooring system 4 | EN 14342 : 2013

Main features	Performance	Harmonised technical specification
Behaviour in fire	Cfl-s1 spruce, beech, oak Dfl-s1 other wood species	
Emission (content) of formaldehyde	E1	
Emission of (content of) pentachlorophenol	PCP ≤ 5 x 10-6n	EN 14342:2013
Emission of other dangerous substances	no performance requirement defined	
Breaking strength, sliding resistance, thermal conductivity	no performance requirement defined	
Natural durability against fungal infestation	according to EN 335	
Technical characteristics		
Thermal resistance m <sup>2</sup> K/W = 0,12		Lambda value (thermal conductivity) λ-value = 0,17

Sorting is carried out by our experienced staff and according to fixed rules. However, occasional sorting errors cannot be entirely excluded. Provided that this does not affect more than 5 % of the order quantity, this does not constitute grounds for complaint. For wood as a natural product, differences in colour and structure are always a sign of guaranteed authenticity.

# THE INSTALLATION OPTIONS:



Floating installation with clips  
130/135/137 mm plank width



Installation with screws



Installation with glue



Full-surface bonding on underfloor heating



Dry construction elements with underfloor heating (screwed to intermediate battens)



Installation with clips on underfloor heating (screed or dry construction systems; floating "System FEEL WOOD")

Type of wood	λ-Value	m²K/W	Thickness [mm]	Width [mm]						
Spruce Nordic	0,13	0,12	15	135	•		•	•		•
Spruce Nordic	0,13	0,15	19	135	•	•	•	○	•	○
Spruce Nordic	0,13	0,19	25	135	•	•	•			
Pine Nordic	0,13	0,15	19	135	•	•	•	○	•	○
Larch European	0,12	0,13	15	135	•		•	•		•
Larch European	0,12	0,16	19	135	•	•	•			
Larch Canadian	0,15	0,10	15	130	•		•	•		•
Larch Canadian	0,15	0,13	19	130	•	•	•	○	•	○
Larch Canadian	0,15	0,17	25	130	•	•	•			
Canadian Douglas fir	0,15	0,13	19	178		•	•			
Stone Pine	0,13	0,15	19	135	•	•	•	○	•	○
Oak European	0,17	0,09	15	137	•		•	•		•
Oak European	0,17	0,09	15	168			•	••		
Oak European	0,17	0,12	21	116		•	•	•	•	
Oak European	0,17	0,12	21	137	•	•	•	•	•	•
Oak European	0,17	0,12	21	168		•	•	••	••	
Oak European	0,17	0,12	21	198		•	•			
Red Oak European	0,17	0,09	15	137	•		•	•		•
Ash European	0,17	0,12	21	137	•	•	•	•	•	•
Oak Herringbone	0,17	0,09	21	137		•	•	•	•	

Glue (e.g. Sika 54)	0,08	0,03	2
Cork	0,08	0,04	3
Wood fibre board	0,07	0,04	3

m²K/W thermal resistance

λ-Value Lambda value (thermal conductivity)

- suitable installation method
- suitable for underfloor heating; in case of deviations of the room climate outside the optimal range joint formation or cupping to a small extent is to be expected
- conditionally suitable for underfloor heating; depending on additionally used system elements, the recommended thermal resistance could be exceeded. Slower reaction time during heating/cooling is to be expected