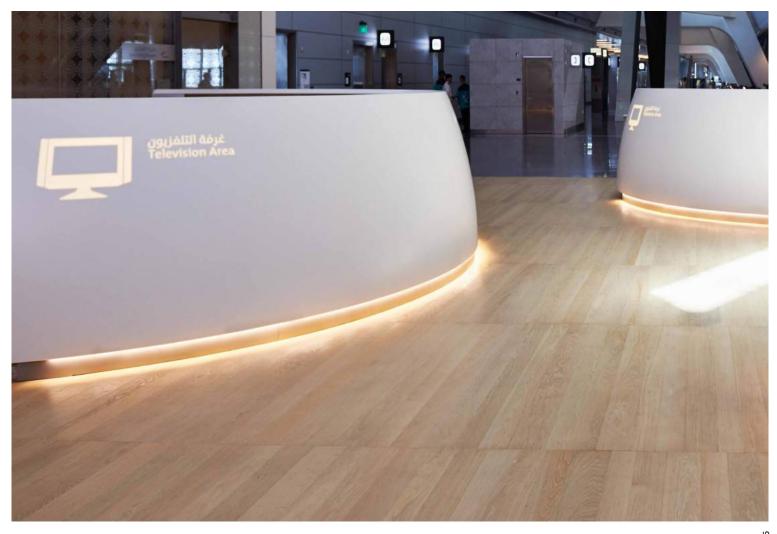
Flooring

Short Board





Short Board

Product specifications

Description	Construction:	Multi-layer engineered board			
	Top-layer:	Oak veneer			
	Carrier: Birch plywood				
Length	2400 - 2950 mm; prop	portionally short lengths 1450 mm, 1950 mm) up to 10 %.			
Width	160-240 mm in fine and medium selection. In steps of 10 mm ¹ .				
Thickness ³	KD9 9mm	KD 15 15 mm			
	KD 12 12 mm	KD 18 18 mm			
Top-layer ¹	2.8 mm; glued waterproof and formaldehyde-free.				
Surface	Schotten & Hansen pre-finished, permeable surface.				
	Surface treatment with natural oils, resins and waxes.				
	Schotten & Hansen surfaces can be regenerated without sanding or mechanical treatment.				
	Avoid strongly acidic	-			
		ccording to BS 7976-2:2002 - mean value 54 (low slip hazard under dry			
	conditions); test specimen in fine selection and treatment machining.				
Wood moisture content	On delivery: approx. 8				
		ess during production reduces shrinkage and swelling behaviour of the			
	floor boards after installation.				
Emissions	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717- 1				
	VOC emission accord	ing to AgBB-Schema < 1 mg / m³			
	ENISSIONS CANS L'AIR INTÉRIEUR				
	(m) A+				
Fire behaviour classification	Cfl – s1 according to EN 13501-1:2010				
Profile processing	With circumferential groove and tongue;				
	Chamfer: approx 0.7 mm, 30°. Other chamfer options on request.				
Installation	Full bonding with permanently elastic adhesive. Installation according to DIN 18356.				
	Requirement on subsoil: Installation-ready subsoil according to DIN 18356 and DIN 18202				
	chart 3, line 4 increased requirements.				
	Recommended adhesive: BONA Quantum or adhesive of equal quality (adhesive used for				
	installation has to be approved by general building inspectorate); suitable for gluing the floorboards on screed.				
Underfloor heating	Schotten & Hansen flo	porboards are well-suited for use in combination with underfloor heatin			
	with hot water or electrically.				
	Heat conductivity λ [W/(m*K)]: oak top layer 0.169 (calculated according to EN 14342:2013)				
	Heat contact resistance R [m ² K/W]: oak top layer 0.088 (calculated according to EN 14342:2013)				
	Maximum surface temperature of the floorboards: 29° C.				
Cleaning & Care	Schotten & Hansen cleaning and caring products.				
	Schotten & Hansen recommends the use of a floor polishing machine.				
	For further information please see the cleaning and caring instructions or contact our service				
	department: service@schotten-hansen.com				
Recycling	Schotten & Hansen wood products are recyclable according to the waste wood regulation				
Recycling	Schotten & nansen w	bod products are recyclable according to the waste wood regulation			

¹ Distribution of lengths and widths according to production requirements.

³ (± 0.5 mm)



Flooring 3/5

Short Board

Edition Oak



Character Selection⁴

1 Fine (160-280 mm width)	Even and calm wood structure with few small knots and fine cracks, mended by hand.
2 Medium (160-360 mm width)	Distinct wood structure with knots, shrinkage and wind cracks, mended by hand.

Up to 5% of the boards may originate from the corresponding neighboring selection.

Treatment⁴

1 Brushed	Accentuate the wood's typical grain structure by brushing out early wood.
3 Shrunk⁵	Special processes create an expressive surface with the character of naturally aged wood.

2 Medium / 1 Brushed we recommend only for selected colours, e.g. from Edition Oak: Oyster dark, Linen dark, Smoke medium and dark, Mocha medium and dark. With light colours and structured processing, knots can appear dark.



Colour between floorboards is subject to variations and display exhibits or samples, as far as these are due to the natural quality of the used material as well as customary.

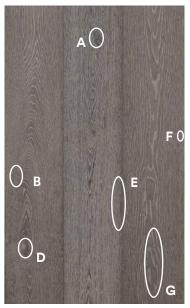
4 Available on request / selectable. Possibly not available in all colours and/or sizes. Customised products on request.

⁵ Patented Schotten & Hansen surface treatment.



1. Fine

Even and calm wood structure, with few small knots and fine cracks, mended by hand.



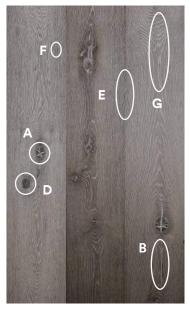
Not included: Splay knots, moon rings

Characteristics

A Knot

2. Medium

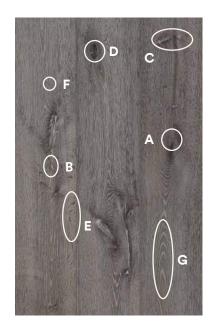
Distinct wood structure, with knots, shrinkage and wind cracks, mended by hand.



Not included: Splay knots

3. Coarse

Very lively wood structure, with selected knots, distinctive shrinkage and wind cracks, mended by hand.



Description Knots firmly intergrown together with the wood tissue. The cracks in a knot (intergrown) are filled by hand. **B** Cracks Cracks caused by e.g. growth stresses or mechanical impacts such as wind, frost or dry weather periods are filled by hand, using a specially produced putty, colour matched to the wood colouration. C Splay knots When a branch is cut along its longitudinal axis, this results in a splay knot, stretching out from the core. **D** Loose knots A knothole happens when a knot separates from the wood tissue and drops out. These holes are manually filled with matching wooden implants. E Medullary rays The flakes are created by the medullary rays of a tree that formerly provided it with water and nutrients. Transversely running rays are more frequently represented in both the medium and coarse grades. **F** Pinknots Very small knots, which appear in the form of dots, occassionally in close arrangements in the medium and coarse grade selections. G Cathedral The wood pores follow the consecutive annual rings. In the medium and coarse selection grades, the otherwise conical curves may also take a wild coarse. H Moon rings Late frost periods can cause the formation of moon rings, which appear as visible light rings in the cross-section. These rings occur more often in the medium and coarse grades, which are not depicted in the images above.

The above images symbolise the respective characteristics. These characteristics may appear slightly differently, depending on the chosen treatment and colouration, among other factors. Please note, up to 5% of your order quantity can include planks from an adjacent grade selection.

Short Board

Further Information

Indoor climate and wooden floor

Wood is a natural material that is adjusting to the indoor climate. Wood absorbs moisture from the air and releases it again.

We would like to point out that during the heating period, the floorboards might strongly dry out and thus develop shrinkage cracks. Cracks caused by low air humidity during the heating period do not justify complaint.

With the maintenance of a comfortable and healthy indoor climate of 20° C and 50% relative humidity during the heating season, you can largely avoid the negative effects of this natural phenomena. Thermal- and hygrometers control the air in your rooms easily. In case the air is too dry, suitable measures for humidifying the air must be taken. We recommend you a humidifier control - hygrostat for obtaining a constant air humidity.

Installation should be carried out professionally by a trained Schotten & Hansen partner.

Bonding

The preparation of the subsoil is to be carried out in accordance with the guidelines of the adhesive manufacturer and relevant DIN standards.

For the bonding of all Schotten & Hansen floor products we recommend a solvent-free and elastic adhesive.

In the process of glueing, full bonding to the subsoil and a sufficient contact pressure during the setting has to be ensured.

Bonding on Screed

First, an inspection of the subsoil and the application requirements has to be conducted according to VOB Part B DIN 1961 and Part C DIN 18356. Due to the large lengths and widths of some flooring products, increased care is required for the evenness of the subsoil.

Installation on underfloor heating

All Schotten & Hansen long boards are to be fully bonded with elastic adhesive to underfloor heating. Prior to this, a thorough inspection of the heating screed's readiness for installation has to be carried out – in particular the heating protocol and the details of test points (pursuant to DIN standards) have to be documented by the screed layer. The adhesive must be suitable for bonding on an underfloor heating system.

Please observe the maximum surface temperature of 29° C.

Additionally, during a heating-period the air humidity should be improved. Otherwise the floorboards might strongly dry out and develop shrinkage cracks. Cracks caused by low air humidity during the heating period do not justify complaint.

Important measurements prior to installation:

- Let the unpacked workpieces acclimatise in the final room conditions for approx. one week until the equilibrium moisture content is reached.
- Switch off underfloor heating three days before installation.
- Measure moisture content of the screed.
- Keep room climate constant at 45 % ± 5 % relative air humidity. This also applies for the next few days after the installation (during this time increase underfloor heating by 5° C per day).
- Prepare a heating protocol.

All information on this data sheet is to be considered as advice and is based on empirical investigations according to today's state of the art. Therefore, all provided information on the suitability, processing and application of our products, as well as technical advice and further particulars, do explicitly not release the customer and/or user from verifying the products' suitability by means of their own tests.



Long Board







Long Board

Product specifications

Description	Construction:	Three-layer engineered board	
	Top-Layer:	Oak veneer, other types of wood on request	
	Carrier:	Softwood	
Length ¹	2450-5000 mm, in steps of 500 mm²; short length share (1450 mm, 1950 mm) up to 10%.		
Width ¹	160-360 mm in fine selection		
	160-420 mm in medium selection		
	200-360 mm in coarse selection. In steps of 10 mm		
	•		
Thickness ¹	19 mm⁴ (± 0.5 mm)		
Top-layer ¹	4.5 mm (± 0.5 mm); gl	ued waterproof and formaldehyde-free.	
Surface	Schotten & Hansen pre-finished, permeable surface. Surface treatment with natural oils, resins and waxes. Schotten & Hansen surfaces can be regenerated without sanding or mecha- nical treatment. Avoid strongly acidic and alkaline agents. Slip resistance PTV according to BS 7976-2:2002 - mean value 54 (low slip hazard under dry conditions); test specimen in fine selection and treatment machining.		
Wood moisture content	On delivery: approx. 8 % ex works. A special drying process during production reduces shrinkage and swelling behaviour of the floor boards after installation.		
Emissions	-	on according to EN 14342: Class E1, measured as EN 717- 1 ing to AgBB scheme < 1 mg / m³.	
Fire behaviour classification	Cfl – s1 according to EN 13501-1:2010		
Profile processing	-	nd tongued on the long sides,	
	Face sides of the boar Chamfer: approx. 0.7	rds are grooved. mm, 30°. Other chamfer options on request.	
Installations	Full bonding with per	manently elastic adhesive. Installation according to DIN 18356.	
		il: Installation-ready subsoil according to DIN 18356 and DIN 18202	
	chart 3, line 4 increas		
		ve: BONA Quantum or adhesive of equal quality (adhesive used for	
	floorboards on screed	approved by general building inspectorate); suitable for gluing the l.	
Underfloor heating	Schotten & Hansen flo	porboards are well-suited for use in combination with underfloor heating	
	with hot water or elec	ctrically. Heat conductivity λ [W/(m*K)]: overall construction with top	
		ted according to EN 14342:2013). Heat contact resistance R [m²K/W]:	
		.15 (calculated according to EN 14342:2013). Maximum surface tempera-	
	ture of the floorboard	s: 29° C.	
Cleaning & Care		eaning and caring products.	
		commends the use of a floor polishing machine.	
		n please see the cleaning and caring instructions or contact our service schotten-hansen.com	
Recycling	Schotten & Hansen w	ood products are recyclable according to the waste wood regulation	
-	category A2 and can t	herefore be reused for the production of wood-based materials.	

¹ Distribution of lengths and widths according to production requirements.

² Possible fixed lenghts: 2450, 3000, 3500, 4000, 4500, 5000 mm

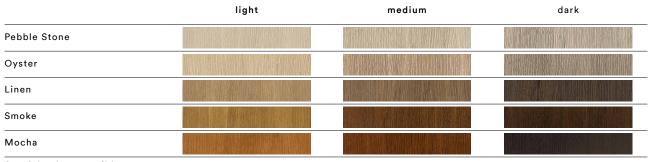
4 Other total thickness of boards possible on request.



Flooring 3/5

Long Board

Edition Oak



Special colour possible on request.

Character Selection⁵

1 Fine (160-360 mm width) Even and calm wood structure, with few small knots and fine cracks, mended by	
2 Medium (160-420 mm width)	Distinct wood structure, with knots, shrinkage and wind cracks, mended by hand.
3 Coarse (200-360 mm width)	Very lively wood structure, with selected knots, distinctive shrinkage and wind cracks, mended by hand.

Up to 5% of the boards may originate from the corresponding neighboring selection.

Treatment⁵

1 Brushed	ed Accentuate the wood's typical grain structure by brushing out early wood.	
2 Hand-planed	A landscape of small ridges and hollows award the boards a wavy structure for a vivid appearance.	
 3 Shrunk⁰	Special processes create an expressive surface with the character of naturally aged wood.	

2 Medium / 1 Brushed we recommend only for selected colours, e.g. from Edition Oak: Oyster dark, Linen dark, Smoke medium and dark, Mocha medium and dark. With light colours and structured processing, knots can appear dark.



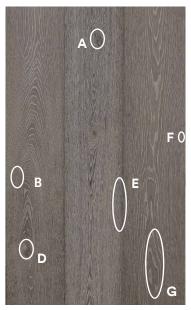
Colour between floorboards is subject to variations and display exhibits or samples, as far as these are due to the natural quality of the used material as well as customary.

- ⁵ Available on request / selectable. Possibly not available in all colours and/or sizes. Customized products on request.
- ⁶ Patented Schotten & Hansen surface treatment.



1. Fine

Even and calm wood structure, with few small knots and fine cracks, mended by hand.

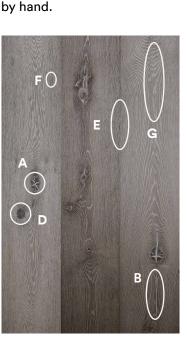


Not included: Splay knots, moon rings

Characteristics

A Knot

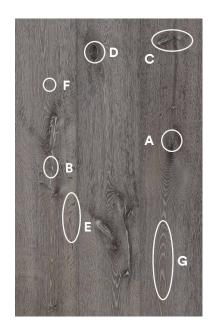
2. Medium Distinct wood structure, with knots, shrinkage and wind cracks, mended



Not included: Splay knots

3. Coarse

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Long Board

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Please observe the maximum surface temperature of 29° C.

Additionally, during a heating-period the air humidity should be improved. Otherwise the floorboards might strongly dry out and develop shrinkage cracks. Cracks caused by low air humidity during the heating period do not justify complaint.

Important measurements prior to installation:

- Let the unpacked workpieces acclimatise in the final room conditions for approx. one week until the equilibrium moisture content is reached.
- Switch off underfloor heating three days before installation.
- Measure moisture content of the screed.
- Keep room climate constant at 45 % ± 5 % relative air humidity. This also applies for the next few days after the installation (during this time increase underfloor heating by 5° C per day).
- Prepare a heating protocol.

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