# DOUGLAS CATHEDRAL

graceful, radiant & impressive

# Collection



Douglas Cathedral light



Douglas Cathedral medium



Douglas Cathedral dark

Schotten <sup>&</sup>Hansen



# **Douglas Cathedral**

## **Product specifications**

Description	Construction:	Three-layer engineered board				
	Top-Layer:	Douglas Fir veneer				
	Carrier:	Softwood				
Length <sup>1</sup>	2450-5000 mm;					
	in steps of 500 mm <sup>2</sup> ;	short length share (1450 mm, 1950 mm) up to 10%.				
Width <sup>1</sup>	160-360 mm in natura	al selection				
	In steps of 10 mm					
Thickness <sup>1</sup> <sup>2</sup>	19 mm⁴ (± 0.5 mm)					
Top-layer¹	4.5 mm; glued waterp	proof and formaldehyde-free.				
Surface	Schotten & Hansen p	re-finished, permeable surface.				
	Surface treatment wi	th natural oils, resins and waxes.				
	Schotten & Hansen su Avoid strongly acidic	urfaces can be regenerated without sanding or mechanical treatment. and alkaline agents.				
Wood moisture content	On delivery: approx.	8 % ex works.				
		ess during production reduces shrinkage and swelling behaviour of the				
	floor boards after ins	tallation.				
Emissions	Formaldehyde emissi	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717- 1				
	VOC-emission according to AgBB scheme < 1 mg / m <sup>3</sup> .					
Fire behaviour classification	Cfl-s1 according to DIN EN 13501-1:2018					
Profile editing	Boards are grooved and tongued on the long sides, Face sides of the boards are grooved Chamfer: approx. 0.7 mm, 30°. Other chamfer options on request.					
 Installations	Full bonding with per	manently elastic adhesive. Installation according to DIN 18356.				
		oil: Installation-ready subsoil according to DIN 18356 and DIN 18202				
		ive: 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 scree	d.				
Underfloor heating	Schotten & Hansen fl	oorboards are well-suited for use in combination with underfloor heating				
	with hot water or electrically.					
	Heat conductivity $\lambda$ [W/(m*K)]: top layer douglas 0.111 (calculated according to EN 14342:2013)					
	Heat contact resistance R [m²K/W]: top layer douglas 0.171					
	(calculated according to EN 14342:2013) Maximum surface temperature of the floorboards: 29° C.					
	Maximum surface ter	nperature of the floorboards: 29° C.				
Cleaning & Maintenance		leaning and caring products.				
		ecommends 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	Cohotton 9 Harris	ood products are recyclable according to the waste wood regulation				

<sup>1</sup> Dimensions may vary slightly due to production conditions. Distribution of lengths and widths according to production requirements.

<sup>2</sup> Other total thickness of boards possible on request.

<sup>3</sup> Possible fixed lengths: 2450, 3000, 3500, 4000, 4500, 5000 mm.





# **Douglas Cathedral**

### **Collection Colours**



Custom colours possible on request.

## **Character Selection**

Natural

Expressive wood structure, sapwood content possible, isolated resin pockets as well as cracks and knots, repaired by hand.

## Treatment

1 Brushed

Strong accentuation of the wood's typical grain structure by brushing out early wood.



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.



#### Flooring 4/4

# **Douglas Cathedral**

## **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.



# EUCALYPTUS SENSE

sensory, powerful & elegant

400

# Collection



Eucalyptus Sense light



Eucalyptus Sense medium



Eucalyptus Sense dark

Schotten <sup>&</sup>Hansen



# **Eucalyptus Sense**

# **Product specifications**

Description	Construction: Top-Layer:	Multi-layer engineered board Eucalyptus	
	Carrier:	Birch plywood	
Length <sup>2</sup>	2400-2950 mm; prop	ortionally short lengths up to 10 %.	
Width <sup>2</sup>	160-240 mm in select selection In steps of 10 mm <sup>1</sup>		
Thickness	KD 15 15 mr	n (± 0,5 mm)	
Top-layer	2.8 mm, glued water	proof 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 and alkaline agents.		
Wood moisture content	On delivery: approx. 8 % ex works. A special drying process during production reduces shrinkage and swelling behaviour of th floor boards after installation.		
Emissions	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717-1 VOC-emission according to AgBB scheme < 1 mg / m <sup>3</sup> .		
Fire behaviour classification	Dfl - s1 according to EN 14342:2013		
Profile editing	Tongue and groove on all sides. Chamfer: approx. 0.7 mm, 30°. Other chamfer options on request.		
Installations	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 floorboards are well-suited for use in combination with underfloor heating with hot water or electrically. Heat conductivity $\lambda$ [W/(m*K)]: top layer eucalyptus 0.172 (calculated according to EN 14342:2013) Heat contact resistance R [m <sup>2</sup> K/W]: top layer eucalyptus 0,086 (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 reg category A2 and can therefore be reused for the production of wood-based materia		

<sup>1</sup> Distribution of lengths and widths according to production requirements.

<sup>2</sup> Dimensions may vary slightly due to production conditions. Distribution of lengths and widths according to production requirements.





# **Eucalyptus Sense**

**Collection Colours** 



Custom colours possible on request.

## **Character Selection**

Select Uniform, calm wood texture with occasional knots and predominantly straight grain.

## Treatment

3 Shrunk³	Special processes create an expressive surface with the character of naturally aged wood.
	, , , , , , , , , , , , , , , , , , , ,



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. <sup>3</sup> Patented Schotten & Hansen sur face treatment.





# **Eucalyptus Sense**

## **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.

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# TABLE ANTIQUE

majestic, tactful & dignifie<u>d</u>

ut Ait





Antique light



Antique medium



Antique dark



# Board parquet antique collection

# **Product specifications**

Description	Construction: Top-Layer: Carrier:	Multi-layer engineered board Oak veneer Birch plywood	
Length x Width	800 × 800 mm		
Thickness	19 mm (± 0,5 mm)		
Top-layer	2.8 mm, glued water	proof 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 and alkaline agents.		
Wood moisture content	On delivery: approx. 8 % ex works. A special drying process during production reduces shrinkage and swelling behaviour of floor boards after installation.		
Emissions	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717-1 VOC-emission according to AgBB scheme < 1 mg / m <sup>3</sup> .		
Fire behaviour classification	Dfl - s1 according to EN 14342:2013		
Profile processing	Groove on all sides. Chamfer: approx. 0.7 mm, 30°. Connection by means of external springs (11 mm wide, 5 mm thick).		
Installations	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 on screed.		
Underfloor heating	Schotten & Hansen parquet are well-suited for use in combination with underfloor heating with hot water or electrically. Heat conductivity $\lambda$ [W/(m*K)]: top layer oak 0.12 (calculated according to EN 14342:2013) Heat contact resistance R [m <sup>2</sup> K/W]: top layer oak 0.11 (calculated according to EN 14342:201 Maximum surface temperature: 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 regulati category A2 and can therefore be reused for the production of wood-based materials.		





# Board parquet antique collection

#### **Collection Colours**



# **Character Selection**

6 Engeli Very vibrant structure with selected knots, pronounced shrinkage and wind cracks, repaired by hand.

## Treatment <sup>1</sup>

6 Engeli

Naturally dried surface with antique-looking filled joints and nail holes.

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.

Patented Schotten & Hansen surface treatment.





Floor 4/4

# Board parquet antique collection

## **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.

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# OUGH CUT

rugged, raw & tactile

Collection



Linen light



Linen medium



Linen dark





# **Rough Cut Collection**

## **Product specifications**

Description	Construction:	Three-layer engineered board			
	Top-Layer:	Oak veneer			
	Carrier:	Softwood			
Length <sup>1</sup>	2450-5000 mm, in ste	ps of 500 mm²; proportionally short lengths up to 10 %.			
Width <sup>1</sup>	160-360 mm, In steps	of 10 mm			
Thickness <sup>1</sup>	Approx. 19 mm³ (± 0,5	i mm)			
Top-Layer <sup>1</sup>	Approx. 4.5 mm; glue	d waterproof and formaldehyde-free.			
Surface	Avoid highly acidic ar	d alkaline substances.			
	Schotten & Hansen pre-finished, permeable surface.				
		h natural oils, resins and waxes.			
	Schotten & Hansen su	rfaces can be regenerated without sanding or mechanical treatment.			
Wood moisture content	On delivery: approx. 8	3 % ex works.			
	A special drying proc floor boards after inst	ess during production reduces shrinkage and swelling behaviour of the allation.			
Emissions	Formaldehyde emissic	on according to EN 14342: Class E1, measured as EN 717- 1			
	VOC-emission according to AgBB scheme < 1 mg / m <sup>3</sup>				
	ÉMISSIONS DANS L'AIR INTÉRIEUR				
	AT A B C				
Fire behaviour classification	Cfl – S 1 according to EN 13501-1:2010				
Profile processing	Boards are grooved a	nd tongued on the long sides,			
	Face sides of the boar	•			
	Chamfer: approx. 0.7	mm, 30°. Other chamfer options on request.			
Installations	Full bonding with peri	manently elastic adhesive. Installation according to DIN 18356.			
	Requirement on subsc	il: Installation-ready subsoil according to DIN 18356 and DIN 18202			
	chart 3, line 4 increas				
	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		porboards are well-suited for use in combination with underfloor heating			
	with hot water or electrically.				
	, ,	W/(m*K)]: top layer oak 0.12 (calculated according to EN 14342:2013)			
		e R [m²K/W]: overall construction 0.15 (calculated according to EN			
	14342:2013) Maximum surface tem	perature of the floorboards: 29° C.			
	Ochows O.U.				
Cleaning & Care		eaning and caring products.			
		commends 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 w	ood products are recyclable according to the waste wood regulation			
Recycling		sou products are recyclable according to the waste wood regulation			

<sup>1</sup> Dimensions may vary slightly due to production conditions. Distribution of lengths and widths according to production requirements.

<sup>2</sup> Possible fixed lenghts: 2450, 3000, 3500, 4000, 4500, 5000 mm

<sup>3</sup> Other total thickness of boards possible on request.



#### Flooring 3/5

# **Rough Cut Collection**

### **Collection Colours**



# Selection

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

## Treatment

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When the wood is cut at a sawmill, grooves, which run at a 90° angle to the length, are created and result in a matt shimmering surface with a pleasantly lively appearance.

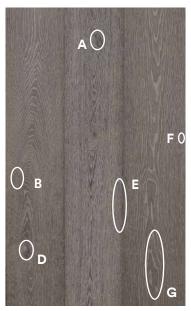


We reserve the right to deviations in color compared to exhibits or samples, insofar as these are in the nature of the materials and are customary in the trade.



### 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 (intergrown)

**B** Cracks

C Splay knots

**D** Loose knots

E Medullary rays

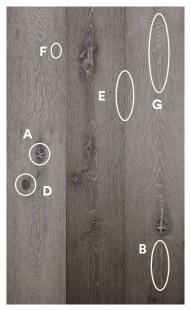
F Pinknots

G Cathedral

**H** Moon rings

# 2. Medium

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



Not included: Splay knots

Description

#### 3. Coarse

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



	Knots firmly intergrown together with the wood tissue. The cracks in a knot are filled by hand.
	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 pro- duced putty, colour matched to the wood colouration.
	When a branch is cut along its longitudinal axis, this results in a splay knot, stretching out from the core.
	A knothole happens when a knot separates from the wood tissue and drops out. These holes are manually filled with matching wooden implants.
T	The flakes are created by the medullary rays of a tree that formerly provi- ded it with water and nutrients. Transversely running rays are more fre- quently represented in both the medium and coarse grades.
	Very small knots, which appear in the form of dots, occassionally in close arrangements in the medium and coarse grade selections.
	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.
	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.

#### Flooring 5/5

# **Rough Cut Collection**

## **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.



Collection

# OAK 1900

lived-in, authentic & welcoming



Oak 1900 light



Oak 1900 medium



Oak 1900 dark





# **Eiche 1900 Collection**

## **Product specifications**

Description	Construction:	Three-layer engineered board			
	Top-Layer: Carrier:	Oak veneer Softwood			
Length <sup>1</sup>					
	2450-5000 mm, in steps of 500 mm <sup>2</sup> ; proportionally short lengths up to 10 %.				
	280-360 mm; In steps of 10 mm				
Thickness <sup>1</sup>	ca. 19 mm³ (± 0.5 mm	)			
Top-layer <sup>1</sup>	Approx. 4.5 mm; glue	d waterproof and formaldehyde-free.			
Surface		nd alkaline substances.			
		re-finished, permeable surface. th natural oils, resins and waxes.			
		urfaces can be regenerated without sanding or mechanical treatment.			
		arraces can be regenerated without sanding or mechanical treatment.			
Wood moisture content	On delivery: approx.				
	A special drying proc floor boards after ins	ess during production reduces shrinkage and swelling behaviour of the tallation.			
Emissions	Formaldehyde emissi	on according to EN 14342: Class E1, measured as EN 717- 1			
	VOC-emission according to AgBB scheme < 1 mg / m³				
Fire behaviour classification	Cfl – S 1 according to EN 13501-1:2010				
Profile processing	-	nd tongued on the long sides,			
	Face sides of the boa	-			
	Chamfer: approx. 0.7	mm, 30°. Other chamfer options on request.			
Installations	Full bonding with per	manently 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. Recommanded adhecive: RONA Quantum or adhecive of equal quality (adhecive used for				
	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 fl	oorboards are well-suited for use in combination with underfloor heating			
	with hot water or electrically.				
	-	[W/(m*K)]: top layer oak 0.12 (calculated according to EN 14342:2013)			
	Heat contact resistance R [m <sup>2</sup> K/W]: overall construction 0.15 (calculated according to EN				
	14342:2013)				
	Maximum surface ten	nperature of the floorboards: 29° C.			
Cleaning & Care		leaning and caring products.			
		ecommends 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 w	ood products are recyclable according to the waste wood regulation			

<sup>1</sup> Dimensions may vary slightly due to production conditions. Distribution of lengths and widths according to production requirements.

<sup>2</sup> Possible fixed lenghts: 2450, 3000, 3500, 4000, 4500, 5000 mm

<sup>3</sup> Other total thickness of boards possible on request.





# **Eiche 1900 Collection**

## **Collection Colours**



# Selection

3 Coarse

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.

## Treatment

3 Shrunk	Special processes create an expressive surface with the character of naturally aged wood.
	Patented Schotten & Hansen surface treatment.



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.

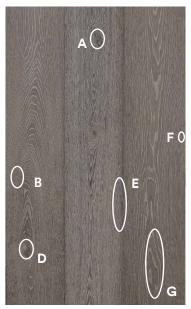


Distinct wood structure, with knots,

shrinkage and wind cracks, mended

## 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

(intergrown)

**B** Cracks

C Splay knots

**D** Loose knots

E Medullary rays

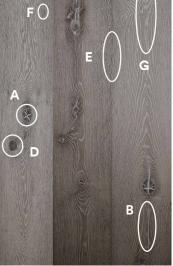
**F** Pinknots

G Cathedral

**H** Moon rings

2. Medium

by hand.



Not included: Splay knots

Description

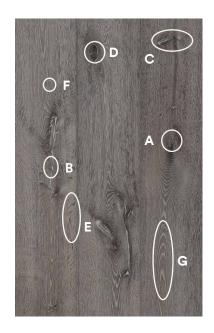
coarse.

are filled by hand.

stretching out from the core.

### 3. Coarse

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



# duced putty, colour matched to the wood colouration. When a branch is cut along its longitudinal axis, this results in a splay knot, A knothole happens when a knot separates from the wood tissue and drops out. These holes are manually filled with matching wooden implants. 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. Very small knots, which appear in the form of dots, occassionally in close arrangements in the medium and coarse grade selections. The wood pores follow the consecutive annual rings. In the medium and coarse selection grades, the otherwise conical curves may also take a wild

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.

Knots firmly intergrown together with the wood tissue. The cracks in a knot

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 pro-

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.

#### Flooring 5/5

# **Eiche 1900 Collection**

## **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.



### Collection



Engeli light



Engeli medium



Engeli dark



# ENGELI

historic, patinated & remarkable



# **Engeli Collection**

# **Product specifications**

Description	Construction:	Multi-layer construction			
	Top-Layer:	Oak veneer			
	Carrier:	Birch plywood			
Length <sup>1</sup>	2450-5000 mm, in ste up to 10 %.	ps of 500 mm²; proportionally short lengths (1450 mm, 1950 mm)			
Width <sup>1</sup>	240-360 mm, In steps	of 40 mm <sup>3</sup>			
Thickness <sup>1</sup>	17 mm⁴ (± 0.5 mm)				
Top-layer¹	2.5 mm (± 0.5 mm); gl	ued waterproof and formaldehyde-free.			
Surface	Schotten & Hansen pr	e-finished, permeable surface.			
	Surface treatment wit	h natural oils, resins and waxes.			
	Schotten & Hansen su	rfaces can be regenerated without sanding or mechanical treatment.			
	Avoid strongly acidic				
Wood moisture content	On delivery: approx. 8	2 % av works			
	,	ess during production reduces shrinkage and swelling behaviour of the			
	floor boards after inst				
 Emissions	Formaldehvde emissio	n according to EN 14342: Class E1, measured as EN 717- 1			
	VOC-emission according to AgBB scheme < 1 mg / m <sup>3</sup> .				
	ÉMISSIONS DANS L'AIR INTÉRIEUR'				
Fire behaviour classification	Dfl – s1 according to EN 14342:2013				
Profile processing	Boards are grooved ar	nd tongued on the long sides,			
	Face sides of the boar	ds are grooved.			
	Integrated, filled joint	t 4 mm.			
Installations	Full bonding with peri	nanently elastic adhesive. Installation according to DIN 18356.			
	Requirement on subsc	il: Installation-ready subsoil according to DIN 18356 and DIN 18202			
	chart 3, line 4 increas	ed 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.				
	We recommend a roor	n-length installation of the floor boards.			
Underfloor heating	Schotten & Hansen flo	porboards are well-suited for use in combination with underfloor heating			
	with hot water or elec	trically.			
	Heat conductivity [] [W/(m*K)]: top layer oak 0.12 (calculated according to EN 14342:2013)				
	Heat contact resistanc	e R [m²K/W]: overall construction 0.11 (calculated according to EN			
	14342:2013)				
	Maximum surface temperature of the floorboards: 29° C.				
Cleaning & Care	Schotten & Hansen cl	eaning and caring products.			
	Schotten & Hansen re	commends the use of a floor polishing machine.			
	For further information please see the cleaning and caring instructions or contact our service				
	department: service@				
Recycling	Schotten & Hansen wo	ood products are recyclable according to the waste wood regulation			
	category A2 and can therefore be reused for the production of wood-based materials.				

Dimensions may vary slightly due to production conditions. Distribution of lengths and widths according to production requirements.

<sup>2</sup> Possible fixed lenghts: 3000, 3500, 4000, 4500, 5000 mm

<sup>3</sup> Possible fixed widths: 240, 280, 320, 360 mm

4 Other total thickness of boards possible on request





# **Engeli Collection**

## **Collection Colours**



# Selection

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

## Treatment

6 Engeli	Shrunk treatment <sup>5</sup> with integrated and filled joint between the floor boards in a matching
	colour.



We reserve the right to deviations in color compared to exhibits or samples, insofar as these are in the nature of the materials and are customary in the trade.

<sup>5</sup> Patented Schotten & Hansen surface treatment.





# Engeli Collection

## **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.

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Linen light



Linen medium



Linen dark





# **Tiger Grain Collection**

## **Product specifications**

Description	Construction:	Multi-layer construction			
	Top-Layer:	Oak veneer			
	Carrier:	Birch plywood			
Length <sup>1</sup>	1450-2950 mm; propo	rtionally short lengths up to 10%			
Width <sup>1</sup>	160-240 mm; In steps	of 10 mm			
Thickness <sup>1</sup>	ca. 15 mm² (± 0.5 mm)				
Top-layer¹	Approx. 2.8 mm; glue	d waterproof and formaldehyde-free.			
Surface		e-finished, permeable surface.			
		h natural oils, resins and waxes.			
	Schotten & Hansen su Avoid strongly acidic	rfaces can be regenerated without sanding or mechanical treatment. and alkaline agents.			
Wood moisture content	On delivery: approx. 8				
	A special drying proc floor boards after inst	ess during production reduces shrinkage and swelling behaviour of the tallation.			
 Emissions	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717- 1				
	VOC-emission according to AgBB scheme < 1 mg / $m^3$ .				
Fire behaviour classification	Cfl – S 1 according to EN 13501-1:2010				
Profile processing	-	nd tongued on the long sides,			
	Face sides of the boar	-			
	Chamfer: approx. 0.7	mm, 30°. Other chamfer options on request.			
Installations		manently 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 heating			
	with hot water or electrically.				
	Heat conductivity $\lambda$ [W/(m*K)]: top layer oak 0.169 (calculated according to EN 14342:2013)				
	Heat contact resistance R [m²K/W]: overall construction 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 re	commends 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 w	ood products are recyclable according to the waste wood regulation			
	category A2 and can therefore be reused for the production of wood-based materials.				

<sup>1</sup> Dimensions may vary slightly due to production conditions and availability. Distribution of lengths and widths according to production requirements.

<sup>3</sup> Other total thickness of boards possible on request.



# **Tiger Grain Collection**

Flooring 3/4

**Collection Colours** 



# Selection

5 Tiger Grain

Even and calm wood structure with few small knots and fine cracks, mended by hand. The hand-picked feature of the cut wood rays results in a distinctive tiger-pelt appearance that gives contemporary flair to any space.

## Treatment

1 Brushed

Accentuate the wood's typical grain structure by brushing out early wood.



We reserve the right to deviations in color compared to exhibits or samples, insofar as these are in the nature of the materials and are customary in the trade.



#### Flooring 4/4

# **Tiger Grain Collection**

## **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:

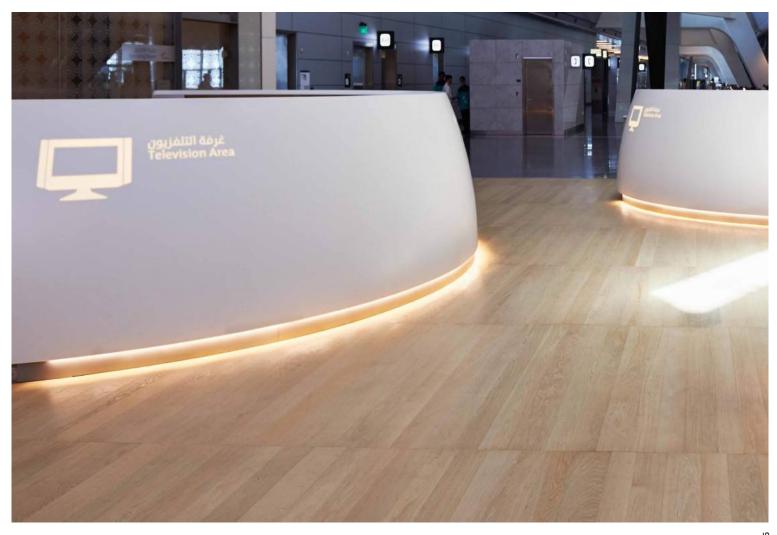
- Let the unpacked workpieces acclimatise in the final room conditions for approx. one week until the equilibrium moisture content is reached.
- Switch off underfloor heating three days before installation.
- Measure moisture content of the screed.
- Keep room climate constant at 45 % ± 5 % relative 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.

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Flooring

# Short Board





# Short Board

# **Product specifications**

Description	Construction:	Multi-layer engineered board		
	Top-layer:	Oak veneer		
	Carrier:	Birch plywood		
Length	2400 - 2950 mm; proportionally short lengths 1450 mm, 1950 mm) up to 10 %.			
Width	160-240 mm in fine and medium selection. In steps of 10 mm <sup>1</sup> .			
Thickness <sup>3</sup>	KD 9 9 mm	KD 15 15 mm		
	KD 12 12 mm	KD 18 18 mm		
Top-layer <sup>1</sup>	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 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	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717- 1			
	VOC emission according to AgBB-Schema < 1 mg / m <sup>3</sup>			
	EMISSIONS DANS L'AIR INTERIEUR			
	( <b>A+</b>			
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.			
	floorboards on screed			
Underfloor heating		porboards are well-suited for use in combination with underfloor heatin		
	with hot water or electrically.			
	Heat conductivity $\lambda$ [W/(m*K)]: oak top layer 0.169 (calculated according to EN 14342:2013)			
	Heat contact resistance R [m <sup>2</sup> 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			
	category A2 and can therefore be reused for the production of wood-based materials.			

<sup>1</sup> Distribution of lengths and widths according to production requirements.

<sup>3</sup> (± 0.5 mm)



#### Flooring 3/5

# Short Board

#### **Edition Oak**



**Character Selection**<sup>4</sup>

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.

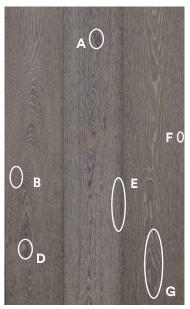
4 Available on request / selectable. Possibly not available in all colours and/or sizes. Customised products on request.

<sup>5</sup> Patented Schotten & Hansen surface treatment.



### 1. Fine

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



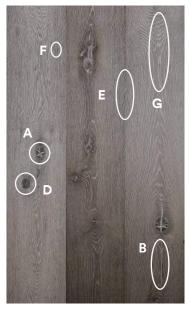
Not included: Splay knots, moon rings

# **Characteristics**

A Knot

# 2. Medium

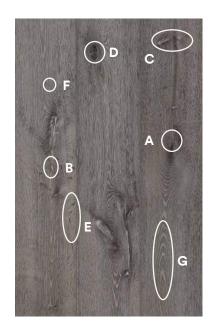
Distinct wood structure, with knots, shrinkage and wind cracks, mended by hand.



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 <sup>1</sup>	2450-5000 mm, in steps of 500 mm²; short length share (1450 mm, 1950 mm) up to 10%.		
Width1	160-360 mm in fine selection		
	160-420 mm in medium selection		
	200-360 mm in coarse selection. In steps of 10 mm		
	•		
Thickness <sup>1</sup>	19 mm⁴ (± 0.5 mm)		
Top-layer <sup>1</sup>	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.	
	Requirement on subsoil: 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	
	installation has to be 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	
<b>.</b>	with hot water or elec	strically. Heat conductivity $\lambda$ [W/(m*K)]: overall construction with top	
	layer oak 0.12 (calcula	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.	

<sup>1</sup> Distribution of lengths and widths according to production requirements.

<sup>2</sup> Possible fixed lenghts: 2450, 3000, 3500, 4000, 4500, 5000 mm

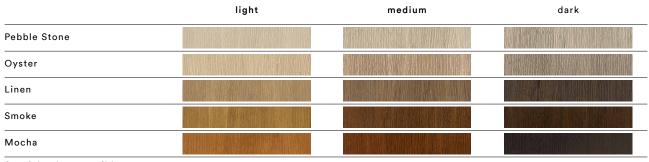
4 Other total thickness of boards possible on request.



#### 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 hand.	
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	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.



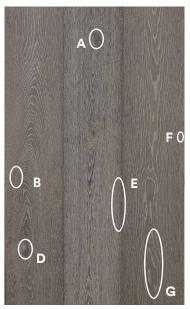
Colour between floorboards is subject to variations and display exhibits or samples, as far as these are due to the natural quality of the used material as well as customary.

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



### 1. Fine

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



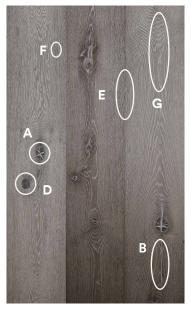
Not included: Splay knots, moon rings

### **Characteristics**

A Knot

### 2. Medium

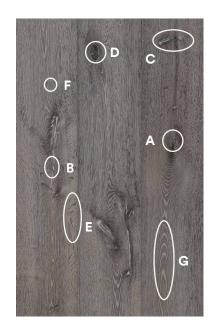
Distinct wood structure, with knots, shrinkage and wind cracks, mended by hand.



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.

## Long 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.



Flooring

# **Parquet Three-Layer**





Nature Refined.



## Parquet Three-Layer

### **Product specifications**

Description	Construction:	Three-layer engineered board	
	Top-layer:	Oak veneer, other type of wood on request	
	Bottom-layer:	Softwood	
Length x Width	500 × 100 mm / 600 ×	120 mm / 700 × 140 mm	
	Chevron 45°: 400 × 10	0 mm / 480 × 120 mm / 560 × 140 mm as drawing	
Thickness <sup>1</sup>	19 mm (± 0.5 mm) <sup>2</sup>		
Top-layer	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 su Avoid strongly acidic	rfaces can be regenerated without sanding or mechanical treatment. and alkaline agents.	
Wood moisture content	On delivery: approx. 8	3 % ex works	
	A special drying proce	ess during production reduces shrinkage and swelling behaviour of the	
	floorboards after insta	allation.	
Emissions	Formaldehyde emissio	n according to EN 14342: Class E1, measured as EN 717- 1	
	VOC-emission accord	ing to AgBB scheme < 1 mg / m³.	
	ÉMISSIONS DANS L'AIR INTÉRIEUR		
Fire behaviour classification	Cfl – s1 according to EN 13501-1:2010		
Profile processing	Boards grooved and to	ongued at the long sides.	
	Face sides are groove		
		, other chamfer options on request;	
	Possible installation p	atterns: Chevron 45°, Herringbone 90°	
Installation	Full bonding with perr	nanently elastic adhesive. Installation according to DIN 18356.	
	Requirement on subsoil: Installation-ready subsoil according to DIN 18356 and DIN 18202		
	chart 3, line 4 increas		
	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		rquet is well-suited for use in combination with underfloor heating	
	with hot water or elec	•	
	-	V/(m*K)]: top-layer oak 0.12 (calculated according to EN 14342:2013)	
		ce R [m²K/W]: top-layer oak 0.15 (calculated according to EN	
	14342:2013). Maximum surface temperature of the floorboards: 29° C.		
Cleaning & Care	Schotten & Hansen old	eaning and caring products.	
		commends 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 wo	ood products are recyclable according to the waste wood regulation	
		herefore be reused for the production of wood-based materials.	

<sup>1</sup> Dimensions may vary slightly due to production.

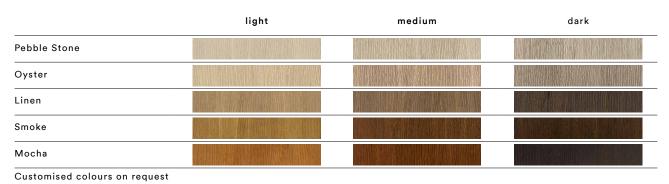
<sup>2</sup> Other overall thicknesses possible on request.



#### Flooring 3/4

## **Parquet Three-Layer**

### **Edition Oak**



### Character Selection<sup>2</sup>

1 Fine	Even and calm wood structure with few small knots and fine cracks, mended by hand.
2 Medium	Distinct wood structure with knots, shrinkage and wind cracks, mended by hand.

Up to 5% of the boards may be from the adjacent grade.

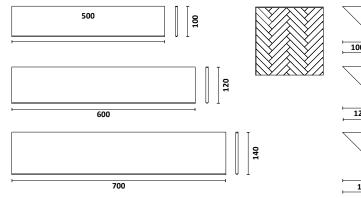
### Treatment<sup>2</sup>

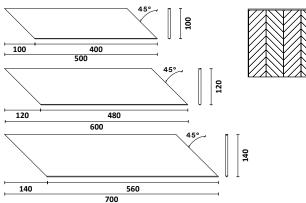
1 Brushed	Accentuate the wood's typical grain structure by brushing out early wood.
3 Shrunk³	Special processes create an expressive surface with the character of naturally aged wood.

2 Medium / 1 Brushed we recommend only for selected colours, e.g. from Oak Edition <sup>21</sup>: Oyster dark, Linen dark, Smoke medium and dark, Mocha medium and dark.

Version 1 Herringbone, 90° (dimensions in mm)4

Version 2 Chevron, 45° (dimensions in mm)4





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

- <sup>2</sup> Available on request / selectable. Possibly not available in all colours and/or sizes. Customised products on request (minimum quantity).
- <sup>3</sup> Patented Schotten & Hansen surface treatment.
- 4 Other angle on request.



#### Flooring 4/4

## Parquet Three-Layer

### **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.



Flooring

# **Parquet Elegance**





Nature Refined.



## **Parquet Elegance**

### **Product specifications**

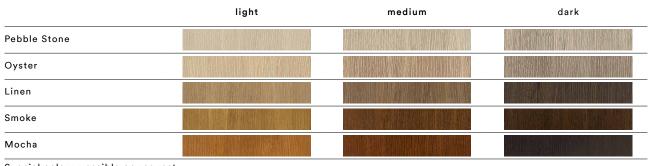
Description	Construction: Top-Layer: Carrier:	Multi-layer engineered board Oak veneer Birch plywood	
Length x Width	800 × 800 mm		
Thickness	18 mm (± 0,5 mm)		
Top-layer	3.5 mm (± 0,5 mm)		
Surface	Schotten & Hansen pre-finished, permeable surface. Surface treatment with natural oils, resins and waxes. Schotten & Hansen surfaces can be regenerated without sanding or mechanical treatment. Avoid strongly acidic 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.	On delivery: approx. 8 % ex works.	
Emissions	Formaldehyde emission according to EN 14342: Class E1, measured as EN 717-1 VOC-emission according to AgBB scheme < 1 mg / m <sup>3</sup> .		
Fire behaviour classification	Dfl – s1 according to	EN 14342:2013	
Profile processing	Groove on all sides. Chamfer: approx. 0.7 mm, 30°. Connection by means of external springs (11 mm wide, 5 mm thick).		
Installations	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 on screed.		
Underfloor heating	Schotten & Hansen parquet are well-suited for use in combination with underfloor heating with hot water or electrically. Heat conductivity $\lambda$ [W/(m*K)]: top layer oak 0.169 (calculated according to EN 14342:201 Heat contact resistance R [m <sup>2</sup> K/W]: top layer oak 0.116 (calculated according to EN 14342:2013) Maximum surface temperature: 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 category A2 and can therefore be reused for the production of wood-based materials.		



#### Flooring 3/4

## **Parquet Elegance**

### **Edition Oak**



Special colour possible on request.

### **Character Selection**

1 Fine	Uniform, calm wood structure with small knots and discreet cracks, repaired by hand. re- paired by hand. Mirror and various grain patterns are possible. Putty colour may be slightly darker in light colours depending on use. Product specific grading.
2 Medium	Distinct wood structure with knots, shrinkage and wind cracks. Mirrors and different grain gradients are possible. Depending on use, the colour of the putty in light colours may slightly dark in light colours.

### Treatment



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.



#### Flooring 4/4

## **Parquet Elegance**

### **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.

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