

Technical Data Sheet

Laminated Flooring Ambience 4V
Class 33 according to DIN EN 13329



Core board:

Profile:

Dimensions:

Quantity / Weight per box (PU):

Quantity / Weight per pallet:

Classenboard HDF

ML 2.0

1285 x 158 x 10 mm

8 pieces = 1.624 m² / approx. 15 kg

50 PU = 81.200 m² / approx. 750 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	EN 13329	Length: ± 0.5mm Width: ± 0.1mm
Thickness	EN 13329	Ø ≤ 0,5mm max. ≤ 0,5 mm
Squareness	EN 13329	≤ 0.20 mm
Straightness	EN 13329	≤ 0.30 mm/m
Flatness of the elements	EN 13329	Width: concave ≤ 0.15% convex ≤ 0.20 % Length: concave ≤ 0.50 % convex ≤ 1.00 %
Openings	EN 13329	Ø ≤ 0.15 mm max. ≤ 0.20 mm
Height difference	EN 13329	Ø ≤ 0.10 mm max. ≤ 0.15 mm
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4
Classification Requirements		
Wear resistance	 EN 13329	IP ≥ 6000 cycles (AC5)
Impact resistance	 EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles
Thickness swelling	 EN 13329	≤ 12 %
Locking strength	 ISO 24334	F _{0.2} ≥ 1.0 kN/m F _{0.2} ≥ 2.0 kN/m
Movement of a furniture leg	 EN 424	no damage with type 0
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire*	 EN 13501-1	C _{fl} - s1
Slip resistance*	 EN 13893	DS
Electrostatic behavior*	 EN 1815	≤ 2 kV
Formaldehyde*	 EN 16516	E1
Formaldehyde-Emission	ASTM D6007	US EPA TSCA Title VI / CARB P 2
VOC Emissionen	 Décret no 2011-321	A+
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK
Thermal resistance*	 EN 12667	R ≤ 0.09 (m ² K)/W
additional requirements		
VOC Emissionen  ID 1112 - 33058 - 001	CA 01350	GREENGUARD GOLD
	ID 1112 - 33058 - 001	eco Label
	RAL-UZ 176	Blauer Engel

We guarantee consistency of our decor colours under artificial light of type D50 (CIE D50, ANSI PH 2.30, ISO 3664) and D65 (CIE D65).

* basic attributes concerning health, safety and energy saving acc.

CE EN 14041

Our technical data sheets are constantly updated and adapted to the state of the art.

This edition replaces all previous versions and is valid at the time of writing.

Version 05 / 2020

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Technical Data Sheet

Laminated Flooring Arteo 10 XL

Class 33 according to DIN EN 13329



CLASSEN.

Profile:

Core board:

Dimensions:

Quantity / Weight per box (PU):

Quantity / Weight per pallet:

ML2.0

by CLASSEN

Classenboard HDF

1285 x 280 x 10 mm

5 pieces = 1.799 m² / approx. 17 kg

48 PU = 86.352 m² / approx. 816 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	EN 13329	Length: ± 0.5 mm Width: ± 0.1 mm
Thickness	EN 13329	Ø ≤ 0.5 mm
Squareness	EN 13329	≤ 0.20 mm
Straightness	EN 13329	≤ 0.30 mm/m
Flatness of the elements	EN 13329	Width: concave ≤ 0.15% convex ≤ 0.20 % Length: concave ≤ 0.50 % convex ≤ 1.00 %
Openings	EN 13329	Ø ≤ 0.15 mm max. ≤ 0.20 mm
Height difference	EN 13329	Ø ≤ 0.10 mm max. ≤ 0.15 mm
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4
Classification Requirements		
Wear resistance	 EN 13329	≥ 6000 cycles (ACS)
Impact resistance	 EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles
Thickness swelling	 EN 13329	≤ 15 %
Locking strength	 ISO 24334	F _{10.2} ≥ 1.0 kN/m F _{50.2} ≥ 2.0 kN/m
Movement of a furniture leg	 EN 424	no damage with type 0
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire*	 EN 13501-1	C _{fl} - s1
Slip resistance*	 EN 13893	DS
Electrostatic behavior*	 EN 1815	≤ 2 kV
Formaldehyde*	 EN 16516	E1
Formaldehyde-Emissions	ASTM D6007	US EPA TSCA Title VI / CARB P 2
VOC Emissions	 Décret no 2011-321	A+
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK
Thermal resistance*	 EN 12667	R ≤ 0.09 (m ² K)/W
Additional requirements		
VOC Emissions	 according to eco institute specifications	eco Institute Label
	 RAL-UZ 176	Blauer Engel

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Version 01 / 2021

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Technical Data Sheet

Laminating Flooring Arteo 8 XL

Class 33 according to DIN EN 13329



CLASSEN.

Profile:

Core board:

Dimensions:

Quantity / Weight per box (PU):

Quantity / Weight per pallet:

ML2.0

by CLASSEN

Classenboard HDF

1285 x 280 x 8 mm

6 pieces = 2.158 m² / approx. 15 kg

48 PU = 103.584 m² / approx. 720 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	EN 13329	Length: ± 0.5 mm Width: ± 0.1 mm
Thickness	EN 13329	Ø ≤ 0.5 mm
Squareness	EN 13329	≤ 0.20 mm
Straightness	EN 13329	≤ 0.30 mm/m
Flatness of the elements	EN 13329	Width: concave ≤ 0.15% convex ≤ 0.20 % Length: concave ≤ 0.50 % convex ≤ 1.00 %
Openings	EN 13329	Ø ≤ 0.15 mm max. ≤ 0.20 mm
Height difference	EN 13329	Ø ≤ 0.10 mm max. ≤ 0.15 mm
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4
Classification Requirements		
Wear resistance	 EN 13329	≥ 6000 cycles (ACS)
Impact resistance	 EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles
Thickness swelling	 EN 13329	≤ 15 %
Locking strength	 ISO 24334	F _{10.2} ≥ 1.0 kN/m F _{50.2} ≥ 2.0 kN/m
Movement of a furniture leg	 EN 424	no damage with type 0
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire*	 EN 13501-1	C _{fl} - s1
Slip resistance*	 EN 13893	DS
Electrostatic behavior*	 EN 1815	≤ 2 kV
Formaldehyde*	 EN 16516	E1
Formaldehyde-Emissions	ASTM D6007	US EPA TSCA Title VI / CARB P 2
VOC Emissions	 Décret no 2011-321	A+
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK
Thermal resistance*	 EN 12667	R ≤ 0.07 (m ² K)/W
Additional requirements		
VOC Emissions	 according to eco institute specifications	eco Institute Label
	 RAL-UZ 176	Blauer Engel

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Technical Data Sheet

Laminated Flooring Extreme

Class 33 according to DIN EN 13329



CLASSEN.

Profile:

ML2.0

by CLASSEN

Core board:

Classenboard HDF

Dimensions:

1285 x 158 x 12 mm

Quantity / Weight per box (PU):

8 pieces = 1.624 m² / approx. 18 kg

Quantity / Weight per pallet:

40 PU = 64.960 m² / approx. 720 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	EN 13329	Length: ± 0.5 mm Width: ± 0.1 mm
Thickness	EN 13329	Ø ≤ 0.5 mm
Squareness	EN 13329	≤ 0.20 mm
Straightness	EN 13329	≤ 0.30 mm/m
Flatness of the elements	EN 13329	Width: concave ≤ 0.15% convex ≤ 0.20 % Length: concave ≤ 0.50 % convex ≤ 1.00 %
Openings	EN 13329	Ø ≤ 0.15 mm max. ≤ 0.20 mm
Height difference	EN 13329	Ø ≤ 0.10 mm max. ≤ 0.15 mm
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4
Classification Requirements		
Wear resistance	 EN 13329	≥ 6000 cycles (AC5)
Impact resistance	 EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles
Thickness swelling	 EN 13329	≤ 15 %
Locking strength	 ISO 24334	F _{0.2} ≥ 1.0 kN/m F _{50.2} ≥ 2.0 kN/m
Movement of a furniture leg	 EN 424	no damage with type 0
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire*	 EN 13501-1	C _{fl} - s1
Slip resistance*	 EN 13893	DS
Electrostatic behavior*	 EN 1815	≤ 2 kV
Formaldehyde*	 EN 16516	E1
Formaldehyde-Emission	ASTM D6007	US EPA TSCA Title VI / CARB P 2
VOC Emissionen	 Décret no 2011-321	A+
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK
Thermal resistance*	 EN 12667	R ≤ 0.11 (m²K)/W
Additional requirements		
VOC Emissionen	 according to eco institute specifications	eco Institute Label
	 RAL-UZ 176	Blauer Engel

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Version 12 / 2020

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Technical Data Sheet

Laminated Flooring Freedom

Class 32 according to DIN EN 13329



CLASSEN.

Profile:

ML2.0
by CLASSEN

Core board:

Classenboard HDF

Dimensions:

1285 x 158 x 10 mm

Quantity / Weight per box (PU):

8 pieces = 1.624 m² / approx. 15 kg

Quantity / Weight per pallet:

50 PU = 81.200 m² / approx. 750 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	EN 13329	Length: ± 0.5 mm Width: ± 0.1 mm
Thickness	EN 13329	Ø ≤ 0.5 mm
Squareness	EN 13329	≤ 0.20 mm
Straightness	EN 13329	≤ 0.30 mm/m
Flatness of the elements	EN 13329	Width: concave ≤ 0.15% convex ≤ 0.20 % Length: concave ≤ 0.50 % convex ≤ 1.00 %
Openings	EN 13329	Ø ≤ 0.15 mm max. ≤ 0.20 mm
Height difference	EN 13329	Ø ≤ 0.10 mm max. ≤ 0.15 mm
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4
Classification Requirements		
Wear resistance	 EN 13329	≥ 4000 cycles (AC4)
Impact resistance	 EN 13329	small - diameter ball ≥ 12 N large - diameter ball ≥ 750 mm
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles
Thickness swelling	 EN 13329	≤ 15 %
Locking strength	 ISO 24334	F _{0.2} ≥ 1.0 kN/m F _{50.2} ≥ 2.0 kN/m
Movement of a furniture leg	 EN 424	no damage with type 0
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire*	 EN 13501-1	C _{fl} - s1
Slip resistance*	 EN 13893	DS
Electrostatic behavior*	 EN 1815	≤ 2 kV
Formaldehyde*	 EN 16516	E1
Formaldehyde-Emission	ASTM D6007	US EPA TSCA Title VI / CARB P 2
VOC Emissionen	 Décret no 2011-321	A+
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK
Thermal resistance*	 EN 12667	R ≤ 0.09 (m ² K)/W
Additional requirements		
VOC Emissionen	 according to eco institute specifications	eco Institute Label
	 RAL-UZ 176	Blauer Engel

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Technical Data Sheet

Laminated Flooring Story WR 4V

Class 33 according to DIN EN 13329



CLASSEN

Profile:

Core board:
Dimensions:
Quantity / Weight per box (PU):
Quantity / Weight per pallet:

megaloc
aqua protect

Classenboard HDF
1285 x 192 x 12 mm
6 pieces = 1.480 m² / approx. 16 kg
52 PU = 76.960 m² / approx. 832 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	EN 13329	Length: ± 0.5 mm Width: ± 0.1 mm
Thickness	EN 13329	$\varnothing \leq 0.5$ mm
Squareness	EN 13329	≤ 0.20 mm
Straightness	EN 13329	≤ 0.30 mm/m
Flatness of the elements	EN 13329	Width: concave $\leq 0.15\%$ convex $\leq 0.20\%$ Length: concave $\leq 0.50\%$ convex $\leq 1.00\%$
Openings	EN 13329	$\varnothing \leq 0.15$ mm max. ≤ 0.20 mm
Height difference	EN 13329	$\varnothing \leq 0.10$ mm max. ≤ 0.15 mm
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4
Classification Requirements		
Wear resistance	 EN 13329	≥ 6000 cycles (AC5)
Impact resistance	 EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles
Thickness swelling	 EN 13329	$\leq 15\%$
Locking strength	 ISO 24334	$F_{0.2} \geq 1.0$ kN/m $F_{50.2} \geq 2.0$ kN/m
Movement of a furniture leg	 EN 424	no damage with type 0
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire*	 EN 13501-1	Cn - s1
Slip resistance*	 EN 13893	DS
Electrostatic behavior*	 EN 1815	≤ 2 kV
Formaldehyde*	 EN 16516	E1
Formaldehyde-Emissions	ASTM D6007	US EPA TSCA Title VI / CARB P 2
VOC Emissions	 Décret no 2011-321	A+
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK
Thermal resistance*	 EN 12667	$R \leq 0.11$ (m ² K)/W
Additional requirements		
VOC Emissions	 according to eco institute specifications	eco Institute Label
	 RAL-UZ 176	Blauer Engel

We guarantee consistency of our decor colours under artificial light of type D50 (CIE D50, ANSI PH 2.30, ISO 3664) and D65 (CIE D65).

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Version 03 / 2021

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Technical Data Sheet

Laminated Flooring Trend 4V
Class 33 according to DIN EN 13329



Core board:
Profile:
Dimensions:
Quantity / Weight per box (PU):
Quantity / Weight per pallet:

Classenboard HDF
ML 2.0
1285 x 192 x 8
8 pieces = 1.973 m² / approx. 14 kg
48 PU = 94.704 m² / approx. 672 kg

Characteristics	Test Method	Requirements
General Requirements		
Geometrical characteristics	DIN EN 13329 Annex A	Length: ± 0.5 mm Width: ± 0.1 mm
Thickness	DIN EN 13329 Annex A	$\varnothing \leq 0.5$ mm max. ≤ 0.5 mm
Squareness	DIN EN 13329 Annex A	≤ 0.20 mm
Straightness	DIN EN 13329 Annex A	≤ 0.30 mm/m
Flatness of the elements	DIN EN 13329 Annex A	Width: concave $\leq 0.15\%$ convex $\leq 0.20\%$ Length: concave $\leq 0.50\%$ convex $\leq 1.00\%$
Openings	DIN EN 13329 Annex B	$\varnothing \leq 0.15$ mm max. ≤ 0.20 mm
Height difference	DIN EN 13329 Annex B	$\varnothing \leq 0.10$ mm max. ≤ 0.15 mm
Residual indentation 	EN ISO 24343-1 : 2012	≤ 0.05 mm
Light fastness 	EN ISO 4892-2:2006/A1:2009	grey scale level ≥ 4
Classification Requirements		
Wear resistance 	EN 13329	IP ≥ 6000 cycles (AC5)
Impact resistance 	EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm
Castor chair resistance 	EN 425	no damage with type W after 25 000 cycles
Thickness swelling 	EN 13329	$\leq 15\%$
Locking strength 	ISO 24334	F _{10.2} ≥ 1.0 kN/m F _{50.2} ≥ 2.0 kN/m
Movement of a furniture leg 	EN 424	no damage with type 0
Resistance to staining 	EN 438	5 (group 1 and 2), 4 (group 3)
Surface soundness	EN 311	≥ 1.25 N/mm ²
Essential Characteristics		
Reaction to fire* 	EN 13501-1	Cfl - s1
Slip resistance* 	EN 13893	DS
Formaldehyde* 	EN 717-1	E1
Thermal resistance* 	EN 12667	R ≤ 0.07 (m ² K)/W

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Version 01 / 2020

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Technical Data Sheet

Laminated Flooring Vogue

Class 33 according to DIN EN 13329



CLASSEN.

Profile:

ML2.0

by CLASSEN

Core board:

Classenboard HDF

Dimensions:

1285 x 158 x 10 mm

Quantity / Weight per box (PU):

8 pieces = 1.624 m² / approx. 15 kg

Quantity / Weight per pallet:

50 PU = 81.200 m² / approx. 750 kg

Characteristics	Test Method	Requirements	
General Requirements			
Geometrical characteristics	EN 13329	Length: ± 0.5 mm Width: ± 0.1 mm	
Thickness	EN 13329	Ø ≤ 0.5 mm	
Squareness	EN 13329	≤ 0.20 mm	
Straightness	EN 13329	≤ 0.30 mm/m	
Flatness of the elements	EN 13329	Width: concave ≤ 0.15% convex ≤ 0.20 % Length: concave ≤ 0.50 % convex ≤ 1.00 %	
Openings	EN 13329	Ø ≤ 0.15 mm max. ≤ 0.20 mm	
Height difference	EN 13329	Ø ≤ 0.10 mm max. ≤ 0.15 mm	
Residual indentation	 EN ISO 24343-1	≤ 0.05 mm	
Light fastness	 EN ISO 4892-2	grey scale level ≥ 4	
Classification Requirements			
Wear resistance	 EN 13329	≥ 6000 cycles (AC5)	
Impact resistance	 EN 13329	small - diameter ball ≥ 15 N large - diameter ball ≥ 1000 mm	
Castor chair resistance	 EN 425	no damage with type W after 25 000 cycles	
Thickness swelling	 EN 13329	≤ 15 %	
Locking strength	 ISO 24334	F _{0.2} ≥ 1.0 kN/m F _{50.2} ≥ 2.0 kN/m	
Movement of a furniture leg	 EN 424	no damage with type 0	
Resistance to staining	 EN 438-2	5 (group 1 and 2), 4 (group 3)	
Surface soundness	EN 311	≥ 1.25 N/mm²	
Essential Characteristics			
Reaction to fire*	 EN 13501-1	C _{fl} - s1	
Slip resistance*	 EN 13893	DS	
Electrostatic behavior*	 EN 1815	≤ 2 kV	
Formaldehyde*	 EN 16516	E1	
Formaldehyde-Emission	ASTM D6007	US EPA TSCA Title VI / CARB P 2	
VOC Emissionen	 Décret no 2011-321	A+	
Thermal conductivity*	 EN 12667	≥ 0.75 W/mK	
Thermal resistance*	 EN 12667	R ≤ 0.09 (m²K)/W	
Additional requirements			
VOC Emissionen	 	according to eco institute specifications	eco Institute Label
		RAL-UZ 176	Blauer Engel

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