

# GRAND SELECTION OAK / WALNUT / MONUMENTAL

Laminate floor covering for heavy use in commercial applications (AC5 / 33)

<p>Characteristics</p>	<p><b>Attractive:</b> Premium flooring available in two classic and eight limed Oaks, five Walnuts in modern colour tones from light to dark and ten individual, distinguished planks. A floor of timeless beauty to enrich any place.</p> <p><b>Innovative:</b> Looks and feels like a precious hardwood floor – unrivalled in depth and precision of how the structure meets perfectly with the decor. Produced with the latest technology</p> <p><b>Healthy:</b> Produced to strict European standards. For a healthy living, emissions of vapours are the same as you would expect from wood in its natural state.</p> <p><b>Ecological:</b> Made of 100 % FSC Mix certified wood from local sources – produced at the most modern, environmental friendly production facility of its kind.</p> <p><b>Strong:</b> Superior abrasion, scratch- &amp; impact resistance (AC5/33) as well as colourfast (anti-fade) &amp; anti-static properties.</p> <p><b>Affordable:</b> Unbeatable price/performance ratio compared to traditional hard wood floors: You not only save initially when buying the floor but again later on in both money and time. It is a low maintenance and easy to care flooring. There is no need to wax, polish nor sanding it, and it stays looking like the day you laid it for years and years.</p>																
<p>Technical classification</p>	<p>Laminate floor covering according to EN 13329 for indoor use according to EN 14041          Declaration of Performance (EU 305/2011): <a href="http://www.swisskrono.ch/dop">www.swisskrono.ch/dop</a></p>																
<p>Use</p>	<p>Floor-Covering inside buildings</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th colspan="3">Levels of use</th> </tr> <tr> <th></th> <th>Moderate</th> <th>General</th> <th>Heavy</th> </tr> </thead> <tbody> <tr> <td>Domestic</td> <td>   <b>AC 1 / Cl. 21</b>            Bed-, guestrooms         </td> <td>   <b>AC 2 / Cl. 22</b>            Living-, dining rooms         </td> <td>   <b>AC 3 / Cl. 23</b>            Kitchen, entrance halls         </td> </tr> <tr> <td>Commercial</td> <td>   <b>AC 3 / Cl. 31</b>            Hotel rooms, small offices         </td> <td>   <b>AC 4 / Cl. 32</b>            Offices, boutiques         </td> <td>   <b>AC 5 / Cl. 33</b>            Stores, corridors         </td> </tr> </tbody> </table>		Levels of use				Moderate	General	Heavy	Domestic	 <b>AC 1 / Cl. 21</b> Bed-, guestrooms	 <b>AC 2 / Cl. 22</b> Living-, dining rooms	 <b>AC 3 / Cl. 23</b> Kitchen, entrance halls	Commercial	 <b>AC 3 / Cl. 31</b> Hotel rooms, small offices	 <b>AC 4 / Cl. 32</b> Offices, boutiques	 <b>AC 5 / Cl. 33</b> Stores, corridors
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<p>Warranty and maintenance</p>	<p>Residential: 35 years      commercial: 5 years          Warranty conditions: <a href="http://www.swisskrono.ch/en/products/flooring/your-guarantee.html">http://www.swisskrono.ch/en/products/flooring/your-guarantee.html</a>          Care and maintenance: <a href="http://www.epfl.com/en/laminate/infomaterial.html">www.epfl.com/en/laminate/infomaterial.html</a></p>																
<p>Certificates / Labels</p> <table style="width: 100%; text-align: center;"> <tr> <td>             Swiss Made Swiss Quality         </td> <td>             Certified Quality and Environmental Management         </td> <td>             Low CO<sub>2</sub>-production         </td> <td>             Swiss Wood         </td> <td>             from sustainable forestry            (certificates can be provided upon request)         </td> <td>             The Mark of responsible forestry            FSC® C014686            Ask for FSC® certified products  <a href="http://www.fsc.org">www.fsc.org</a> </td> <td>             Quality and Innovation made in Europe            Association of European Producers of Laminate Flooring         </td> </tr> </table>		 Swiss Made Swiss Quality	 Certified Quality and Environmental Management	 Low CO <sub>2</sub> -production	 Swiss Wood	 from sustainable forestry (certificates can be provided upon request)	 The Mark of responsible forestry FSC® C014686 Ask for FSC® certified products <a href="http://www.fsc.org">www.fsc.org</a>	 Quality and Innovation made in Europe Association of European Producers of Laminate Flooring									
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## Technical Specifications

Product specifications							
		MONUMENTAL		OAK		WALNUT	
Thickness	mm   inch	12		12		12	
Length	mm   inch	2780	109.45	1380	54.33	1380	54.33
Width	mm   inch	244	9.60	193	7.6	193	7.6
Elements per box	pcs	3		5		5	
Surface	m <sup>2</sup>   sqft	2.035	21.90	1.332	14.33	1.332	14.33
Weight	kg   lbs	21.65	47.72	16	35.27	16	35.27
Declaration of Performance DoP		KCH_LFa_003		KCH_LFa_003		KCH_LFa_003	
Technical specifications							
Characteristics	Value	Explanation					Standard
Abrasion resistance	33	Heavy use in commercial applications					EN 13329
	AC 5	≥ 6000 revolutions (IP ≥ 6000)					EN 13329
Impact resistance	≥ 15 N	Small ball (surface resistance), impact in N					EN 13329
	≥ 1000 mm	Large ball (panel resistance), height of fall in mm					
Reaction to fire	C <sub>fi</sub> -s1	Flame-retardant, no/low smoke emission					EN 13501-1
Thickness swelling	≤ 8 %	24 hours in water bath of 20°C					EN 13329
Volatile Organic Compounds in total after 28 days	< 100 µg/m <sup>3</sup>	TVOC <sub>28d</sub> required for inside use < 1000 µg/m <sup>3</sup>					ISO 16000
Formaldehyde emission	≤ 0.1 ppm	E1 ≤ 0.1 ppm					EN 717-1
	≤ 0.11 ppm	CARB II ≤ 0.11 ppm					ASTM E 1333
Surface soundness	≥ 1.00 N/mm <sup>2</sup>	Quality of bonding between coating and panel.					EN 13329
Static electrical propensity	≤ 2 kV	No electrostatic charge /discharge					EN 1815
Static indentation	No visible change	≤ 0.01 mm indentation using a straight steel cylinder of 11.3 mm diameter					EN 13329 EN 433
Thermal resistance	0.089 (m <sup>2</sup> K)/W	Use of floor heating only if thermal resistance is lower than 0.15 (m <sup>2</sup> K)/W					EN 12667
Slip resistance	DS	Slip resistant: coefficient ≥ 0.3					EN 14041
Effect of a furniture leg	No damage	Tested with foot type 0					EN 13329 EN 424
Effect of a castor chair	No damage	25'000 cycles without any damage					EN 13329 EN 425
Resistance to staining	Level 5 in group 1+2 Level 4 in gr. 3	No visible change (group 1 Aceton and 2 Coffee), light change in group 3 (strong acids)					EN 13329 EN 428-2.26
Light fastness	≥ 4	Blue wool scale: change of colour with method of grey scale					EN 20105-B02
Micro scratch resistance	MSR-A2	Gloss change 10% – 30% (Martindale Test)					EN 16094
Tolerances							
Thickness of the element, <b>t</b>		$\Delta t_{average} \leq 0.50 \text{ mm} \mid t_{max} - t_{min} \leq 0.50 \text{ mm}$					EN 13329
Length of the surface layer, <b>l</b>		$\Delta l \leq 0,60 \text{ mm}$ (Monumental $\Delta l \leq 0,8 \text{ mm}$ )					EN 13329
Width of the surface layer, <b>w</b>		$\Delta w_{average} \leq 0.10 \text{ mm} \mid w_{max} - w_{min} \leq 0.20 \text{ mm}$					EN 13329
Squareness of the element, <b>q</b>		$q_{max} \leq 0.20 \text{ mm}$					EN 13329
Straightness of surface layer, <b>s</b>		$s_{max} \leq 0.30 \text{ mm/m}$					EN 13329
Flatness of the element, <b>f</b> Maximum single values		Width: $f_{w, concave} \leq 0.15 \% \mid f_{w, convex} \leq 0.20 \%$					EN 13329
		Length: $f_{l, concave} \leq 0.50 \% \mid f_{l, convex} \leq 1.00 \%$					
Openings between elements, <b>o</b>		$o_{average} \leq 0.15 \text{ mm} \mid o_{max} \leq 0.20 \text{ mm}$					EN 13329
Height diff. betw. elements, <b>h</b>		$h_{average} \leq 0.10 \text{ mm} \mid h_{max} \leq 0.15 \text{ mm}$					EN 13329
Dimensional variations after changes in relative humidity, <b>δ</b>		Width: $\delta_w_{average} \leq 0.9 \text{ mm}$					EN 13329
		Length: $\delta_l_{average} \leq 0.9 \text{ mm}$					
Ecological characteristics							
Energy and Content Swiss Product declaration		Renewable energy > 90 %   wood fibre ~80 %, Swiss wood   UF adhesive ~15 % no post-consumer recycled content   no chlorides and no biocides in the wood heavy metal free coating					SIA 493.05
Disposal		Thermal recycling					