















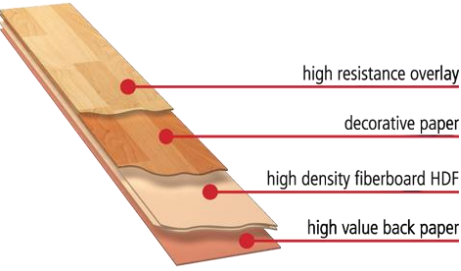























SWISS-NOBLESSE

SWISSFLOOR PREMIUM FOR GENERAL COMMERCIAL USE (AC4/32)

Menznau, 01. Jan. 2015 | Version 1.2 (supersedes all previously published data)

<p>Characteristics</p>	<p>Attractive: Available in many, authentic, modern colour tones from light to dark and various individual, distinguished planks. A floor of timeless beauty to enrich any place.</p> <p>Innovative: 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. Optionally, many products are available with 4-sided V-Groove and footfall sound insulation.</p> <p>Healthy: Produced to strict European norms. For a healthy living, emissions of vapours are the same as you would expect from wood in its natural state.</p> <p>Ecological: Wood from local sources – produced at the most modern, environmental friendly production facility of its kind.</p> <p>Resilient: High abrasion (cl. AC4/32), for general use in commercial applications.</p> <p>Affordable: 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 High Density Fibreboard (HDF) Declaration of Performance (EN 14041): www.kronospan.ch/dop</p> <div style="text-align: right;">  <small>KCH_LFa_003</small> </div>																			
<p>Use</p>	<p>Floor-Covering inside buildings</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2"></th> <th colspan="3">Levels of use</th> </tr> <tr> <th colspan="2"></th> <th>Moderate</th> <th>General</th> <th>Heavy</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Domestic</td> <td></td> <td> AC 1 / Cl. 21 Bed-, guestrooms</td> <td> AC 2 / Cl. 22 Living-, dining rooms</td> <td> AC 3 / Cl. 23 Kitchen, entrance halls</td> </tr> <tr> <td>Commercial</td> <td> AC 3 / Cl. 31 Hotel rooms, small offices</td> <td> AC 4 / Cl. 32 Offices, boutiques</td> <td></td> </tr> </tbody> </table>			Levels of use					Moderate	General	Heavy	Domestic		 AC 1 / Cl. 21 Bed-, guestrooms	 AC 2 / Cl. 22 Living-, dining rooms	 AC 3 / Cl. 23 Kitchen, entrance halls	Commercial	 AC 3 / Cl. 31 Hotel rooms, small offices	 AC 4 / Cl. 32 Offices, boutiques	
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<p>Warranty and maintenance</p>	<p>Residential warranty: 25 years Commercial warranty: 2 years Warranty conditions : http://www.kronospan.ch/en/products/flooring/your-guarantee.html Care and maintenance: www.epf.com/en/laminate/infomaterial.html</p>																			

Product range and technical specifications

Product specifications

Size per board:	1380 x 193 x 8 mm 54.33 x 7.6 x 5/16 in
1 Box contains:	8 boards in total 2,131 m ² and 15 kg 22.94 sqft / 33.07 lbs
Characteristics:	Optional 4-sided V-Groove, footfall sound insulation

Technical specifications

Characteristic	Value	Explanation	Rating	Standard
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Classification properties

Level of use	Class 32	General use in commercial applications	High resistant Class	EN 13329
Abrasion resistance	AC 4	≥ 4000 revolutions (IP ≥ 4000)	High, Cl. 4 of 5	EN 13329-E
Impact resistance	IC 2	Small ball (surface resistance), impact in N Large ball (panel resistance), height of fall in mm	Medium, Cl. 2 of 3	EN 13329-F
Reaction to fire	C _{fl} -s1	Flame-retardant, no smoke emission	Improved skill for floor	EN 13501-1

General properties

Thickness swelling	≤ 18 %	24 hours in water bath of 20°C	Normal swelling	EN 13329-G
Volatile Organic Compounds in total after 28 days	< 100 µg/m ³	TVOC _{28d} required for inside use < 1000 µg/m ³	Very low emissions	ISO 16000
Formaldehyde emission	≤ 0.1 ppm ≤ 0.11 ppm	E1 ≤ 0.1 ppm CARB II ≤ 0.11 ppm	Very low emission	EN 717-1 ASTM E 1333
Surface soundness	≥ 1.00 N/mm ²	Quality of bonding between coating and panel.	According to standard	EN 13329-D

Physical properties

Static electrical propensity	≤ 2 kV	No electrostatic charge in dry room conditions (22 % rel. moisture)	According to standard	EN 1815
Static indentation	No visible change	≤ 0.01 mm indentation using a straight steel cylinder of 11.3 mm diameter	According to standard	EN 13329 EN 433
Thermal resistance	0.059 (m ² K)/W	Use of floor heating only if thermal resistance is lower than 0.15 (m ² K)/W	Qualified for use with floor heating	EN 12667
Slip resistance	DS	Slip resistant (DS) if coefficient ≥ 0.3	fulfilled	EN 14041
Effect of a furniture leg	No damage	Tested with foot type 0	high resistance	EN 13329 EN 424
Effect of a castor chair	No damage	25'000 cycles without any damage	high resistance	EN 13329 EN 425

Optical properties

Resistance to staining	Level 5 in group 1+2 Level 4 in gr. 3	No visible change (group 1 Aceton and 2 Cof-fee), light change in group 3 (strong acids)	Very high optical resistance, grade 5/4 of 5	EN 13329 EN 428-2.26
Light fastness	≥ 6	Blue wool scale: change of colour with method of grey scale	Very stable (level 6 of 6)	ISO 105-B02
Resistance to cigarette burns	4	Light visible change	Good resistance (4 of 5)	EN 438
Micro scratch resistance	≤ 20 %	Gloss change (Martindale Test)	Very low change	EN 16094

Size and Tolerances

Thickness of the element, <i>t</i>	8 mm	$\Delta t_{\text{average}} \leq 0.50 \text{ mm} \mid t_{\text{max}} - t_{\text{min}} \leq 0.50 \text{ mm}$	EN 13329
Length of the surface layer, <i>l</i>	1'380 mm	$\Delta l \leq 0,50 \text{ mm}$	EN 13329
Width of the surface layer, <i>w</i>	193 mm	$\Delta w_{\text{average}} \leq 0.10 \text{ mm} \mid w_{\text{max}} - w_{\text{min}} \leq 0.20 \text{ mm}$	EN 13329
Squareness of the element, <i>q</i>		$q_{\text{max}} \leq 0.20 \text{ mm}$	EN 13329
Straightness of surface layer, <i>s</i>		$s_{\text{max}} \leq 0.30 \text{ mm/m}$	EN 13329
Flatness of the element, <i>f</i> Maximum single values		Width: $f_{w, \text{concave}} \leq 0.15 \% \mid f_{w, \text{convex}} \leq 0.20 \%$ Length: $f_{l, \text{concave}} \leq 0.50 \% \mid f_{l, \text{convex}} \leq 1.00 \%$	EN 13329
Openings between elements, <i>o</i>		$o_{\text{average}} \leq 0.15 \text{ mm} \mid o_{\text{max}} \leq 0.20 \text{ mm}$	EN 13329
Height diff. between element, <i>h</i>		$h_{\text{average}} \leq 0.10 \text{ mm} \mid h_{\text{max}} \leq 0.15 \text{ mm}$	EN 13329
Dimensional variations after changes in relative humidity, δ		Width: $\delta_{w, \text{average}} \leq 0.9 \text{ mm}$ Length: $\delta_{l, \text{average}} \leq 0.9 \text{ mm}$	EN 13329

Ecological Properties

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	Swiss Leg.