

Technical Data Sheet

HARO Celenio

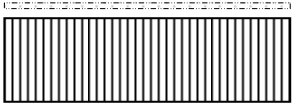


Laboratory tests		
Test criteria	Nominal values	Description
Abrasion resistance (S-33 method) (Falling sand method)	IP \geq 260 rev.	<i>Celenio</i> special finish: Evaluation of the abrasion resistance of the surface finish by means of the IP value determined in the so-called Taber Abraser Test (on a smooth surface texture)
	IP \geq 1500 rev.	
Scouring test (steel wool)	scour-proof	<i>HARO</i> factory procedure for floor finishes; no marking left even after applying twice the weight force specified by the factory procedure.
Impact test (EN 438-2, 12)	> 2000 mm	Evaluation of the behaviour when subjected to impact from a large steel ball dropped on the surface (falling-ball test)
Effect of castor chair (DIN EN 425)	resistant	Evaluation as per EN 13329; with chair castor type W resistant at least up to a level of use of 33
Slip resistance / Non-slip safety	R 9 / $\mu = 0.45$ (safe)	Evaluation by means of the μ -value under field conditions (plastic heel) or as per German safety regulation BGR 181 / German standard DIN 51130
Colouration and light fastness (factory procedure)	change of colour possible	<i>Celenio</i> consists of approx. 95% untreated wooden particles. Therefore change of colour due to intensive influence of light is unavoidable, but is reduced by special typ of varnish.
Resistance to staining, varnished surface (prEN 13442:1999)	resistant	No changes from staining substances (even critical "stain-makers" such as red wine fade away after a short time).
Resistance to soiling	resistant	Dirt-repellent due to closed-pore surface
Hardness (EN 1534, Brinell hardness)	130 N/mm ²	Brinell hardness; the values of natural wood range between 25 and 35 N/mm ²
Emission (formaldehyde and TVOC, chamber test, EN 717)	no health risk	<i>Celenio</i> is significantly below the applicable limit values and by far meets the requirements for the "Blue Angel" eco label. <i>Celenio</i> is practically non-odorous.
Thermal resistance (DIN 4108)	0.024 m ² k/W	Thermal conductivity value; only about 1/6 of the limit value for floor coverings (max. 0.15 m ² K/W)
Electrostatic behaviour (prEN 14041:2003)	ASF 2	Electrostatic charging of persons < 2 kV even with low indoor air humidity levels.
Effect of room sound	64 Sone GF	With glue-down installation
Reaction to fire (DIN EN 13 501-1)	C _{fi} -s1	The achieved fire classification applies to installation in accordance with the laying instructions; it corresponds approximately to German fire rating class B1.

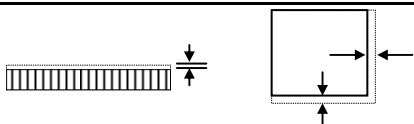

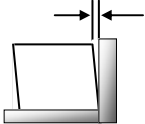
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Construction

Celenio special finish	
HaroLite , wood-based floor tile	
Total thickness	8 mm
Surface layer dim.	356 mm x 356 mm

Ready-to-install tile

Tolerance criteria ^{*)}	ACT. value average	Symbol/Remark
Thickness	± 0.5 mm	
Edge length	± 0.5 mm	
Surface area	7.94 tiles/m ²	Including 5 mm joint
Deviation from flatness (cupping/bowing)	± 1 mm	
Deviation from squareness	-	

Quality criteria	ACT. value average	Symbol/Remark
Weight per unit area per tile	1000 - 1200 g	Ensures the high quality level
Wood moisture content	approx. 6%	The equilibrium wood moisture content of the tile adjusted to the average indoor climate

Dimensional stability, longitudinal and transverse (climatic)	dimensionally stable	No significant dimensional changes under normal indoor climate conditions (laying instructions must be complied with!).
Thickness swelling Edge swelling	≤ 8%	Short-term exposure to moisture causes neither temporary nor permanent swelling in thickness and surface which would render the floor unusable. Prolonged exposure to moisture, in particular standing moisture, is to be avoided.
Swelling of remaining product	≤ 5%	
Tensile strength in transverse direction	> 2.2 N/mm ²	The strength properties of the <i>Celenio</i> tile body <u>exceed</u> those of all materials usually used for floor coverings made of wood.
Bending module of elasticity	> 5000 N/mm ²	
Bending strength	> 400 N/mm ²	

^{*)} Manufacturing tolerances apply to the state at the time of dispatch