

TECHNICAL SPECIFICATIONS

Product type	Eco-resilient Composite Flooring	Installation	Floating (Angle-Tap lock)
Overall thickness	10mm	Bevel	Painted bevel
Top layer	0.55mm wear layer equivalent	Backing type and thickness	2mm Cork

CLASS OF USE AND WARRANTY

Class of use (EN 16511)	23 Heavy Domestic	Class of use (EN 16511)	33 Heavy Commercial
Domestic warranty	Lifetime Limited	Commercial warranty	15 Years Limited

CERTIFICATIONS

CE Marking	Compliant	GreenGuard Gold	Compliant
IAC Gold	Compliant		

CERTIFICATIONS & CHEMICAL PROPERTIES

Norm	Item	Test method	Requirement	Result
EN 14041	Emissions	EN 717-1	≤0.12mg/m ³	Compliant
Decret No.2011-321	Emissions	ISO 16000	VOC A+ (TVOC<1000µg/m ³)	Compliant
CDPH	Emissions	Spectrometry, chromatography	TVOC ≤220µg/m ³	Compliant
CPSIA & Prop 65	Ortho-Phthalates	CPSC-CH-C-1001-09.4	N.D.	Compliant
REACH	SVHC	Spectrometry, chromatography	≤0.1%	Compliant

PHYSICAL PROPERTIES

Norm	Item	Test Method	Requirement	Result
EN 16511	Thickness	EN 17539	ΔT _{ave} ≤0.50 mm	Compliant
	Length	EN 17539	l≤1500mm: Δl≤0.5 mm l>1500 mm: Δl≤0.3 mm/m	Compliant
	Width	EN 17539	ΔW _{ave} ≤0.10 mm	Compliant
	Squareness	EN 17539	≤0.2mm	Compliant
	Straightness	EN 17539	≤0.3mm/m	Compliant
	Flatness	EN 17539	Width: ≤0.20%(concave), ≤0.20% (convex) Length: ≤0.50% (concave), ≤1.00% (convex)	Compliant
	Opening	EN 17539	O _{ave} ≤0.15mm	Compliant
	Height difference	EN 17539	H _{ave} ≤0.10mm	Compliant
	Light fastness	ISO 105-B02:2014 procedure 3	≥6	Compliant
	Dimensional stability	ISO 23999	≤0.15%	Compliant
	Curling	ISO 23999	≤2mm	Compliant
	Wear resistance	ISO 24338 Procedure A	≥4000 cycles	Compliant
	Impact resistance-big ball	EN 13329	≥1600mm	Compliant
	Micro-scratch resistance	EN 16094 Procedure A	≤MSR-A2	Compliant
	Castor chair	EN ISO 4918	25000 cycles	Compliant
Effect of furniture leg	EN ISO 16581	No visible damage	Compliant	
Residual indentation	EN ISO 24343-1	≤0.20mm	Compliant	
Resistance to staining	EN 438-2	Group 1 and 2: grade 5, group3: grade 4	Compliant	
Swelling	ISO 24336	≤12%	Compliant	
Locking strength	ISO 24334	Long side≥1.0KN/m Short side≥3.5KN/m	Compliant	
EN 14041	Reaction to fire	EN 13501-1	Bfl-s1	Compliant
	Thermal resistance (R)	EN 12664/ASTM C518	NA	Compliant
	Thermal conductivity	EN 12664/ASTM C518	NA	Compliant
Others	Slip resistance (SCOF)	ASTM C1028	≥0.5	Compliant
	Slip resistance (DCOF)	ANSI/NFSI B101.3-2012	≥0.4	Compliant
	Critical radiantflux	ASTM E648	Class 1 (>0.45W/cm ²)	Compliant
	Smoke density	ASTM E662	<450 (under non-flaming exposure)	Compliant
	NALFA surface swell (T-seam)	NALFA	≤Grade 2	Compliant
	Thickness swell	ASTM F3261	Max 5 % swell – with attached back	Compliant
	Airborne sound transmission	ISO 10140-2	N/A	67 dB*
	Impact sound transmission	ISO 10140-3	N/A	42 dB*
	Impact sound transmission - Reduction	ISO 10140-1	N/A	16 dB
	Airborne sound transmission (STC)	ASTM E413-16	≥50	68*
	Impact sound transmission (IIC)	ASTM E989-6	≥50	67*
	Reducing impact sound -transmission (ΔIIC)	ASTM E2190-16	NA	20

* The structure for sound performance test: 150mm thick concrete with 300 mm cavity with 12mm gypsum boards and 50 mm thick glass wool.
Disclaimer: The sound test results were achieved using a 6 mm (overall thickness) product and can only be used for reference.

LEED SCORECARD

How our products fit into LEED v4:

LEED BD+C and ID+C	Credit Type	Points	Criteria	Product Contribution
	EQ Credit: Low-Emitting Materials	1-3 points	Product has been tested according to California Department of Public Health (CDPH) Standard Method v1.2-2017 and complies with the VOC limits in Table 4-1 of the method. Additionally, the range of total VOCs after 14 days (336 hours) was measured as specified in the CDPH Standard Method v1.2 and is reported (TVOC ranges: 0.5 mg/m ³ or less, between 0.5 and 5 mg/m ³ , or 5 mg/m ³ or more).	CFL products are GreenGuard Gold certified.

MR Credit: Building Product Disclosure and Optimization – Material Ingredients 1 point

Option 2. Product has been tested according to EN 16516:2017 and complies with the LCI values from Table 1 of the German AgBB Testing and Evaluation Scheme (2015) and a formaldehyde limit of 10 micrograms per cubic meter. Additionally, the range of total VOCs after 28 days was measured as specified in EN 16516 and reported (TVOC ranges: 0.5 mg/m3 or less, between 0.5 and 5 mg/m3, or 5 mg/m3 or more).

CFL products are IAC Gold certified, including compliance with German AgBB testing.

International Alternative Compliance Path – REACH Optimization (value at 100% of cost or 1 product). End use products and materials have fully inventoried chemical ingredients to 100 ppm and assess each substance against the Authorization List – Annex XIV, the Restriction list – Annex XVII and the SVHC candidate list, (the version in effect June 2013,) proving that no such substance is included in the product. If the product contains no ingredients listed on the REACH Authorization, Restriction, and Candidate list.

CFL products are REACH compliant.

WELL SCORECARD

The WELL Building Standard is founded on the understanding that facets of our environment interact with personal, genetic and behavioral factors to shape our overall health and well-being. By compiling leading practices in building design and management and referencing existing standards and best practice guidelines set by governmental and professional organizations, WELL works to harmonize and clarify existing thresholds and requirements.

Facet	Feature	Part	Requirements	Concept score	How our product contribute to obtain WELL level certification	
AIR	01. Air quality standards	1. Standards For Volatile Substances	The following conditions are met: a. Formaldehyde levels less than 27ppb (0.027ppm) b. Total volatile organic compounds less than 500ug/m3 (0.5mg/m3)	PRECONDITION	a. Formaldehyde emission are less than 0.05mg/m3. b. The total volatile organic compounds are less than 0.5mg/m3.	
		04. VOC Reduction	1. Interior Paints and Coatings	The VOC limits of newly applied paints and coating meet one of the following requirements: a. 100% of installed products meet California Air Resources Board (CARB) 2007, Suggested Control Measure (SCM) for Architectural Coatings, or South Coast Air Quality Management District (SCAQMD) Rule 1113, effective June 3, 2011 for VOC content. b. At minimum 90%, by volume, meet the California Department of Public Health (CDPH) Standard Method v1.1-2010 for VOC emissions	PRECONDITION	a. The VOC limits for California Air Resources Board (CARB) are less than 0.11ppm. b. Measured Concentration of Total Volatile Organic Compounds (TVOC): Less than/equal to 0.5 mg/m3 (in compliance with CDPH/EHLB Standard Method v1.1-2010). The product is GreenGuard Gold certified
			3. Flooring	The VOC emissions of all newly installed flooring must meet all limits set by the following, as applicable: a. California Department of Public Health (CDPH) Standard Method v1.1-2010.	PRECONDITION	Conforms to the CDPH/EHLB Standard Method v1.1-2010 (California Section 01350), effective January 1, 2012, for the school classroom and private office parameters when modeled as Flooring. The product is GreenGuard Gold certified
		11. Fundamental Material Safety	1. Asbestos and Lead Restriction	All newly-installed building materials meet the following materials composition requirements: a. No asbestos. b. Not more than 100 ppm (by weight) added lead.	PRECONDITION	a. No asbestos b. The product contain less than 100 ppm.
			2. Lead Abatement	For repair, renovation or painting on buildings constructed prior to any applicable laws banning or restricting lead paint, lead evaluation and abatement.	PRECONDITION	The product contain less than 90 ppm.
			3. Asbestos Abatement	To reduce hazards in buildings constructed prior to any applicable laws banning or restricting asbestos, the following testing, evaluation and abatement.	PRECONDITION	The product contain less than 90 ppm.
		25. Toxic Material Reduction	2. Flame Retardant Limitation	Halogenated flame retardants are limited in the following components to 0.01% (100 ppm) to the extent allowable by local code: a. Window and waterproofing membranes, door and window frames and siding. b. Flooring, ceiling tiles and wall coverings. c. Piping and electrical cables, conduits and junction boxes. d. Sound and thermal insulation. e. Upholstered furniture and furnishings, textiles and fabrics.	OPTIMIZATION	The product don't contain halogenated flame retardants
			3. Phthalate (Plasticizers) Limitation	DEHP, DBP, BBP, DINP, DIDP or DNOP (often found in polyvinyl chloride [PVC]) are limited in the following components to 0.01% (100 ppm): a. Flooring, including resilient and hard surface flooring and carpet. b. Wall coverings, window blinds and shades, shower curtains, furniture and upholstery. c. Plumbing pipes and moisture barriers.	OPTIMIZATION	In accordance with US Consumer Product Safety Improvement Act 2008 (CPSIA) (H.R. 4040) Title I, Section 108 & California Proposition 65 & Annex XV II item 51&52 of the REACH Regulation (EC) No. 1907/2006 and amendment No. 552/2009, the product contains less than 100ppm.

Comfort

	5. Urea-Formaldehyde Restriction		Urea-formaldehyde presence is limited in the following components to 100 ppm: a. Furniture or any composite wood products. b. Laminating adhesives and resins. c. Thermal insulation.	OPTIMIZATION	The product contains urea-formaldehyde less than 100ppm.
	74. Exterior Noise Intrusion	Part 1. Sound Pressure Level	Each regularly occupied space meets the following sound pressure level as measured when the space and adjacent spaces are unoccupied, but within 1 hour of normal business hours: a. Average sound pressure level from outside noise intrusion does not exceed 50 dBA.	PRECONDITION	<ol style="list-style-type: none">1. The product has $L_{nw} = 42$dB according to the standard ISO 10140-32. The product has $R_w = 67$dB according to the standard ISO 10140-23. The product has $IIC = 69$ according to the standard ASTM E492-094. The product has $STC = 69$ according to the standard ASTM E90-09
	79. Internally Generated Noise	Part 1. Sound Masking Limits	If sound masking systems are used, sound levels fall within the following range, when measured from the nearest workspace: a. Open workspaces: 45 - 48 dBA. b. Enclosed offices: 40 - 42 dBA	OPTIMIZATION	<ol style="list-style-type: none">1. The product has $L_{nw} = 42$dB according to the standard ISO 10140-32. The product has $R_w = 67$dB according to the standard ISO 10140-23. The product has $IIC = 68$ according to the standard ASTM E492-094. The product has $STC = 67$ according to the standard ASTM E90-09

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