SPC Flooring Spec Sheet

TECHNICAL SPECIFICATIONS

Product type	SPC (Rigid LVT)	**Installation**	Floating (Angle-Drop Lock)
Overall thickness	5.0mm	**Bevel**	Painted bevel on 4 sides
Wear layer	0.55mm	**Backing type and thickness**	1mm Cork
Finish	Anti-microbial NaturTrend Finish		

CLASS OF USE AND WARRANTY

Domestic	23 Heavy	**Commercial**	33 heavy
Domestic Warranty	Lifetime Limited	**Commercial Warranty**	15 Years Limited

CERTIFICATIONS

CE Mark	Certified	**GreenGuard Gold**	Certified
UKCA Mark	Certified	**Product Health Declaration**	Platinum level
IAC Gold	Certified	**Assure**	Certified

CHEMICAL PROPERTIES

Norm	Item	Test Method	Requirement	Result
EN 14041	Emissions	EN 717-1	≤0.124mg/m3	Compliant
Decret No.2011-321	Emissions	ISO 16000	VOC A+ (TVOC<1000µg/m3)	Compliant
CDPH	Emissions	Spectrometry, chromatography	TVOC ≤220µg/m3	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
ISO 10582	Dimensional stability (6hrs at 80℃)	ISO 23999	ΔW/ΔL ≤0.15%	Compliant
		ISO 23999	Curling: ≤1mm	Compliant
	Length	ISO 24342	≤0.15% of nominal L up to max 0.5mm	Compliant
	Width	ISO 24342	≤0.1% of nominal L up to max 0.5mm	Compliant
	Total thickness (with backing)	ISO 24346	+0.13mm/-0.1mm	Compliant
	Squareness	ISO 24342	≤0.25mm/≤400mm ≤0.35mm/≥400mm	Compliant
	Flatness	ISO 10582 Appendix B	Length: ≤0.50% (concave) / ≤1.0% (convex) Width: ≤0.10%(concave) / ≤0.15% (convex)	Compliant
	Openings	ISO 10582 Appendix C	Average ≤0.15mm / Max ≤0.2mm	Compliant
	Height difference	ISO 10582 Appendix C	Average ≤0.1mm / Max ≤0.15mm	Compliant
	Residual indentation	ISO 24343-1	≤0.1mm	Compliant
	Castor chair	ISO 4918	Moderate Commercial 15,000R	Compliant
	Light fatness (Blue wool)	ISO 105-B02:2014 Method 3A	≥Grade 6	Compliant
	Locking strength	ISO 10582 Appendix D	≥1.5 KN/m	Compliant
EN 16511	Wear resistance	EN 13329	≥4000 cycles (AC4)	Compliant
	Impact resistance	EN 13329 Annex A	≥1600mm	Compliant
	Martindale (Gloss retention)	EN 16094	≤MSR-A2	Compliant
	Martindale (Micro-scratch)	EN 16094	≤MSR-B2	Compliant
	Furniture leg	EN 424	No visible damage	Compliant
	Resistance to staning	EN 438-2	Group 1 and 2: Grade 5 Group 3: Grade 4	Compliant
	Swelling	ISO 24336	≤12%	Compliant
EN 14041	Thermal Resistance (R)	EN 12667/ASTM C518	NA	Compliant
	thermal Conductivity	EN 12667/ASTM C518	NA	Compliant
	Slipperiness	EN 13893	≥0.3	Compliant
	Reaction to fire	EN 13501-1	Class Bfl -S1	Compliant
OTHERS	Slipperiness	DIN 51130	≥R9	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	18 dB
	Resistance to staning	EN423	Not affected	Compliant

LEED SCORECARD

LEED was developed to address all buildings everywhere, regardless of where they are in their life cycle. From hospitals to data centers, from historical buildings to those still in the design phase, there is a LEED certification programm for every building. Our products will contribute value to a building's LEED v4 Scorecard in the following LEED certiifcation programm categories recognized by the USGBC as per following

LEED Programme Certifcation	Category	Credit Title	LEED Points Attainable	Credit Description	How our product contributes to obtaining LEED points
BD+C Building Design and Construction	**Indoor Environmental Quality**	Credit 1: Enhanced Indoor Air Quality Strategies – Option 2 Additional Enhanced IAQ Strategie - option D	1 point ID&C, 2 points Retail CI	To reduce concentrations of chemical that can damage air quality, human health, productivity, and the environment.	1. Formaldehyde emission are less than 0.05mg/m3, TVOCs are less than 0.5mg/m3. 2. The product is GreenGuard Gold certified.
		Credit 2: Low-Emitting Materials – Option1 Flooring	1 point		1. VOC emission are less than 0.5mg/m3. 2. The products is GreenGuard Gold certified.
		Credit 4: Indoor Air Quality Assessment - Option 2 Air Testing	2 points	To establish better quality indoor air in the building	1. Formaldehyde emission are less than 0.05mg/m3, TVOCs are less than 0.5mg/m3. 2. The product is GreenGuard Gold certified.
		Credit 9: Acoustic Performance	2 points	To provide effective acoustic design	The product has a high acoustic performance. Rw and Ln,w test report are available on request
	Material & Resource	Credit 4: Material ingredient– Option 2	1 point	Minimize the use and generation of harmful substances	The product is 100% REACH compliant
		Credit 6 – PBT source reduction: lead, cadmium and copper	1 point	To reduce the release of persistent, bioaccumulative, and toxic chemicals	The product is free of lead, cadmium and copper
O+M Building Operations and Maintenance	**Material & Resource**	Credit 3: Purchasing - Facility maintenance and renovation	1 point	To reduce the environmental harm from materials used in building renovations	1. The product is 100% REACH compliant 2. Formaldehyde emission are less than 0.05mg/m3, TVOCs are less than 0.5mg/m3. 3. Test repost according to ISO 16000 is available on request. 3. The product is GreenGuard Gold certified.
HOMES Homes	**Indoor Environmental Quality**	Credit 2: Contaminant Control – Option 4 Air Testing	1 point	Demonstrate that contaminants do not exceed concentration levels listed	The products is GreenGuard Gold certified.
		Credit 7: Low-Emitting Materials	0.5 point	To reduce occupants' exposure to airborne chemical contaminants	The product is GreenGuard Gold certified and meet the requirements of CA Section 01350. The product is made with ULEF or non-added formaldehyde material
	Material & Resource	Prerequiste – Durability management	0 point (Prerequiste)	To promote durability and performance of the building	The product is water resistant
ID+C Interior Design and Construction	**Indoor Environmental Quality**	Credit 1: Enhanced Indoor Air Quality Strategies – Option 2 Additional Enhanced IAQ Strategies - option D	1 point ID&C, 2 points Retail CI	To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.	1. Formaldehyde emission are less than 0.05mg/m3, TVOCs are less than 0.5mg/m3. 2. The product is GreenGuard Gold certified.
		Credit 2: Low-Emitting Materials – Option1 Flooring	1 point		1. VOC emission are less than 0.5mg/m3. 2. The products is GreenGuard Gold certified.
		Credit 4: Indoor Air Quality Assessment - Option 2 Air Testing	2 points	To establish better quality indoor air in the building	1. Formaldehyde emission are less than 0.05mg/m3, TVOCs are less than 0.5mg/m3. 2. The product is GreenGuard Gold certified.
		Credit 9: Acoustic Performance	2 points	To provide workspaces and classrooms effective acoustic design	The product has a high acoustic performance. Rw and Ln,w test report are available on request
	Material & Resource	Credit 4: Material ingredient– Option 2	1 point	Minimize the use and generation of harmful substances	The product is 100% 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)	PRECONDITION	a. Formaldehyde emission are less than 0.05mg/m3.
			b. Total volatile organic compounds less than 500ug/m3 (0.5mg/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:	PRECONDITION	a. The VOC limits for California Air Resources Board (CARB) are less than 0.11ppm.
			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. 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
			b. At minimum 90%, by volume, meet the California Department of Public Health (CDPH) Standard Method v1.1-2010 for VOC emissions		
		3. Flooring	The VOC emissions of all newly installed flooring must meet all limits set by the following, as applicable:	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.
			a. California Department of Public Health (CDPH) Standard Method v1.1-2010.		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.
		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.
Comfort	**74. Exterior Noise Intrusion**	**Part 1. Sound Pressure Level**	Each regularly occupied space meets the following sound pressure level as mesured 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	1. The product has Lnw = 42dB according to the standard ISO 10140-3 2. The product has Rw = 67dB according to the standard ISO 10140-2

| 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 | 1. The product has Lnw = 42dB according to the standard ISO 10140-3
2. The product has Rw = 67dB according to the standard ISO 10140-2 |

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