

moduleo® Layred

design floors

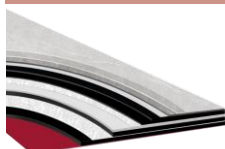
TECHNICAL DATA SHEET

Edition 02/2025

DIMENSIONS

FORMAT		Herringbone	Medium Plank	Medium Tile
Width	EN 17539:2021-08	126 mm	209 mm	428 mm
Length	EN 17539:2021-08	630 mm	1494 mm	856 mm
Number of panels per pack		10	6	6
m² per pack		0,794 m²	1,873 m²	2,198 m²
Weight per pack		6,8 kg	15,5 kg	18,1 kg
Tongue and groove		Unizip	Uniclic-Uniclic	Uniclic-Uniclic
Total mass per unit area	EN ISO 23997:2012-02	8109 g/m²		
Total thickness	EN 17539:2021-08	6 mm (= 5 + 1 mm attached underlay)		
Finishing		Protectonite Plus®		
Bevels		Genuine		

PANEL BUILD-UP



- 1 Top lacquer
- 2 PVC wearlayer
- 3-4 PVC printfilm
- 5 PVC soft layer
- 6-11 PVC backing with 2 glass fibers
- 12 1 mm crosslinked polyethylene underlay

FACTORY WARRANTY

	METHOD	PARAMETERS		VALUES
Usage class	EN ISO 10874 / EN 16511:2023-05		Class	23 - 33
Product norm	EN 16511:2023-05			
CE	EN 14041:2004+AC:2005+AC:2006	Notified body	NB 2401 - CRET	DOP: see end label on pack
UKCA	EN 14041:2004+AC:2005+AC:2006	Approved body	AB 0321 - Satra UK	
Warranty	Residential use	See warranty conditions		Lifetime
	Commercial use	See warranty conditions		5 years - on request up to 15 years

GENERAL DATA

	METHOD	PARAMETERS	NORM REQUIREMENTS	MODULEO VALUES
Squareness & straightness	EN 17539:2021-08		$q_{max} \leq 0,20 \text{ mm} \mid s_{max} \leq 0,30 \text{ mm/m}$	$q_{max} \leq 0,20 \text{ mm} \mid s_{max} \leq 0,30 \text{ mm/m}$
Light fastness	EN ISO 105-B02:2014-08	Blue reference	Class ≥ 6	Class > 7
Dimensional stability	EN ISO 23999:2021-11	6 hrs at 80°C	$\leq [0,15]\%$	$\leq [0,15]\%$
Curling	EN ISO 23999:2021-11		$\leq [2] \text{ mm}$	Average production result: $\leq [1] \text{ mm}$
Wear resistance	ISO 24338:2022-03, Procedure B		$\geq 5000 \text{ cycles}$	Average production result: $\geq 7000 \text{ cycles}$
Impact resistance	EN 13329:2006+A1:2008-08, Annex F		$\geq 1600 \text{ mm}$	Average production result: $\geq 1800 \text{ mm}$
Scratch resistance	EN 16094:2021-06, method A and B		$\Delta R' \leq 1,5 (60^\circ)$	$\Delta R' < 1$ MSR-B1
Castor chairs	EN ISO 4918:2021-03	25000 cycles		No delamination, no disturbance
Displacement of furniture feet	EN ISO 16581:2019-06	Foot 0,1 mm / 32 kg		No visible damage
Residual indentation	EN ISO 24343-1:2012-01		$\leq 0,2 \text{ mm}$	Average production result: $\leq 0,05 \text{ mm}$
Resistance against staining	EN 438-2:2016+A1:2018-12	Acetone - Coffee - NaOH - H2O2 - Shoe Polish	$\leq 18\%$	Grade 5 (No change)
Swelling	ISO 24336:2005-03	Fmax long side	$\geq 1,0 \text{ kN/m}$	No swelling
Locking strength	ISO 24334:2019-07	Fmax short side	$\geq 1,5 \text{ kN/m}$	$\geq 1,0 \text{ kN/m}$
Water Resistance	ISO 4760:2022-05	Qualitative rating for Recovery swell		$\geq 1,5 \text{ kN/m}$
		Quantitative rating for Recovery swell		Grade 1 (No change)
		Joint leakage		$\leq 0,02 \text{ mm}$
Acoustic insulation	DIN EN ISO 717-2:2021-05	Impact sound reduction		No leakage
Floor heating		Appropriate for all standard heating systems IN cement subfloors. Limited application with heating films and alternatives. Max contact temp $\leq 27^\circ\text{C}$. See separate installation instructions.		$\Delta L_w = 21 \text{ dB}$

ENVIRONMENT, SAFETY & HEALTH

	METHOD	PARAMETERS	NORM REQUIREMENTS	MODULEO VALUES
EPD				
AFFSET				A+
Floorscore				SCS-FS-02828
Finnish Building Emission				M1: Very low emission, odorless
Formaldehyde emission	EN 717-1:2004-10	No added formaldehyde in production	E1 ($\leq 0,124 \text{ mg/m}^3$)	< Detection limit
TVOC 28 days	ISO 16000 part 9-6	AgBB requirement after 28 days $<1000 \mu\text{g/m}^3$		< $20 \mu\text{g/m}^3$
Fire classification	EN 13501-1:2018			Bfl-s1
Thermal resistance	EN 12667:2001-01			0,035 $\text{m}^2 \text{K/W}$
Slip resistance	EN 13893:2002-11		$\mu \geq 0,30$	DS
	EN 16165:2021 Annex B			$\geq \text{R9}$
	BS EN 16165:2021 Annex C (UKSRG)	Wet		Low slip potential (PTV ₉₆ ≥ 36)
		Dry		Low slip potential (PTV ₉₆ ≥ 36)
	UNE-EN 16165:2022 Annex C	Dry		PTV ₉₆ ≥ 54
Content	Anexo Nacional A (ES)			NOT present
Dangerous substances	Heavy metals + lead/cadmium			NOT present
REACH	Carcinogenic, mutagenic or reprotoxic substances class 1A and 1B (candidate list)			Compliant
Plasticizer	Phthalate free plasticizer except recycled content			
Recycled content	Minimum 22% Pre-Consumer Recycled PVC Content			SCS-RC-20324

