

TECHNICAL DATASHEET

EGGER SILENZIO

APPLICATION AREA

Direct coated under the laminate flooring elements (EN13329, EN15468)

STANDARD DATA

Product	EGGER Silenzio
Material	HFPS-Foam foil
Color	green

MATERIAL DATA

Parameter	Specification	Tolerance	Test method
Thickness [mm]	2.0	± 0.15	EN 823 ¹⁾
Length [m]	1.285	± 0.0015	CEN TS 16354
Width [m]	0.8	+2.5% / -1%	CEN TS 16354
	Classic	187	± 1.0
	Medium	129	± 1.0
	Kingsize	319	± 1.0
	Large	327	± 1.0
Reaction to fire	Efl	-	EN 13501
Thermoforming [°C]	≤ 60	-	
Moisture / Water absorption [%]	< 2	-	EN 12087
Thermal resistance R _λ [m ² K/W]	~ 0.068	-	EN 12667
Water vapor diffusion resistance SD [m]	-	-	CEN TS 16354

TECHNICAL DATA CONCERNING CEN TS 16354

Description	Pictogram	Parameter	Value	Recommendations according to the EPLF
Impact Sound Reduction		IS [dB]	≤ 18	≥ 18
Reflected Walking Sound Reduction		RWS	up to 38 % according to IHD – W431 compared to reference	in progress
Resistance to Large Ball		RLB [mm]	≥ 1.400	≥ 1.200
Compressive Strength		CS [kPa]	≥ 100	≥ 60
Compressive Creep		CC [kPa]	≥ 25	≥ 20
Dynamic Load		DL [cycles]	≥ 100000	≥ 100000
Punctual Conformability		PC [mm]	≤ 1.1	≥ 0.5

Information: All above mentioned values were determined under laboratory conditions and defined laboratory materials and structures and may with different system flooring components deviate from these test values. For all of them mentioned performance values inaccuracies are possible owing to the testing methods.

The information given above is based on our current state of knowledge and should be used for information of our product application. This should not be taken to as an assurance of certain quality of our products or their use for specific purposes. Subject to change, legal obligations cannot be derived from the information in this document. Existing commercial protective rights are to be observed.

INFORMATION/ REQUIREMENTS

- **R_{A,B} (Thermal Resistance)**

The thermal resistance is the resistance of a component to the flow of heat or cold.

Heated or cooled floors:

EPLF-Requirements: *heated floors: $R \leq 0.15 \text{ m}^2\text{K/W}$*

cooled floors: $R \leq 0.10 \text{ m}^2\text{K/W}$

R_{A,B} is calculated by the sum of R_A – values of the individual installed components (e.g. laminate + underlay + humidity protective foil) – see the manufacturer's instructions.

The smaller the R_{A,B} value of the flooring system or the R- value of the underlay, the better suited the flooring system will be for on a heated / cooled subfloor.

Unheated floors:

EPLF- Requirements: *R_A $\geq 0.075 \text{ m}^2\text{K/W}$*

The greater the R-value of the underlay or R_{A,B} of the flooring system, the more marked will be the rise in temperature and the comfort underfoot (thermal insulation properties).

- **SD Water vapour diffusion resistance (SD-Wert)**

EPLF- Requirements: *SD $\geq 75 \text{ m}$*

The greater the SD value, the more effectively the foil will protect the laminate flooring against damages through raising damp.

- **PC Punctual Conformability**

EPLF- Requirements: *PC $\geq 0.5 \text{ mm}$*

For acoustic and mechanical protection of the laminate flooring smaller uneven areas should be avoided. The underlayment should be able to compensate for minor irregularities, such as screed granules on the ground. The higher the PC value, the better this compensation functions.

- **Protection with load:**

The flooring system is stressed by daily use.

The greater the DL value, the longer the underlay will withstand dynamic demands. (Walking, static load, furniture movement)

DL Dynamic Load

EPLF- Requirements: *DL $\geq 10000 \text{ cycles}$ / **increased:** $\geq 100000 \text{ cycles}$ (intensive / lasting use)**

Dynamic load by walking.

CS Compressive Strength

EPLF- Requirements: *$\geq 10 \text{ kPa}$ / **increased:** $\geq 60 \text{ kPa}$ (intensive / lasting use)**

Compressive Strength through loading.

The greater the CS value, the better the underlay can protect the connecting system (joint education/-break) against separation and cracking.

CC Compressive Creep

EPLF- Requirements: *$\geq 2 \text{ kPa}$ / **increased:** $\geq 20 \text{ kPa}$ (intensive / lasting use)**

Compressive creep through static load (furniture).

The greater the CC value, the better the laminate floor can withstand permanent loading from heavy furniture.

RLB Resistance to Large Ball

EPLF- Requirements: *$\geq 500 \text{ mm}$ / **increased:** $\geq 1200 \text{ mm}$ (intensive / lasting use)**

In order to minimize damage to the surface the system must be able to absorb brief heavy shocks from falling objects.

The better the underlayment can minimize damage to the surface of the flooring.

- **IS Impact Sound**

EPLF- Requirements: *$\geq 14 \text{ dB}$ / **increased:** $\geq 18 \text{ dB}$ (intensive / lasting use)**

Impact sound is the sound generated when walking on laminate flooring, which is sensed in rooms on lower levels.

The greater the IS value, the better the underlay can reduce the transmission of impact sound.

- **RWS Reflected Walking Sound**

EPLF- Requirements: *in development*

A reflected walking sound refers to the sound that occurs and is sensed when walking on laminate flooring in a room.

Test method: in development

For more information, test methods, etc, please see the „Technical Info sheet- New data sheet: Underlay Materials under Laminate Floor Coverings - Test Standards and Performance Indicators“. (<http://www.eplf.com>).

* (intensive / lasting use)*= Laminate flooring / class of use 31, 32, 33)