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INTRODUCTION

Breeam defined

Building Research Establishment Environmental Assessment Methodology (BREEAM) is a certification system for green buildings that is administered by the Building Research Establishment (BRE). The system is most widely used in the United Kingdom but it is internationally recognised. BREEAM International New Construction ranks buildings on an extensive list of weighted categories and can award different certification levels, namely Pass, Good, Very Good, Excellent and Outstanding. These are based on the percentage of credits achieved. In order to achieve basic certification, minimum standards must be met. This framework encompasses the following categories: Management, Health and Well-being, Energy, Transport, Water, Materials, Waste, Land Use and Ecology, Contamination and Innovation.

An important consideration when aiming for **BREEAM** certification is identifying products that are in keeping with and contribute to the objectives of the project. To help you take these decisions, this document describes how Beauflor products can contribute to various **BREEAM** credits.

Description of product

Beauflor develops cushion vinyl flooring and it aims to offer clients a hard-wearing, comfortable and aesthetically pleasing floor. To add weight to this aim, various certificates have been envisioned for these products. You can find an overview of all our certificates at the end of this brochure.

Newbuild:

BREEAM Int. NC V6 - SD250 - for new buildings

Renovation:

BREEAM RFO - SD225 - for renovation projects

Beauflor credits: score when fitting Beauflor floors

Max. credits: maximum score achievable



APPLICABLE CREDITS

		NEWE	BUILD	RENOVATION		
Category		Beauflor credits	max. credits	Beauflor credits	max. credits	
Management	MANO2 Life-cycle cost	+1	4	+1	4	
Health and wellbeing	HEA02 Indoor air quality	2+2E	5+2E	2	5	
	HEA04 Thermal comfort	(2)	3	(2)	3	
	HEA05 Acoustic performance	(6)	6	(6)	6	
Energy	ENEO1 Reduction of energy use and carbon emissions	(9)	13+5E	(16)	16+7E	
Materials	MAT01 Life-cycle analysis (LCA)	6+(1E)	6+1E	6+(1E)	6+1E	
	MATO3 Responsible procurement of materials	(3)+(1E)	3+1E	(3)+(1E)	3+1E	
	MAT05 Designing for durability and resilience	(1)	1	(1)	1	
	MAT06 Material efficiency	1	1	1	1	
Waste	WST04 Speculative finishes	1	1	1	1	
	WST06 Flexible and modifiable design	(1)	1	(1)	1	

Certified Analysis executed by independent engineering office ABO

(): this credit is only applicable after additional measurement and calculation by a qualified engineer as it is influenced by various elements in the building



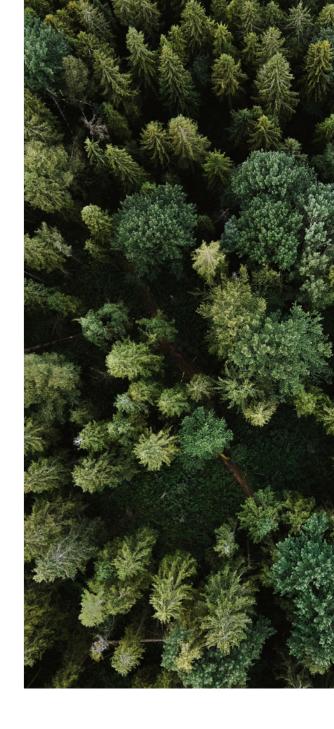
MANAGEMENT

MANO2

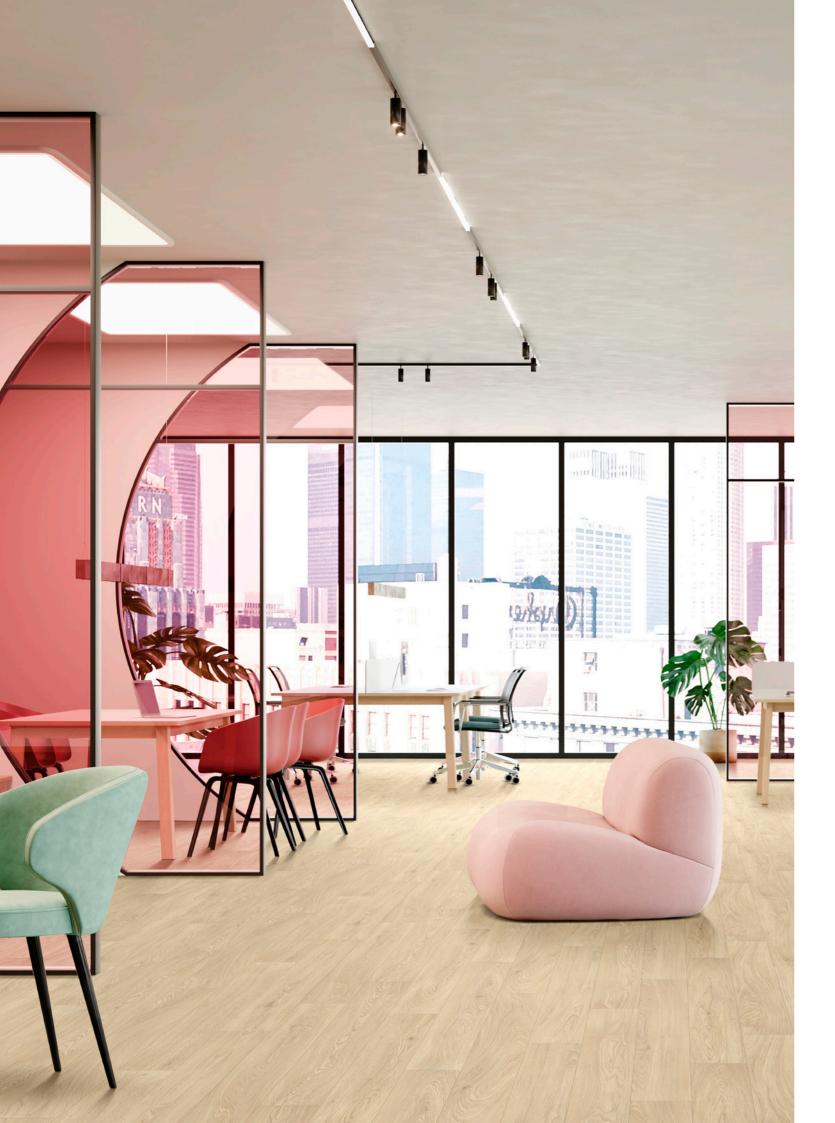
Life-cycle cost

The creation of value across the entire lifespan of the building by stimulating the use of life-cycle costs for improving design, specification, maintenance and operation and through spreading capital-cost reporting to promote economic sustainability.

The life-cycle costs of vinyl floors are minimal thanks to their durability and low maintenance requirements. It is possible to gain points by creating an LCC analysis.



	NEWBUILD		RENOVATION	
MAN02	Beauflor credits	max. credits	Beauflor credits	max. credits
Elemental life cycle cost	0	2	0	2
Component level LCC options appraisal	+1	1	+1	1
Capital-cost reporting	0	1	0	1



HEALTH AND WELLBEING

HEA02

Indoor air quality

The recognition and promotion of a healthy indoor environment through the specification and installation of appropriate ventilation, fittings and finish.

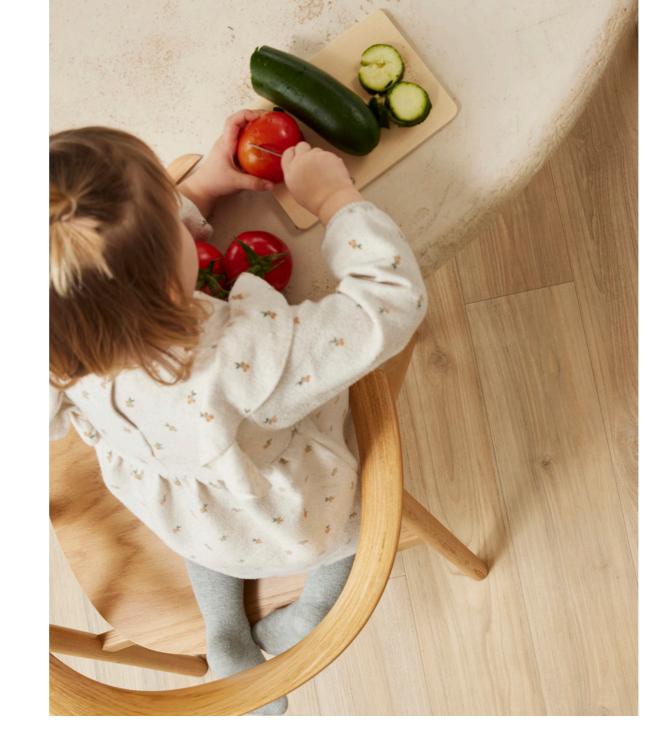
When you choose a vinyl floor, it comes with tested and approved Eurofins certificates which give you certainty that the product does not contain carcinogens and that it has extremely low TVOC emissions. It is possible to request the following emission reports:

- Eurofins
- Floorscore®
- French 'Emissions dans l'air intérieur' label: A+

Thanks to the Floorscore certificate, the product satisfies the strictest conditions for BREEAM.

It is also possible to gain a credit by measuring the VOC levels after finishing the construction. It goes without saying that the use of VOC low-emission materials makes it easier to gain this credit. However, the award of the credit also depends on all of the other materials in the building.

	NEW	BUILD	RENOVATION	
HEA02	Beauflor credits	max. credits	Beauflor credits	max. credits
Prerequisite	0	0	0	0
Indoor air quality plan	0	1	O	1
Ventilation	0	1	0	1
Emissions from building products	1 + 1E	1 + 1E	1	1
Post-construction indoor air quality measurement	(1)+(1E)	(1)+(1E)	(1)	1
Potential for natural ventilation	0	1	0	1



HEA04

Thermal comfort

To ensure that the right thermal comfort levels are achieved by the design and that the regulators are selected to maintain a thermally comfortable environment for users in the building.

Our cushion vinyl is well suited for using underfloor heating/cooling. This technology enables a pleasant indoor climate to be created in a wide variety of buildings.

The comfort level must meet ISO 7730:2005 throughout the year, including seasons and climate change in the next 50 years. This needs to be checked over by a technology engineering firm and will depend on the type of building, the users and the type of heating.

	NEWBUILD		RENOVATION	
HEA04	Beauflor credits	max. credits	Beauflor credits	max. credits
Thermal modelling	(1)	1	(1)	1
Adaptability for a projected climate change scenario	(1)	1	(1)	1
Thermal zoning and controls	0	1	0	1

HEA05

Acoustic performance

The recognition of the acoustic performance of the building, including noise insulation, by meeting the correct standards for the purpose.

Vinyl floors muffle the transmission of sound to adjoining areas which makes them suitable for use in most applications where privacy is also an issue. The floor can be used as a sprung floor, which also makes it compatible with extra acoustic damping materials.

The acoustic comfort should always be checked over by a qualified acoustics specialist. This specialist can use the measured values of the vinyl flooring for both damping of contact noise and damping of reverberation.

RENOVATION

NEWBUILD

HEA05	Beauflor credits	max. credits	Beauflor credits	max. credits
Prerequisite	0	0	0	0
Indoor ambient noise and sound insulation	(1)	1	(1)	1
Reverberation times	(1)	1	(1)	1
Only residential buildings: Acoustic performance standards for residential buildings and long term stay residential institutions	(4)	4	(4)	4



ENERGY

ENE01

Reduction of energy use and carbon emissions

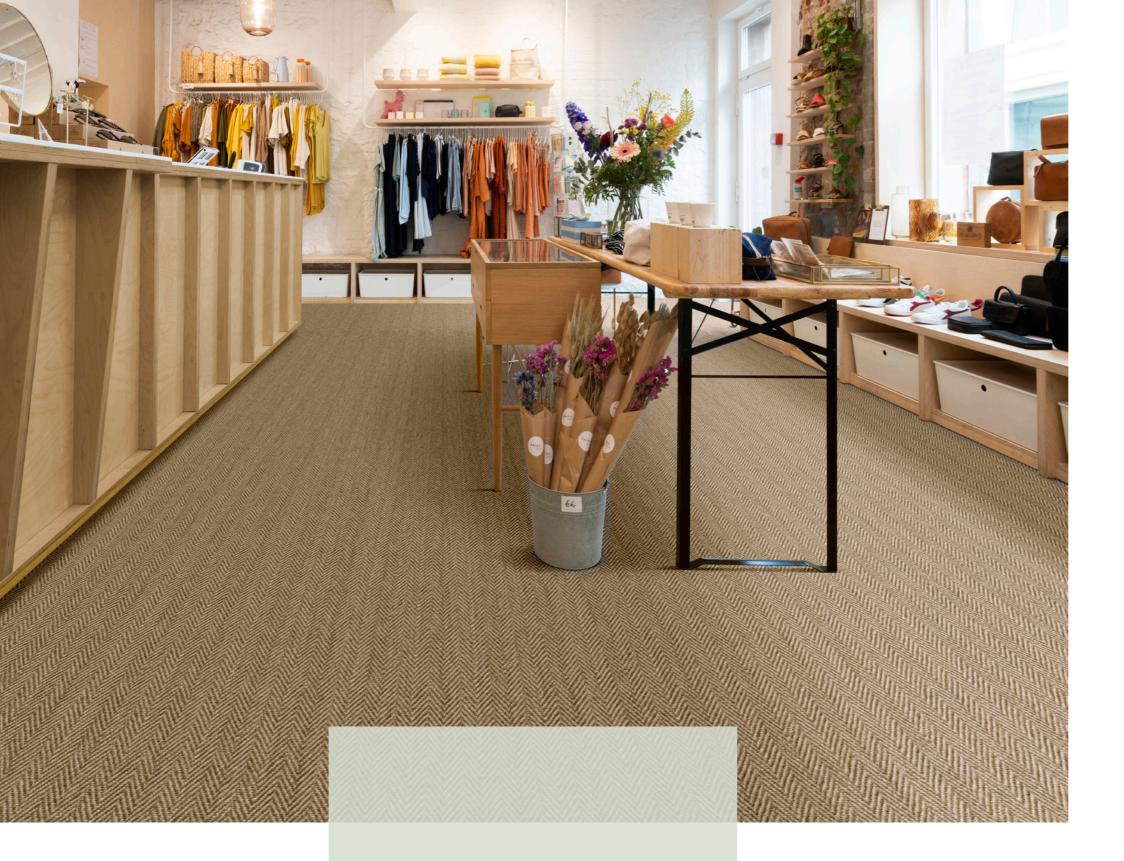
Buildings that have been designed to keep demand for operating energy, consumption of primary energy and emission of CO² to a minimum. It aims to encourage architects to design buildings this way.

Cushion Vinyl by Beauflor is suitable for use as a finish above underfloor heating. This makes it suitable for heating a building at a low temperature and enables the use of low-temperature boilers which are more efficient than standard boilers. It is even possible to connect a heat pump using outside air or the ground as the heat source. This can be taken a step further by using the floors as a cooling surface in the summer which makes passive cooling possible.

These possibilities considerably increase the energy performance of a building. This needs to be checked over by the appointed EPC expert using EPB software.

	NEWBUILD		RENOVATION	
ENEO1	Beauflor credits	max. credits	Beauflor credits	max. credits
Energy performance	(9)	9	(12)	12
Prediction of operational energy consumption	O	4	-	-
Historic buildings	-	-	(4)	4
Exemplary: beyond zero net regulated carbon	0	3E	-	-
Exemplary: post-occupancy stage	0	2E	-	-
Exemplary: zero net CO2 emissions	-	-	0	2E
Exemplary: carbon neutral	-	-	0	5E





MATERIALS

MAT01

Life-cycle analysis

This is the recognition and stimulation of the use of robust and appropriate life-cycle promotion instruments and consequently the specification of building materials with a low environmental impact (including carbon contained) across the entire life cycle of the building.

The use of floors with a low impact on the environment which gains 5 credits compared to standard reference floors. An LCA study needs to be carried out.

The EPD (environmental product declarations) sheets on Beauflor's floorcovering were drawn up according to EN15804+A. However, at least 5 sheets (or 10 for an exemplary credit) for various materials need to be found.

Categories of materials

- Wood or wood-based products
- Concrete and cement
- Metal
- Stone or aggregate
- Clay
- Gypsum
- Glass
- Plastic, polymer, resin, paint, chemicals or bitumens
- Animal fibres, skin or cellulose fibres
- other

	NEW	BUILD	RENOVATION		
MAT01	Beauflor credits	max. credits	Beauflor credits	max. credits	
LCA report building	5	5	6 + (1E)	6 + (1E)	
EPD	(1)	1	-	-	
Exemplary EPD	(1E)	1E	-	-	



MAT03

Responsible procurement of materials

Acknowledging and stimulating the specification and procurement of responsible building products.

Credits can be gained through the specification of responsible materials in the design and the building. Beauflor holds an ISO 14001 certificate and is therefore considered an environmentally responsible supplier of its products.

The MATO3 calculator uses all of the materials specified in the building for its input and gives extra points for materials obtained through an environmentally responsible supplier, processor or producer. The ISO 14001 certificate contributes to these extra points and can lead to up to three additional points after evaluation with the MATO3 calculator.

RENOVATION NEWBUILD Beauflor Beauflor max. max. MAT03 credits credits credits credits Prerequisite 0 Sustainable procurement policy Sustainable procurement of materials (3) (3) 3 Exemplary: responsible procurement of materials (1E) 1E (1E) 1E

MAT05

Designing for durability and resilience

The recognition and stimulation of adequate protection for exposed elements of a building and landscape which minimises replacement frequency and optimises the use of materials.

Vinyl floors by Beauflor have excellent resistance against wear and tear caused by pedestrians and light wheeled equipment. The standardised hardness degree of the product means that it requires little repair. However, when it does need to be repaired, a piece of the floor can be easily replaced. The floor is not suitable for supporting motorised vehicles.

	NEWBUILD		RENOVATION	
MAT05	Beauflor credits	max. credits	Beauflor credits	max. credits
Protecting vulnerable parts of the building from damage	(1)	,	(1)	,
Protecting exposed parts of the building from material degradation	(1)	'	(1)	'

MAT06

Material efficiency

The recognition and stimulation of measures to optimise the efficiency of materials to minimise the environmental impact of material usage and waste without compromising the structural stability, durability or lifespan of the building.

Our floors come in standard sizes of 2, 3, 4 and 5 meters which means that this can be taken into account in the design. Other widths can be custom made. Outer ends can be cut on site and do not create cutting waste. These leftovers can be reused if they have a sufficient length meaning that surpluses can always be used and that waste is kept to a minimum.

	NEWE	BUILD	RENOVATION		
MAT06	Beauflor credits	max. credits	Beauflor credits	max. credits	
Material efficiency	1	1	1	1	



WASTE

WST04

Speculative finishes

To encourage the specification and fitting of finishes that have been chosen by the building user and in this way avoid unnecessary wastage of materials.

When buildings are constructed for as yet unknown users, there is uncertainty about whether the selected/fitted floor will be suitable for the future purchaser or tenant. The project team can opt to first discuss the design with the future user. Alternatively, if the user is still unknown at the time of completion, the team can simply fit a floor in a limited part of the building as a show space. The future purchaser/tenant will then still be able to select the ultimate finish during the provisional completion. Beauflor has sample books for showing possible finishes to the purchaser or tenant.

This ensures there is no unnecessary waste because the contractor installed a floor that was undesirable by the purchaser/tenant and subsequently removed.

Alternatively, the building owner can also use the visualisation tool developed by Beauflor (Room Visualiser: https://www.beauflor.com/global/en) to include the design of the floors in (future) presentations for potential purchasers and tenants.

	NEW	BUILD	RENOVATION		
WST04	Beauflor credits	max. credits	Beauflor credits	max. credits	
Speculative finishes	1	1	1	1	



WST06

Flexible and modifiable design

The recognition and stimulation of measures that have been taken to respond to future changes in the use of the building during its lifespan.

One advantage of using cushion vinyl flooring is that the floor covering does not need to be glued down (up to a certain number of m²). This means that the floor can be modified to a new layout if the building is rearranged.

	NEW	BUILD	RENOVATION		
WST06	Beauflor credits	max. credits	Beauflor credits	max. credits	
Functional adaptability	(1)	1	(1)	1	

CERTIFICATION& RESOURCES

By using our products, numerous **BREEAM** credits, across the categories of Management, Health & wellbeing, Energy, Materials and Waste, can be acieved for your projects. The feasibility of achieving these credits was analysed and confirmed by **ABO**, an independent expert engineering company, specialised in environmental management.

This document was drawn up after analysing the following documents and certificates:

- FloorScore certificates
- Eurofins test reports
- ISO 14001 certificate Juteks
- Beauflor installation guide and videos
- Technical data sheets
- EPD / FDES Certificates



OUR CERTIFICATES



REACH

Reach is a European Union regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals. The position of BIG floorcoverings, division cushion vinyl is clear; for all of our European legal entities and divisions, all measures are in place in order to ensure REACH compliancy. No harmful substances added, such as formaldehyde; lead; cadmium; mercury or hexavalent chromium.



AgBB

AgBB (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten) is a committee for health-related evaluation of building products. Beauflor's vinyl products satisfy the stringent emission criteria as stipulated by the renowned DIBt Institute in Berlin.



Floorscore®

The most recognized indoor air quality (IAQ) certification standard for hard surface flooring materials, adhesives, and underlayments. Developed by SCS with the Resilient Floor Covering Institute (RFCI), a leading industry trade association of flooring manufacturers and suppliers, it qualifies for many green building schemes including LEED v4, WELL, BREEAM, and CHPS.



E1

E1 means that the level of formaldehyde is inferior to 0.1ppm $(= 0.12 \text{ mg/m}^3 \text{ of air})$



ERFMI

ERFMI (European Resilient Flooring Manufacturer Institute) has prepared EU wide Life Cycle Assessment of a broad range of flooring types and specifications. From this study, a series of Life Cycle Analysis data sheets have been produced, called EPD's (Environment Product Declaration). Beauflor is an active member of ERFMI.



Ortho-phthalates free

All our vinyl sheet products are produced without plasticizers that contain significant impurities. This means that we only use other non-phtalate plasticizers, such as DOTP. We produce with known virgin raw materials from trustworthy vendors throughout the world and therefore we guarantee a 100% ortho-phthalate-free flooring worldwide.



EcoVadis

The EcoVadis rating covers a wide range of non-financial management systems, including environmental, labor & human rights, ethics and sustainable procurement impacts. EcoVadis, the world's most trusted provider of corporate sustainability ratings, assesses a company's commitments, policies, actions, and results on these 4 topics. Beaulieu International Group, the group to which Beauflor belongs, has achieved a bronze EcoVadis medal for its global operations and 29 factories. This reward underlines our group's valued actions and reliability in the field of sustainable business operations.



BREEAM

BREEAM is one of the world's leading rating systems to measure sustainability and environmental performance of new and existing buildings. Beauflor products, which hold high ratings, positively contribute to a building's overall score.



Green A+ label

All our Beauflor products carry the green A+ label, the highest accolade awarded by the French authorities.



VinylPlus®

VinylPlus* is the voluntary commitment to sustainable development of the European PVC industry, working to improve the sustainability performance of PVC. PVC can be recycled multiple times, and VinylPlus* works to do just this! Beauflor is an active member of Vinylplus*.



FDES

An FDES (Fiche de Déclaration Environnementale et Sanitaire) is a standardized document that shows the results of a product's life cycle analysis as well as health information, used to calculate the environmental and health performance of an eco-designbuilding. This is also known as an EPD (Environmental Product Declaration). All our ranges are covered by an FDES - or EPD - which enables our customers to assess the environmental impact of our products and to our engineers, to set eco-design targets according to objective criteria.



ISO 14001

ISO 14001 certification means that the industrial site complies with all the environmental standards, measures all environmental impacts and is committed to continuously improve its environmental performance. Beauflor's Slovenian plant is ISO 14001 certified.



ISO 9001

The most widely used standard for quality control worldwide. The goal of the quality management system is to keep the organization focused on continuous improvement in order to increase customer satisfaction. Beauflor industrial sites are ISO 9001 certified.



B.I.G. Floorcoverings nv

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