

Sustainability Standards

**Sustainability in action
with Kugelgarn® floor coverings
from Fabromont**

SWISSMADE 

fabromont
INSPIRED BY PEOPLE

Kugelgarn® flooring by Fabromont

Our Sustainability Standards

We at Fabromont put people's well-being first. Whether it be the customer, the employee, the neighbour, the user or the supplier. That is why ecological, economic and social issues are kept in mind during product development, manufacturing and marketing.

As a **pioneer of sustainability**, we have been committed to the principles of environmentally and people-friendly production since our company was founded. As early as the beginning of the 1990s, Fabromont advocated for important environmental issues in the industry as a founding member of the Association for Environmentally Conscious Management – ÖBU.

In practice, **we live sustainability** in the following ways:

In manufacturing

We aim for the controlled transformation of resources into high-quality products that make the lives of their users more liveable. Our manufacturing processes produce no wastewater and hardly any solid production waste. Edge trimmings and powdery residues are recycled internally. Due to the low-emission binders, there is hardly any exhaust air pollution even during drying. According to the Swiss electricity mix, a large part of the electrical energy used comes from renewable sources (hydropower). Furthermore, we use natural gas instead of heating oil as a fossil energy source.

No raw materials are used or stored that could cause significant environmental damage through leakage in the event of a malfunction. We use solution-dyed fibres with no heavy metal content and without water consumption for dyeing.

In the field of logistics

(transport, storage, presentation and processing)

Our direct suppliers and our customers are all from Europe, which means relatively short transport distances. All of them sign a supplier declaration that excludes the use of toxicologically and ecologically questionable substances. The wastage (material loss) when laying Kugelgarn® is significantly lower than with other coverings, as Kugelgarn® is direction-free and seamless.

There are low transport and storage risks, as the materials are chemically inert and non-explosive.

Thanks to rolls of 2 x 32 running metres or modules, easy transport of the end products to the construction site is guaranteed. The flooring is easy to install as it is direction-free, dust-free and can be fixed with low-emission adhesive.

In use

An important aspect for the sustainability of a floor covering is certainly its service life. Here, Kugelgarn® floor coverings have proven in many reference projects over decades that you can rely on the quality of Swiss brand products. Kugelgarn® is economical to maintain. Regular brush-vacuuming is sufficient. No water or cleaning agents are needed.

Our products are free of PVC and other halogens (chlorine, bromine and fluorine) and do not contain any ingredients that are harmful to health or to the environment (REACH-compliant). They have a high degree of slip resistance and non-toxic fire protection.

Our floor coverings offer high thermal, visual and walking comfort. Their sound-absorbing properties contribute to pleasant room acoustics. The textile surface binds harmful dust and supports indoor hygiene. We coat the backs with special low-emission binder (no SBR). Kugelgarn® offers safety, accessibility, space efficiency and conversion capability.



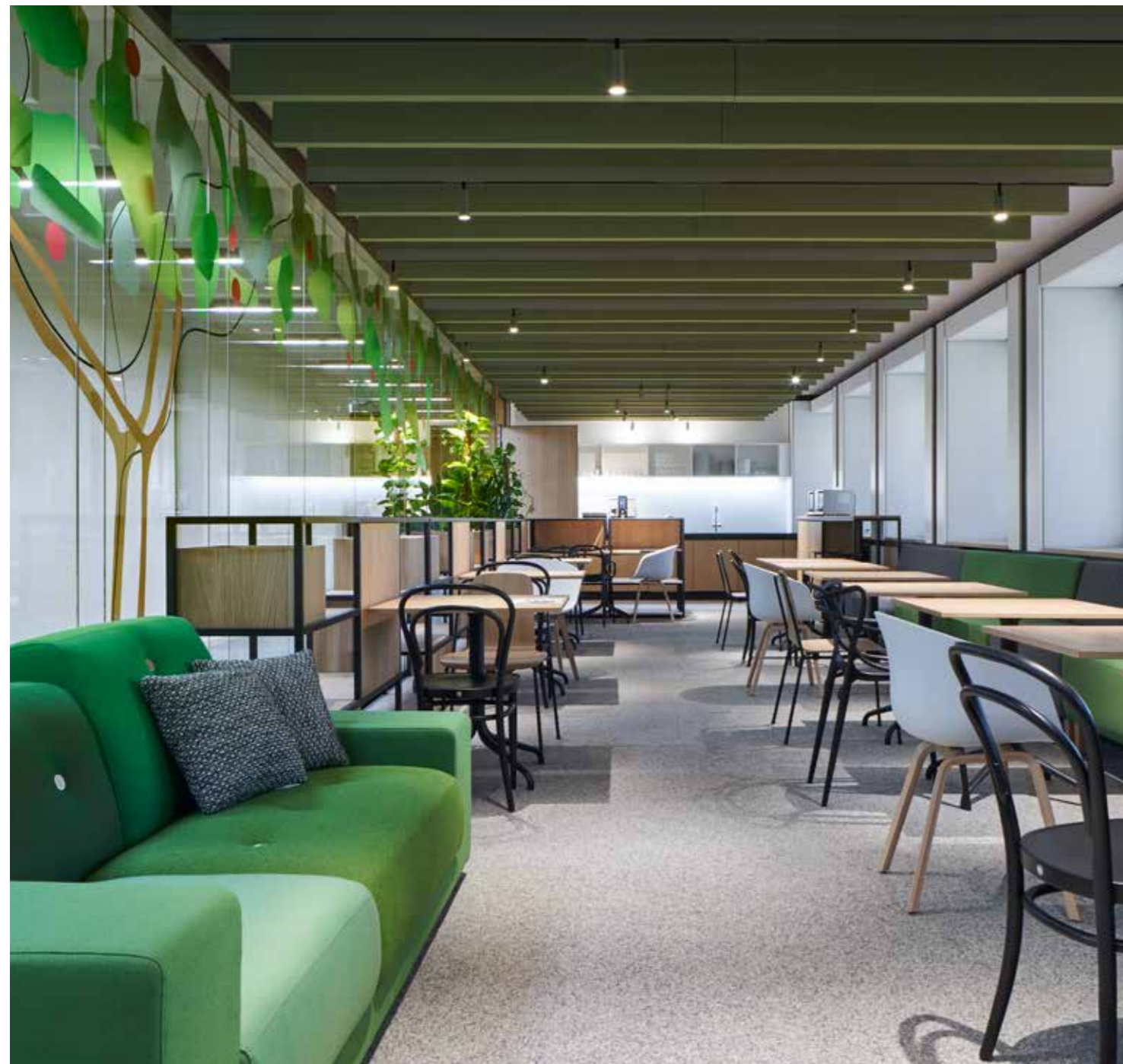
During disposal

We have a durable product. This is the most important contribution to keeping the “footprint” low. The floor covering can be harmlessly mechanically removed with a stripper and remains largely dust-free in the process. The removal is done without solvents and without risk of injury.

For our employees and the region

We bear social responsibility for the company’s own processes and offer modern employment conditions: Our employees benefit from above-average retirement benefits (2nd pillar) and equal opportunities for both younger and older employees. Our foundation „Das Leben meistern“ („mastering life“) supports large families and the working poor in the (comparatively economically weak) canton of Fribourg.

Kugelgarn® in the DGNB-certified building, the Evangelische Bank in Kassel.



Sustainability

Labels and certificates

Quality, safety and environmental friendliness are key requirements for the sustainability of Fabromont products. This has also been confirmed by several independent reviewers and certifiers.

Blauer Engel



All Kugelgarn® and Kugelvlies® products bear the “Blauer Engel” (Blue Angel) – the oldest and most prestigious environmental label in the world. This label confirms our high standards in terms of environmental compatibility, conservation of resources and healthy indoor climate. With the Blue Angel, we guarantee that our floor coverings are particularly low in emissions and do not contain any substances that are hazardous to health or the environment.

TÜV PROFICERT product Interior PREMIUM



The label is awarded as a product certification in cooperation between TÜV Hessen and TFI Aachen GmbH. It combines emission requirements of different relevant ecolabels with the legal requirements and supports the health and ecological issues in the field of construction. It thus promotes better indoor air quality. The label “TÜV PROFICERT product Interior PREMIUM (V1.1)” is recognised accordingly for the criterion “ENV1.2 Risks for the local environment” as proof of the requirements for emissions.

Swiss Made



The majority of the value added in the manufacture of Fabromont products takes place in Switzerland. That is why they are entitled to carry the “Swiss Made” label. Fabromont produces beyond the Western European standard – while respecting the demands of sustainable production.

GuT and PRODIS



Fabromont products are tested by the Association of environmentally friendly Carpets GuT and carry the label “GuT – carpets tested for a better living environment”.

PRODIS is the first uniform consumer information system that not only provides information on environmental and safety aspects but also covers the quality and usage characteristics of textile floor coverings.

PRODIS provides independent and reliable information on Kugelgarn®- and Kugelvlies® products. This information is based on two elements, the GuT test criteria in combination with the FCSS symbols which inform about the use and comfort classes as well as the many possible additional features of our products. The registration number indicates that the product is registered in the PRODIS system and fulfils all corresponding requirements.

Environmental Product Declaration EPD

The Environmental Product Declaration (EPD) is an instrument created at European level to enable builders and planners to evaluate and compare the quality aspect of the environmental compatibility of a building product. The product EPDs also play an important role in the assessment for sustainability, such as the “Sustainable Building” seal of quality awarded by the DGNB.

The assessment of the building products for the EPD is carried out in accordance with the latest life cycle assessment standards, as defined in the DIN EN ISO 14025:2011-10 standard. The product is checked regarding a variety of criteria.

Fabromont has had EPDs prepared for its Kugelgarn® and Kugelvlies® (sheeting) as well as for the “Self-laying modules” delivery form. These are now available in validated form and can be viewed in the download centre of our website www.fabromont.ch.

CE Label

CE Since 1 January 2007, all floor coverings in EU countries must bear the CE label, which refers to health and safety. All floor coverings that are to be used in common rooms must achieve at least fire class Cf1. All our Kugelgarn® and Kugelvlies® floor coverings meet this requirement. We give our coverings their excellent fire protection properties by using a non-toxic flame retardant (aluminium hydroxide) in the form of a discrete flame-extinguishing layer. In terms of slip behaviour, Kugelgarn®, like all textile coverings, meets the DS class for non-slip. Only hard and elastic coverings are known to have a slip hazard. Pollutant monitoring of our coverings goes far beyond the basic requirements of the European standard (see below). All our coverings are antistatic. This prevents unpleasant electrical charging of persons. If required, we also supply our floor coverings in the special electrically conductive version.

In addition to testing as part of our own quality control, we undergo regular inspections by an institute approved by the EU for this purpose ("Notified Body"). This review covers the quality assurance processes and random product samples taken by the reviewer. The CE label affixed to product packaging and delivery notes is supplemented by declarations of conformity and certificates of conformity.

VKF Fire protection register

Fabromont products have VKF certificates from the Swiss Association of Cantonal Fire Insurers and are entered in the VKF fire protection register. This confirms that they meet the strict fire protection regulations of Switzerland.



Association of Cantonal Fire Insurers
and are entered in the VKF fire

Nature photographs served as inspiration for the abstract designs and ultimately for the colour variations of the Kugelgarn Impression® collection.

**Kugelgarn Reval® SL**

For DGNB-certified buildings

The DGNB certificate is awarded by the DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen, German Sustainable Building Council) to buildings (not individual materials) that meet specified sustainability criteria. Nevertheless, certain requirements are imposed on the building materials used as well.

Six areas for achieving sustainability

The criteria for fulfilment of the Gold, Silver and Bronze seals of approval are divided into six subject areas:

- 1. Ecological quality**
- 2. Economic quality**
- 3. Socio-cultural and functional quality**
- 4. Technical quality**
- 5. Process quality**
- 6. Quality of location**

Kugelgarn® in buildings certified according to DGNB standards. Our Kugelgarn® floor coverings make a positive contribution to ecological, economic, technical, socio-cultural and functional quality:

1. Ecological quality

- Raw materials sourced exclusively from key European suppliers, all of whom are committed to European or Swiss environmental standards.
- Short transport distances and optimal utilisation of transport capacities.
- No raw materials are used or stored that could lead to considerable environmental damage in the event of an incident.
- No liquid and little solid production waste.
- Edge sections are recycled internally.
- Laying only with adhesive fixing; after removal at the end of the life cycle, no mineral adhesive or filler residues will remain.
- A large proportion of the thermal energy is recovered from the drying processes.

2. Economic quality**2.1 Building-related life cycle cost**

- The cleaning costs for Kugelgarn® surfaces are significantly lower than for hard or elastic surfaces.
- The flooring is slightly patterned and textured, making it tolerant to light soiling.
- Stains are easily removeable thanks to the special fibre composition and solution-dyed fibres.
- Stains that cannot be removed can be cut out and invisibly replaced with a "patch" thanks to the non-directional look.
- A long service life and minimal wastage contribute significantly to the conservation of resources.
- The colours in the collections have an above-average lifespan. This means that the same colours will be available even years later in the event of extensions or replacements.

2.2 Flexibility and adaptability

- Surface efficiency due to their non-directional and non-repeating pattern, resulting in extremely little wastage during installation,
- Excellent utilisation of the material even with complicated floor plans.
- Well suited for raised floors with or without mobile walls, the non-directionality of Kugelgarn® supports its technical flexibility and significantly reduces maintenance costs.
- Self-laying broadloom and modules can be removed without damage and re-laid in other areas, either over the entire surface or in partial areas, e.g. for island-shaped subsequent installation laying on hard or elastic top floors for visual or room acoustic improvement.

3. Socio-cultural and functional quality

3.1 Thermal comfort

- As a textile flooring, Kugelgarn® offers greater thermal comfort than hard or elastic coverings.

3.2 Indoor air quality

- Special low-emission binders, no significant odours or other air pollution
- Extremely low emission of volatile organic compounds (VOC), complies with the regulations of the GuT (Gemeinschaft Umweltfreundliche Teppichböden e.V.) the prominent association of leading European carpet manufacturers located in Aachen, Germany.
- Furthermore, Kugelgarn® products contain no solvents, no heavy metals such as cadmium, chromium or lead, no carcinogenic or sensitising ingredients, no mineral fibres, no biocides, no PVC and no compounds containing fluorine or bromine.

3.3 Acoustic comfort

- Positive effect on reverberation time, sound level, speech clarity and the reduction of sound levels in rooms. Thanks to its exceptionally long service life, even under normal conditions typical for commercial properties, the acoustic comfort described in the technical data remains effective for longer.
- High impact sound reduction

4. Technical quality

4.1 Fire prevention

- Preventive fire protection through aluminium hydroxide, in the form of a built-in, special 'extinguishing layer'. In addition, the smoke gases produced in the event of a fire are toxicologically harmless.

4.2 Sound insulation

- High absorption of ambient noise and impact sound (see above) allows for savings on special sound insulation measures.

4.3 Ease of cleaning building components

- Weekly maintenance cleaning is carried out simply by brush-vacuuming. The cleaning effort is comparatively low.
- A thorough cleaning using spray extraction may be advisable once a year.

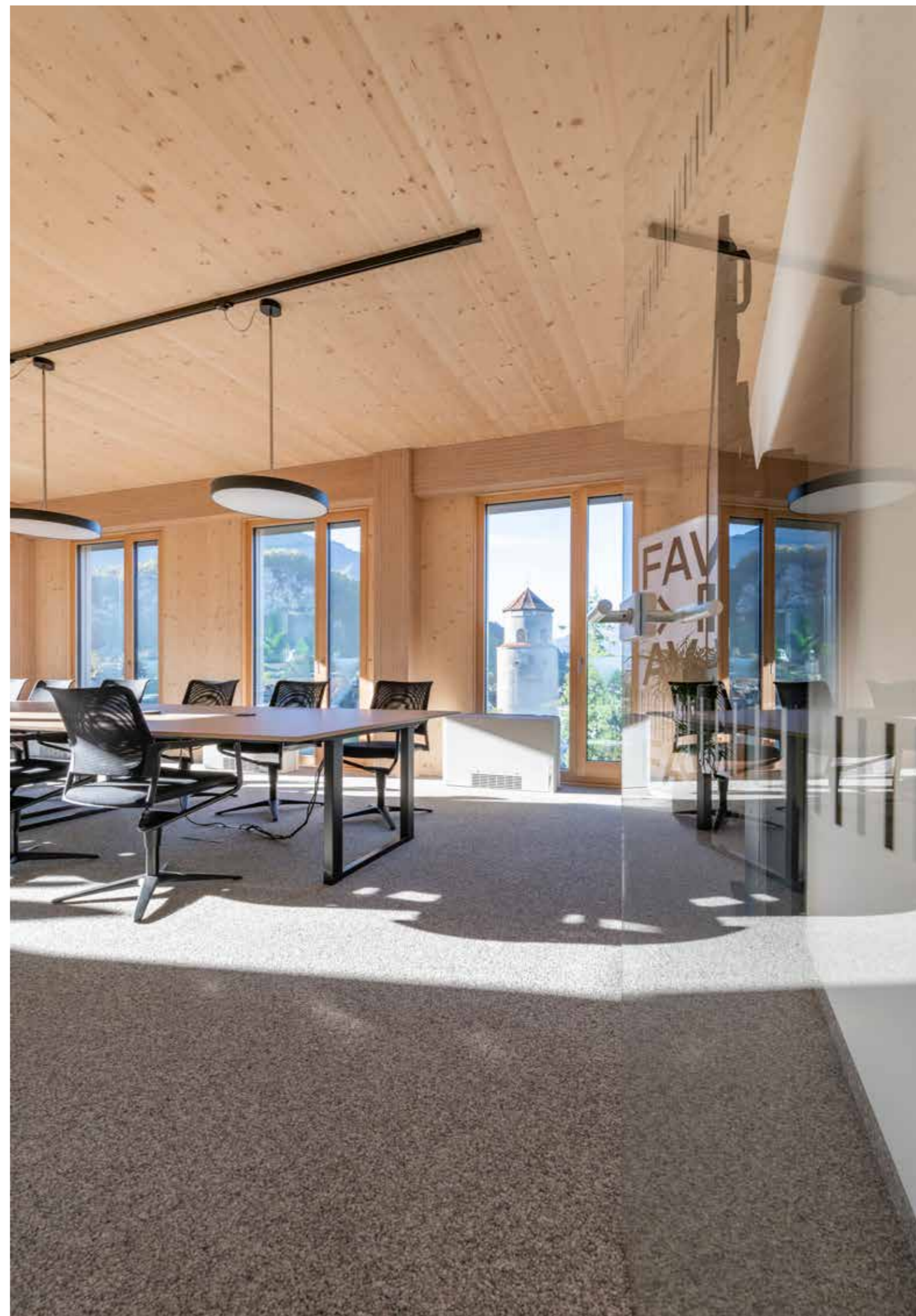
4.4 Ease of recovery and recycling

The self-laying Kugelgarn® tiles (modules) and self-laying broadloom achieve their self-laying properties without the conventional heavy backing coatings made of PVC or bitumen.

Fabromont is a member of DGNB, the German Sustainable Building Council. EPDs (Environmental Product Declarations) are available for Kugelgarn® and Kugelvlies® products.



For further information visit www.dgnb.de and our web site www.fabromont.ch



Kugelgarn®

For LEED certified buildings

The LEED system (“Leadership in Energy and Environmental Design”) is an internationally recognised classification system originating from the USA for buildings designed, constructed and operated under sustainability aspects.

The assessment according to LEED criteria (LEED v4) is based on eight central areas (“environmental categories”):

1. Location and transport
2. Building site
3. Efficient water use
4. Energy and atmosphere
5. Material and resources
6. Indoor quality (emissions)
7. Innovation and design
8. Regional priority

For a building project to receive a certificate compliant with LEED, it must fulfil some basic conditions and at least 40 defined points (credits) from these sectors. The award levels “silver”, “gold” and “platinum” can be achieved via additional points.

Our Kugelgarn® floor coverings contribute to the fulfilment of LEED criteria as follows:

Low emissions

For a building to achieve more than the LEED level “certified” level, it is advantageous for the floor covering to comply with certain emission values regarding volatile organic compounds (VOC) according to the criteria of the CDPH (Calif. Dep. of Public Health) or according to the German AgBB. All Fabromont floor coverings comply with the AgBB guidelines. The GuT seal (Association of environmentally friendly Carpets), which all Kugelgarn® floor coverings have, is subject to similar criteria.

All Kugelgarn® floor coverings also meet the “Blauer Engel (Blue Angel)” emission criteria¹. The manufacture and the products are subject to emission monitoring by TFI Aachen GmbH, which is authorised for this purpose.

Efficient use of water

- Compared to elastic or hard floor coverings, Kugelgarn® is economical in maintenance, and regular brush vacuum cleaning is sufficient. No water or cleaning agents are needed².

Material and resources

- **Use of regional products:** Raw materials exclusively from key European suppliers who are committed to European or Swiss environmental standards.
- Short transport distances and optimal utilisation of transport capacities.
- **Durability:** The durability and long service life of Kugelgarn® contribute significantly to sustainability.
- **Reduction of construction waste:** The wastage (material loss) when laying Kugelgarn® is significantly lower than with other coverings, as Kugelgarn® is direction-free and seamless.
- EPDs (Ecological Product Declaration) issued.

Indoor quality

- **Indoor air:** To keep the products safely free of odour problems, special low-emission, water-based binder formulations are used.
- **Thermal comfort:** The use of textile floor coverings instead of hard or elastic coverings enable a reduction in room temperature by up to 2° C due to the subjectively greater feeling of warmth. This saves approx. 12 % in heating costs³.

For further information visit www.usgbc.org and our web site www.fabromont.ch/en.

Committed

Locally anchored, internationally networked

Fabromont is involved in various associations and organisations with the aim of supporting their efforts in the areas of ecology, sustainability and the promotion of quality textile floor coverings.

öbu

Fabromont is one of the founding members of öbu, the Swiss Association for Ecologically Conscious Management, originally founded in 1989 by 50 companies. To date, over 300 companies have joined the association. They are committed to a prosperous economy in compliance with ecological and social principles.

GuT and PRODIS

Fabromont is a member of the Community of environmentally friendly Carpets (“Gemeinschaft umweltfreundlicher Teppichboden - GuT”). GuT and its members have set themselves the objective of improving environmental and user-friendliness throughout the life cycle of a textile floor covering - from production to laying and from use to recycling (from cradle to grave). Accordingly, all Fabromont products are GuT certified and thus meet strict emission and content criteria in the interest of a good indoor climate. PRODIS is the first uniform consumer information system that not only provides information on environmental and safety aspects but also covers the quality and usage characteristics of textile floor coverings.

¹ According to TFI-TÜV PROFICERT certificates.

² A spray extraction with water and surfactant may be indicated after prolonged use and heavy soiling, at most once a year.

³ German Carpet Research Institute 81st Technical Note “Significance of the thermal resistance of carpets with underfloor heating and with regard to the saving of heating energy”, Aachen 1981.

