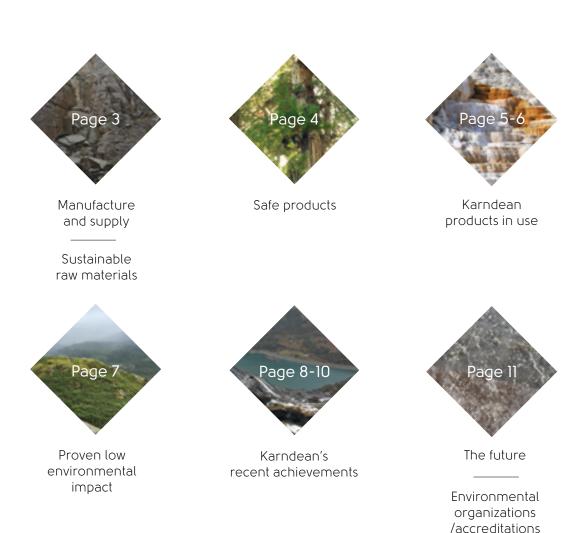


Introduction

Karndean Designflooring is a family-owned, leading supplier of luxury vinyl tile (LVT), in business since 1973. We are aware that the activities of our company have an impact on the environment and are committed to the continual improvement of our manufacturing and logistical processes to ensure sustainability and best value for our customers and stakeholders alike.

This commitment is driven from the top down, with training given to all employees on how they can contribute to the achievement of our environmental objectives. We pride ourselves on environmental awareness in the supply and maintenance of all our products worldwide and regularly monitor our performance against key criteria, to ensure continual improvement of both our products and processes in this area.

Within our own premises, we reduce our environmental impact by adopting reasonable controls to prevent air, water, ground and noise pollution and keeping sites clean and tidy. We also work with our suppliers and sub-contractors to improve their awareness of environmental issues.





Manufacture and supply

Our factories are all certified to the ISO 14001 environmental standard, which means we are committed to continuous improvement of environmental performance, including systems to control water usage, and product packaging made of 100% recycled material. All of our factories are also certified to ISO 9001 quality standard.

The wear layers in our products use high quality 100% virgin PVC and all of our flooring products use recycled PVC as part of the remaining layers. In fact, our products can contain as much as 50% recycled content in the backing layers, derived from post-production waste such as off-cuts, trimmings and process dust. Almost 100% of this production and post-production waste is granulated and recycled back into new product in a closed loop recycling process.

Our European operation is certified to ISO 14001:2015.





Sustainable raw materials

The key raw material in our product, PVC, is manufactured using a truly sustainable resource, salt. In addition to some renewable bio-based raw material, the minerals used to reinforce our products are naturally plentiful in the earth's crust and can be considered sustainable.

Raw materials are purchased in bulk and sourced as locally to our factories as possible. They are also sourced from ISO 14001/ISO 9001 certified raw material suppliers where possible.





Safe products

Our products are based on vinyl (PVC); the same tried and tested material used in vital medical equipment, from blood bags to dialysis tubing, heart and lung bypass tubing, surgical gloves to pill packets. The same material we put our trust in for pipes, wire and cable protection and window frames. Indeed, it is the most widely used polymer in building and construction.

All our products are manufactured free from the addition of heavy metals. No mercury catalysts are used in the manufacture of our PVC. They are fully compliant with 'REACH' (Registration, Evaluation, Authorisation and Restriction of Chemicals). This is a European Union regulation addressing the production and use of chemicals and their potential impacts on human health and the environment. They are also free from both 'BPA' (bisphenol A) and formaldehyde.

None of our products are carcinogenic and none contain raw materials which are either reprotoxic or endocrine disrupting.

Our European products are **CE marked**, which confirms that they comply with EU Construction Products Regulation 305/2011 and meet the requirements of the harmonized European standard **EN 14041**.

In the USA, our products comply with California's 'Proposition 65' and are free from chemicals known to cause cancer, birth defects or other reproductive harm. They require no warning labels when offered for sale throughout the USA.











Karndean products in use

Installation

We include the whole life of a floor when thinking about its sustainability and that means we make sure our floors start performing from the moment they are installed. So, we design our products for easy installation to minimize the amount of different materials required to install.











Low impact cleaning and maintenance

The in-use or service life of our planks and tiles can exceed 35 years and typically accounts for 80% of the environmental impact of the product. So, we endeavor to design the most efficient maintenance procedures and maintenance chemicals. Virtually all of our products have PU coatings ("K-Guard+®") to offer ease of maintenance and to reduce the quantity of maintenance chemicals required to keep them looking their best throughout the service life. Products in our floor care range contain biodegradable materials.



Air Quality

All Karndean products have been tested for contribution to indoor air quality and independent testing proves that our products are very low emitting in terms of VOCs (volatile organic compounds), meeting the strictest standards for air quality.

All have been successfully certified to 'Indoor Air Comfort Gold standard,' which means that they fully comply with the national emission requirements of European countries including:

- Germany AgBB/AGB/DGNB
- Sweden BVB
- Italian Regulation on Green Public Procurement
- Blue Angel RAL UZ 120
- Austrian Ecolabel Criteria UZ56
- In France, our products achieve A+ (the lowest level of emissions)
- BREEAM International

All our products carry FloorScore® Indoor Air Quality certification, which is a VOC test certification issued by an independent laboratory, demonstrating compliance with the emissions criteria of the California Section 1350 Program.

Low impact accessories and adhesives

Our adhesives are all either water-based or solventfree and have extremely low VOC emissions.

End of life

Our products offer exceptional durability, with an expected lifespan in excess of 35 years for domestic use.

We are at the forefront of loose lay and floating floors which require reduced or no adhesives and can be uplifted and re-used if so desired, or simply recycled; thereby reducing environmental installation impact.





Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions)







Proven low environmental impact

All of our gluedown ranges, Karndean LooseLay and Korlok rigid core products have an Environmental Product Declaration (EPD). An EPD is an independently verified and registered objective report based on a life cycle assessment (LCA). Its purpose is to communicate transparent and comparable information about the life cycle environmental impact of products, including: global warming potential, ozone depletion potential, and fossil fuel depletion potential.

The Building Research Establishment (BRE) has undertaken its own LCA and our products also have generic ratings in the BRE Green Guide of A/A+ for use in health, education, commercial, retail and domestic sectors.

Leadership in Energy & Environmental Design (LEED)

is the most widely used building environmental certification program used in the USA and Canada. It rewards best-in-class building strategies and practices, through a system of points and sets stringent criteria which



building projects must meet in order to achieve LEED certification. In so doing, this allows specifiers to select the most sustainable options for their project. Our products can help earn points by virtue of specific EPDs and contribution to indoor air quality.





Karndean's recent achievements

USA/Canada

LEED v4 Credit Criteria

Credit	Pathway
MR: Environment Product Declarations	Option 1: Environmental Product Declaration (EPD)
EQ: Low-Emitting Materials	Category 3: Flooring via FloorScore® certification

- Most of our products have been successfully certified to NSF/ANSI 332. This is the foremost US standard by which to evaluate and certify the sustainability of resilient floor coverings across the entire product life cycle, including both environmental and social aspects of the production and use of LVT.
- All of our rigid core products are Assure Certified™ by the Resilient Floor Covering Institute (RFCI) and SCS Global Services. This standard ensures that rigid core products are manufactured to the highest standard and meet the requirements for indoor air quality, rigorous performance, and are free of heavy metals and ortho-phthalates.



- Our products are listed on the 'mindful MATERIALS' database, which allows architects and designers access to transparent environmental information about our products.
- mindful MATERIALS
- Samples recycling program and 100% carbon neutral shipping available through our partners at Material Bank.
- More than 200,000 lbs. of pre-consumer cutting waste from our USA facilities is sent to plants each year where it is recycled for reuse in products such as parking cones, garden hoses, rubber sheeting, roofing material and some interior car parts.
- Our offices have introduced motion sensitive lighting and low energy bulbs. Water fountains include bottle refilling stations. Office waste, such as paper and plastic bottles, is recycled.







Australia/New Zealand

- The majority of Karndean luxury vinyl ranges are fully certified to Global GreenTag, the externally verified eco-labelling program which comprises two certification systems:
 - The first of these is LCA Rate. This is Life Cycle Analysis for all products and all rating tools that engage LCA with separate EPD output. Our products are certified "silver streamline" and "silver plus" for several of our products.
 - The second is GreenRate. This is a Type 1 eco label developed to meet the requirements of specific green building rating tools which includes indoor environmental air quality.
 Karndean ranges are fully certified to GreenRate Level 'A' and Karndean adhesives achieve level 'C'. As such they qualify for Eco points towards Greenstar building projects.
- We received an 'Excellence Award' from the Vinyl Council of Australia (VCA) for meeting 100% of the Australian PVC industry's voluntary Product Stewardship Program commitment.
- Additionally, we have been awarded 'Best Practice PVC', the first supplier in Australia to receive this certification for LVT products.









- All products supplied in to Australasia are phthalate free.
- In Australia, we offer an end of life take back program in which tiles and planks are recycled into other vinyl products at the end of their life.
- We have achieved Gold status in the PVC Stewardship Program of the Vinyl Council of Australia.









Karndean's recent achievements

IJK

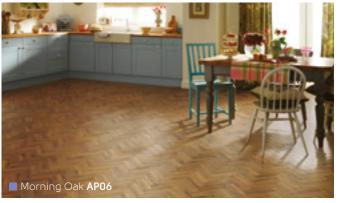
- We have achieved zero waste to landfill at our UK offices.
- The UK business is now fully compliant with the latest ISO14001:2015 standard.
- All products supplied into our UK business are phthalate free.
- We have introduced regular auditing of our waste processors to ensure strict adherence to latest best practice and recycling legislation.
- We have introduced new storage and load carrying features in our sales teams' cars to reduce load carrying by 62kg per vehicle, leading to improved fuel economy of 2.7% (a saving of 285 litres of fuel per month).
- We have installed electric vehicle charging points at our HQ.



- In the UK, we have introduced free postage return labels for all consumer chip size samples which will increase the reuse and recycling of samples, saving on future cost for production and lower energy consumption.
- Our UK operation stores product in high density racking, and our offices have introduced motion sensitive lighting and low energy bulbs.







Select products available in the US and Canada. Contact Karndean directly for more information.



The future

Our continued policy of product innovation includes focus on reducing environmental impact and introducing products which are easier to recycle.

We aim to develop robust products in order to extend product life cycles and thus further reduce environmental impact

We will continually review our environmental commitment and comply with environmental legislation, seeking opportunities to enhance the environmental credentials of our products.

We intend to maintain ISO 14001 accreditation.

Our aim is to remain a leading supplier of LVT worldwide and to have a market leading environmental record of achievement through the continual development of sustainable products and processes.

Environmental organizations/accreditations





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