
HELPING YOU
ACHIEVE GREEN
BUILDING
CERTIFICATION
Tarkett

INTRODUCTION

Buildings are the largest energy consuming sector in the world[1]. Accounting for over one-third of total final energy consumption, they are an equally important source of carbon dioxide (CO_2) emissions. From construction to use, to renovation, retrofitting or demolition, buildings use energy, water, and valuable raw materials.

In this era of climate change, sustainable buildings will be central to reaching net zero emissions by 2050, as will a growing emphasis on the sustainability credentials of any retrofit or new build project.

40%

of worldwide energy consumption

33%

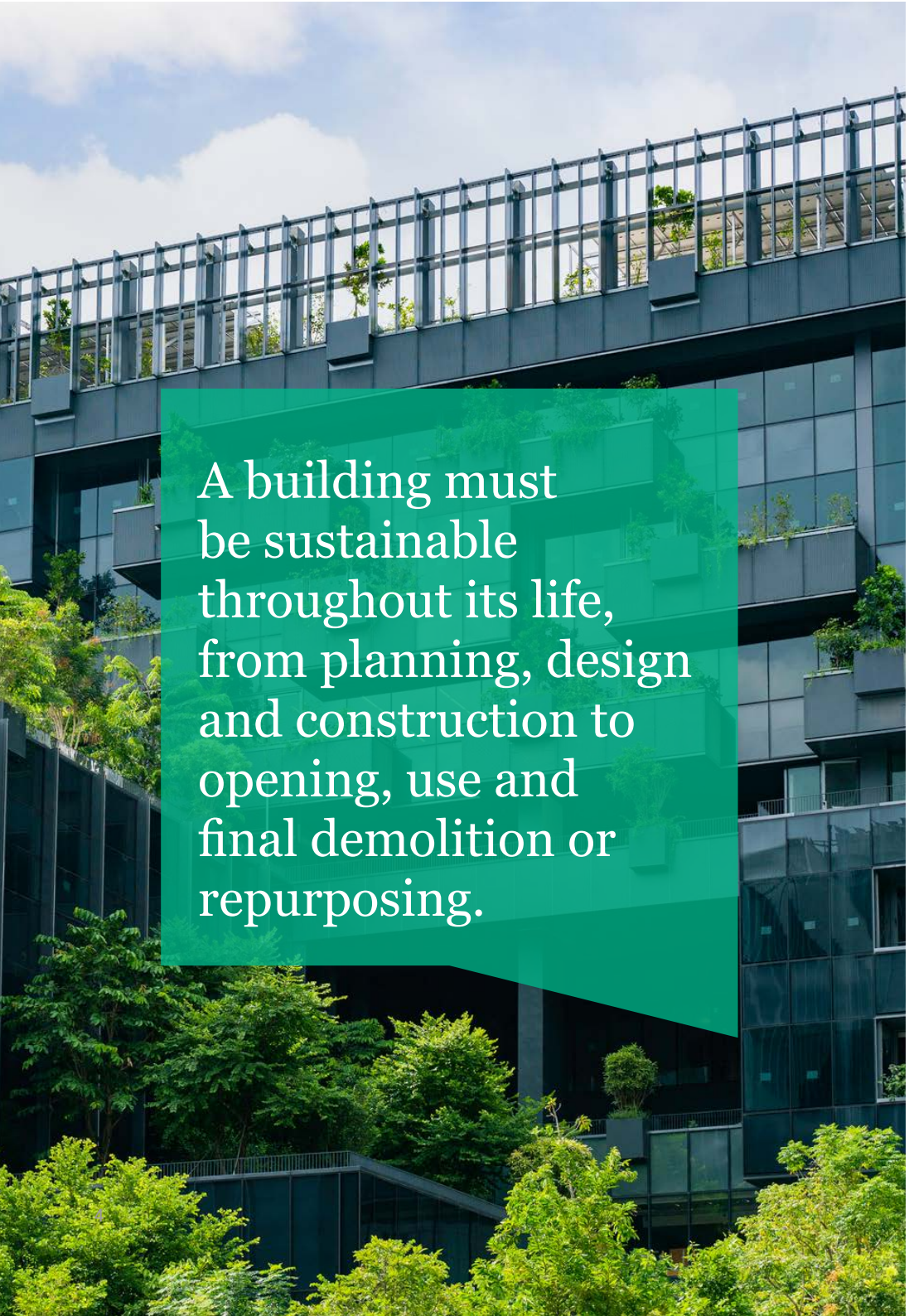
of greenhouse gas emissions

[1] *Buildings are responsible for 40% of global energy consumption and 33% of greenhouse gas emissions. Source https://www.weforum.org/agenda/2021/02/why-the-buildings-of-the-future-are-key-to-an-efficient-energy-ecosystem/*

SUMMARY

GREEN BUILDING CERTIFICATIONS EXPLAINED

- What is a green building certification?
- Overview of green building certifications
- Can green building certifications be compared?
- Why does certification matter?
- Achieving green building certification
- How can Tarkett contribute?
- Tarkett Green building cards
- Tarkett in green building projects



WHAT IS A GREEN BUILDING CERTIFICATION?

A green building certification is a scheme that assesses a building's sustainability performance based on its design, construction, and operation. The main schemes in use today originated in different countries and evaluate a range of criteria. They provide helpful guidance for both manufacturers and building owners on making buildings sustainable.

A building with this type of certification is recognised as more energy efficient, healthier and more environmentally friendly than uncertified buildings.

OVERVIEW OF GREEN BUILDING CERTIFICATIONS

There are several green building certifications, with the best-known as follows:

BREEAM®

BREEAM for Building Research Establishment Environmental Assessment Method was founded in the UK but is now popular throughout Europe too. The scheme has over 535000 certifications worldwide and features country-specific versions.

> BREEAM applies only to commercial buildings and is awarded by the Building Research Establishment (BRE).

LEED for Leadership in Energy and Environmental Design has the widest recognition and largest user base of all green building certification schemes. Like BREEAM, it offers country-specific certifications.

> LEED applies only to commercial buildings and is awarded by the US Green Building Council (USGBC).

DGNB

DGNB for Deutsche Gesellschaft für Nachhaltiges Bauen is a German green building assessment system that has won international acknowledgement since it started in 2007.

> DGNB applies to commercial and residential buildings and is awarded by the Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB).

WELL is a US-based green building certification scheme that focuses exclusively on the health and well-being of building users.

> WELL applies only to commercial buildings and is awarded by the International WELL Building Institute (IWBI).

HQE for Haute Qualité Environnementale is a French green building certification system regarded as among the most stringent and comprehensive scheme. It is widely used in France and French-speaking countries.

> HQE applies to commercial and residential buildings (NF HABITAT HQE) and is awarded by HQE accredited third-party organisations.

HQM for Home Quality Mark is a green building certification programme for homes in the United Kingdom. It aims to provide homebuyers with a comprehensive assessment of the sustainability, comfort, and health of new homes.

> HQM applies only to residential buildings only and is awarded by the Building Research Establishment (BRE).

Each scheme has its own evaluation criteria. These are the main aspects assessed by the six certification schemes just described:

1 BREEAM® INTERNATIONAL NEW CONSTRUCTION 2016

Management and maintenance - quality control by the building project teams and training for building users.

Health and wellbeing - the working environment and indoor air quality, as well as thermal, acoustic and visual comfort.

Energy use and efficiency - building energy consumption and the use of power from renewable sources.

Transport and accessibility - building accessibility and the availability of sustainable transport options.

Water use and management - the building's water consumption and water saving technologies.

Material use and waste management - the integration of recycled or renewable materials and disposal of construction waste.

Land use and ecology - the building's impact on the local ecosystem and the green spaces provided by the project.

Pollution - limiting or preventing night time light and general noise pollution generated by the building.

> *"The BREEAM assessment process analyses building design and construction, producing a score for each aspect listed above. That score determines the level of certification, ranging from Pass to Outstanding.*

2 V4.1 BUILDING DESIGN AND CONSTRUCTION

Integrated process - the combined ability of on-site systems to deliver quality, value and equitable outcomes.

Location and transport - the availability of sustainable transport options, such as infrastructure for public transport and cycling.

Sustainable sites - rainwater management, the use of renewable energy and preservation of natural habitats.

Water efficiency - how the building uses water.

Energy and atmosphere - the building's energy performance and use of renewable power, such as solar or wind.

Materials and resources - the sourcing and use of materials in the building, including the role of recycled material.

Indoor environment - the building's air quality and comfort levels for lighting, temperature and noise.

"The total points earned from each category determine the building's LEED certification, from Certified to Platinum.

3

SYSTEM FOR NEW CONSTRUCTION

Environmental quality - the building's impact on the environment, energy and water consumption, emissions.

Economic quality - the building's cost-effectiveness, from construction through operation to future adaptation.

Sociocultural and functional quality - the building's indoor environment including lighting, acoustics and thermal comfort.

Technical quality - the building enclosure and fire safety.

Process quality - how the construction project is managed.

Site quality - the building's site and surroundings.

"Points-based certification varies from Bronze to Platinum.

4 BUILDING STANDARD V2

Air - indoor air quality and external ventilation.

Water - clean, safe water for drinking, washing and other uses.

Nourishment - healthy food options, including on-site cafeterias and promoting healthy eating.

Light - natural light and lighting controls.

Movement - opportunities for physical activity and exercise.

Thermal comfort - maintaining a comfortable indoor temperature.

Sound - acoustic comfort in the building.

Materials - specifying building materials that are safe for occupants.

Mind - spaces to encourage interaction, relaxation and wellbeing.

Community - access to healthcare and other local needs.

“Certification levels run from Bronze to Platinum.

5

BÂTIMENT DURABLE v4

Well-being - focus on indoor air quality, thermal/ acoustic/visual comfort, sustainable transportation and services available in the building and in its surroundings

Environment - focus on energy and water consumption, waste management, low-carbon design and biodiversity

Economy - encourage life cycle costing and the development of local stakeholders

Project management - focus on the building's adaptability, responsible jobsite practices, commissioning and green lease for the occupiers

"Certification levels go from HQE Performant to HQE Exceptionnel.

6

HOME QUALITY MARK
delivered by bre

Transport and movement - focus on public transportation availability and sustainable transport options.

Outdoors - focus on biodiversity.

Safety and resilience - risk analysis regarding flood and rainfall.

Comfort - different aspects of the indoor environmental quality, such as thermal and acoustic comfort.

Energy - energy efficiency of the building.

Materials - responsible sourcing and life cycle thinking.

Space - availability of drying space and recyclable waste storage room.

Water - lower water consumption.

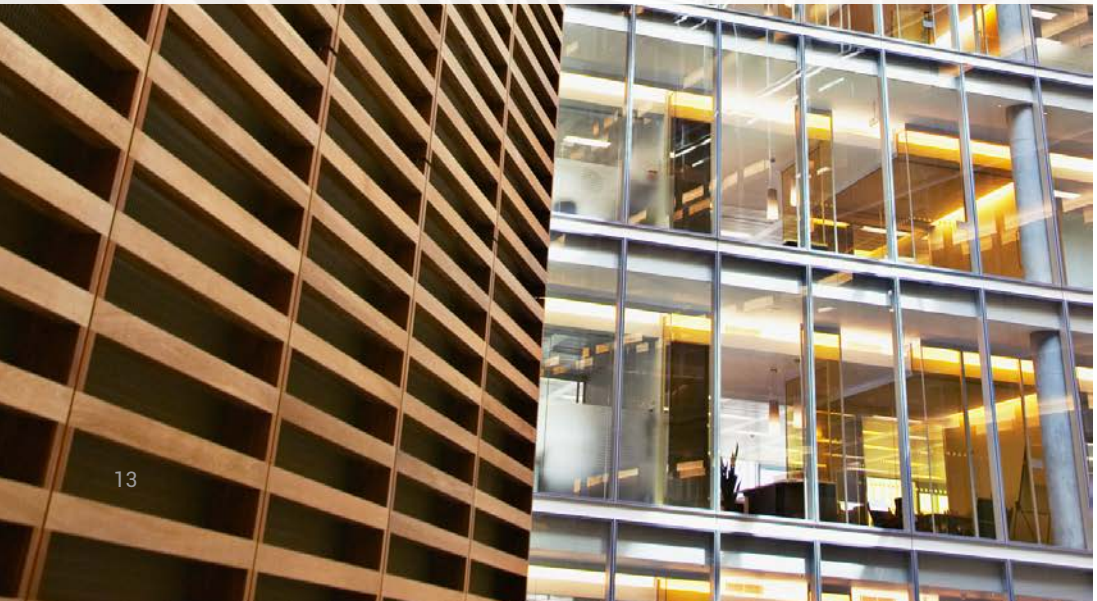
Quality assurance - project preparation and commissioning.

Construction impacts - responsible construction practices.

Customer experience - focus on the post-delivery stage of the building and how information is provided to the occupiers.

> *"The certification level can go up to 5 stars based on the percentage of credits achieved.*

CAN GREEN BUILDING CERTIFICATIONS BE COMPARED?



As each certification scheme has its own specific focus and each building's sustainability needs are unique, comparing the schemes directly is difficult. The most relevant green building certification for a particular building will depend on factors like its location, size, use, and the objectives of the building owner.

For example, a building that prioritises the health and wellbeing of occupants may benefit from certification under the WELL Building Standard v2. Alternatively, buildings focused on energy efficiency and resource management might find LEED or BREEAM more appropriate.

Ultimately, the aims of the building's owners and stakeholders will determine which certification scheme forms the best fit. All the schemes in this white paper offer a valid route to sustainability.

When choosing a scheme, keep in mind that certifications awarded by independent, non-profit bodies are generally seen as the most trustworthy.

WHY DOES CERTIFICATION MATTER?

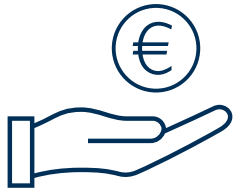
Green building certification is increasingly important for building owners, designers and developers as it demonstrates a commitment to sustainability and better environmental performance.

WHY DOES CERTIFICATION MATTER?

The benefits of certification include increased marketability, enhanced reputation, wider brand recognition and greater profitability, as well as less of an impact on the environment:

- **Smaller environmental footprint** – reduced energy and water consumption and the use of sustainable building materials.

- **Health and wellbeing** – better indoor air quality comfortable, supportive surroundings for occupants to live and work in.



- **Greater profitability** – lower operating costs from using less energy and water, higher occupancy and rental income from happier occupants.

- **Reputation and brand recognition** – wider acknowledgement and competitive advantage for the building and its owners among peers, clients and government.

- **Increased marketability** – greater demand for green buildings from occupants and buyers.

ACHIEVING GREEN BUILDING CERTIFICATION

ACHIEVING GREEN BUILDING CERTIFICATION

Making certification part of a building project requires a methodical approach and good organisation skills. The outline below will vary according to the certification scheme selected, but it provides an overview of the steps to follow.

1. Seek guidance from a sustainability consultant.
2. Choose the most relevant certification scheme based on your project's sustainability goals.
3. The sustainability consultant then contacts the scheme to start the certification process.
4. Assemble a project team of architects, engineers, contractors and other stakeholders, making everyone aware of the project's aims.
5. Create a plan for meeting the certification criteria. This should cover the architectural design, sourcing of construction materials and targets for building performance e.g. energy and water use.
6. Have every stage of the project reviewed by the sustainability consultant during the design phase.
7. Most certification schemes make a first assessment at the end of the design phase, ensuring the specification is aligned with sustainability goals.
8. During construction, follow sustainable construction practices such as minimising site disturbance, reducing waste generation and checking materials and systems are as specified.
9. When construction is complete, provide as-built documentation to the scheme auditors to obtain final certification. Sometimes a site visit is necessary.ensuring the specification is aligned with sustainability goals.
10. Once the building has been delivered, other types of certification for its operation can be sought.

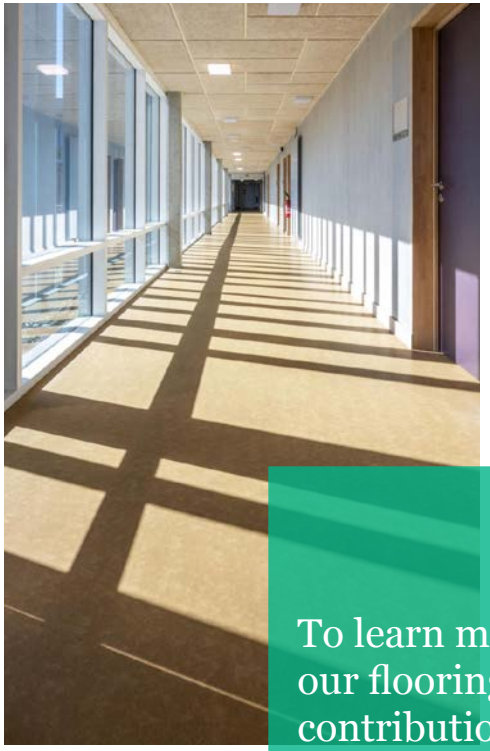
Lead times for achieving certification can vary. Initial design approval usually comes a few months after the design phase, while construction-stage certificates are often awarded after delivery of the building.

HOW CAN TARKETT CONTRIBUTE?

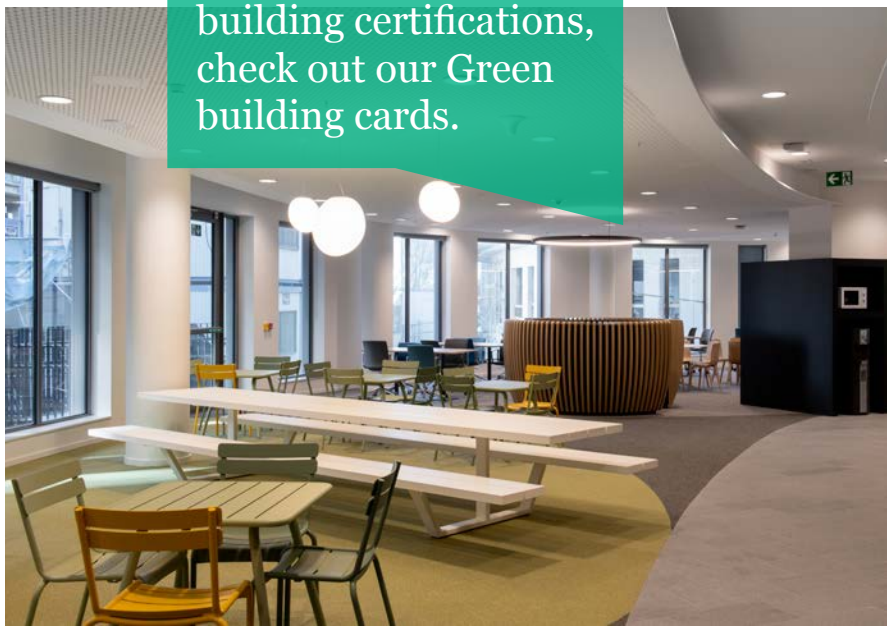
Flooring plays an important role in green building certification because it forms a significant part of the building's interior. Tarkett flooring can contribute to certification through:

- Waste reduction via our ReStart® programme, which promotes the recycling of carpet tiles, linoleum or vinyl*. This means less waste for landfill or incineration and fewer carbon emissions.
- The use of sustainable ingredients that are recycled, renewable or bio-sourced.
- Better indoor air quality through products with low to ultra-low emissions from volatile organic compounds (VOCs) and formaldehyde.
- Improved acoustic and visual comfort.

Choosing Tarkett sustainable flooring and following best practice can contribute to a building's overall sustainability and green building certification.



To learn more about our flooring potential contribution to green building certifications, check out our Green building cards.



Homogeneous floors (post 2011), iD Square (post-2018) , Heterogeneous floors loose-lay, LVT Click, vinyl rolls (glue-free installation below 50 sqm)

TARKETT GREEN BUILDING CARDS

Our Green building card brings together information about the recyclability, VOC and formaldehyde emissions and the total carbon footprint of our main products, together with their potential contribution to green building certification.

This data is relevant to the following certifications schemes: BREEAM, LEED, DGNB, WELL, SKA Rating, HQE, Greenstar, MILJO, NF HABITAT HQE and HQM.

Tarkett Green Buildings Cards can be downloaded from our online catalogue at tarkett.com

You can also ask your sales representative.

A product's potential contribution is analysed by certification scheme and assessment criterion. Below is an example for BREEAM:

While products like flooring can contribute towards green building certification, they cannot themselves be certified e.g. by LEED.

Here is another example for the Home Quality Mark (HQM) certification scheme:

Version of certification scheme

Specific certification scheme requirements

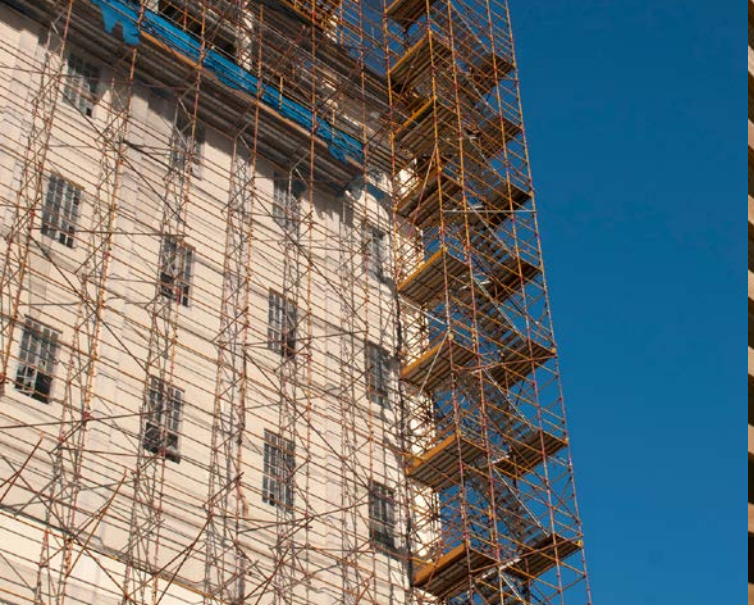
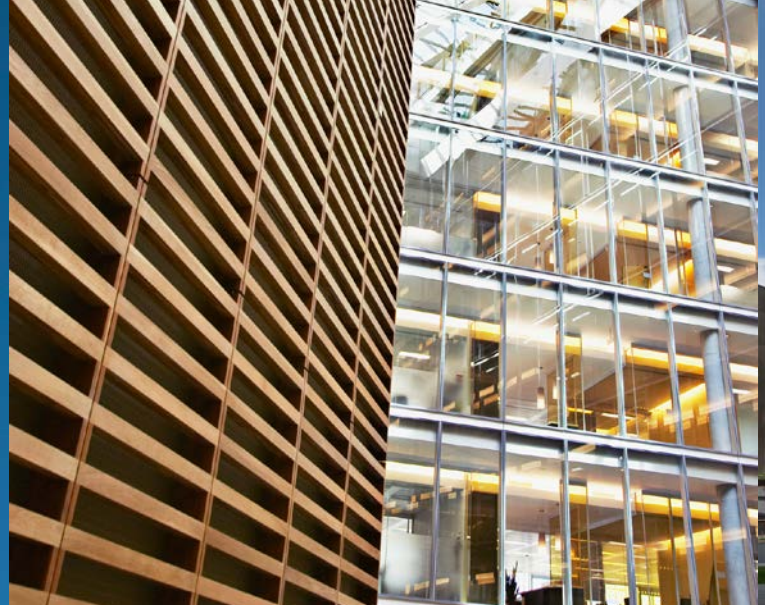
Tarkett responses to requirements

Certification scheme assessment criteria

Certification scheme name

HOME QUALITY MARK

HOME QUALITY MARK ISSUES	CERTIFICATION REQUIREMENTS	THE TARKETT RESPONSE
4.1 Indoor Pollutants	TVOC at 28 days ≤ 1000 µg/m³ and Formaldehyde at 28 days ≤ 60 µg/m³	≤ 10 µg/m³ OPTIMAL INDOOR AIR QUALITY; < 10 µg/m³ LOW FORMALDEHYDE EMISSIONS; floor score
4.2 Daylight	Best practices in daylighting and artificial lighting design *No specific requirement at product level*	VISUAL COMFORT
4.4 Sound Isolation	Best practices in impact noise reduction *No specific requirement at product level*	IMPACT NOISE REDUCTION < 85dB
6.1 Responsible Sourcing	Ingredients verified by a third party or Product composed of recycled content and ISO 14001 certified	MHS; 35% RECYCLED CONTENT; Tarkett ISO 14001
6.2 Environmental Impact of Materials	EPD available	EPD
10.4 Site Waste Management	Avoid sending waste to landfill *No specific requirement at product level*	RECYCLABLE; ReStart by Tarkett

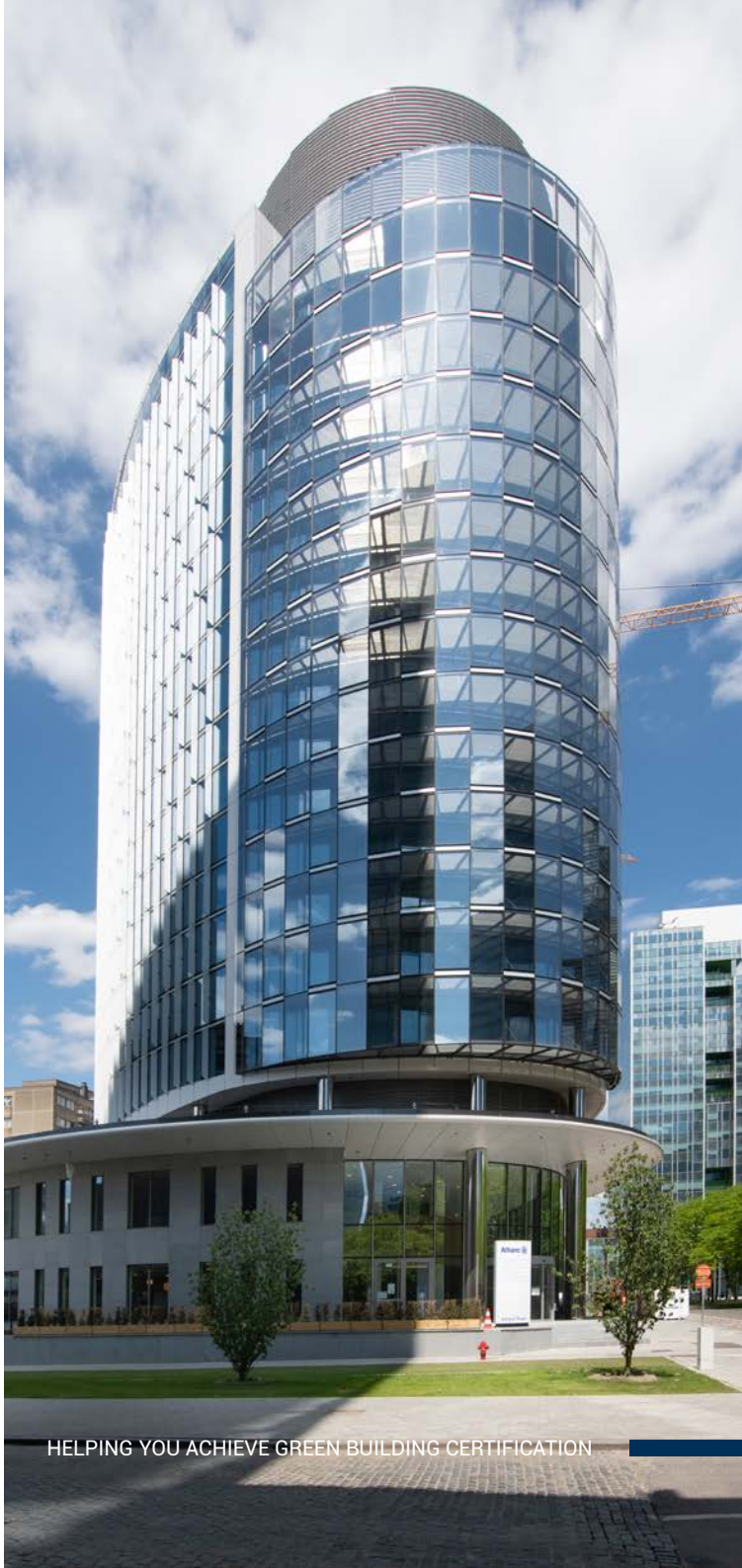

TARKETT IN GREEN BUILDING PROJECTS



BREEAM®

Location	Brussels, Belgium
Tarkett product	DESSO Grain
Surface area	~20,000 m^2
Certification achieved	BREEAM Excellent
Building type	Offices
Project team	Assar (architects) Allianz (occupant) VK Group (engineers) Kyotec (facades)

Tarkett flooring can help towards BREEAM certification in the following criteria:
Health and wellbeing (Hea), Materials (Mat), Management (Man) and Waste (Wst).



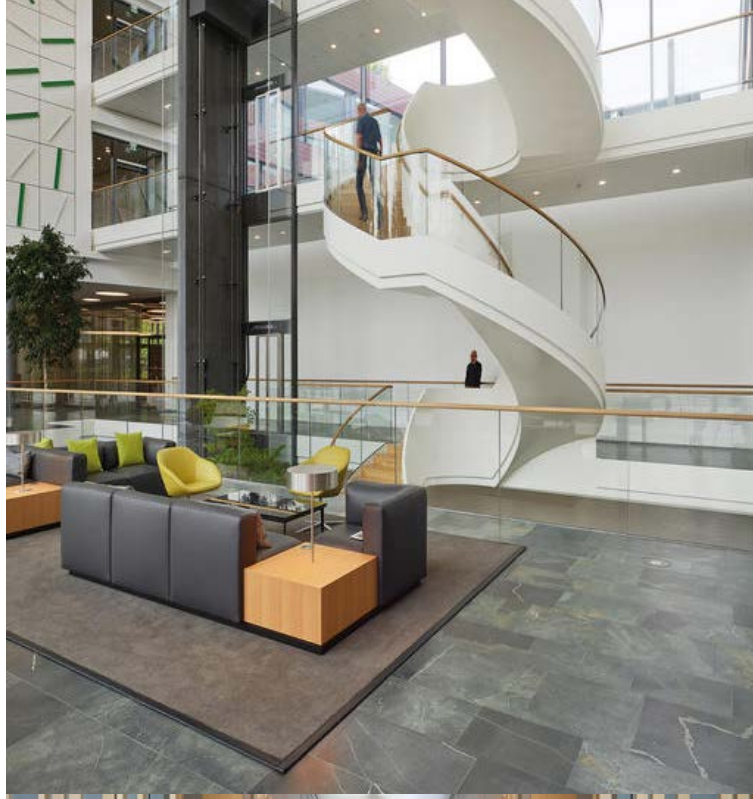
V4.1

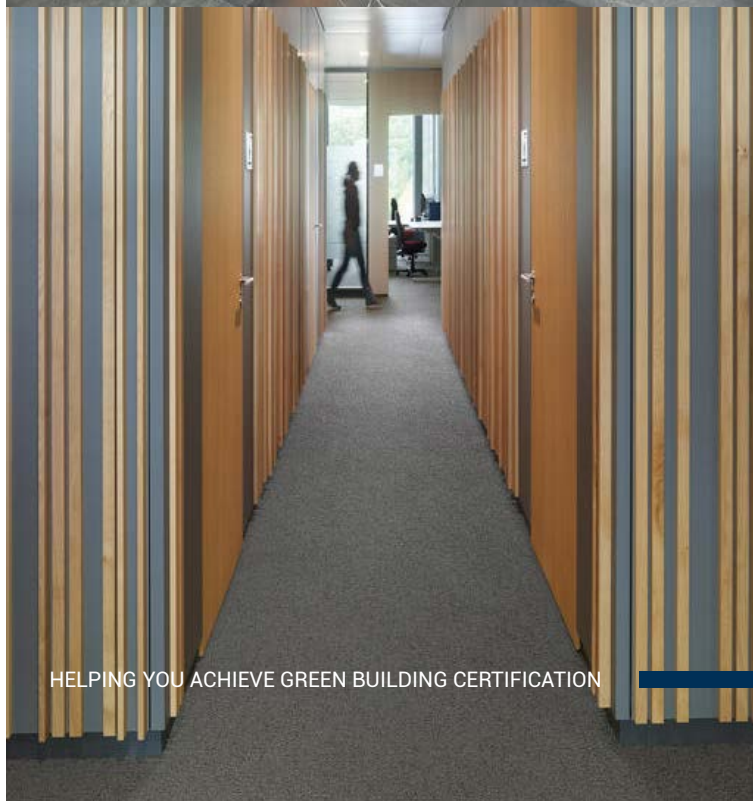
Client name	Caixabank – The Ó Building
Location	Barcelona, Spain
Tarkett product	DESSO Metallic Shades and AirMaster Tones
Surface area	~10,000 m^2
Certification achieved	LEED Excellent
Building type	Offices
Project team	Bardaji Capdevila Management (architects & project managers) STATIC Ingeneria (structural engineers) PGI Engineering (facility engineers)

Tarkett flooring can help towards LEED certification in the following criteria:
Materials and resources (MR) and Indoor environmental quality (EQ).

Client name	Vector Informatik GmbH
Location	Stuttgart, Germany
Tarkett product	DESSO Fields EcoBase
Surface area	~14,000 m^2
Certification achieved	DGNB Platinum & Diamond
Building type	Offices & administration
Project team	Schmelze+Partner mbB Architects BDA, Hallwangen, Michael Frey (Architect)

Tarkett flooring can help towards DGNB certification in the following criteria:
Economic efficiency (ECO), Social sustainability (SOC), Technical quality (TEC) and Environmental quality (ENV).





Client name	La Generalitat
Location	Barcelona, Spain
Tarkett product	DESSO AirMaster
Surface area	~30,000 m^2
Certification achieved	WELL and LEED Platinum
Building type	Public building
Project team	Batlleiroig (architects) HBG Corp (engineers)

Tarkett flooring can help towards WELL certification in the following criteria:
Light, sound and materials.

Client name	Lycée Nort-sur-Erdre
Location	Nort-sur-Erdre, France
Tarkett product	Linoleum
Surface area	~5,400 m^2
Certification achieved	NF HQE
Building type	Public building
Project team	AIA Life Designers (architects) TCE + Economie AIA Ingénerie (engineers) AIA Environnement (environmental expertise) SERDB (acoustic engineering)

Tarkett flooring can help towards HQE certification in the following criteria:
Wellbeing, Environment and Economy.