







## SUSTAINABILITY REPORT

2021



## Welcome to Polyflor

Welcome to our 16th annual report. This report sets out to openly and comprehensively communicate our sustainability performance for 2020 in an engaging manner to all our stakeholders.

- "Sustainability at Polyflor is not the responsibility of just one person: It is very much a team effort throughout the entire company and involves listening to our customers and other external driving forces. Sustainability is driven by our board of Directors across all areas of the business and includes our environmental objectives and processes or quite simply, encouraging employees to 'do their bit' at home, in the community and in the work-place.
- "Like all manufacturers, Polyflor has an environmental impact and therefore an important responsibility to minimise this impact. This report highlights our endeavours in doing so through our focused objectives and guiding policies. Furthermore, we will continue to report with integrity and without partiality, indicating where improvements can be made in the future.
- "Polyflor continues to be industry leading with regards to it's sustainability achievements, including having used harvested rainwater for production since 1915 and recycling vinyl since we pioneered it in 1950. Polyflor was an early adopter of BRE with products first assessed on a Life Cycle Analysis in 2005. We were also the first commercial flooring manufacturer to achieve the BRE's standard for Responsible Sourcing, BES 6001, for many of our products. There were many other firsts, including being the first flooring manufacturer to achieve GreenTag LCARate certification and being the first flooring manufacturer to roll out a recycling initiative inclusive of site collections and distributor dropoff sites to suit all customer and waste volume requirements.
- "In what has been a very challenging year for most, Polyflor has continued to show resilience, whilst balancing economic and environmental sustainability. Despite this turbulent time, Polyflor has still achieved many significant accomplishments for 2020, including reducing water usage and gross waste. Particularly worth noting is the further reduction of our carbon footprint, by increasing renewable electrical energy consumption to 100% from 93%, as well as reducing CO<sub>2</sub> emissions by 29%.

- "Once more, our Transport & Logistics department worked hard to reduce CO<sub>2</sub> emissions through reduced fuel and journeys.
- "Finally, and importantly, labour retention was at its highest in years moreover, we continued to recruit new employees - a true testament to our corporate social responsibility values.
- "As a business, we are pleased with 2020's results and the progress that we have continued to make, although we will endeavour to improve further in 2021 and beyond."



Group Chief Executive, James Halstead PLC



## Striving for a



## About this report

This report provides an overview of Polyflor's sustainability performance for the 2020 calendar year and enables us to communicate to all stakeholders, be accountable for our sustainability activities and identify where improvements should be made.

#### Report Boundary

The environmental data reported is required as part of our BES 6001 sustainability objectives and framework, relating to our 2 UK production sites. In compliance to our BES 6001 Excellent rating, the methodology used for significant environmental aspects is outlined

#### Polyflor Environmental Impacts Assessment - Methodology

Polyflor has assessed its operations and as a result has identified environmental impacts of the business.

#### Responsibilities

It is the responsibility of Polyflor Senior Management to systematically examine their business operations and identify possible and actual effects on the environment.

#### Control Measures

- Internal procedure titled "Environmental Aspects Identification and Assessment"
- · Register of Environmental Aspects.
- · Environmental Aspects Identification and Assessment Form.
- · Register of legal requirements.
- · Environmental Objectives.

#### **Identification of Environmental Aspects**

Polyflor has identified 18 non-significant aspects and 15 significant aspects. Identification of all Environmental Aspects consider the

- · Possible and actual effects on the environment.
- Type of activities carried out.
- · Use of materials and utilities.
- · Generation of solid and liquid waste.
- · Discharges to sewer or surface waters.
- · Emissions to atmosphere.
- Energy consumption.
- Transport and distribution.
- · Noise emissions.
- Packaging.
- · Housekeeping and visual impacts.
- · Effect of fire.
- · Effect of flooding
- · Electrical failure.
- · Spillages on site.

- · EA8 Transport of goods and materials to the Polyflor sites.
- · EA9 Energy Use steam generation.

Significant Environmental Aspects

- EA10 Emissions to air from safety flooring manufacture.
- · EA12 Environmental noise and vibration from site.
- EA13 Generation of waste for off-site disposal or reclamation.
- · EA14 Disposal of foul water.
- EA17 Packaging of final product.
- · EA18 Distribution of product from site.
- EA24 Effect of liquid spillage from site.
- EA25 Use of cooling towers on site.
- EA26 Presence of asbestos in building materials on site.
- EA27 Presence of chiller systems.
- EA33 Demolition and building on site.
- · EA36 Climate change and energy.
- · EA37 Water abstraction.

#### **Assessment of Significance**

Environmental Aspects are assessed based on environmental risk.

The severity score will be based on the following:

1-4 = Trivial effect.

5-8 = Minor effect.

9-12 = Major effect.

The likelihood will be based on the following:

- 1 = Improbable occurrence.
- 2 = Possible occurrence.
- 3 = Occasional occurrence.
- 4 = Regular occurrence.

The significance is calculated from multiplying the severity by the likelihood. An aspect is considered significant if the significance score is greater than 25

#### **Environmental Aspect Identification and Assessment Form**

Each aspect identifies the following criteria.

- · Description of the area of activity.
- · Description of the environmental impact.
- · Specific activities associated with impacts.
- · Mitigation strategies (objectives).
- · Legal requirements.

#### **Review of Environmental Aspects**

Environmental aspects are reviewed periodically by senior management to assess the following:

- · Progress of associated objectives and targets.
- · Associated activities.
- · Necessary updates/changes.
- · Need for identification of new aspects.
- · Significance Score.

#### **Auditing of Environmental Aspect**

All significant aspects are audited to ensure:

- · Compliance to legal requirements.
- · Compliance to management system requirements.

Polyflor is compliant to legal and management system requirements and remains accredited to ISO 14001.

#### Stakeholder Engagement

Stakeholder engagement is important to Polyflor and facilitates a two-way process for communication and insight, as outlined within our BES 6001 parameters. The stakeholder consultation process and its activities generally involve meetings, feedback procedures and surveys, audits, representations and regular contact and involvement with the following: Employees; customers; suppliers; trade unions; industry associations; local communities; shareholders; government and financial organisations.

We value your opinions and would welcome feedback on this report. Please get in touch at info@polyflor.com

## Governance

Polyflor Ltd. is part of James Halstead PLC, with UK headquarters based in Manchester. The James Halstead Group employs over 819 people, has 2 UK production sites and 21 sales distribution sites worldwide.

Polyflor Ltd. has a board of 6 directors who report to Mark Halstead, Group Chief Executive and the executive board of James Halstead PLC. Mark Halstead is the fourth generation of the family to head up the business, following his Father, Geoffrey Halstead's official retirement in December 2017, after 70 years with the company.

Polyflor's directors are responsible and accountable for the compliance of policies which form the basis of our Code of Conduct. This promotes equality, trust and integrity and ensures legal, regulatory and ethical compliance.

#### Standards of Conduct

#### **Employees**

We will treat employees fairly and use employment practices based on equal opportunity for all employees. Recruiting, employing and promoting employees on the basis of objective criteria and the qualifications and abilities needed for the job to be performed in line with the Equal Opportunities Policy.

#### Customers

We will provide high quality and value, competitive prices, and honest transactions to those who use our products. We will deal lawfully and ethically with our customers.

All employees are expected to behave respectfully and honestly in all their dealings with customers and the general public in accordance with the principles set out in this Policy.

We will deal fairly with our suppliers. We will seek long lasting business relationships, without discrimination or deception. In those dealings, we expect those with whom we do business to adhere to business principles consistent with our own.

#### Communities

We are committed to fostering good relationships with the communities in which we work. We will abide by all national and local laws, and we will strive to improve the wellbeing of communities through the protection of natural resources, through the encouragement of employee participation in charitable affairs.

#### National and International Trade

We will seek to compete fairly and ethically within the framework of applicable competition. We will comply with all applicable export control laws and sanctions when conducting business around the world.

## **BES 6001 Verification Statement**

Certification to BES 6001, the framework standard for responsible sourcing, has become increasingly significant in the construction industry. As a result, a number of construction product manufacturers have achieved certification to this standard. BES 6001 requires construction product manufacturers to demonstrate levels of achievement against a series of clauses. Some elements of these clauses are compulsory, with one credit awarded. Additional credits are also available for achieving progress beyond the compulsory level. Depending upon the score achieved by the organisation, it is possible to gain a Pass, Good, Very Good or Excellent rating. Higher levels of performance are achieved (in part) through external verification of particular clauses of the BES 6001 standard. This is particularly important for those organisations wishing to certify to an Excellent rating, as this rating cannot be achieved without this verification.

This is the external verification statement on BES 6001 environmental and social activities (qualitative and quantitative) based on 2020 data as reported by Polyflor in their 2021 Sustainability Report.

#### Nature and Scope of Verification

Polyflor engaged the services of Dr James Upstill-Goddard to verify a number of environmental and social issues which are communicated to stakeholders in the Polyflor Sustainability Report, which is due to be published online later in 2021. The scope of the data verified included the Head Office, located in Whitefield, Manchester, as well as the Riverside flooring facility in Teesside.

The scope of the verification focused on specific clauses in the BES 6001 v3.1 Framework Standard for Responsible Sourcing.

Dr Upstill-Goddard has not been involved in the preparation of the Sustainability Report and is completely independent from Polyflor without any bias or conflict of interest.

#### Statement on Independence and Competence

Dr James Upstill-Goddard has experience of responsible sourcing and BES 6001 in both commercial and academic capacities. He spent a number of years working for a small Leicestershire based environmental and CSR consultancy specialising in responsible sourcing advice, and during this time supported a number of construction companies to certification to BES 6001. These organisations include those from the precast concrete, plasterboard, paint, flooring, and steel sectors. He has carried out data verification exercises for a number of major construction product manufacturers, and has also been involved in collaborative research on the topic with a significant amount of his Engineering Doctorate (EngD) degree focused on responsible sourcing in the construction industry.

Dr Upstill-Goddard was also centrally involved in the development of the CIRIA published handbook 'Minimising Risk through Responsible Sourcing: A handbook for the construction industry', which was published in June 2017. He has also worked in manufacturing organisations which have held certification to BES 6001 so has experience in collating data for reporting and verification purposes.

#### Responsible Sourcing Issues

The specific clauses of BES 6001 relevant to this verification are Greenhouse Gases (3.4.1); Resource Use (3.4.3); Waste (3.4.4);

Water (3.4.5); Employment & Skills (3.4.9) and Community (3.4.10). The majority of the verification process focused on the metrics communicated to BES 6001 Verification Statement stakeholders; however, part of the process examined existing policy as per the requirements of the BES 6001 framework standard.

The exercise was conducted to ensure that the data communicated to stakeholders were:

- a) Materially accurate;
- b) Supported by appropriate documentation and evidence.

#### Verification Standard

There is no specific verification standard for BES 6001, although greenhouse gas emissions are required to be calculated to the principles of ISO 14064-1. As such the process followed ensured that data that make up the calculations and reported figures in the stakeholder report could be traced back to invoices, bills, meter readings and raw data.

#### **Verification Opinion**

Based on the information and data reported I am satisfied that it provides a fair and balanced representation of Polyflor's sustainability activities during 2020 with respect to the requirements for BES 6001 clauses as described on page one. Based on the verification exercise, I can conclude that:

• The information presented in the Sustainability Report is materially accurate to a reasonable level;

- A reasonable level of assurance is given to the greenhouse gas calculations meaning that the GHG assertion is:
- Materially correct and a fair representation of the GHG data and information; and
- Is prepared in accordance with the requirements of ISO 14064-1.
- There was a process by which primary information was collated (i.e. bills, invoices, meters, other supplier provided data) and used for reporting purposes; primarily for clauses 3.4.1, 3.4.4 and 3.4.5;
- · Constituent materials were able to demonstrate environmental stewardship at source, primarily for clause 3.4.3 with a significant percentage of the supply chain having certification to ISO 14001;
- Statements are materially accurate and supported by a range of documents from within the management systems and from reports, minutes, company publications and other sources; primarily for clauses 3.4.9 and 3.4.10.

Dr James Upstill-Goddard PIEMA

20 September 2021

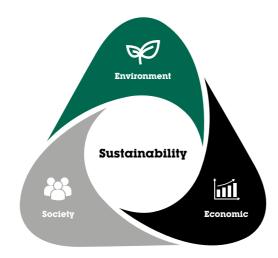
Independent Consultant, Leicestershire, UK.



Polyflor's vision is to minimise carbon emissions, as well as being socially and economically responsible. The vision of our business model is fully encompassed by the Three Pillars of Sustainability, which focus on synergy between Environment, Society (people) and Economics.

## **Key Steps to** achieve a more sustainable **future**

- 1 The avoidance of emissions to the ecosystem.
- 2 The introduction of products that are environmentally consistent with their intended use by providing a high level of durability, reliability, ease of maintenance and safe disposal at end of life.
- 3 Active participation in industry initiatives and projects that improve environmental impact.
- 4 Careful selection of materials, processing techniques and state of the art technology to reduce environmental impact.
- 5 Compliance with circular economy principals:
  - Reduction of waste to a minimum
  - Conservation of resources by use of recycling
- 6 Engaging and raising environmental awareness by stakeholders.
- 7 To go above and beyond in the communities in which
- 8 Best practice procurement and business ethics.



## The Three Pillars

#### **Environment**

Natural Resource Use Waste & Pollution Prevention Bio Diversity Energy Efficiency & Renewables Green Technology

#### Economic

Growth Profit Cost Saving R&D

#### Society

Responsible Sourcing, Stewardship & Fair Trade **Business Ethics** Working with Local Communities Workers' Rights & Benefits Standard of Living Jobs & Education

## Sustainable Progress

For many decades Polyflor has been recognised as a leading global manufacturer of high quality, high performance sustainable floor coverings. We will continue to do good as a responsible and ethical manufacturer, whilst looking to continually improve.

#### Polyflor's Sustainability KPIs for 2020\*

In 2020, the company's total greenhouse gas (GHG) emissions were reduced by 3,259,741 (KG CO2e) - an improvement of 29%. This is the equivalent to GHG emissions from 709 passenger vehicles driven for 1 year. In terms of GHG emissions per m<sup>2</sup> output, a 22% reduction was made. Additionally, Polyflor's emissions intensity was reduced by 9% compared to 2019.

## **Our Biggest Achievements**

100%

14%

CO<sub>2</sub> emissions reduced through transportation

reduction on Polyflor's total GHG emissions

21%

decrease on water usage

100%

decrease on net waste

employee retention in 7 years

#### Sustainable Design

UK manufactured Polysafe Stone fx PUR and Polysafe QuickLay PUR were launched, both with EN 15804 EPD and BRE A+ rating; low maintenance; low VOC and phthalate free. Both are recyclable but Polysafe QuickLay PLIR. an adhesive free floor covering, can also be reused.

#### Production

- 100% renewable electricity used.
- Reduced Direct (from natural gas) and Indirect Greenhouse Gas Emissions by 13% and 100% respectively.
- 21% decrease on water usage
- Net waste reduced by 100%
- 84 tonnes of glass were recycled into some of the Polysafe ranges.

- Achieved 93% for bulk deliveries above the minimum load size of 23 tonnes against >90% target
- 100% of raw material suppliers achieved ISO 9001 (a 1% increase):
- 92% for ISO 14001 (1% increase):
- 88% achieved OHSAS 18001 (an increase of 6%)

- · Kilometres travelled by the Polyflor fleet decreased by 14%.
- Fuel consumption decreased by 14%
- 14% reduction of CO<sub>2</sub> emissions from transportation.
- Polyflor's external backhaul operation removed 200 HGV journeys from the road.

- · Recofloor collected 424 tonnes of vinyl waste flooring, which was testament in such challenging times.
- Scheme acquired 43 new companies/fitters, plus 5 major distributor branches joined.
- The main awards event was cancelled, but winners were announced via Twitter live in intervals through the morning of the original planned event.

#### **Environmental Assessments**

· Polysafe Verona Pure Colours PUR and Polysafe Stone fx PUR were individually assessed by the BRE, achieving A+ certification

- · Polyflor hosted 18 floor fitting courses on site at Whitefield, training 119 delegates.
- · 22 new employees were recruited.
- · Labour turnover decreased by 45%.
- 357% more employees underwent training.
- 7 new members in the 25-Year Club totalling 80 members (a 10% increase).
- Loss time accidents fell by 75%
- $\bullet \ \, \text{Polyflor continued to liaise with and support local communities, comprising charitable donations, volunteering}$ and fostering better relationships with immediate neighbours.

\*Data increases or decreases are compared with 2019.

12 Polyflor & Sustainability

#### From 1915 to present day

1915

Lodge water is used on site to harvest rainwater for production.

1950

Post-production vinyl is recycled. 1992

ISO 9001 quality

2000

Polyflor's first low maintenance PUR products are produced, reducing

environmental impact.

certification.

Polyflor signs up to the

## 2010

LVT ranges achieve BRE A+ individual ratings.

First products achieve GreenTag LCARate certification.

Recofloor is set up in Australia and New Zealand 2009

Polyflor co-founds and

Recyclable paper plastic roll wrap.

Polyflor products go onto Ecospecifier database.

FloorScore® VOC certification is achieved

2008

First VOC emissions certificates available. 2007

group to recycle post

Polyflor joins Recovinyl.

2005

First products are individually assessed by BRE Global.

First VOC emissions tests.

## 1998

certificate attained.

Polyflor gains ISO 14001 environmental

Vinyl 2010 commitment.

invests heavily in the Recofloor vinyl flooring recycling scheme for postconsumer waste.

packaging used, replacing

## Polyflor joins a working

## Over 100 years



## 2011

Polyflor's new fleet has Euro V compliant engines for reduced emissions.

Polyflor joins Vinyl Plus. Polyflor makes significant progress in its energy consumption, making reductions of over 43% and reducing carbon emissions by 15,236 tonnes.

## 2012

Expona Simplay, loose lay LVT is launched. Adhesive free for reduced environmental impact.

3rd party EN15804 EPDs

Indoor Air Comfort Gold VOC certification is available.

AFSSET indoor air quality labelling starts.

Recofloor has first Annual Awards Ceremony, certification is achieved.

### 2013

3 Product Specific EPD's for Expona Design, Commercial and Domestic. Generic EPD's for resilient flooring through collaboration with the industry body and partners within ERFMI.

Secura is launched - a Luxury Vinyl Sheet with PUR, available in multiple widths to reduce waste, which can be loose laid on areas up to 24m2.

SA 8000 certification is achieved.

Obtains BES 6001 certification for Responsible Sourcing, achieving a 'very good' rating for LVT product ranges.

PVC Best Practice on Polyflor's homogeneous flooring ranges, independently verified by NCS International Pty Ltd.

## 2014

Polyflor becomes a member of the BRE EPD verification scheme.

Economiser installed on steam boiler increasing boiler water feed temperature to boiler, improving efficiency.

BES 6001 certification for Responsible Sourcing is obtained, achieving a 'very good' rating for most homogeneous, safety and heterogeneous products.

Camaro Loc PUR is launched - adhesive free for reduced environmental impact.

Product Specific EPD for Expona Simplay.

## 2015

Winner of 'Made in the North West - Green Company 2015'.

Floor Cleaning & Maintenance Course launched to promote sustainable cleaning processes

Recofloor is rolled into Iceland.

BS OHSAS 18001 is achieved.

2017

Obtains BES 6001 Excellent rating.

563 tonnes of waste vinyl flooring from the UK.

All Polyflor's HGVs are replaced with Euro VI engines for lower emissions

Silentflor is launched - low maintenance, low VOC environmentally certified and

78% renewable electricity is used.

## 2019

93% renewable electricity used

Recofloor's 10-Year Anniversary



## Sustainable Design

Sustainability is at the heart of our design process, from the healthier materials we use to how well the product performs in the in use phase. In terms of aesthetics, sustainability is an important consideration: For instance, some decorative patterns or plainer designs help to minimise waste and can help future-proof interiors, improving longevity.



- "As Group Design Manager it is crucial to innovate, and with each project comes specific, essential requirements. From the outset, the goals should always be to embrace technological enhancements whilst producing a functional and aesthetic product that can perform for years to come.
- "As an established, commercial business we are tasked with meeting customer desires in tandem with satisfying our own criteria. The development process enables us to be alert to, but avoid any unnecessary trends, minimising dated or 'out of season' designs and increasing longevity. This strengthening philosophy of minimising waste whilst maximising the lifecycle of the material is critical to our development process.
- "A logical and correct understanding of each project provides the opportunity to both conserve resources and enhance the user experience, continuing to lead us on a more sustainable path."

#### Craig Moorhouse,

Group Design Manager, James Halstead PLC

## **New Product Development**

In collaboration with industry partners, Polyflor is working on developments in new products and technologies. We are continually evaluating new ideas or alternatives which improve our environments.



**Contribution to the Built Environment:** To develop products that improve the quality and sustainability of the built environment.

The latest Polyflor launches included two new Polysafe ranges: Polysafe Stone fx PUR and Polysafe QuickLay PUR. These are the latest additions to our family of environmentally sound, UK produced safety floor coverings with BRE A+ ratings and generic EN 15804 EPDs.

Both ranges have been developed with the end user in mind and feature PUR to ease maintenance requirements and increase longevity, further reducing the environmental impact and cost of its 'in use' phase. They are also healthy options for superior indoor air quality and comfort. They are non-shedding and have extremely low VOC emissions, certified in accordance with Indoor Air Comfort Gold and FloorScore®.

Polysafe Stone fx PUR and Polysafe QuickLay PUR, like all Polyflor products, are 100% recyclable. Specifically, Polysafe QuickLay PUR is an adhesive-free, loose-lay safety sheet flooring - part of our new Fast Track Collection of loose-lay and interlocking vinyl floor coverings. Polysafe QuickLay PUR is not only completely recyclable but also reusable. Moreover, without the need for adhesives there are additional environmental benefits such as the embedded carbon footprint and further reductions in VOC emissions.





**Contribution to the Built Environment:** To develop "loose lay" (adhesive free) products with reduced environmental impact for ease of recycling.

100% Recyclable Low VOC emissions Resists soiling & scuffing









Polysafe QuickLay PUR

**EXPONA SIMPLAY** 



## **Future-Proof Design** with Dementia in mind

Dementia-friendly interior design can have a real impact on health and wellbeing, helping to promote a more positive environment for people living at home or within an assisted living facility. Flooring can work hand in hand with other interior elements to provide a comfortable environment for residents living with the condition.



With regards to the global increase of people with dementia, our building designs of tomorrow need to be future proofed. Implementing dementia friendly environments will be more sustainable and beneficial in the longer term, ensuring flexibility in design and prolonging the life cycle of a building.

As with many other interior elements, flooring plays a significant part in a dementia-led design with underfoot safety and aesthetics working hand in hand for physical and mental wellbeing.

"Flooring can help promote a more positive and inclusive environment to those living with dementia and encourage reduced stress and anxiety."

Professor Marcus Ormerod University of Salford

#### Polyflor NPD with Dementia in mind

Polyflor is a member of the Dementia Action Alliance, which is committed to transforming the lives of those living with dementia in the UK. This means that Polyflor has an action plan of commitment to improve outcomes for people living with dementia in terms of support activity to the community. Find out more about the DAA at www.dementiaaction.org.uk

#### International Dementia Design Network

Most recently, Polyflor worked with the Dementia Services Development Centre (dsdc) at the University of Stirling to assess the suitability of a number of Polyflor products for specification in dementia friendly environments. The dsdc is an international centre of knowledge and expertise dedicated to improving the lives of people living with dementia which offers a product accreditation scheme.

The dsdc rates products in a tier scale:

- 1a Flooring within this rating is plain and can be used indiscriminately
- **1b** Flooring within this rating is semi-plain (minimal texture, fleck, pattern or wood effect with no knots) and in general, can be used throughout.
- 2 Flooring within this rating has some pattern and needs to be used with caution / consideration.

#### Specify Flooring with Dementia in mind

Flooring design and specification can help those with dementia to feel more at ease:

- · Use a matt flooring as shiny or glossy surfaces can cause glare and give the illusion of wetness.
- · Use a product without sparkle as this can also make the floor look wet.
- · Choose a floor without highly contrasting secondary flecks and speckles, as someone living with dementia could see these as something to pick up off the ground. Tonal flecks or solid colour designs are preferable.
- · The use of effects that replicate natural outdoor materials such as wood and stone promote a homely fresh feel which is less clinical than a traditional healthcare environment.

- · Many patterns and textures on the floor should be avoided as this can lead to
- · Use flooring with similar tones in adjacent areas as a strong contrast in colour can be perceived as a step. However, a strong contrast between the colour of walls, skirtings, doors and floors, as well as floors and furniture can help those who are visually impaired. A minimum contrast of 30 units LRV (Light Reflectance Value) is recommended between the critical surfaces mentioned above.
- Strong colours with more depth are better than paler shades for those whose colour vision has deteriorated. However, dark colours should be avoided as these could trigger emotions of imprisonment or might be viewed as a hole in the floor by
- Acoustic flooring is recommended to absorb noise and reduce impact sound levels between rooms as noise can cause agitation for patients and residents.

Bear in mind the need to contrast flooring with walls, skirtings, doors / frames, furniture and sanitary ware. A minimum contrast of 30 units LRV (Light Reflectance Value) is recommended between the critical surfaces mentioned above.

For more information on this and Polyflor flooring, contact us at info@polyflor. com or visit the Healthcare Sector at www.polyflor.com. Polyflor also has a dedicated brochure and CPD, both of which cover our commitment to the dementia care sector.











## Focus on LCA

Life Cycle Assessment or Analysis (LCA) is a comprehensive way to identify environmental impacts throughout a product or service's life - commonly known as 'cradle to grave'.

When it comes to looking at a product's environmental performance, it is easy to be impressed with headline grabbing statements and emotional communications. Importantly, we must consider scientific fact and rational information when forming opinions, rather than making decisions based on perception. An LCA provides us with the measured and scientific approach we should take when considering environmental factors and places all flooring on a level playing field.

The benefits of using an LCA methodology enables the specifier to have a better understanding of all the environmental impacts and not just one aspect in isolation.



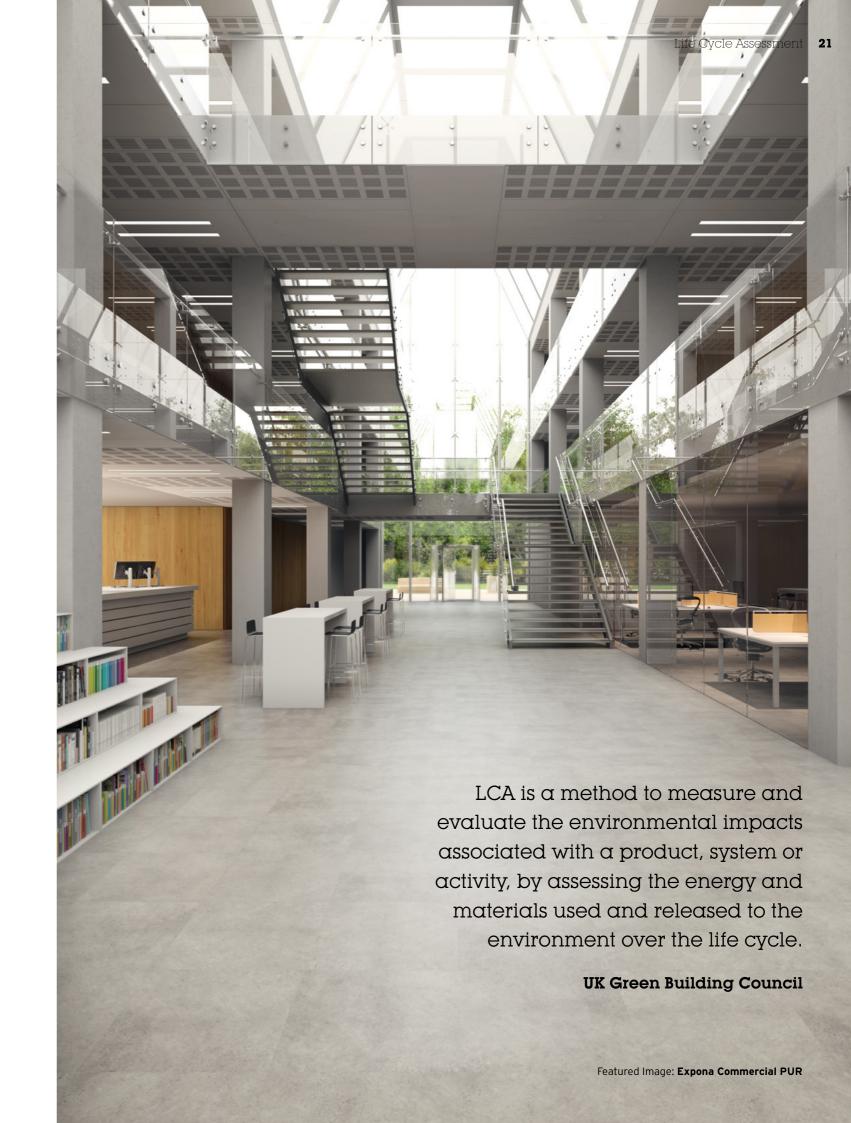
"Is this product better than that product 'for planetary and human health?' It is only at the product level that a valid answer is possible. Only at the product level can we answer questions like: what sort of impacts do the raw materials have; what energy sources are used during manufacture; what are the cleaning, maintenance or replacement schedule requirements; what end of life reuse or recycling options are available, or how ethical is the supply chain?

"We need to stop genericising 'materials' and start putting individual products and processes under the microscope, making our product selections based on detailed knowledge of the WOL (whole-of-life) impacts of each range and each brand as they compare to one another.

"In our experience of doing just that and hundreds of LCAs for products to be certified, sometimes the results are counterintuitive. What we think based on commonly accepted norms is more 'sustainable' is demonstrably not always so."

#### David Baggs,

CEO & Program Director, Global GreenTag International Pty Ltd. & CEO & Technical Director, Integreco Pty Ltd., a Sustainable Project & Product Consultancy



# Our 6 Step

# Life Cycle

## -STEP 6 Recycling

Closing the Loop: We have been recycling our postproduction waste vinyl since the 1950s and now collect and recycle post-consumer waste vinyl too. Many of our floor coverings can be reused, but if not, they are all 100% recyclable through the Recofloor take back scheme or other initiatives and outlets.





## STEP 1 Materials

**Responsible Sourcing:** Polyflor floor coverings contain a combination of ingredients which are clean, REACH compliant, natural and recycled for a more sustainable product. The materials we use in our flooring are responsibly sourced and audited for our BES 6001 certification.

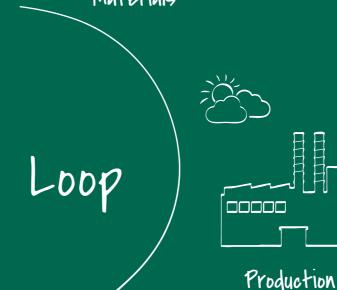
## STEP 5 In Use

**Zero Compromise:** Accounting for at least 80% of our flooring's environmental impact, the in use phase is an important element of the life cycle, given the potential 20 to 25-year lifespan. Low maintenance and low VOC, our floor coverings are fit for purpose without compromising on the environment.



In use





## STEP 2 Production

**Protecting Resources:** Our flooring is manufactured with minimal environmental impact. It has a low carbon footprint, because it is energy efficient to manufacture. We apply 'The 3 Rs' as we look to continuously reduce, recycle and reuse resources. Our use of renewable energy has also increased dramatically.

## STEP 4 Installation

Sustainable Fit: Polyflor is reducing environmental impacts associated with installation through healthier adhesives, adhesive-free installation and promoting correct installation for a long-lasting, well performing vinyl floor covering.



Installation



Logistics

## **STEP 3** Logistics

**Reducing Footprints:** We are responsible within the supply chain, and our floor coverings are distributed efficiently through our own well managed fleet and distribution network.

We recognise social and environmental impacts of all transportation, therefore adopting appropriate strategies to minimise our carbon footprint.

## **STEP 1** Materials



We are the only flooring manufacturer to contribute an additional 3.5 points in BREEAM accreditation due to our responsible sourcing

















NATURAL MATERIAL

RECYCLED MATERIAL

**OF SUPPLIERS WITHIN 50 MILES** 

## STEP 2 Production

**100%** 

Reduction in net waste

0%

Post-production vinyl waste sent to landfill

2,974

**TONNES** 

of CO, saved = 647 cars off the road for 1 year

**RENEWABLE ELECTRICITY SUPPLY** 

100%







WATER SUPPLY

from recycled water



Reduction in Direct GHG (natural gas) emissions

100%

Reduction in Indirect greenhouse gas emissions

21%

Less water used

## **STEP 3** Logistics



#### **EFFICIENT FLEET**

Distributed in our own fleet of highly efficient HGV's with modern Euro VI engines





Product wrapped in recycled paper



Reduction of

CO, emissions

Reduction in kilometers

14%

travelled

Decrease in fuel consumption



**HGV** journeys removed due to back hauling



### **STEP 4** Installation



### **ADHESIVE FREE FLOORING**

A range of options available which can be Flooring Solutions reused or recycled



#### TRAINING ACADEMY

Ensuring best practice, Polyflor has provided floor fitting training to 1,459 industry associates over the last 10 years









**EnCORE** RIGID LOC

Polysafe QuickLay PUR

**EXPONA SIMPLAY** 





#### **PUR TECHNOLOGY**

Less energy & chemicals: Lifetime Polish Free

Uses 55% less water and up to 60% Maintenance cost savings compared to untreated flooring options



#### **LOW VOC**

Indoor Air Comfort Gold, FloorScore®, AgBB, Afsset



Extremely durable with few replacements required

## STEP 6 Recycling



## 100% RECYCLABLE

Can be recycled into **new flooring** or other items such as traffic cones

**84** TONNES

of recycled glass in Polysafe products

that's...



168,000

**WINE BOTTLES** 

## **5.391 TONNES**

of post-consumer waste vinyl collected since 2009 = 1,925,357m<sup>2</sup> or 48,134 x 20m rolls of Polyflor vinyl

enough to cover...





**FOOTBALL PITCHES** 



CO-FOUNDER OF...

We are a

70%

### **COST SAVING**

when arranging collections via Recofloor



#### **DROP-OFF SITES**

Free use of distributor drop-off sites to redirect waste from landfill and recycle flooring waste into new flooring



## Step 1

## Materials

Not all natural materials are necessarily sustainable ones: Depending on how they are harvested or extracted and how they are going to be processed and treated, they can have a higher environmental impact within the life cycle than synthetic materials. This section of the report explains more about vinyl as a material, its benefits and the raw materials included in Polyflor vinyl.





"Sustainable manufacturing starts with the responsible selection of raw materials. Our vinyl flooring products contain up to 85% natural material and are 100% recyclable.

"We strive to use renewable raw materials wherever possible and materials derived from waste streams, including post-consumer waste. All raw materials considered for use in manufacture are subject to rigorous scrutiny, ensuring they are always REACH registered and no materials of concern are ever used.

"Our products are developed with sustainability in mind and are optimised to minimise environmental impact throughout their whole life cycle. As the first resilient flooring manufacturer to achieve third party product certification to BRE BES 6001, we are well placed to give our customers confidence that the products they are offered are responsibly sourced.

"We are committed to manufacturing flooring in accordance with our values, recognising that good material resource management is key in ensuring a sustainable future."

Technical Director, Polyflor Ltd.

28 Step 1 — Materials

## **About Vinyl**

Vinyl is a cost effective multi faceted plastic — a necessity in everyday life due to its functionality and performance across many different applications. The unique composition of vinyl creates an extremely practical and durable flooring, which can have a life span of 20 years plus, if correctly maintained.

Importantly, vinyl is used in medical equipment including blood bags and surgical tubing and is irreplaceable for many of its lifesaving applications. Such products are disposable and as such have come under scrutiny, due to waste volumes. However, the benefit of PVC enables the recycling of non-infectious apparatus - something that is being rolled out across UK hospitals via the RecoMed PVC take-back scheme, a similar initiative to the Recofloor take-back scheme for vinyl waste.

Vinyl is also used in packaging and significantly, in many building products, including flooring; pipes; cables and windows for all construction projects from every day housing renovations to impressive new stadia.

"PVC makes a major contribution to the quality, safety and costeffectiveness of construction materials, as well as contributing to lower environmental impacts of completed projects. It is the most widely used polymer in building & construction applications and over 60% of Western Europe's annual PVC production is used in this sector."

PVC Europe

Through modern manufacturing, vinyl has a low environmental impact and exceptional performance characteristics within a multitude of uses, where no other material could perform as well or cost effectively. Vinyl can be an environmentally sound choice: Over its whole life cycle, vinyl floor covering performs comparably or better than alternative materials across a range of environmental impacts.

Vinyl flooring is exceptionally energy efficient to manufacture, using less energy than other plastics and linoleum. Due to its incredible durability it has a long service life, greatly reducing short-term replacements and subsequent energy consumption. Polyflor products' ease of maintenance means that energy intensive cleaning is not required and the need for harsh chemical cleansers, polish, strippers and water usage is massively reduced, if needed at all.

As a material, vinyl is ideally suited to being recycled. It is 100% recyclable and can be recycled many times over without losing any of its performance properties. If it is not recycled, vinyl has a high calorific value and may be safely incinerated generating energy recovery. For Polyflor, landfill is seldom used and is the last option, albeit a safe one as vinyl remains chemically inert without producing leachate.

PVC is not a significant contributor of dioxin emissions. Dioxins are toxic chemicals which occur as an unwanted byproduct of some chemical reactions within manufacture (of any product using heating or thermal processing) and during incineration for example.

Power stations and the steel industry are the biggest man-made producers of dioxin emissions, but 'fun' items such as fireworks and BBQs also contribute. The annual dioxin concentration of the UK PVC industry is less than 140mg per annum, whereas a single tug boat in the North Sea is 70mg per annum. Dioxins also occur naturally in the environment, for instance with natural fires and wood biodegradation.

Modern, clean PVC is a safe choice and is the most thoroughly researched and tested plastic, meeting all international health and safety standards as per the intended application: In the event of a fire, vinyl is flame retardant due to the chlorine content and once removed from the fire it will self extinguish. In the event of a fire, vinyl flooring typically outperforms linoleum and rubber flooring. It can provide the best slip resistance for underfoot safety and regarding indoor air quality, vinyl characteristically has low VOC emissions.

### Key Sustainability Credentials of PVC for use within the construction industry

- 1 Safe in use.
- 2 More variation in uses than any other plastic.
- 3 Best use of natural resources.
- 4 Low energy consumption.
- 5 Low carbon emissions.
- 6 Best cost : performance ratio.
- 7 Excellent energy efficient ratings.
- 8 Excellent BRE ratings.
- Can be recycled into more construction products than any other polymer.
- 10 Comes with a 10 year proven European-wide voluntary commitment.

## **Polyflor Materials**

Polyflor floor coverings use a high percentage of natural materials, e.g. the homogeneous range uses up to 85% natural materials, including the salt content in the polyvinyl chloride resin (polymer) and the calcium carbonate in the filler.



**Resource Use:** To recognise the need to source & use raw materials in the most appropriate & sustainable manner.

#### 1. PVC Polymer

Polymer is made up of 57% salt (chlorine) and 43% oil (ethylene); salt being one of the world's most abundant natural resources.

Chlorine has an established place in the natural world: The sea, plants and animals all contain and produce vast quantities of chlorinated molecules. Chlorine is also a chemical used within the manufacture of essential, every day items. For example, 85% of medicines either contain chlorine or use chlorine in the production process. Chlorine is not emitted during the production stage of Polyflor flooring - chlorine is chemically bound within vinyl and remains so during the process and the life of the flooring.

Ethylene comes mainly from gas or oil, but ethylene from biomass is also used. Ethylene is also a natural product, given off by ripening fruit. Only 4% of barrel oil is used for all plastic products globally and vinyl flooring uses only a tiny fraction of this, with most oil used for heating and travel consumption.

The level of fillers used in Polyflor vinyl can account for as much as 74%. Fillers come from calcium carbonate - chalk and limestone, for example – the high abundance of calcium carbonate in the earth's crust makes it a sustainable material.

#### 3. Plasticisers

Plasticisers are added to our flooring to enhance the product performance characteristics through a range of operational temperatures. Softening the vinyl is important in making it the flexible and versatile product that it is. Polyflor does not use plasticisers which are registered as reprotoxic, endocrine disrupting or carcinogenic. Ortho-phthalates and non-phthalate alternatives, including bio plasticisers are used.

Ensuring that we get the right balance between what is best for product performance, the environment and what our customers want is critical and something which is constantly evolving.

#### 4. Other Materials

In addition to PVC, filler and plasticiser, a small percentage of other ingredients such as stabilisers, pigments and inks are used. All raw materials used by Polyflor are REACH (Registration, Evaluation, Authorisation & restriction of Chemicals) compliant. Polyflor follows the strictest industry regulations ensuring no harmful substances to human health or the environment are included in our vinyl, such as formaldehyde; lead; cadmium; mercury or hexavalent chromium.

#### Recycled Content

Vinyl flooring is easily recycled, this subsequently minimises the use of raw materials. Polyflor flooring is 100% recyclable and contains up to 40% recycled content, which can be a combination of post-production vinyl, post-consumer vinyl and recycled glass (used with aggregates in Polysafe flooring).

In 2020 we used 84 tonnes of recycled glass in Polysafe products - that's 168,000 wine bottles.

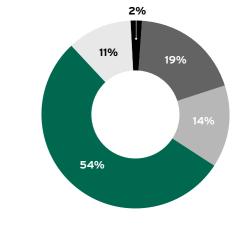
#### Responsible Sourcing

All raw materials used in the manufacture of Polyflor vinyl flooring are responsibly sourced from the closest possible suppliers and purchased in bulk to minimise the transport impacts. Like Polyflor, our suppliers are ISO 14001 certified or demonstrate robust environmental management.

Polyflor's products are BES 6001 certified\*. This helps us manage our supply chain and so provides our customers with the assurance that our products are responsibly sourced.

\*Those which are individually assessed and certified by BRE

#### Breakdown of materials used in Polyflor Flooring



■ PVC (57% Salt) ■ PVC (43% Oil) ■ Natural Fillers ■ Plasticisers ■ Other Materials: Renewable plasticiser; stabilisers; inks; pigments

This is a typical representation for many of our products, raw material quantities vary across ranges. E.G. the filler content is as much as 74% in homogeneous ranges.





"The flooring sector, as part of the wider construction industry, is a significant consumer of resources and raw materials. It is important that flooring manufacturers recognise this fact and have a good understanding of the effect of their operations on the environment on both a local and global scale. This is why a commitment to continuously improving sustainability performance is essential to build upon the progress already made and protect our environments for the future. Across our collections of flooring during the sourcing and manufacturing phases (Cradle to Gate) we look at maximising the content of both natural sustainable raw materials and recycled content be that from internal or external sources such as Recofloor. Our products are engineered, designed and manufactured with longevity of performance in mind and this has been proven throughout the last 100+ years.

"Our sustainability agenda is incredibly important to Polyflor as a company with a lot of hard work and commitment going into making improvements to our environmental performance. Our strategy is to minimise the environmental impact of our products and operations, always setting ambitious objectives for ourselves to uphold our reputation as a company that prioritises these issues. This sets us apart from competitors and reassures customers that our products are sustainable and that we, as a company, are ethical and responsible in all areas of our business."

#### Steve Mulholland.

Manufacturing Director, Polyflor Ltd.

## **Energy & Emissions**

There is a direct connection between energy use and the environment. Energy consumed equals emissions being released into the atmosphere, which is why energy efficiency is crucial and why Polyflor sets out to minimise its energy consumption where possible and use renewable energy.



**Polyflor Climate Change and Energy:** To use energy efficiently in the production of materials and products and minimise the emission of greenhouse gases associated with these processes. To also reduce fossil fuel consumption and utilise renewable sources of energy.

Byproducts that come from traditional methods of power generation. include carbon dioxide, sulfur dioxide and nitrogen oxide. Carbon dioxide, which accounts for the majority of all emissions, is a greenhouse gas. Carbon dioxide absorbs the sun's warmth and keeps heat in our atmosphere when it is released into the air. This 'greenhouse effect' is a naturally occurring phenomenon and required for survival on earth. However, as power plants burn more fuel to create more energy, the extra carbon waste traps too much heat, which can be detrimental. The known effects of greenhouse gas emissions include, rising temperatures; heat waves and drought; higher sea levels; smog and acid rain; abnormal weather patterns and increased intensity of natural disasters.

In terms of climate change, vinyl has a low impact, which can be observed in EPDs (environmental product declarations).

#### Vinyl Energy Facts

Vinyl is exceptionally energy efficient to produce and embedded energy is further reduced when recycled material is used in place of raw materials. PVC has a relatively low carbon footprint and to put this into context it gives equivalent carbon dioxide emissions as:

1kg of frosted cornflakes, both = 1.9kg CO<sub>2</sub>. Recycled PVC is just 0.3kg CO<sub>2</sub>.

Here are some other everyday examples:

1kg Lamb = 14kg CO<sub>2</sub>

1kg Cheese = 11kg CO<sub>2</sub>

1kg Aluminium = 10kg CO<sub>2</sub>

Less energy to produce than other plastics, at least 15% less energy than linoleum and 50% less energy than ceramics, due to their lengthy processes in 'ovens'.

Working with



Due to the result of the company's hard work and compliance to its Climate Change and Energy Goal for 2020, Polyflor achieved many positives with regards to its production's energy and emissions.

Production was not running as efficiently due to the impacts of covid, therefore 4.21 KwHr per m<sup>2</sup> of energy was used, an increase of 8% compared to 2019. However, Greenhouse Gas Emissions were significantly reduced.

Direct GHG (natural gas) emissions were reduced by 13% to 6,906 tonnes of CO<sub>2</sub> in 2020. Indirect Greenhouse Gas Emissions reduced by 100% as our energy supply continued to positively change and improve our carbon footprint, with 100% of the electricity used on site coming from renewable energy. This was an increase from 93% renewable energy supply in 2019 and aligned with our goal to utilise renewable sources of energy.

In 2020 Polyflor's production saved 2,974 tonnes of CO<sub>2</sub>. That's the same as 647 passenger vehicles being driven for the year or 358 homes' energy use over that period. Since 2017, Polyflor has saved 13,218 tonnes of carbon emissions.



A selection of Polyflor's ongoing investment in energy-saving equipment and projects - from which, the environment is now reaping the rewards - is highlighted below:

- · Replaced old chillers on 2 production lines with energy efficient modern chillers with free cooling technology, which can reduce energy by up to 70%.
- Installed LEAP ESP (low energy abatement plant) on 1 of the production lines.
- · More daylight ports were installed to maximise natural lighting.
- Existing lighting was replaced with new LED lighting, operated with sensors, throughout the production halls and warehousing.
- · Weekend switch off schedules were issued for Whitefield plants.
- · Energy incidents are raised and corrected.
- Objectives, such as air leak, steam trap and thermal imaging surveys are carried out at regular intervals.





**13%** 

Reduction in Direct GHG (natural gas) emissions

## **Polyflor Energy Facts** 2020

100% renewable electricity used

Used 4.21 KwHr per m<sup>2</sup>

Direct GHG (natural gas) emissions reduced by 13% with 6,906 tonnes of CO<sub>2</sub>

Indirect GHG emissions reduced by 100% with 0 tonnes of CO<sub>3</sub>

2,974 tonnes of CO<sub>2</sub> saved

## Don't forget!

Typical lifecycle of 20-25 years meaning fewer replacements therefore less energy to produce flooring for the life of the building

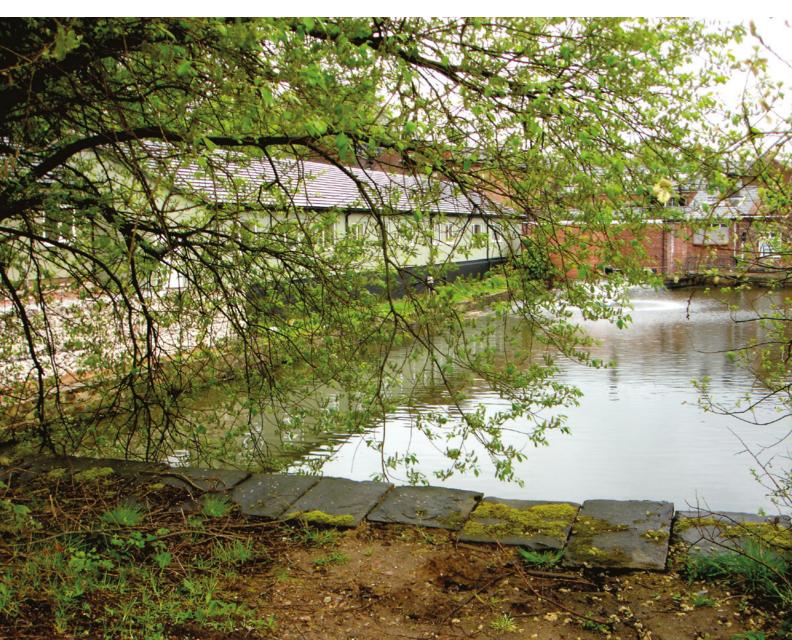


## **Water Use**

Water is a natural resource which must be protected. Water usage can be high in many manufacturing plants, but Polyflor has taken numerous steps to ensure that water usage is minimised and that we continue to adhere to our Trade Effluence License.

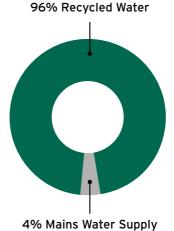


**Polyflor Water:** To use water efficiently to minimise demand on potable water supplies and treat process water and site run-off effectively to mitigate against pollution risks.





At the Whitefield site, rainwater is collected and stored in a designated area known as 'lodge water' and is used for cooling. Following its use, it is returned into the lodge. Lodge water is used to substitute mains water supply, with just 4% of water consumed by manufacturing coming from the mains supply.



Water used on site from the mains supply is largely for steam and cooling tower usage and is linked to overall production volumes. Water usage has remained roughly the same over recent years, but 2020 saw a 21% decrease compared to 2019, meeting our objective to reduce mains water usage.



Across our sites we have many steps in place to minimise water usage throughout production, including the following:

- A filtering system filters lodge water for one of the cooling towers, with the aim of substituting mains water with lodge water for process cooling. This will potentially reduce annual mains water usage by 10%-15%
- Part of Whitefield's factory's guttering is linked up to an underground water collection tank that has a 22,000 litre water collection. Our target to harvest 30% of the rainwater from the roof has been surpassed and we are now collecting 50%. This water is used on a jet washing facility, but may also be used elsewhere, such as the cooling towers and production line. Based on average rainfall, the system can harvest 1.3 million litres of water per year.
- · Optimisation of steam pressure
- · Improvement of the efficiency of pumps and automatic controls
- Regular steam trap surveys
- · Optimisation of cooling water temperature

## **Waste Management**

Waste Management continues to be an important part of Polyflor's ongoing sustainability objectives within its BES 6001 and ISO 14001 management systems. Waste minimisation from the outset is pivotal with recycling being an integral part of Polyflor's waste management process.



**Polyflor Waste Management:** To manage all waste streams effectively by adopting the waste reduction hierarchy and minimise waste incinerated and disposed of to landfill without energy or material recovery.



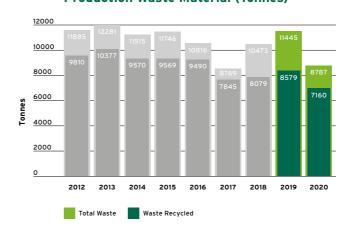
#### Polyflor Waste Hierarchy



In accordance with BES 6001, Polyflor's objectives to reduce waste to landfill in 2020 included recycling post-production waste and returned post-consumer waste; actively managing and promoting the Recofloor vinyl take-back scheme and applying a Waste Hierarchy to all Polyflor waste streams. Moving waste streams up the hierarchy is important but limiting the potential for waste at the outset will continue to be a priority, working to the ethos of 'Reduce, Reuse, Recycle'.

Significantly, all post-production waste vinyl is recycled, either back into new Polyflor flooring or sent to a third-party recycler.

#### **Production Waste Material (Tonnes)**



Our vinyl flooring 100% **UP TO** recycled material content 25% average recycled content across ranges average post-consumer

### Recycling

Polyflor has been recycling vinyl since the 1950s, when we pioneered the manufacture of homogeneous flooring. It has always been considered a natural part of the manufacturing process.

Post-production waste vinyl is generated on site from scrap material produced during and after production, this comprises vinyl chippings, clean trims and offcuts as well as recovered dust.

In 2020 we also recycled 84 tonnes of glass (post consumer waste), combined with aggregates and used in the production of some of our Polysafe products. That is around 168,000 wine bottles diverted from

Post-consumer vinyl waste is returned to Polyflor via the Recofloor recycling scheme, which operates throughout the UK, Eire, Australia,

New Zealand and most recently, Iceland. Post-consumer waste that is recycled back into Polyflor flooring is fully controlled and REACH compliant.

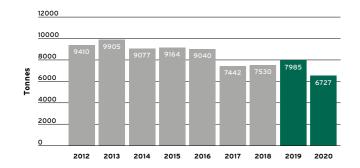
recycled content

It is evident that there can be few materials better suited to recycling than vinyl flooring. Vinyl is 100% recyclable and can be recycled many times over without losing any of its performance properties. Furthermore, recycled vinyl requires 85% less energy to manufacture than virgin PVC.

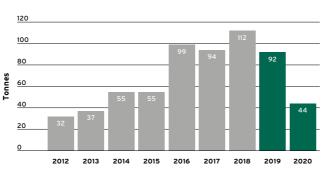
It is important to note that as a business with electrical and electronic equipment to dispose of, we are fully compliant with the Waste Electrical and Electronic Equipment (WEEE) Directive and therefore recycle such waste accordingly.

#### **Recycled Production Waste Material (Tonnes)**

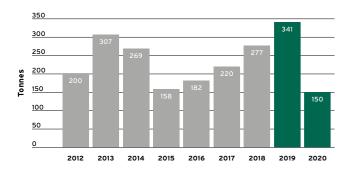
#### Recycled Post Production Vinyl



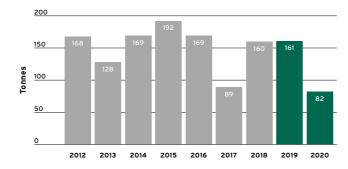
#### Recycled Wood



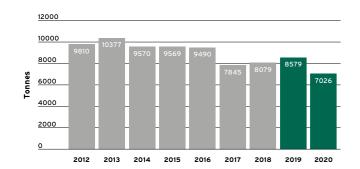
#### Recycled Liquid Waste



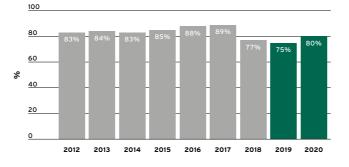
#### Recycled Packaging (Plastic, Paper, Cardboard)



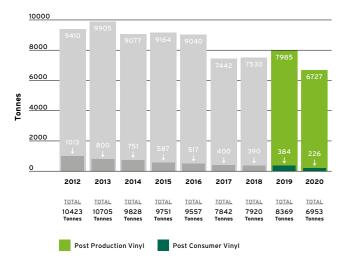
#### **Total Production Waste Material Recycled**



#### Recycled Waste as % of Total Waste Stream



#### **Recycled Waste Vinyl**



## In Summary

2020 remained a positive year for our waste management process. Polyflor recycled less than in previous years, however, the waste volumes were also significantly lower: The gap between total waste and waste recycled was the narrowest it had been in several years, with 80% of the total waste stream being recycled.

Post-consumer tonnages being recycled dropped by 41%, but the Recofloor scheme was suspended for a short period in 2020, due to Covid. Recycled vinyl as a percentage of vinyl manufactured was 17%, again our best performance in several years and better than 14% which was achieved in 2014.

Investment is repeatedly made to improve storage and handling facilities for waste on site. This will continue, and recycling will remain an important part of our waste management process, including the support provided to the Recofloor recycling scheme.





# Logistics

Logistics plays an important role in Polyflor flooring's life cycle. This section of the report outlines our performance against the associated environmental impacts, including how we monitor and improve our fleet, driver efficiency and distribution.





"Polyflor always stipulates, when purchasing new vehicles for the distribution fleet, that any replacement vehicle must be the most fuel efficient with lowest emission available. This is irrespective of current legislation requirements resulting in Polyflor becoming early adopters and running cleaner engine vehicles before the legislation deadline.

"Polyflor operates Euro VI emission standard vehicles which produce the lowest Nitrogen Oxide (NOx) levels available, using both MAN's EGR (Exhaust Gas Recirculation) and SCR (Selective Catalyst

"Our environmental impact is further reduced through effective tyre servicing and maintenance: Tyre pressure plays an important role in this. Around 30% of fuel consumption can be attributed to truck tyres. Therefore, we aim to maximise tyre life and reduce the amount of new tyres purchased, plus tyres that have a low remaining tread depth or have been regrooved are more fuel efficient than brand new tyres."

#### Dave Southern,

Operations Director, Polyflor Ltd.

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## **Transport & Logistics**

The efficient distribution of our products is imperative to our customers. It is important that we achieve this whilst acting responsibly within the supply chain and minimising our carbon footprint.



**Transport Impact:** To recognise the social and environmental impacts of all transportation and the need to adopt appropriate strategies to reduce adverse impacts, including but not limited to: i) Fuel usage / efficiency; ii) Normal emissions to air, land and water; iii) Accidental emissions to air, land and water; iv Noise; v) Packaging.

#### Packaging

Polyflor flooring is packed in the most effective manner to provide necessary protection, whilst minimising waste. Recycling of various elements of our packaging waste is organised on site, with recycled packaging used where possible. Ongoing objectives for BES 6001 include assessing current and new packaging to ensure it has the best fit in terms of recycled content and recyclability, as well as minimising double wrapping or potential for damage.



#### Warehousing

Polyflor has 3 warehouse units to optimise stock handling for greater supply chain efficiency. At these sites, energy efficient LED lighting has been installed to reduce environmental impact. In 2019, Polyflor replaced 16 of its diesel forklift trucks with electric ones. Each year an electric forklift truck saves 3,025 kg of CO2 emissions compared to the diesel FLTs. Added benefits of our new forklift trucks also include being cleaner and quieter, for improved air quality and reduced noise pollution on and around the sites.



#### Transportation

Polyflor operates its own transport fleet in the UK which is frequently maintained and updated to ensure the most fuel-efficient vehicles are used. As such, all Polyflor HGVs have modern Euro VI engines. In addition to improving the HGV fleet, further reductions of the fleet's environmental impact are achievable through driver efficiencies, using the shortest routes possible and increasing bulk loading and backhauling volumes. Alternative transport methodologies and technology are constantly reviewed.



#### Distribution Network

As a UK manufacturer, Polyflor distributes product from its central distribution centre in the North West of England through a network of distributors throughout the UK and around the world - responsible for regional and local delivery. This model ensures efficiency through the transportation of full, bulk loads.



#### 2020 Overview

Polyflor continued to perform well in relation to logistical operations and will continue to do so in line with ongoing BES 6001 and ISO 14001 environmental objectives. These objectives are reinforced within UK Transport Planning – all personnel within the department are conversant with SEMP 3, Schedule of Requirements for Transport Procedures and the Reduction of Transport Impacts.

In line with these objectives, Polyflor had many positives which have been outlined below. As with all our sustainability goals, we will endeavor to improve and further reduce our carbon footprint as much as possible.

#### Monitoring our Drivers

As part of the telematics function, Driver CPC Training and MAN Driver Training were used to facilitate Polyflor's driver assessment process. In 2020, due to circumstances, our total number of active drivers went from 27 to 20, with an overall KPI 'B Rating' on the MAN KPI system being achieved.

#### Monitoring our Fleet & Logistics

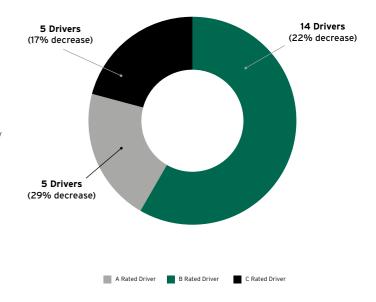
The 20 vehicles in Polyflor's fleet collectively travelled 1,463,093 kilometers and used 426,571 litres of fuel. Compared to 2019, the kilometers travelled by our fleet decreased by 14% and fuel consumption dropped by 14%. Equally, carbon emissions were also down by 14%. Bulk load orders declined by 23% compared to the previous year. Despite the decrease, Polyflor still reduced carbon emissions per tonne from 34.23kg to 33.50kg.

Additionally, Polyflor's external backhaul operation removed 200 HGV journeys from the road network in 2020, a decrease of 113 backloads against 2019. Polyflor's supplier collection operation removed a further 398 unnecessary HGV journeys from the roads, a decrease of 186 loads compared with the previous year.

Renewing all the fleet to Euro VI engines, meant that changes to the telematics reporting criteria were implemented to improve miles per gallon. Polyflor HGV fleet replaced all 14 Articulated Units in November 2020, to increase MPG figures and further reduce carbon emissions.

The telematics function within the Polyflor HGV fleet monitored and assessed vehicle and driver efficiencies.

A benefit of vinyl flooring being much lighter than other flooring materials produces a positive outcome in transit, reducing fuel consumption.



Based on the new emissions levels, it would take over thirty Euro VI engines to create the same NOx levels as one Euro 0 engine from 1993.

## **CE & UKCA Marks**

As a manufacturer of vinyl flooring it is Polyflor's responsibility to clearly label its product with the CE & UKCA Marks and declare conformity with all of the legal requirements to achieve the markings. Polyflor is therefore ensuring the validity for that product to be sold throughout the European Economic Area (EEA).

## C€ CE

CE Marking is the symbol shown here. The letters 'CE' are the abbreviation of the French phrase 'Conformité Européene', which literally means 'European Conformity'. The original 'EC Mark' was officially replaced by 'CE Marking' in the Directive 93/68/EEC in 1993. 'CE Marking' is a mandatory conformity marking for certain products sold within the EEA and is included within packaging and literature.

EN 14041, the European standard relevant to the CE mark for floor coverings, has been adopted and is now legally binding. Essential characteristics specified within EN 14041 include:

- · Reaction to fire
- · Content of dangerous substances
- · Emission of dangerous substances into indoor air
- · Water tightness
- Slip resistance (EN 13893)
- · Electrical behaviour
- Thermal resistance (thermal conductivity)

Once the product is placed on the market with a CE mark the manufacturer must issue and sign a Declaration of Performance, made available in the official language(s) of the member state into which the product is intended to be sold. The CE mark must be affixed visibly, legibly and indelibly before the product is placed on the

As with the CE mark, the UKCA (UK Conformity Assessed) marking is a new UK product marking that is used for goods being placed on the market in Great Britain (England, Wales and Scotland). The UKCA mark, BS EN 14041, works in the same way as the CE mark and covers most goods which previously required the CE marking.











"Installation is another aspect of environmental consideration Polyflor takes very seriously. We work closely with the leading adhesives manufacturers and constantly evaluate ways to improve installation.

"We also believe we have a duty of care to properly educate floor fitters on installing our flooring, so it maximises its potential longevity, significantly reducing environmental impact. We have been offering customers installation training since 1992 and over the years we have added to and improved this service, now offering 1 to 4-day training courses at our purpose-built facility."

#### Anthony Sturgess,

Senior Customer Technical Support Advisor, Polyflor Ltd.

## Sustainable Planning & Installation

Polyflor continues to develop, grow and improve ways to plan and install flooring ranges, with sustainability in mind.

#### **Planning**

Effective planning using Polyflor's range of BIM objects enables cost efficiencies throughout the design process: It allows the specifier to review how different variables affect the function and performance of the product, facilitating a more-informed product selection. which can improve the installation and in-use phases, and economic sustainability

While accelerating project delivery timings and reducing order errors, it increases the accuracy of specifications and critically minimises wastage.

#### Installation

Polyflor has increased the use of sustainable adhesives and adhesivefree vinyl flooring. In fact, Polyflor launched a 'Fast Track' collection, comprising adhesive-free loose-lay or click ranges including Camaro Loc, Expona EnCore Rigid Loc, Expona Simplay, Secura, Polysafe QuickLay and Designatex. The Fast Track collection does not require adhesives, providing additional environmental benefits, such as the embedded carbon footprint and further reductions in VOC emissions. Furthermore, the loose-lay ranges (excluding the click ranges -Camaro Loc and EnCore Rigid Loc) are reusable as well as recyclable.



Contribution to the Built Environment Goal: To develop "loose lay" products with reduced environmental impact (lack of adhesives) with built in end of life and more sustainable ease of recycling.

With the use of solvent free adhesives across our collection of floor coverings, Polyflor is continually in collaboration with the recommended adhesive manufacturers which offer benefits on the health of the installer, the environment and life cycle of the product. Many of Polyflor's approved adhesives meet the EC1, EC1 plus and/or Blue Angel certification, this ensures they meet the requirements of LEED and BREEAM.

#### Training & Best Practice

Polyflor currently offers various training courses at our purpose-built Training Academy in Manchester. This is aimed at improving the skill and knowledge sets of installers - this in turn increases the longevity

of the floor covering as a quality installation is imperative to ensuring a Polyflor product achieves and exceeds its expected 20-year life. A correct installation facilitates a longer life for the product, reducing repair or renewal costs. More information is on the next page.

Additionally, the Polyflor Technical Information Manual is available on the Polyflor website which relates to BS8203, the installation of resilient floor coverings code of practice. This is a guide on how to install the floor covering to appropriate standards, aimed at enhancing the knowledge of installers, architects etc.

Visit www.polyflor.com/technical for more information.



Fast Track Flooring Solutions









## Polyflor Training Academy

Ensuring that we go one step further as a responsible company, it is important that we go beyond producing best quality product and add to our value chain by encouraging best practice throughout the flooring sector also.

Correct installation is crucial to the performance and longevity of Polyflor vinyl flooring. This has significant value, economically and sustainably.

The established Training Academy, based at Polyflor Head Office, Manchester, contributes positively to the value chain and continued to deliver high quality 1-4 day training courses intermittently throughout 2020 at the purpose-built facility.

Clearly there were periods where we were unable to carry out training, due to Covid-19. However, once courses were opened-up again, they were done so safely with no more than 4 attendees per session, to enable safe, distanced working practices.

The comprehensive training courses from Polyflor, are suited to most skill levels, whether a floor layer with previous experience of laying resilient flooring or an apprentice just starting out in the trade. The courses prepare for everyday scenarios and offer a comprehensive insight into laying the perfect vinyl floor; preparing sub-floors; conditioning; using the correct adhesives to setting-out and fitting.

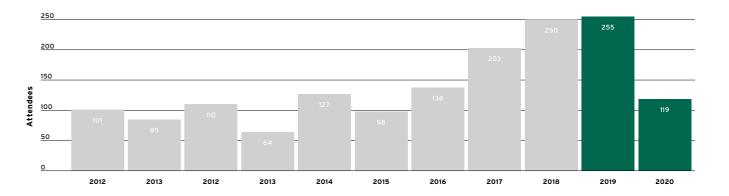
Throughout 2020 Polyflor trained 119 delegates in total - a decrease of 53%, but still a respectable number, given the extenuating circumstances. During the 18 on-site training courses held at Whitefield, 80 delegates were trained, 7 of whom were Polyflor employees. 39 delegates were also trained off-site.

Over the last 10 years Polyflor has provided valuable floor fitting training to 1,459 industry associates.





#### Polyflor Training Academy attendee figures







"My work as an Interior Designer, focuses on the healthcare design sector - mainly designing care homes, assisted living and retirement living. I regularly specify Polyflor flooring within my projects, because I have more flexibility - they have a wide range of products to suit different and varying areas across my projects, from sheet vinyl and safety flooring to LVT.

"The colours and styles are very current, which means that I can create interesting Interiors while remaining totally practical. I also find that Polyflor innovate with new products to suit the ever evolving knowledge gained in Dementia friendly design, allowing designers to use evidence based design more effectively."

**Diana Celella,** Principal, The Drawing Room Interiors Ltd. 52 Step 5 — In Use Step 5 — In Use

## Fit for Purpose

Choosing an environmentally preferable product from Polyflor means zero compromise in the function of the product.

- Positive environmental credentials and benefits are built into our flooring
- Other elements, whether underfoot safety, hygiene, ease of maintenance, durability or aesthetics work hand in glove with the environmental performance of the product

The In Use phase is therefore a key consideration for Polyflor, ensuring product is not only stylish but designed with the latest standards and requirements in mind. Polyflor flooring is functional, practical and safe for human and environmental health.

The majority of Polyflor 2.0mm floor coverings obtain the highest (domestic and commercial) Use Area Classification of 23/34/43 to EN 685, making them suitable for heavy domestic, very heavy commercial and heavy or light industrial use. In comparison, a greater thickness is required for linoleum to achieve a similar recommendation, but even at 2.5mm thick it is not recommended for class 43 areas. Under the Agrément (UPEC) system only 3.2mm thick linoleum had the same wearability as most of the accredited Polyflor products.

Polyflor vinyl floor coverings are also exceptionally durable with a lifespan of 20-25 years, if suitably maintained. Although in many instances it has been known to last much longer than this: Polyflor Standard XL was installed in 1974 at Palmerston North Hospital, New Zealand, where it still looks great today!

"I have been the facility manager at Palmerston North Hospital for 36 years, having worked there my whole life. I recall Polyflor being installed in 1974 and have looked after it ever since, with no issues – I love it! There are a couple of areas in the hospital where we have replaced the original Polyflor vinyl with new Polyflor, although what used to be the main entrance and walkways are showing no signs of visible wear – these are areas which have had hundreds of thousands of people, wheel beds/chairs, laundry trolleys etc. regularly 'abuse' it."

lan Stevens, Facility Manager, Palmerston North Hospital, New Zealand

In 1968, 650m² of Polyflor Standard XL in Black Cherry and Mushroom was installed in the George Civic Centre, South Africa, where it has stood the test of time for 50 years and still looks great. In fact, this floor received an award for the 'Longest Lifespan Installation' at the South African Flooring Awards in 2014. With great installation and proper maintenance, it is proven just how durable Polyflor vinyl flooring is.

Effective maintenance and longevity are elements of the product's lifecycle that Polyflor is keen to constantly develop and improve. So much so, Polyflor offers a Floor Cleaning & Maintenance Course to promote sustainable cleaning processes and educate how to maximise Polyflor floor coverings' longevity.

Another of vinyl's strengths is its much greater resistance to water, whereas many alternative materials are not suitable for use in areas where there can be the extensive contact with water. Vinyl is impervious and can be thermally welded with the joints actually fused together and is inherently more flexible and easily self-coved. This flexibility also means that vinyl has much better recovery from indentation.

At Polyflor we are clear in our belief that our customers don't need to compromise on performance, choice or budget in order to use products with the lowest environmental impact.



## **Safety Performance**

Health & safety within the environment is an important factor to consider when selecting a floor covering, particularly with key concerns surrounding slips and trips as well as fire performance.

#### Sustainable Slip Resistance

Polyflor safety flooring can be used in a variety of internal use areas and this also includes locations where hazards are potentially much higher, for instance in kitchens, stairwells and showers where slipping is likely if incorrect flooring is specified and where the consequences of doing so are the most dangerous.

Polysafe flooring is fully compliant with both Health and Safety Executive (HSE) and UK Slip Group Guidelines, offering sustainable wet slip resistance. Using the portable Pendulum Test machine which is advocated by the HSE to measure slip resistance, Polysafe ranges all meet a value in the wet of least 36+, thereby achieving a low slip potential. The Pendulum is the accepted test to denote a floor's classification as a safety floor rather than relying purely on the ex-factory R values offered by the Ramp Test. Meeting the European standard for particle based safety flooring - EN 13845, all Polysafe ranges pass the 50,000 cycles abrasion test to the standard, ensuring longevity of slip resistant performance. Ranges are also independently assessed by the British Board of Agrément to provide an assurance of performance for the guaranteed life.

The use of Polysafe flooring helps to reduce the potential for accidents and injuries due to its slip resistance properties. The particles contained within the full performance layer of the product create foot to floor contact in wet conditions and are made up of a combination of aggregates including quartz, aluminium oxide, silicon carbide and recycled glass. Polysafe's distinctive surface emboss also

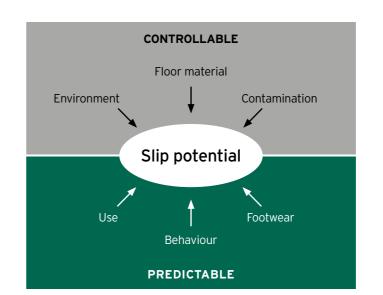
combines with these particles to provide the required roughness to ensure continual friction in wet areas. All recent additions to the Polysafe portfolio meet all the usual Polysafe credentials but include particles that are carborundum-free and virtually invisible once installed to ensure both a high clarity and safe surface.

For Polysafe, design and functionality go hand in hand with ease of cleaning and most ranges in the collection featuring the exclusive Polysafe PUR maintenance enhancement to provide superior cleaning benefits and the optimum in appearance retention.

#### Fire Performance

Vinyl is engineered to provide the best fire performance characteristics of all resilient flooring materials. Vinyl flooring is slow to ignite in a fire compared to other materials – the chlorine content makes it flame retardant. In fact, a fire which is large enough to ignite vinyl would have already produced fatal levels of carbon monoxide from other burning materials before any danger from burning vinyl flooring.

Regarding fire safety classification, vinyl flooring typically outperforms linoleum, achieving class Bfl to EN 13501-1 (8kw/m or greater) with linoleum achieving class Cfl to EN 13501-1 (4.5kw/m or greater).



### Slips and Trips

According to HSE research:

- Slips and trips are the single most common cause of major injuries in the UK workplace, accounting for 1 in 3 major injuries every year.
- Over 8,500 major injuries are suffered each year at a cost to the economy of £750 million each year.
- A cost of £512 million is felt by employers in lost production and other costs each year.

## Low Maintenance

Ease of maintenance has always been a key criterion in the selection of any type of flooring. Clients will wish for their floor covering to remain in excellent condition throughout its life and for the cleaning process to be as cost-effective and straightforward as possible.

#### Market leading low maintenance

A poor maintenance regime damages aesthetics, impairs performance, shortens the durability and creates hygiene problems in critical areas. The in-use phase of the resilient flooring life cycle accounts for at least 80% of its environmental impact, given Polyflor floor covering's potential 20-25 year life span. Therefore this can be

In recognition of this, Polyflor provides low maintenance options throughout the product portfolio. Our easy to clean PU and PUR ranges ensure that use of polish, water, strippers and chemical cleansers are significantly reduced and thus contribute to significant maintenance cost savings for the life of the floor.

All new ranges launched with market leading maintenance and environmental benefits built in and existing ranges have had these benefits added. Continuously improving technologies enables flooring to raise the standard in terms of durability, maintenance and performance, sought by the customer.

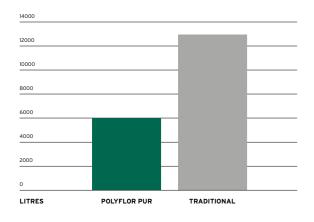
All Polyflor products are designed with low maintenance features.

- · PUR reinforcement is cross-linked and UV cured for superior cleaning benefits, enhanced protection and optimum appearance
- · Environmentally sustainable using less energy, polish, water and cleansing chemicals
- Polyflor homogeneous PUR is polish free for life and Polysafe PUR should never be polished.
- · Polysafe PUR achieves superior cleaning benefits and facilitates easier soil release, whilst enabling optimum appearance retention.
- · Economically sustainable, with 48% to 60% maintenance cost savings over a 20+ year life when compared to untreated vinyl

\*48% cost saving for smooth PUR ranges and 60% for Polysafe PUR ranges.

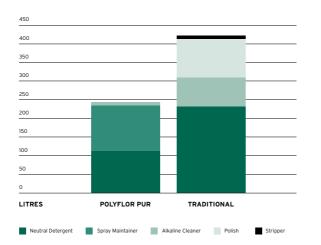
#### 55% less water

#### WATER USAGE 1 year 1000m<sup>2</sup> PUR vs Traditional vinvl



#### Polish free for life

#### CHEMICAL USAGE 1 year 1000m2 PUR vs Traditional vinyl





#### Creating clean & hygienic environments

More than ever, it is crucial that our environments are clean and hygienic. Vinyl sheet flooring can be welded at the seams, forming an impervious base that facilitates ease of cleaning by eliminating gaps and cracks where dirt and bacteria can gather.

Polyflor flooring also stands up to the test, where much needed hand gel dispensers are housed. Polyflor homogeneous PUR, heterogeneous PUR, LVT PUR and Polysafe safety PUR ranges are compatible for use with the most-commonly used alco-based hand gels, some of which have a very high concentration of ethanol.

Discuss this further with our experienced Customer Technical Services Department (tech@polyflor.com).

#### Floor Cleaning & Maintenance Course

Adding to the Value Chain, Polyflor continued its free, Floor Cleaning & Maintenance Course, aimed at facilities management staff and others in the healthcare, education, housing, retail and commercial sectors. The day-long course aims to educate how to get the best from a Polyflor vinyl floor covering by using the correct cleaning methods and products. Correct maintenance facilitates a longer life, reducing costs and frequency of purchasing new flooring.







"Thank you for inviting us to your factory and training facility. It was great to meet people with not only in depth product knowledge but a passion for what they do. We came away with a better understanding of maintenance which will be invaluable to us and enable our maintenance staff to carry out basic repairs with confidence."

Daniel Neale, Yeovil District Hospital

## Air Quality

The VOC emissions of our flooring ranges are all below the very strictly set, accepted levels. Products have been tested by independent laboratories with certificates available upon request.

Indoor Air Quality remains an important topic, but further emphasis has been made on significant contributors such as poor ventilation, moving away from building products such as flooring which can have minimal to no VOC emissions.

A recent report, 'Every Breath We Take: the lifelong impact of air pollution', by the Royal College of Physicians (RCP) and the Royal College of Paediatrics and Child Health (RCPCH), warns of hidden dangers that everyday products such as personal hygiene, DIY, cleaning, faulty boilers, fly sprays and even air fresheners contribute to poor indoor air quality.

Dr Andrew Goddard, the Royal College of Physicians lead for the report, said: "Taking action to tackle air pollution in the UK will reduce the pain and suffering for many people with long term chronic health conditions, not to mention lessening the long term demands on our

Our flooring ranges have passed key international standards, but we continuously look to reformulate our ranges to ensure their VOC emissions are kept to the lowest levels achievable. Polyflor ranges have undergone many independent and rigorous VOC tests and have approval certification for the following: AgBB; Swedish B.P.D (FLEC test); Finland M1 test; Afsset A+ and FloorScore®. The most recent test method by Eurofins, is 'Indoor Air Comfort'. This test method is the most comprehensive and stringent within the industry, worldwide, and tests for all known emissions. Polyflor products tested to date

have achieved Indoor Air Comfort Gold. Additionally, Polyflor products conform to health and safety standard EN 14041:2004 via an E1 Declaration, which confirms that formaldehyde is not used in any Polyflor vinyl products.

Polyflor vinyl is favoured for its superior 'cleanability' over other flooring products and is used in the strictest of hygiene zones throughout hospitals. An additional benefit of Polyflor's low maintenance PUR products is the minimised VOC emissions from reduced cleaning chemicals.

Along with positive VOC test results there is no evidence to suggest that vinyl flooring contributes to common allergies such as asthma or dust allergies. It is non-shedding, where most allergies are caused by airborne dust (clean room test certification for non-shedding is available on most ranges).

Indoor air quality should be considered when selecting building products and for the reasons provided, Polyflor vinyl flooring makes a significant contribution towards creating indoor environments with very low VOC emissions: Low VOC emissions is a prerequisite of the WELL Building Standard™. Our certified products will also contribute towards the Health & Wellbeing (HEA 02) Credit on a BREEAM® project, the EQ Credit: Low Emitting Materials on a LEED® project and points on the IEQ-VOC section of a Green Star® project.

- No negative contribution to indoor air quality.
- Passed all the most stringent international VOC emissions tests, including Indoor Air Comfort Gold, FloorScore®, M1 and Afsset.
- E1 Declaration conformance to EN 14041:2004.
- Reduced VOC emissions by low maintenance routine (less cleaning chemicals).
- Meets WELL Building Standard®.
- Contributes to BREEAM®, LEED®, and Green Star® projects











## Case Study

## Polyflor Colonia Wood PUR brings Nordic minimalist style to Hertfordshire Eco Home

Location: Hertfordshire, UK

Architect: Richard Mitzman Architects LLP

Installer: Underfoot Flooring Mr and Mrs Jay Client:

Colonia Wood PUR - Nordic White Oak Products:

130m<sup>2</sup> Area m<sup>2</sup>:

Imagine owning a house with no CO, producing gas supply that generates energy so efficiently that you receive back more in rebates than you are charged for the electricity you consume. This may seem like fiction but for David and Gill Jay it is a reality. Through a combination of careful design and innovative technology, their home achieves a very high SAP rating of 97, meaning it costs less to run than its current annual energy rebate. However, this astonishing energy performance is only part of the story.

The plot was formerly occupied by a 1960s bungalow. To transform it, David turned to childhood friend and now RIBA Award winning architect - Richard Mitzman. Working within the footprint of the previous building, he created a striking angular design with a mezzanine floor and balcony - offering views out across the nearby golf course.

The open-plan layout is flooded with natural light and includes a spacious living area and stylish kitchen diner which can be separated off with sliding dividers. The areas feature a monochrome palette of whites, blacks and greys supported with natural materials. In keeping with this, Polyflor's Colonia Wood PUR Luxury Vinyl Tile (LVT) collection was specified for the floors throughout this main living area in neutral Nordic White Oak.

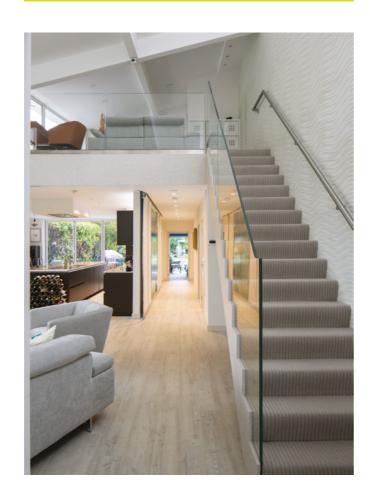
Colonia Wood PUR fitted naturally within the design brief to create clean internal spaces that could be easily maintained. Fitted in a traditional straight laid pattern, the oak-style floor brings Scandinavian charm to the home and is both soft and warm underfoot. Colonia features a textured surface which captures the look and feel of real wooden flooring but is far simpler to clean and care for over time.

Integral to this hard-wearing design is a durable wear layer which offers lasting protection against dirt, dust, soil and everyday wear and tear, backed with a comprehensive 7-year residential guarantee. Colonia LVT is also designed to handle accidental splashes and temporary surface water, meaning they are more than capable of dealing with the occasional spill or mishap within kitchen or dining



"We are very happy indeed with the quality of the Polyflor flooring. The installers, Underfoot Flooring, were excellent. The finished surface looks good and with the right equipment, it is very easy to clean."

David Jay, Homeowner



In addition to ensuring their new home is highly energy efficient, the Jays were also keen to use sustainable materials within its construction. Colonia Wood PUR more than ticked this box. The LVT is manufactured with materials which are responsibly sourced and typically comprise around 40% recycled content. Their low maintenance regime means less water and chemicals are needed to keep the floors in top condition. Colonia is also 100% recyclable. As a result of this environmentally friendly performance, Colonia has been assigned a BRE A rating.

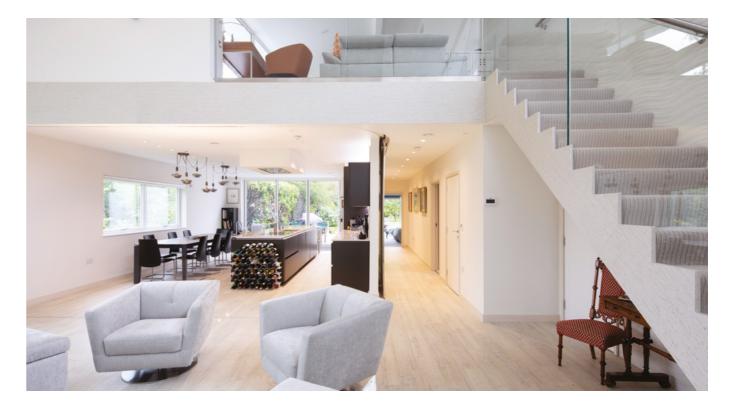
Colonia also meets some of the most demanding indoor air quality standards, creating a healthier and more comfortable environment within the Jay's home. The LVT can be quickly and accurately cut to size with a sharp utility knife. This allowed the experienced installers to easily accommodate more unusual features of the home including floor sockets and the track for the sliding separators around the

John Gold, Director, Underfoot Flooring

The Nordic White Oak LVT chosen for David and Gill Jay's home is just one of a wide variety of design options from within the Colonia PUR collection. The complete collection accurately recreates the beauty of natural materials from rich timbers such as Koa and Walnut, to stylish stone, slate and marble. Each option can be installed in several different patterns with optional feature strips which can be laid around borders, creating a truly unique look each time.







## Step 6 Closing

The Loop

Since the 1950s, Polyflor has been recycling its post-production waste vinyl. This section of the report explains why recycling is so important and how Polyflor is proactively closing the loop, preventing post production and post-consumer waste vinyl from entering the waste stream.

Various schemes are operating in our global markets, which we have directly implemented or have become active members of. Ultimately our goal is to increase our network of recycling initiatives throughout our international markets and further increase the volume of recyclable, clean vinyl and reduce the use of raw materials.





"With the growing awareness of the impact waste is having on our environment, it is vital that manufacturers take responsibility for the material they place on the market. Recofloor is a fantastic example of how the entire supply chain can work together, to provide a solution that is not only practical but also diverts a considerable quantity of material from landfill back into new products.

"Recofloor is driven by Polyflor and another manufacturer, and relies on the engagement of the distributors, specifiers and end users. Through this effective scheme, more post-consumer waste material can be recycled back into their products or repurposed and used in the production of new, non-flooring articles. It is a true example of the circular economy in motion."

#### Richard McKinlay,

Head of Circular Economy, Recofloor



62 Step 6 — Closing The Loop

## **Product Stewardship**

A concern we all have is that plastic (and any other waste) should not be in our seas and oceans, this has a massive ecological impact and the UK, along with other developed nations must set an example of best practice.

The UK Government has announced its 25-year plan to reduce plastic waste via the following initiatives:

- A pledge to eradicate all avoidable plastic waste in the UK by 2042
- · Confirmation of the extension of the 5p charge for plastic carrier bags to all retailers in England
- · Government funding for plastics innovation
- · A commitment to help developing nations tackle pollution and reduce plastic waste, including through UK aid
- Fruit, vegetables and other fresh food to be sold loose and not in plastic packaging
- · A look at the tax system or charges to further reduce the amount of waste created

Regarding the waste from the West, The British Plastics Federation (BPF) would like to see a tougher stance on littering. It is highly doubtful that simply providing alternative materials will reduce littering in the UK, as this is an issue of personal behaviour and attitudes. The types of products entering the marine environment from the UK tend to be from irresponsible littering.

The BPF is very positive to work with the UK government to progress towards a truly circular economy by helping to reduce littering, increasing recycling infrastructure, ensuring 'on the go' food and drink packaging is captured for recycling and encouraging design for recyclability and the use of recycled material in new low carbon

In cooperation with the European Commission, the European Plastics Industry is aiming to reach a 50% target of plastics waste recycling and reuse and 70% recycling and reuse of plastic packaging by 2040. VinylPlus® which has adopted a framework of voluntary commitment to continue and expand existing plastics recycling activities and create additional circularity platforms, will be involved in initiatives. A strong commitment to meeting the outlined targets and full cooperation from stakeholders and the entire plastics value chain will be necessary.

Sources: BPF statement & European Plastics Industry press release. Industry targets are listed in the document, "The European Plastics Industry Circular Economy Voluntary Commitments Towards 50% Plastics Waste Recycling".

### The Circular Economy Package

The Circular Economy Package has introduced new European regulation to recycle 70% of waste and to decrease landfill by targets of 30% and 50% in 2020 and 2025 respectively. It is expected that landfill bans for recyclable waste will be binding by 2025.

Polyflor Australia is a signatory to the Product Stewardship Program as a member of the Vinyl Council Australia. Through this process and voluntary reporting, Polyflor Australia achieved the Excellence Award with 100% Compliance in 2019-2020.

'Product stewardship is an approach to managing the impacts of different products and materials through their life cycle, including end-of-life. The aim of the Australian PVC Stewardship Program is to enable raw material suppliers, products, manufacturers and distributors to be joint stewards of the safe and beneficial production, use and disposal of PVC products. All are to share in the management of health, safety and environmental aspects of PVC products throughout their entire life cycle.

'The Program supports the Australian PVC industry to work as one to address issues. It provides a level playing field for all Signatories to progress towards our common objective of a more sustainable industry." VCA

## **Polyflor's Commitment**

Polyflor is fully committed to the recycling of its post production waste and its post consumer waste, supporting voluntary industry-wide commitments.. Polyflor is an active member of Recovinyl, a scheme which provides financial incentives to support the collection of PVC waste from the non-regulated PVC waste streams. Recovinyl is also an initiative of VinylPlus®, another European initiative of which Polyflor is a member. VinylPlus® is the new ten-year Voluntary Commitment of the European PVC industry, which looks to tackle all sustainability challenges for PVC. Each of the challenges is based on The Natural Step System, with step one focusing on Controlled-Loop Management. Key objectives for this stage include recycling 900,000 tonnes per year of PVC by 2025 and 1 million tonnes by 2030.

In a bid to address and tackle the waste problem within the construction industry, Polyflor tackled this head on by becoming a proud co-owner of Recofloor, the waste vinyl flooring recycling scheme which is available throughout the UK and also operates across Australia, New Zealand and Iceland. By providing an accessible and efficient facility for waste vinyl to be reclaimed and recycled, Recofloor helps prevent post consumer waste from going to landfill and contributes to Polyflor's value chain.

In addition to this, Polyflor also uses recycled glass, which is postconsumer waste combined with the aggregates into many of the Polysafe ranges. In 2020 84 tonnes of recycled glass went into some Polysafe products - that's 168,000 wine bottles.









#### In the Future

Polyflor will stay committed to recycling end of life vinyl through VinylPlus® and the Recofloor scheme. We will also continue to invest significantly in the systems for collection, sorting, granulation and storage to ensure capacity and capability for dealing with the anticipated growth in the volumes of post-consumer waste we recycle.

## International Schemes

At present, our collections predominantly come from within the UK where transport to our factory is straightforward, using the same delivery vehicles as they return to site. In international markets there is progress in recycling, even where distances are large, and logistics of any recycling operation are more complex. National legislation and local attitudes also play a major part in the implementation and success of recycling.

#### **Central Europe**

In Germany, the AgPR (Arbeitsgemeinschaft PVC-Bodenbelag) vinyl recycling facility has been in use for 30 years and collects postconsumer floor covering waste in Austria, France, Germany and Switzerland. From this waste, AgPR produces a finely ground powder, which is used to produce new PVC construction products. If suitable it is sent to AgPR shareholders, including Polyflor, one of its four shareholders. www.agpr.de

#### France

As a member of Kaléi (Entreprises de Revêtements Techniques et Décoratifs) James Halstead France (Polyflor's French subsidiary company) helps finance the French vinyl flooring recycling scheme, PVC Next, along with four other manufacturers who are Kaléi members. A large number of major French contractors have now officially registered with PVC Next. Thereafter, smooth vinyl flooring offcuts and certain uplifted smooth vinyl flooring can be recycled at one of 16 approved collection points throughout the country. By depositing waste material at one of the scheme's professional waste management sites, a variable fee is applied - depending on region - of €40-€50 per m<sup>2</sup>. This is more cost effective than landfill and benefits the contractor by providing them with marketable credentials as well as contributing towards points on LEED, BREEAM and HQE buildings. www.kalei-services.org

#### Scandinavia

A long history in Scandinavia of recycling, assisted by legislation to ensure waste is segregated on site, means there is a higher volume of post installation waste. In Norway and Sweden, Polyflor uses established schemes, to collect and recover vinyl waste from site. This material can be delivered to Polyflor on return transport for recycling, but typically (and more practically) the waste is sent to other local vinyl flooring manufacturers for them to recycle into new flooring. In

Germany the AgPR (Arbeitsgemeinschaft PVC-Bodenbelag) - www. agpr.de - vinyl recycling facility has been in use for a number of years, offering an outlet for post installation vinyl waste for many manufacturers and contractors. This waste is then supplied to various vinyl flooring manufacturers in Europe, including Polyflor.

#### **North America**

There are over 100 vinyl recyclers in the U.S. and Canada. The Vinyl Institute's website provides a recycling directory that identifies recyclers by state and province. Polyflor vinyl can be recycled through many of these channels. Go to www.vinylinfo.org/recycling-directory for more information.

#### South Africa

Polyflor has delivered on the recycling commitments made as a member of the Southern African Vinyl Association (SAVA):

"We have made a firm commitment to increase responsibility and sustainability within the PVC industry as a whole. However, one of the key challenges outlined within this product stewardship programme has been the commitment to increase recycling. We are proud of Polyflor for taking the lead in such an important industry action."

Delanie Bezuidenhout, CEO of SAVA

Following the successful launch of its independent recycling scheme in 2016, Polyflor SA continued its recycling commitments and collected 7.5 tonnes of waste vinyl flooring material from a significant hospital project. This waste was generated at Dr Pixley Isaka Seme Hospital and Ngwelezane Hospital in KwaZulu Natal, where 35,000m<sup>2</sup> of Polyflor flooring was installed. Previously this would have gone

to landfill, but thanks to collaboration with the vinyl industry and recyclers in SA, this was removed from the waste stream.

In SA, footwear continues to be the biggest market application (43%) for recycled, flexible PVC, followed by pipes (23%), flooring and cables (both 12%). Other applications for recycled PVC include speed bumps, traffic cones, gum boots, vehicle heel mats and rubber edging used around pet bowls (Source, Engineering News SA).

Polyflor SA will continue to develop its scheme, look at new collaborations and provide contractors with specially branded bags for them to place their offcuts in and return to the company's head office, where the waste will be weighed and recorded before it is collected by

#### Recofloor Australia. & New Zealand

Polyflor Australia and Polyflor New Zealand continue to effectively run the Recofloor collection scheme, 2018 was another good year with 8 new contractors joining the scheme and 18.5 tonnes of waste vinyl flooring being collected - amassing 136.5 tonnes since 2010. The tonnage for 2018 was more than double the total recycled in 2017. This fantastic increase was largely due to more key construction projects using Recofloor, including Kellyville North Public School, Homebush West School, Sydney South West Hospital, Brookvale Community Centre, Moran Health, Regis Aged Care and St Basils Aged

Australia and New Zealand continue to use Recofloor bins made from recyclable material, which can be reused to collect further waste vinyl flooring or recycled. The bins can be sent out to customers to their place of business and once the bins are full they are collected. Alternatively, waste vinyl flooring can be taken to one of the 5 dropoff sites in Australia and 2 drop-off sites in New Zealand. Via empty containers, the collected waste material is shipped back to Polyflor in the UK and recycled accordingly, which logistically is relatively straight forward.

"The Recofloor Programme assists in a number of ways. OzFlor was the first Contractor in Australia to take up the Recofloor Programme and we have found that during large project negotiations, the Environmental benefits of this scheme have often got us over the line. With the vinyl waste being 100% recyclable, it can also contribute to a building's GreenStar rating. The bins don't take up too much space in my warehouse and I would highly recommend this programme to anyone wanting to reduce vinyl waste costs and excess landfill."

Brett Grogan, Managing Director, OzFlor Pty Ltd., Australia













#### Reverse logistics is a key building block of a circular economy

#### **About Recofloor**

- · Polyflor is a cofounding and funding member of Recofloor, the industry's leading vinyl take-back scheme for recycling end of life post consumer vinyl flooring in the UK
- · Polyflor invests a great deal into Recofloor and helps drive its success by continually promoting it and engaging with customers.
- · Through Recofloor, Polyflor can recycle smooth (homogeneous, heterogeneous, LVT, loose lay) and safety installation offcuts, smooth uplifted flooring and old stock roll-ends and samples
- · This material is recovered and recycled into new flooring or other useful products such as traffic cones.
- Customers must register with the scheme and then request smaller or larger bulk bags to gather their waste vinyl.

- · Regardless of waste material volumes, there is an outlet accessible
  - For smaller volumes, drop-off sites at distributors are available
  - Larger volumes of waste vinyl can be collected on pallets directly from a live project, on a timed collection, or collected from a contractor's site. There are fees for collections, but compared to the average landfill cost of £120 per tonne these nominal fees can save up to 70%.

For more information go to www.polyflor.com/sustainability

Alternatively contact Recofloor directly on 0161 355 7618 or www.recofloor.org



"At the construction site 8% of the material is assumed to be wasted"

BRE Global



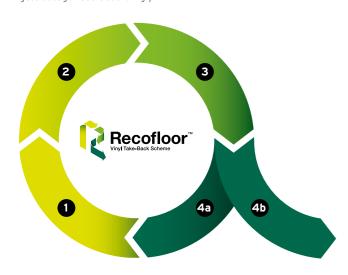
#### In the Beginning

Recycling for Polyflor is easy and something we have been doing since day one, back in the 1950s. However, a major challenge in the recycling of post-consumer waste was the organizing and logistics of retrieving post-consumer waste material. To try and tackle this issue and actively encourage recycling more waste vinyl flooring, a working group was formed in 2007 with many vinyl flooring manufacturers on board, managed and coordinated by a waste management company. Funding for this recycling initiative came from WRAP (Waste & Resources Action Programme). Once the trial period and government funding ceased, members had to review the scheme's future. Polyflor continued to run the scheme with another UK manufacturer and in 2009 Recofloor was formed. As a founding and funding member of Recofloor, Polyflor has helped develop the scheme into the success that it is today - supporting financially, driving the scheme through sales and marketing, as well as logistically supporting with collections, sorting and ultimately recycling.

#### What Happens to the Collected Material?

Returning clean offcuts via Recofloor is the best and most sustainable way of ensuring that they can be recycled, and the material gets

The scrap material is either collected from distributors in the large bins, or we collect from a live site or contractor's premises in the bulk bags we provide. This material comes back to Polyflor for sorting and gets categorised accordingly.



- 4a. Recycled into new flooring
- 4b. Recycled into useful products

Polyflor uses the returned offcut and leftover scrap in their new flooring products, thereby ensuring a 'circular' flow of materials.

The installation offcuts, loose lay uplift and roll ends or sample waste can be reprocessed and recycled back into new flooring. On average this contributes to around 25% of our floor coverings' content.

Uplifted or other contaminated post-consumer vinyl flooring from residential or commercial applications can also be reprocessed and used again. This waste vinyl is recycled into downgraded products such as traffic cones, traffic management products, fencing blocks and advertising sign bases where it is given a long and useful 'second life', stopping it going into landfill.

The uplifted waste goes to third parties, such as Bury-based plastic manufacturer, Melba Swintex, which manufactures temporary traffic management products. Material also goes to Oldham-based Heyside Plastics Ltd, where its two factories recycle 300 tonnes of waste vinyl and produce 300 tonnes of new products from that material per week - thousands of traffic management products, including traffic cone bases, speed bumps and fencing blocks are manufactured on a weekly

8mm chips are extruded to form a 'dough' at a temperature of 200°C. This hot ball of black plastic is then weighed and compressionmoulded on the tool to form one of the mentioned products.

"The material arrives at our back door in Recofloor bulk bags and is shredded or granulated into 8mm chips. These are extruded, compression-moulded and formed into new products that leave through the front door. It's an end-to-end recycling and manufacturing process."

MD Matt Pryce explains

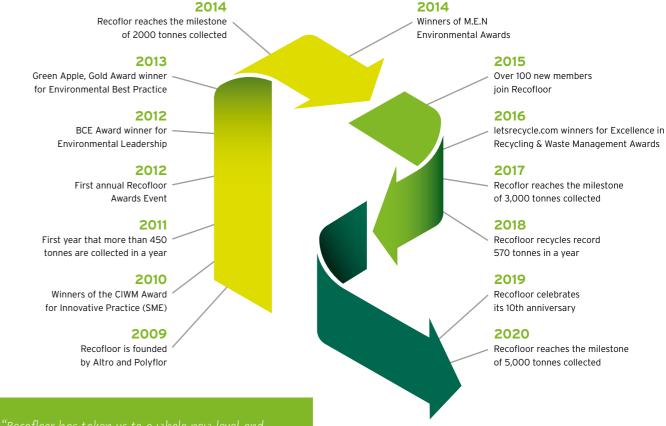
#### Recofloor's Progress

Since 2009 Recofloor has achieved a great deal and is now the industry leading facilitator for efficiently reclaiming vinyl flooring, with 507 members on board today. 2010 was a real turning point for the scheme, which saw Recofloor winning the CIWM (Chartered Institute of Wastes Management) Award for Environmental Excellence in the category of SME Innovative Practice. Since then, Recofloor has won a BCE (Business Commitment to the Environment) Premier Award and the Gold Award in the International Green Apple Environment Awards 2013. for Environmental Best Practice. Recofloor's 'Cost Calculator'. was a great initiative and continues to allow contractors to calculate how much it would cost to send their waste to landfill, and importantly the savings they will generate by using Recofloor instead.

Increasing volumes of quality reclaimed vinyl waste for recycling is continuously improving (a challenge has been educating members about the importance of the material they send back through the Recofloor scheme and avoiding contamination, which is not always easy on a busy building site). Volumes are consistently strong, with 5,391 tonnes having been collected since the scheme started in 2009. This volume equals nearly 1,925,357m<sup>2</sup> or 48,134 x 20m rolls of Polyflor Palettone PUR floor covering - that's enough vinyl waste flooring to cover nearly 270 football pitches. This has had a positive impact on CO<sub>2</sub> emissions too, saving over 6,601 tonnes of CO<sub>2</sub> - the same as taking 1,723 cars off the road or driving 612,000 times around

Many thanks go to our customers who have embraced and supported this unique scheme. Distributors' involvement has certainly contributed to Recofloor's success. By acting as drop-off sites for their customers, distributors have increased the accessibility of Recofloor making it even easier for contractors to dispose of their waste vinyl flooring and today, there are 58 drop-off sites nationwide. The drop-off sites have also facilitated Recofloor's collection and recycling process. Furthermore, CO<sub>2</sub> emissions have been reduced by minimising needless drop-off and pick-up journeys.

### Recofloor Timeline 2009 - 2020



proud of our recycling achievements and always post

Anthony Purnell, Director, Fantasy Flooring





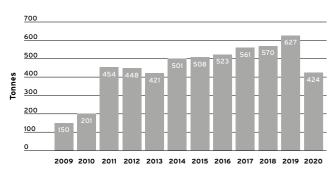


## Recofloor in 2020

#### 2020 Key Targets

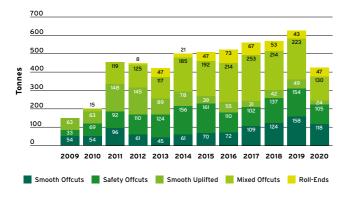
- · To collect at least 600 tonnes of flooring
- To recruit at least 2 new construction projects
- Begin overhaul of bins
- To ensure that specification guides are understood and adhered to by Recofloor collectors

#### Tonnages collected 2009-2020



Volumes collected during 2020 are 32% lower than in 2019. The graph below shows the total figures since Recofloor launch in 2009.

#### Material collected by type in tonnes 2009-2020

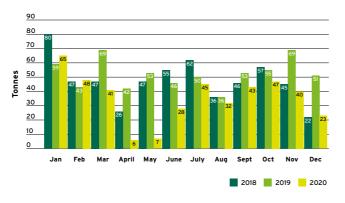


Post-installation offcuts remain on average to be over 80% of the total volumes collected. Roll-ends increased by 10% in 2020, although this was due to a collection from the early decommissioning of a temporary hospital.

#### 2020 Actual

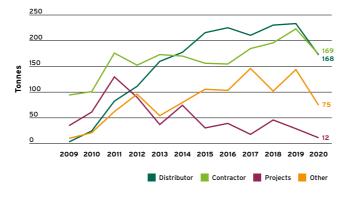
Typically, Recofloor has increased tonnage volumes collected year on year. Our goal was to exceed 600 tonnes, as with 2019, but 2020 was a very challenging year which brought a reduced volume in reclaimed waste, so the scheme recycled volumes closer to those of 2013. Given the socio-economic impacts faced in 2020 and the scheme could not operate for almost 2 months, the 424 tonnes collected is a testament to Recofloor's ongoing commitment and to those of our customers.

#### Tonnages collected by month 2018-2020



This shows the monthly volumes collected over the last three years. The figures were significantly affected in April-May 2020 due to Recofloor temporarily ceasing operations.

#### Volume by type of site 2009-2020



Of our 507-strong membership, 134 members participated during 2020. Contractor and distributor engagement remains the main driving force of the volumes collected, representing 80% of the overall tonnage collected in 2020.

Compared to 2019, volumes from contractors (169 tonnes) had the smallest decrease with 22.8%, followed by distributors (168 tonnes) which decreased by 28.4%. The sources with the biggest reductions were 'Projects' with 57% and 'Other' with 48.5%. Again, given the circumstances, this is reasonable and does not represent the performance of the scheme in the long-term.

## 2020 KPI Roundup

Collections & Logistics

68% of 2020 forecast

of material collected was postinstallation offcuts or roll-ends; 2% higher than in 2019

came from contractors and distributors

New members

the scheme

Headlam branches joined

Marketing

Continued a multi-touch marketing strategy to increase Recofloor brand awareness amongst the flooring sector

The main awards event was cancelled. However, award winners were announced via Twitter live in intervals through the morning of the original planned event

10% more new website traffic than 2019

#### 2021 Key Targets

- · Maintain a target to collect 600 tonnes of flooring
- · Continue with the overhaul of the bins
- · Manage the development of a new website
- · Launch Recofloor Awards to recognise members' efforts during 2020
- Deliver communication campaigns to maintain scheme awareness amongst the flooring industry and provide support and updates to members

#### Why Take Part?

- The drop-off sites are free of charge. For non-timed collections and timed collections from live projects there are nominal fees of around £30 and £60 per tonne respectively, which could save our members up to 70% by recycling through Recofloor, rather than landfilling (costing £120 per tonne)
- Recofloor ties in with site waste management requirements
- Certificates of commitment are awarded to impress and gain
- Recofloor Awards Gold, Silver and Bronze certificates are issued to members who have significantly recycled, as well as awards for numerous categories such as 'Distributor of the Year'; 'Contractor of the Year' and 'Construction Project of the Year'
- Customers are keen to see their waste flooring recycled
- Recofloor can be specified as an outlet for vinyl waste in tenders
- Could help achieve extra points on BREEAM & LEED assessments

# 2020 Recofloor Awards

For the 9th year running, the annual awards rewarded members for their hard work and efforts in recycling vinyl waste flooring.

Sadly, given the unprecedented circumstances of 2020, we were unable to host a physical awards ceremony as we had planned. It is important to acknowledge our members' commitments and identify top performers and present them with awards, so we opted for an online announcement though social media, posting out awards and certificates accordingly.

## 2020 Award Winners and Highly Commended

## Winner: S&D Flooring Ltd 👍 Highly Commended: Bramhall Flooring Company Ltd Distributor of the Year: Winner: SFS Flooring Supplies Highly Commended: 3D Flooring Supplies, Bristol Drop-off Site User: Winner: County Contract Flooring Highly Commended: Darren Davies Flooring **Brand Ambassador:** Y Winner: First Call Flooring Ltd

Contractor of the Year:





# **Top mention** earned 15 engagements SASGO Ltd Previously SFS Flooring Look what we found in this box - such an honour @ Recofloor - we are proud to support you and even prouder to receive Distributor of the Year 2020 award #recycling #greencredentials #flooringdistributor pic.twitter.com/7IPtLhj8ix

Recofloor

ributor of the Year

FS Flooring Supplies



1

**Top mention** earned 36 engagements

AA Flooring Ltd

# **STI Poynton Electronic** Manufacturing Site, Cheshire, UK

Bramhall Flooring was initially engaged to replace the existing flooring with 1,400 sam of Polyflor SD antistatic vinyl in 5100 silver grey.

The contractor demonstrated the ease of implementing Recofloor to collect, return and recycle material from STI Poynton by placing large Recofloor bulk bags on site to collect all the uplifted vinyl with less than 3mm of adhesive for meeting Recofloor Specifications. The Installation offcuts from the new vinyl were also bagged separately and collected from site for recycling.

Unfortunately, within two months of the project's completion the whole building was left under a foot of water after a nearby river burst its banks. Despite being cleaned, the new vinyl had to be replaced due to concerns about possible water damage underneath.

Bramhall Flooring returned to replace the floor, this time in a 'more serviceable' darker grey. A turbostripper was used to uplift the vinyl and again Recofloor was deployed and used on site.

In total, around 18 pallets of waste vinyl flooring were recycled from both project phases.

Julian Normie, Managing Director at Bramhall Flooring Commented: "We totally buy into Recofloor and it was easy to use on both phases of this project. We rang up, asked for the bags and while we brought some back to our premises, most were collected from site as the project continued."

## **Recofloor Awards 2020**

PROJECT OF THE YEAR WINNER

**Julian Normie,** Managing Director, Bramhall Flooring

He added: "We believe that recycling helps the environment and doesn't contribute to overloaded landfill sites. Using Recofloor also saves us money on skips. We have been asked several times to provide evidence that we recycle as this helps clients with their BREEAM ratings – and Recofloor membership helps us to do this."

Leading flooring manufacturers Polyflor and Altro founded Recofloor in 2009 to diver waste vinyl flooring from landfill. All recycled waste vinyl goes back into new products - including flooring.

Operating across the UK and Ireland, the scheme collects post-installation flooring and offcuts from a wide variety of projects in diverse sectors.

Carla Eslava, Recofloor Manager commented: "Bramhall Flooring is a great example of a contractor engaging with the scheme and promoting its ease of use on projects.







Environmental Assessments are crucial for providing specifiers with clear, open information, enabling them to make informed decisions on products and the degree of their impacts to the environment.

Through numerous environmental assessments, Polyflor products continue to prove that they are environmentally sound, have minimal impact on the environment and will contribute positively on project assessments including BREEAM®, LEED® HQE™ and Green Star®.



"There is a general shift towards more transparency in the construction value chain. This is particularly relevant to environmental impacts for products used in the built environment. Polyflor has shown great leadership by having some of its products assessed using the BRE Environmental Profiles methodology which looks at life cycle environmental impacts. More product data in the public arena will generate more accurate data over time which in turn will lead to better buildings."

Dr Shamir Ghumra, C.Env, MIoD, FIEMA BREEAM Director, BRE Group

# **About EPDs**

Environmental assessments or 'Green Labels' legitimately help specifiers make informed decisions on the environmental profiles of construction products. Environmental Product Declarations are the next step.

There are many different green labels to choose from worldwide. This proliferation can make it difficult to make a choice and get the clearest and most up to date environmental information, confusing the global market. Specifiers are ever more discerning over green claims and want reliable, consistent data. With that in mind, the European working group CEN TC 350 created the new standard EN 15804 Sustainability of Construction Works - Environmental Product Declarations (EPD) - with the aim of creating ONE pan European and worldwide harmonised standard for reporting of environmental

- · EPDs communicate verifiable, accurate, non-misleading environmental information for products and their applications, expressed in information modules which allow easy organisation and expression of data throughout the life cycle of the product
- The standard provides a way to develop a Type III environmental declaration of construction products and is part of a collection of standards intended to assess the sustainability of construction

works. It provides core product category rules (PCR) for the Type III declarations

- EN 15804 creates harmonisation of schemes such as BREEAM (UK), DGNB (Germany), FDES / HQE (France) and Green Tag (Australia)
- · Since 2013, EPDs are part of the Construction Products' Regulation
- EPDs provide a standardised system, preventing barriers to trade
- Our EPDs are available via product specific IBU EPDs, generic ERFMI EPDs and INIES FDES
- · The information is reported in the same way across all building products

## EPDs provide completely transparent information about Polyflor products and their impact on the environment.

There are 24 environmental indicators within the assessment process of the EPD, which are broken down into the following categories: Environmental Impact Indicators; Resource Indicators; Waste Indicators; Output Flow Indicators. Critically the 7 Environmental Impact Indicators

**GWP -** Global Warming Potential

**ODP -** Ozone Depletion Potential

AP - Acidification Potential

**EP** - Eutrophication Potential

**POCP -** Formation of Potential of Tropospheric Ozone

**ADP -** Abiotic Depletion Potential of non-fossil fuels

**ADP -** Abiotic Depletion Potential of fossil resources

### The benefits of EPD / FDES

it supports the environmental goals of the stakeholders from design to use, but importantly, the construction or retrofit projects including SKA Ratings and HQE. Specifically, extra points can be gained on BREEAM and LEED assessments:

- · One bonus 'uplift' point can be awarded for the use of one of our ranges where a product specific BRE environmental profile or 3rd party verified EN 15804 (ISO 14025) compliant EPD is available.
- Polyflor ranges can contribute to the LEED v4 score through specific environmental product declarations (EPD), which can provide 1 point; or generic EPDs which may contribute 0.5 points.

## Using EPDs on **BREEAM** and LEED assessments

A benefit of specifying a product with an EPD is that extra points can be gained on BREEAM and LEED assessments:

- · One bonus 'uplift' point can be awarded for the use of one of our ranges where a product specific BRE environmental profile or 3rd party verified EN 15804 (ISO 14025) compliant EPD is available.
- · Polyflor ranges can contribute to the LEED v4 score through specific environmental product declarations (EPD), which can provide 1 point; or generic EPDs which may contribute 0.5 points.

## Polyflor EN 15804 **EPDs**

Products can be individually assessed, or generic profiling is available. Polyflor contributes to the EN 15804 generic data set for the creation of ERFMI EPDs and INIES FDES. The following categories all have EPDs and most have FDES:

EN 10581 PVC Homogeneous EN 10582 PVC Heterogeneous (compact) EN 651 PVC Heterogeneous (foam backed) EN 13845 PVC Safety Flooring EN 10582 Luxury Vinyl Tiles EN 1817 Rubber (smooth)

As well as generic EPDs, Polyflor has product specific EPDs for several LVT product ranges. The datasets used on generic and specific EPDs have been independently verified by Institut Bauen und Umwelt e.V. (IBU) and both generic and product specific EPDs are written to the rules and standards according to EN 15804 and ISO 14025. Polyflor EPDs are listed on systems such as the IBU and DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen e.V. / German Sustainable Building Council) navigator databases. INIES FDES are available on the INIES database.

## **How to view Polyflor EPDs**

- · For generic and product specific EPDs, visit: www.polyflor.com/sustainability www.ibu-epd.com/en/published-epds
- · To view FDES, visit www.inies.fr

| Products                         | IBU Product<br>Specific EPD | ERFMI Generic EPD        | INIES FDES  |
|----------------------------------|-----------------------------|--------------------------|-------------|
| SAFETY                           |                             |                          |             |
| Polysafe Quattro PUR             |                             | EPD-ERF-2013611-E        |             |
| Polysafe QuickLay PUR            |                             | EPD-ERF-2013611-E        |             |
| Polysafe Astral PUR              |                             | EPD-ERF-2013611-E        |             |
| Polysafe Mosaic PUR              |                             | EPD-ERF-2013611-E        |             |
| Polysafe Vogue Ultra PUR         |                             | EPD-ERF-2013611-E        |             |
| Polysafe Standard PUR            |                             | EPD-ERF-2013611-E        |             |
| Polysafe Wood fx PUR             |                             | EPD-ERF-2013611-E        |             |
| Polysafe Wood fx Acoustix PUR    |                             | EPD-ERF-2013611-E        |             |
| Polysafe Stone fx PUR PUR        |                             | EPD-ERF-2013611-E        |             |
| Polysafe Verona PUR Original     |                             | EPD-ERF-2013611-E        |             |
| Polysafe Verona PUR Pure Colours | 5                           | EPD-ERF-2013611-E        |             |
| Polysafe Hydro                   |                             | EPD-ERF-2013611-E        |             |
| Polysafe Hydro Evolve            |                             | EPD-ERF-2013611-E        |             |
| Polysafe Ultima                  |                             | EPD-ERF-2013611-E        |             |
| Polysafe Apex                    |                             | EPD-ERF-2013611-E        |             |
| Polysafe Ecomax                  |                             | EPD-ERF-2013611-E        |             |
| Expona Control PUR               |                             | EPD-ERF-2013611-E        |             |
| HOMOGENEOUS                      |                             |                          |             |
| Palettone PUR                    |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Pearlazzo PUR                    |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Prestige PUR                     |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Classic Mystique PUR             |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| 2000 PUR                         |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| XL PU                            |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Standard XL                      |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Polyflex Plus PU                 |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Palettone SD                     |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Polyflor SD                      |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Finesse SD                       |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| OHMega EC                        |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Polyflor EC                      |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| Polyflor ROF                     |                             | EPD-ERF-2013111-E        | 3-1413:2018 |
| HETEROGENEOUS                    |                             |                          |             |
| Forest fx PUR                    |                             | EPD-ERF-2013211-E        | 3-1407:2018 |
| Expona Flow PUR                  |                             | EPD-ERF-2013211-E        | 3-1407:2018 |
| Bloc PUR                         |                             | EPD-ERF-2013211-E        | 3-1407:2018 |
| HETEROGENEOUS ACOUSTIC           |                             |                          |             |
| Silentflor PUR                   |                             | EPD-ERF-2013311-E        | 3-1408:2018 |
| Acoustix Forest fx PUR           |                             | EPD-ERF-2013311-E        | 3-1408:2018 |
| LVS                              |                             |                          |             |
| Secura PUR                       |                             | EPD-ERF-2013411-E        |             |
| Designatex PUR                   |                             | EPD-ERF-2013411-E        |             |
| LVT                              |                             |                          |             |
| Expona Simplay PUR               | EPD-JHA-20140178-ICA1-EN    | EPD-ERF-2013511-E        | 3-1414:2018 |
| Expona Design PUR                | EPD-JHP-2013111-E           | EPD-ERF-2013511-E        | 3-1414:2018 |
| Expona Commercial PUR            | EPD-JHP-2013211-E           | EPD-ERF-2013511-E        | 3-1414:2018 |
| Expona Bevel Line PUR            |                             | EPD-ERF-2013511-E        | 3-1414:2018 |
| Camaro PUR                       |                             | EPD-ERF-2013511-E        | 3-1414:2018 |
| Camaro Loc PUR                   |                             | EPD-ERF-20180185-CCI1-EN | 3-1414:2018 |
| Colonia PUR                      |                             | EPD-ERF-2013511-E        | 3-1414:2018 |
| Affinity 2 <sup>55</sup> PUR     |                             | EPD-ERF-2013511-E        | 3-1414:2018 |

## **About BRE Global**

Polyflor's product ranges predominantly have BRE specific ratings and achieve A+ in major use areas such as health and education. Where products have not been individually assessed, BRE generic ratings are available\*, again achieving A+ in key areas.

Using a Life Cycle Analysis (LCA) approach over a building life of 60 years, materials are assessed according to their impact on the following criteria:

Climate change – The planet's climate is changing through the increase of 'greenhouse gases', such as carbon dioxide and methane. These gases in the atmosphere are required to prevent our planet from freezing over by trapping heat from the sun's rays. Too much however, creates a greater barrier which absorbs more of the sun's rays and ultimately causes 'global warming'. This is happening at an unnaturally fast rate, largely due to human activity, predominantly caused by burning fossil fuels, deforestation and the vast increase of methane producing cattle.

**Water extraction** – In some areas water is becoming a scarce resource, so the use of 'new' water (not stored, recirculated or sea water) can cause damage and is therefore an environmental impact measured by the BRE.

**Mineral resource extraction –** This relates to the extraction of mineral materials, such as metal ores, aggregates and minerals. This is a resource issue caused by mining and quarrying which could prevent availability for future generations.

**Stratospheric ozone depletion –** Ozone depleting gases cause damage to stratospheric ozone or 'ozone layer', which enables harmful UVB light to penetrate through the filter, hitting the earth's surface.

**Human toxicity -** The emissions of some substances, such as heavy metals, can have impacts on human health. The BRE assesses levels of toxicity based on tolerable concentrations in air, water, air quality guidelines, tolerable daily intake and acceptable daily intake for human toxicity.

**Ecotoxicity to freshwater & land -** Environmental toxicity is measured as two separate impacts which examine land and freshwater eco systems. The emissions of some substances, such as heavy metals can have environmental impacts on the ecosystem.

**Nuclear waste –** Radioactivity can cause serious damage to human health, and as yet, no treatment or permanently secure storage solution exists for higher level radioactive wastes, such as that generated by the nuclear power industry and from decommissioning nuclear power stations.

**Waste disposal** - There are environmental issues associated with the loss of resource implied by the final disposal of waste. BRE uses an absolute measure based on the mass of any waste that is disposed of in landfill or incinerated.

**Fossil fuel depletion –** This impact category indicator is related to the use of fossil fuels. Fossil fuels provide a valuable source of energy and feedstock, but are a finite resource and their continued consumption will prevent use by future generations.

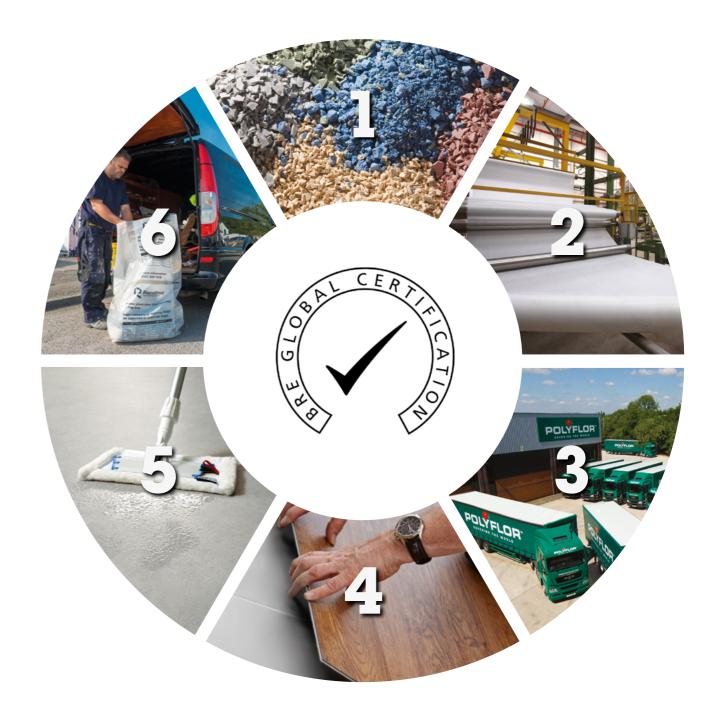
**Eutrophication –** Nitrates and phosphates are essential for life, but increased concentrations in water can encourage excessive growth of algae and reduce the oxygen within the water. Eutrophication can therefore be classified as the over-enrichment of water courses. Its occurrence can lead to damage of ecosystems, increasing mortality of aquatic fauna and flora and to loss of species dependent on lownutrient environments. Emissions of ammonia, nitrates, nitrogen oxides and phosphorus to air or water all have an impact on eutrophication. Direct and indirect impacts of fertilisers are included in the method.

Photochemical ozone creation – In atmospheres containing nitrogen oxides (NOx, a common pollutant) and volatile organic compounds (VOCs), ozone can be created in the presence of sunlight. Although ozone is critical in the high atmosphere to protect against ultraviolet (UV) light, low level ozone is implicated in impacts as diverse as crop damage and increased incidence of asthma and other respiratory complaints.

Acidification – Acidic gases such as sulphur dioxide (SO2) react with water in the atmosphere to form 'acid rain', a process known as acid deposition. When this rain falls, often a considerable distance from the original source of the gas, it causes ecosystem impairment of varying degree, depending upon the nature of the landscape ecosystems. Gases that cause acid deposition include ammonia, nitrogen oxides and sulphur oxides. It accounts only for acidification caused by SO2 and NOx. This includes acidification due to fertiliser.

The complex data derived from the given criteria is calculated into ecopoints, which are then represented by ratings from E to A+ with an A+ rating being the highest achievable environmental rating. Using these ratings sets a benchmark for environmental excellence and ensures that reliable and comparable information is available between competing products, eliminating the confusion of varying claims and counter claims, making specification much easier.

National Scheme Operators (NSOs) develop and own country specific local schemes but are affiliated to BREEAM. BRE Global is the national scheme operator for the UK and broader international and European schemes (BREEAM), the Dutch Green Building Council is the national Scheme Operator for the Netherlands (BREEAM NL), the Instituto Technológico de Galicia is the NSO for Spain (BREEAM ES) and the Norwegian Green Building Council is the NSO for Norway (BREEAM NOR). All of the schemes comply with the requirements established by the Code for a Sustainable Built Environment.



Polyflor's product ranges predominantly have BRE product specific ratings & achieve A+ in major use areas such as health & education

Where products have not been individually assessed, BRE generic ratings are available\*, again achieving A+ in key areas

# BRE Individually Assessed Ratings

Independent, third-party certification is always important as its impartiality reassures customers that our products will perform as expected and is why Polyflor has had most of its product ranges individually assessed by BRE Global.

Each product certificated by BRE Global has undergone an LCA (life cycle analysis) therefore looking at its environmental performance throughout every stage of its life. Generic ratings are a good guidance, but are based on European production averages, whereas individual certification ensures accuracy of LCA data specific to the product and manufacturer.

The BRE Global rating scheme is categorised by end use areas, as the environmental impact in each can vary. Various products are available in the different sectors, which are subject to a pre-determined spread of ratings across the categories A+ to E. Therefore, more options may be available within the domestic sector. Additionally, life spans vary depending on the sector which affects the environmental impact: For example, an assumption that domestic flooring is replaced more frequently due to trends.

Polyflor's safety, homogeneous, heterogeneous and LVT ranges have been individually assessed by BRE Global to measure their environmental impact. The ratings are A+ to E, with A+ being the best rating, having achieved the lowest ecopoints. A better rating helps to maximise a building's BREEAM score, which is achievable through our 34 A+ ratings. Overall, Polyflor's certified ratings are impressive, particularly in the key areas of health and education, where BREEAM ratings are linked to government funding.

| SAFETY                           | Cert.  | Health | Education | Retail (fashion) | Retail (Durability) | Office | Domestic |
|----------------------------------|--------|--------|-----------|------------------|---------------------|--------|----------|
| Polysafe Quattro PUR             | ENP472 | A+     | A+        | Α+               | A+                  | А      | А        |
| Polysafe Astral PUR              | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Mosaic PUR              | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Vogue Ultra PUR         | ENP472 | Α+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Standard PUR            | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Ecomax                  | ENP472 | Α+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Verona PUR              | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Verona Pure Colours PUR | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Stone fx PUR            | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Wood fx PUR             | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Wood fx Acoustix PUR    | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Hydro                   | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Hydro Evolve            | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Apex                    | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Polysafe Ultima                  | ENP472 | Α+     | Α+        | A+               | А                   | А      | В        |
| Expona Control PUR               | ENP429 | Α+     | Α+        | A+               | А                   | А      | А        |
| HOMOGENEOUS                      | Cert.  | Health | Education | Retail (fashion) | Retail (Durability) | Office | Domestic |
| Palettone PUR                    | ENP472 | A+     | Α+        | A+               | Α+                  | А      | А        |
| Pearlazzo PUR                    | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Prestige PUR                     | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Classic Mystique PUR             | ENP472 | A+     | A+        | Д+               | A+                  | А      | А        |
| 2000 PUR                         | ENP472 | A+     | A+        | Д+               | Α+                  | Α      | А        |
| XL PU                            | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| Standard XL                      | ENP472 | A+     | A+        | A+               | A+                  | А      | А        |
| HETEROGENEOUS                    | Cert.  | Health | Education | Retail (fashion) | Retail (Durability) | Office | Domestic |
| Bloc PUR                         | ENP415 | Α+     | Α+        | A+               | A+                  | А      | А        |
| Designatex PUR                   | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Forest fx PUR                    | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Expona Flow PUR                  | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Secura                           | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Silentflor                       | ENP415 | A+     | A+        | A+               | A+                  | А      | А        |
| Acoustix Forest fx PUR           | ENP415 | Α+     | Α+        | A+               | A+                  | А      | А        |
| LVT                              | Cert.  | Health | Education | Retail (fashion) | Retail (Durability) | Office | Domestic |
| Expona Commercial PUR            | ENP429 | Α+     | A+        | Α+               | A+                  | А      | А        |
| Expona Design PUR                | ENP429 | Α+     | Α+        | A+               | А                   | А      | В        |
| Bevel Line PUR                   | ENP429 | Α+     | A+        | A+               | A+                  | А      | А        |
| Camaro PUR                       | ENP429 | *      | *         | A+               | A+                  | А      | А        |
| Colonia PUR                      | ENP429 | *      | *         | *                | *                   | *      | А        |

<sup>\*</sup> Product not suitable for use area and has therefore not been rated for the particular use area.

For verification and more information on our certification and environmental profiles, visit www.greenbooklive.com and click on the 'search GBL' link: Enter 'Polyflor' into the Company Name search box enter the BRE certificate number 472; 415 or 429 (without the ENP prefix) into the 'Cert No' search box.

## **BRE Generic Ratings**

Polyflex Plus PU Palettone SD

Where Polyflor products have not been individually certificated by BRE Global, generic ratings are available. As these products have not been individually assessed, the product data provided to the BRE is generic - it is industry standard data from key European manufacturers.

Generic ratings apply to specific categories of flooring installed into defined use areas. For example, homogeneous flooring to EN 10581 standard rated 34/43 for use area and installed in a healthcare environment. On average vinyl flooring achieves a generic BRE Global A+ rating for most types of vinyl across the categories shown below:

| Standard             | Homogeneous<br>EN 10581 | Heterogeneous<br>EN 10582 | Acoustic<br>EN 651 | LVS<br>ISO 26986 | LVT<br>EN 10582   | Safety<br>EN 13845 | Rubber<br>(profiled)<br>EN 12199 |
|----------------------|-------------------------|---------------------------|--------------------|------------------|-------------------|--------------------|----------------------------------|
| Health               | Α+                      | Α+                        | A+                 | -                | A+                | Α+                 | Α+                               |
| Element              | 821570038               | 821570039                 | 821570053          | -                | 821570054         | 821570055          | 821570057                        |
| Education<br>Element | A+<br>821570065         | A+<br>821570066           | A+<br>821570010    | -<br>-           | A+<br>821570013   | A+<br>921570010    | A+<br>821570015                  |
| Commercial           | А                       | А                         | А                  | -                | А                 | А                  | А                                |
| Element              | 821570038               | 821570039                 | 821570041          | -                | 821570042         | 821570043          | 821570045                        |
| Retail<br>Element    | A+/A+<br>821570038      | A+/A+<br>821570039        | A+/A<br>821570053  | -<br>-           | A+/A<br>821570054 | A+/A<br>821570055  | A+/A+<br>821570057               |
| Domestic<br>Element  | A<br>821570065          | A<br>821570066            | A<br>821570010     | A+<br>821570002  | A<br>821570013    | B<br>921570010     | A<br>821570015                   |

For more detail about how these ratings are arrived at by BRE Global visit www.bre.co.uk/greenguide

The following Polyflor ranges are not individually assessed by BRE Global, but can be included within the appropriate generic ratings:

| HOMOGENEOUS  | RUBBER (profiled) | LVT                         | SAFETY                |
|--------------|-------------------|-----------------------------|-----------------------|
| Polyflor SD  | Noppe Stud Tile   | Expona Simplay PUR          | Polysafe QuickLay PUI |
| Finesse SD   |                   | Camaro Loc PUR              |                       |
| OHMega EC    |                   | Affinity2 <sup>55</sup> PUR |                       |
| Polyflor EC  |                   |                             |                       |
| Polyflor ROF |                   |                             |                       |
|              |                   |                             |                       |

# Maximising BREEAM Credits with Polyflor



Polyflor's vast range of products, technical support and best value flooring, means you can maximis your BREEAM score without any compromise on performance, choice or budget.

Building Research Establishment's Environmental Assessment Method (BREEAM) is the longest standing and most widely used environmental assessment method for buildings in the UK and increasing its brand recognition globally.

Credits are awarded according to performance in 10 different categories for measuring sustainability: Management; Health & Wellbeing; Energy; Transport; Water; Materials; Waste; Land Use &

Ecology; Pollution; Innovation (extra). They are then added together to produce an overall score for the building on a scale of:

- Outstanding: Less than top 1% of UK new non-domestic buildings (innovator).
- Excellent: Top 10% of UK new non-domestic buildings (best practice).
- Very Good: Top 25% of UK new non-domestic buildings (advanced good practice).
- Good: Top 50% of UK new non-domestic buildings (intermediate good practice).
- Pass: Top 75% of UK new non-domestic buildings (standard good practice).

Polyflor products can contribute to the award of BREEAM credits within the following categories - Materials, Waste and Health & Wellbeing

## **Materials**

The Materials section makes up 12.5% of the overall scoring, offering 12 credits in total

Materials - MAT 01: Life Cycle Impact

### Aim

To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.

**3 points:** Using BRE A+ rated product – Polyflor can contribute towards a maximum 3 points for floor finishes when one of our A+ rated products is used. Note: 2 points are available for A rated product and 1 point for B rated product.

**1 point:** Bonus 'uplift' point - This can be awarded for the use of one of our ranges where a product specific BRE environmental profile or 3rd party verified EN 15804 compliant EPD is available.

Points awarded for each material type are then added up and weighted to award credits for this section of the project.

Polyflor products can contribute to the maximum available material points in the MAT 01 section for floor coverings.

## 6 credits total for MAT 01

(depending on building type)

Materials - MAT 03: Responsible Sourcing for Materials

### Aim:

To recognise and encourage the specification of responsibly sourced materials for key building elements. 80% by mass of materials that make up elements must be responsibly sourced.

**3.5 points:** BES 6001 'Excellent' – Polyflor can contribute 3.5 points for the use of ranges which are certified to BES 6001, achieving 'Excellent'.

**1 point:** EMS certified - Polyflor can also contribute 1 additional point for having ISO 14001 environmental management system certification.

Use of Polyflor ranges with BES 6001 'Excellent' and ISO 14001 certification, contribute 4.5 of a maximum of 5 points (90% of available points) towards the award of 3 credits in MAT 03. Floor finishes are considered with all other fittings such as windows and doors on a mass basis for the fittings part of the credit.

The data from the whole building is then weighted and buildings achieving greater than 54% of the available points are awarded a maximum of 3 credits.

Use of Polyflor ranges can significantly contribute to credits in MAT 03

### 3 credits total for MAT 03

### Waste

The Waste section makes up 7.5% of the overall scoring, offering 7 credits in total. Polyflor can contribute to the credits available to flooring for WST 01 and will contribute towards a maximum score for 'diversion of resources from landfill'

Waste - WST 01: Construction Waste Management

#### Aim:

To promote resource efficiency via the effective management and reduction of construction waste.

1 credit: Diversion of Resources from Landfill – Use the Recofloor take-back scheme in conjunction with a site waste management plan (SWMP) to remove waste vinyl flooring from the construction project. This can contribute towards the available credit on a BREEAM assessment.

Exemplary Level Credit - Available where demolition and non demolition waste is kept to under challenging volumes/tonnages (85% by volume and 95% by weight) and diverted from landfill. Use of the Recofloor scheme can help achieve this for flooring demolition waste and non demolition waste, as the material is taken back and recycled.

Use of Polyflor materials and the Recofloor Scheme demonstrates diversion from landfill, potentially contributing towards 1 credit for diversion of resources from landfill and 1 exemplary level credit.

4 credits total for WST 01, plus 1 Exemplary Level credit

## Health & Wellbeing

The Health & Wellbeing section makes up 15% of the overall scoring, offering 10 credits in total. Polyflor can contribute towards 1 credit for HEA 02: Indoor Air Quality

Health & Wellbeing – HEA 02: Indoor Air Quality

### Aim:

To recognise and encourage a healthy environment through specification and installation of appropriate ventilation, equipment and finishes.

1 credit: Minimising sources of VOCs and formaldehyde - Polyflor can contribute towards this credit through demonstrating conformance to EN 14041:2004. Polyflor floor coverings are REACH compliant and do not contain formaldehyde, conforming to the E1 declaration. All Polyflor products have low VOC emissions.

The use of Polyflor materials can contribute towards 1 Health & Wellbeing credit for minimising sources of VOC and Formaldehyde.

### 6 credits total for HEA 02

# Polyflor In Situ

## Barbara Hepworth Building, University of Huddersfield

## **Acheived BREEAM 'Excellent Rating'**

Location: Huddersfield, UK

Products: Expona Flow PUR, Bloc PUR, Polysafe

Stone & Wood fx, Finesse SD

University of Huddersfield's new School of Art, Design and Architecture, showcasing bespoke Polyflor Expona Flow PUR patterns at the heart of its creative environment.

Collaboration and innovation are central themes at the new, £30 million Barbara Hepworth Building. Much like the work of the famed Yorkshire sculptor, the building responds to the topography of the local landscape with a cantilevered design which welcomes visitors from the canal-side location and spans a five-metre elevation change. The façade is veiled with laser-cut metal cladding which references the town's textile heritage.

Inside, the faculty comprises flowing spaces set around an internal atrium, which is easily adapted to meet the varied needs of the multi-disciplinary faculty. The state-of-the-art facilities incorporate the latest motion capture and digital visualisation technologies, whilst also supporting a range of traditional crafts.

Polyflor collaborated closely with AHR, Morgan Sindall and Phoenix Flooring using a variety of vinyl flooring products to create a flooring specification which properly reflects the building's artistic and practical aspirations.

The multi-floor central atrium is set around a feature staircase and the design team were eager for this space to be attractive and easily navigable whilst also encouraging interaction between the different disciplines housed in the building. To help support these goals, we worked with the project team to create a bespoke flooring design using Expona Flow PUR.

The vinyl sheets beautifully recreate the aesthetic of wood and concrete floors and provide excellent durability in this high traffic area. AHR and our technical team designed and developed a bespoke pattern for each atrium area into CAD designs, combining Warm Limed Ash, Steel Blue and Light Industrial Concrete colours. These patterns are both attractive and help students to intuit and navigate the surrounding open-plan spaces and adjoining rooms.

Once the designs were agreed, we produced the flooring at our site in Manchester and supplied them to Phoenix Flooring to be installed. Through careful measurement, we were able to ensure that the flooring supplied precisely matched the dimensions of the finished space, allowing them to complete a streamlined installation.



A number of other Polyflor products were also utilised to provide a high-quality flooring finish throughout the new building.

Polyflor Finesse SD was chosen for the communication and infrastructure rooms where static build-up needs to be carefully controlled. The product has been specially developed for these types of environments, ensuring a uniform flow of electrostatic discharge to a ground point.

Polysafe Stone FX PUR and Wood FX PUR were also specified in areas where there was potential for water spillage. The products have been assessed under many of the most demanding international assessments for slip resistance and achieve a Pendulum Test Value of 36+ for a low slip potential classification under HSE Guidance.

The specification was completed with the use of hardwearing Bloc PUR in Classic Black and Urban Chic. These simple shades of black and grey complemented the use of neutral stone, concrete and wood finishes across the building's floors. By specifying Polyflor products across the building, flooring maintenance is streamlined.

The complex site layout and atrium space posed a key challenge during the installation phase. To overcome this, we collaborated with Morgan Sindall and Phoenix Flooring to develop and commission a bespoke pallet lifting system using an internal crane. This allowed the 2 metre vinyl roles to be easily and safely lifted to the upper floors.

Once all the sections were lifted, Phoenix Flooring set them out to our CAD layout carefully checking them for precision of location. This meticulous approach allowed the 551 sections to be accurately installed in all areas of the building in a period of just 12 weeks.

"Polyflor's technical staff were on hand throughout the installation period to provide aftersales service by telephone and in person if required to support our supervisor and operatives on site. The bespoke pallet system ensured we delivered best working practice in our health and safety obligations."

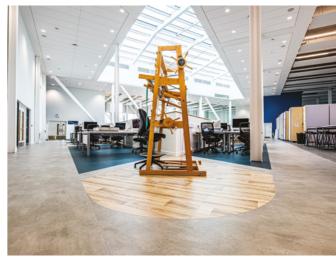
Matt Brown, Director, Phoenix Flooring





The sheets achieve a BRE A+ rating and are certified as 'Excellent' under the BES 6001 responsible sourcing standard. In addition, the products feature recycled content and are 100% recyclable at end of life through the Recofloor scheme – supporting the circular economy.

The products have also been certified under the Eurofins Indoor Air Comfort Gold scheme. This shows they emit exceptionally low levels of volatile organic compounds (VOCs) and are compliant with the most demanding voluntary indoor air quality standards across Europe As a result, these ranges not only support efforts to achieve credits within the Health and Wellbeing section of the BREEAM assessment but also help to maintain a healthier and more comfortable learning environment for students and staff.







# **SKA**rating<sup>®</sup>

Operated by RICS (Royal Institution of Chartered Surveyors), SKA Rating is an environmental assessment tool for sustainable fit-outs. Where BREEAM® and LEED® focus on the environmental impact of the whole building, SKA is a benchmark and standard for nondomestic fit-outs, including Retail, Office and Higher Education.

Around 11% of the UK construction sector is involved in fit-outs and many buildings, particularly for retail and office, can have up to 40 fit-outs during their lifecycle.

The SKA scheme comprises over a hundred 'good practice' measures, incorporating energy, CO<sub>2</sub> emissions, materials, waste, water, wellbeing, pollution and transport. The percentage score for the assessment across the given criteria, provides the fit-out project with a Bronze; Silver or Gold label. These ratings are reached by achieving 25%; 50% and 75% respectively, of the measures in scope.

Along with Polyflor's many credentials including ISO 14001, BES 6001, plus its low maintenance and low VOC emissions, Polyflor products can positively contribute to SKA assessments within the Soft Flooring category and can potentially meet all or at the very least (and the minimum requirement), one of the following criteria:

- Some Polyflor ranges can be reused, including loose-lay products, Expona Simplay and Polysafe QuickLay.
- If new, are manufactured with at least 50% recycled content (measured by mass) and 100% recyclable content (designed for deconstruction with components that can be recycled; Some Polyflor products may contain around 50% recycled material and are all 100% recyclable

- Have an A or A+ rating in BRE's Green Book Live database for the office / retail / education scheme;
- The majority of Polyflor products are individually assessed by BRE and achieve A and A+ ratings
- Have an A or A+ rating in BRE's The Green Guide to Specification for the office / retail / education scheme;
- Polyflor products without Green Book Live ratings achieve generic A and A+ ratings
- Are manufactured from 50% renewable and natural products; Some Polyflor products contain up to 85% natural material, which includes renewables. This can include fillers used, for example
- · Are supplied with an environmental product declaration, written in accordance with ISO 14025 standards;

The vast majority of Polyflor ranges have EN 15804 EPDs written to standard ISO 14025

For more information about SKA Ratings, visit www.rics.org

For SKA ratings specific to Polyflor floor coverings, please contact us at info@polyflor.com







Leadership in Energy & Environmental Design (LEED®) is a sustainable building certification programme that rewards best-in-class building strategies and practices. Stringent criteria are set which a building project must meet to achieve LEED® certification. In doing so, specifiers will seek to use the most sustainable options available for the project.

### There are four levels of certification available.

As highlighted, Polyflor can contribute to points on a LEED® project. The number of points achieved throughout the entire build establishes the level of LEED® certification for that project, outlined below:



| Certified    | Silver       | Gold         | Platinum   |
|--------------|--------------|--------------|------------|
| 40-49 points | 50-59 points | 60-79 points | 80+ points |

In 2017, the top 10% of LEED® certified companies achieved a Platinum rating, with most certified companies achieving a Gold rating at 44%; 30% achieved Silver and 14% obtained a Certified rating. Today there are over 3,800 LEED Platinum buildings around the world.

LEED v4 is the evolutionary next step from LEED v2009. LEED v4 focuses on increasing technical stringency and transparency from past versions and developing new requirements for building types such as data centres; warehouses & distribution centers; hotels & motels; existing schools; existing retail and mid-rise residential. Polyflor floor coverings have the potential to contribute to LEED® points through the following criteria:

### Materials & Resources

### MR Credit: Construction and Demolition Waste Management

Polyflor is 100% recyclable and post-consumer waste, including offcuts and smooth uplifted waste can be recycled. Alternatively, our Expona Simplay, Secura and Designatex can be reused as they do not require adhesive for installation.

The Recofloor scheme (of which Polyflor is a founding and funding member) complies with site waste management legislation and diverts vinyl flooring waste (offcuts and uplifted) from going to landfill. Recycle or salvage 50% of the waste for 1 point, or 75% for 2 points.

### MR Credit: Building Product Disclosure and Optimisation – Sourcing of Raw Materials (Bio-based Content)

Polyflor flooring contains up to 85% sustainable materials and uses bio-based ingredients. 1 point available.

### MR Credit: Building Product Disclosure and Optimisation-Environmental Product Declarations.

Polyflor can contribute to the LEED® credit through its productspecific environmental product declaration (EPD), which can provide 1 point; or its generic EPD which may contribute 0.5 points.

## MR Credit: Building Product Disclosure and Optimisation – Sourcing of Raw Materials (Recycled Content).

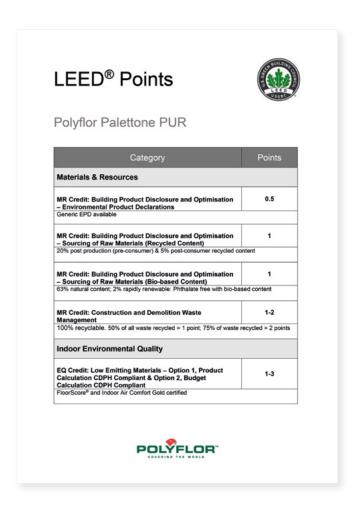
Polyflor flooring contains up to 40% recycled material, which typically includes post-consumer waste from the project site as well as preconsumer (or post-production) waste, including process and sampling waste for instance. 1 point available.

### Indoor Environmental Quality

### EQ Credit: Low Emitting Materials - Option 1, Product Calculation CDPH Compliant & Option 2, Budget Calculation CDPH Compliant

Polyflor can contribute to both options of this credit through certification of its low emitting products. VOC certification is available via Indoor Air Comfort, Indoor Air Comfort Gold and FloorScore® certification (Polyflor's certificates are available online at www.polyflor. com, www.eurofins.com and www.scscertified.com). Along with other materials used on the project, Polyflor products can contribute towards 1-3 points.





For quick referencing and ease of specification, Polyflor has LEED® Points PDFs available digitally, across all product ranges. Please request these documents via info@polyflor.com or speak to our Customer Technical Services Department on +44 (0)161 767 1912.



# Global GreenTag<sup>CertTM</sup>

The Ecospecifier Global GreenTag<sup>CertTM</sup> scheme operated by Global GreenTag P/L is a third party ecolabel programme that rates sustainable products for the built environment.

The assessment of products is based on a life cycle approach and measuring the impact of products and their ingredients, outlined in the following critical areas:

- · Reduction of energy & greenhouse gases
- · Habitat & land degradation
- · Toxicity to land, air & water
- · Resource depletion & efficiency
- · Human health & ethical employment

Due to the strong performance in minimising the environmental and other impacts in these categories, Polyflor products are also listed on the Ecospecifier database (www.ecospecifier.com.au) of environmentally preferable building materials, providing architects, designers and specifiers an easier and effective way to select an environmentally sustainable floorcovering.

Polyflor was the first commercial vinyl floor covering organisation to achieve Global GreenTag LCARate™ certification across its key ranges. GreenTag's LCARate™ is an EPD and is a sustainability rating system based on life cycle analysis (LCA) and EcoPOINT score. The LCA ratings are split into four categories for easy product selection: Bronze (Good); Silver (Very Good); Gold (Excellent) and Platinum (World Leading). Polyflor's ranges perform very well, achieving LCARate™ Silver PLUS and Gold PLUS (the 'PLUS' denotes the link to additional certification via the GreenRate™ system).

In addition to the Global GreenTag LCARate™, Polyflor achieves GreenRate™ level A across these certified ranges. Maximum points are scored in the Materials 'Sustainable Products' and IEQ-VOC sections of the Green Star® rating tools. For example, a GreenRate™ Level A achieves 100% of available credit points in sustainable products and refurbishment products.



| HOMOGENEOUS                   | LCA Rate™   | Green Rate™ | EcoPOINT |
|-------------------------------|-------------|-------------|----------|
| Palettone PUR                 | Gold PLUS   | Level A     | 0.46     |
| Pearlazzo PUR                 | Gold PLUS   | Level A     | 0.47     |
| Prestige PUR                  | Gold PLUS   | Level A     | 0.48     |
| Classic Mystique PUR          | Gold PLUS   | Level A     | 0.48     |
| 2000 PUR                      | Gold PLUS   | Level A     | 0.48     |
| XL PUR                        | Gold PLUS   | Level A     | 0.46     |
| Standard XL                   | Gold PLUS   | Level A     | 0.48     |
| Polyclad PU Plus              | Gold PLUS   | Level A     | 0.37     |
| SAFETY                        | LCA Rate™   | Green Rate™ | EcoPOINT |
| Polysafe Standard PUR         | Gold PLUS   | Level A     | 0.46     |
| Polysafe Astral PUR           | Gold PLUS   | Level A     | 0.47     |
| Polysafe Vogue Ultra PUR      | Gold PLUS   | Level A     | 0.44     |
| Polysafe Wood fx Acoustix PUR | Silver PLUS | Level A     | 0.53     |
| Polysafe Verona PUR           | Gold PLUS   | Level A     | 0.50     |
| Polysafe Wood fx PUR          | Gold PLUS   | Level A     | 0.47     |
| Polysafe Quattro PUR          | Gold PLUS   | Level A     | 0.46     |
| Polysafe Apex                 | Silver PLUS | Level A     | 0.58     |
| Polysafe Hydro Evolve         | Gold PLUS   | Level A     | 0.48     |
| Expona Control                | Gold PLUS   | Level A     | 0.39     |
| HETEROGENEOUS                 | LCA Rate™   | Green Rate™ | EcoPOINT |
| Acoustix Forest fx PUR        | Silver PLUS | Level A     | 0.53     |
| Forest fx PUR                 | Gold PLUS   | Level A     | 0.50     |
| Expona Flow PUR               | Gold PLUS   | Level A     | 0.50     |
| Bloc PUR                      | Silver PLUS | Level A     | 0.52     |
| LVT                           | LCA Rate™   | Green Rate™ | EcoPOINT |
| Expona Design PUR             | Gold PLUS   | Level A     | 0.44     |
| Expona Domestic PUR           | Gold PLUS   | Level A     | 0.44     |
| Expona Commercial PUR         | Gold PLUS   | Level A     | 0.46     |
| Expona Superplank PUR         | Gold PLUS   | Level A     | 0.47     |
| Camaro PUR                    | Gold PLUS   | Level A     | 0.44     |
| Carriaro i Cit                |             |             |          |

### To view certificates visit

www.globalgreentag.com/certified-products-australianz

# Green Star®

In our Australian and New Zealand markets, Green Star® rating tools reward sustainability outcomes and encourage moving beyond standard practice. Green Star® provides a framework of best practice benchmarks and rates the environmental and sustainable performance of a building as with BREEAM® and LEED®.

A Green Star® rating provides independent verification that a building or community project is sustainable and demonstrates leadership, innovation, environmental stewardship and social responsibility. Projects are assessed against a range of environmental impacts, which include Management; Indoor Environment Quality; Energy; Transport; Water; Materials; Land Use & Ecology; Emissions and Innovation.

All types of buildings, new and old, can achieve Green Star® ratings. The rating tools to enable this are as follows:



Green Star - Performance: Increasing levels of operational efficiency within existing buildings.

Green Star - Design and As Built: Sustainable design and construction of public and private buildings, including hospitals, retail and industrial centres, offices, plus schools and colleges.

**Green Star - Interiors:** Transforming interior fitouts of all buildings from shops to hotels.

**Green Star - Communities:** Improving the sustainability of projects within the neighbourhood and community.

Green Star® projects (Design, As Built, Interiors and Communities) can achieve a Green Star® certification of 4 to 6 Star Green Star®. Buildings assessed using the Green Star® Performance rating tool can achieve a Green Star® rating from 1 to 6 Star Green Star®.

Polyflor has achieved maximum rating points in the Green Building Council Australia (GBCA) and New Zealand Green Building Council (NZGBC) Green Star® rating tools. Using Polyflor products certified by the Global GreenTag<sup>CertTM</sup> third party certification scheme can help the specifier achieve maximum points in the Materials 'Sustainable Products' and IEQ-VOC sections of the Green Star® rating tools.

In 2020, Polyflor floor coverings were installed into Westpac's new HQ in Brisbane, Queensland: A modern, state-of-the-art fitout, which achieved a 6 Star rating on the Green Star® sustainability rating scheme. Polyflor ranges were also installed in the Wellington Children's Hospital Auckland and City Mission, New Zealand.

As audited by NCS International Ptv Ltd. to meet the GBCA best practice guidelines, Polyflor also achieved PVC Best Practice accreditation for its homogenous, ESD and wall cladding product ranges. This is a major achievement, outlining Polyflor's commitment to best practice manufacturing and the sustainable and safe use of additives, through responsible sourcing of its ingredients. For this reason, potential for points on a Green Star® assessment is further

"In 2010, Global GreenTag<sup>CertTM</sup> launched with a world-first standard that required PVC to be mercury-free, use nonendocrine disrupting plasticisers, and require full on-site audit of LCA data and environmental licenses and emissions to ensure only BAT (best available technology) products were certified.

"Since then numerous BAT PVC products have been certified, mostly at Silver or Gold level, and can easily be compared to other flooring types with both similar, but also worse, eco-point scores and ratings. Then the collaboration between the Vinyl Council of Australia (VCA) and GBCA recognised BAT under the Best Practice PVC Standard (BPPVC) Guidelines adopted

# WELL Building Standard<sup>TM</sup>

The WELL Building Standard<sup>TM</sup> (WELL) is a performance-based system for measuring, certifying and monitoring aspects of a building that impacts human health and wellbeing. It focuses on 7 core areas:



## Air

The WELL Building Standard™ (WELL) determines requirements in buildings that reduce or minimise the sources of indoor air pollution.

### 01 Air Quality Standards:

Indoor air pollution can lead to a variety of symptoms and health conditions. Volatile Organic Compounds (VOCs), combustion byproducts and airborne particles can trigger nausea, headaches, asthma, respiratory irritation and allergies.

Part 1 Standards for Volatile Substances – The following conditions

- a.1 Formaldehyde levels less than 27 ppb.
- b.¹ Total volatile organic compounds less than 500 ↔g/m³.

Verification: On Site Performance Test

Polyflor meets these conditions and can supply confirmation letters and VOC certification including FloorScore®, AgBB, AFSSET and Indoor Air Comfort Gold, for example.

### 04 VOC Reduction:

Indoor air quality can be compromised by VOCs that off-gas from materials in the building. This can include paints, adhesives, cleaning products and other every-day items such as air fresheners and personal care products.

Part 3 Flooring – The VOC emissions of all newly installed interior flooring must meet all limits set by the following, as applicable: a.1 California Department of Public Health (CDPH) Standard Method

Verification: Letter of Assurance from Architect & Contractor

Polyflor floor coverings are low VOC. Certification meeting the CDPH includes FloorScore®.

### Comfort

Indoor air comfort is important and is therefore a WELL focus for reducing the most common sources of physiological disruption, distraction and irritation. Goals are to enhance acoustic, ergonomic, olfactory and thermal comfort to prevent stress and injury and facilitate comfort, productivity and well-being.

### P4 Impact reducing flooring:

Footfall noise from adjacent spaces can lead to occupant dissatisfaction. Constructing interiors to accommodate for footfall noise can greatly reduce its negative impact on acoustic comfort. In common spaces, especially corridors in open environments where there is heavy foot traffic, this feature minimises disturbances.

Part 1 Floor Construction – All floors in the corridors of all regularly occupied spaces have the following: a<sup>101</sup> Impact Insulation Class (IIC) value of not less than 50.

Verification: Letter of Assurance from Architect

Polyflor offers acoustic flooring options including Silentflor; Acoustix Forest fx PUR; Polysafe Wood fx Acoustix PUR; Secura PUR and Designatex PUR. Acoustifoam, a foam backing sheet, can also be used in conjunction with many other Polyflor sheet floor

### Mind

The WELL Building Standard™ identifies policies that can be implemented to positively impact mood, sleep and stress levels, in order to improve occupant health and well-being.

### 87 Beauty and Design I:

Integrating aesthetically pleasing design into a building or space can provide occupants with pride and joy from their surroundings. This can improve occupant mood and create a calming environment.

Beauty and Mindful Design - The project contains features intended for all of the following:

- a.13 Human delight.
- b.13 Celebration of culture.
- c.13 Celebration of spirit.
- d.13 Celebration of place.
- e.13 Meaningful integration of public art.

Verification: Documents: Professional Narrative

As well as functionality and sustainability, Polyflor floor coverings come in a variety of beautiful designs to stimulate the senses. Visit www.polyflor.com/products for more information.

### 98 Organisational Transparency:

By transparently sharing their sustainability & CSR policies and investment decisions, organisations enable stakeholders to determine if their personal values are shared by the organisation, and also engage.

Transparency Program Participation – The entity seeking WELL certification must participate in one of the following programs, and results must be publicly available within the project premises and on the entity's website:

a.<sup>72</sup> The JUST program operated by the International Living Future Institute (for more information, see www.justorganizations.com). b.<sup>181</sup> Sustainability reporting following the G4 Sustainability Reporting Guidelines organised by the Global Reporting Initiative (for more information, see www.globalreporting.org).

Verification: On Site Spot Check & Policy Documents

Polyflor openly shares its sustainability & CSR policies online. Sustainability & CSR performance and Objectives, as outlined from the ISO 14001 and BES 6001 Responsible Sourcing frameworks, are included within this Sustainability Report. For additional information visit our dedicated sustainability page at www.polyflor.com/sustainability

For more information on the WELL Building Standard™ please visit www.wellcertified.com

# HQETM

HQE™ is the French and international certification awarded to building construction and management, as well as urban planning projects. It promotes best practice and sustainable quality in building projects.

HQE™ certification aims to verify and approve the performance of a building and the four critical areas considered by the certification scheme, which include energy, environment, health and comfort. The performance levels attained are stated and endorsed in a certificate issued upon completion of the project. Within this overall building assessment, product and material lifecycles are taken into account.

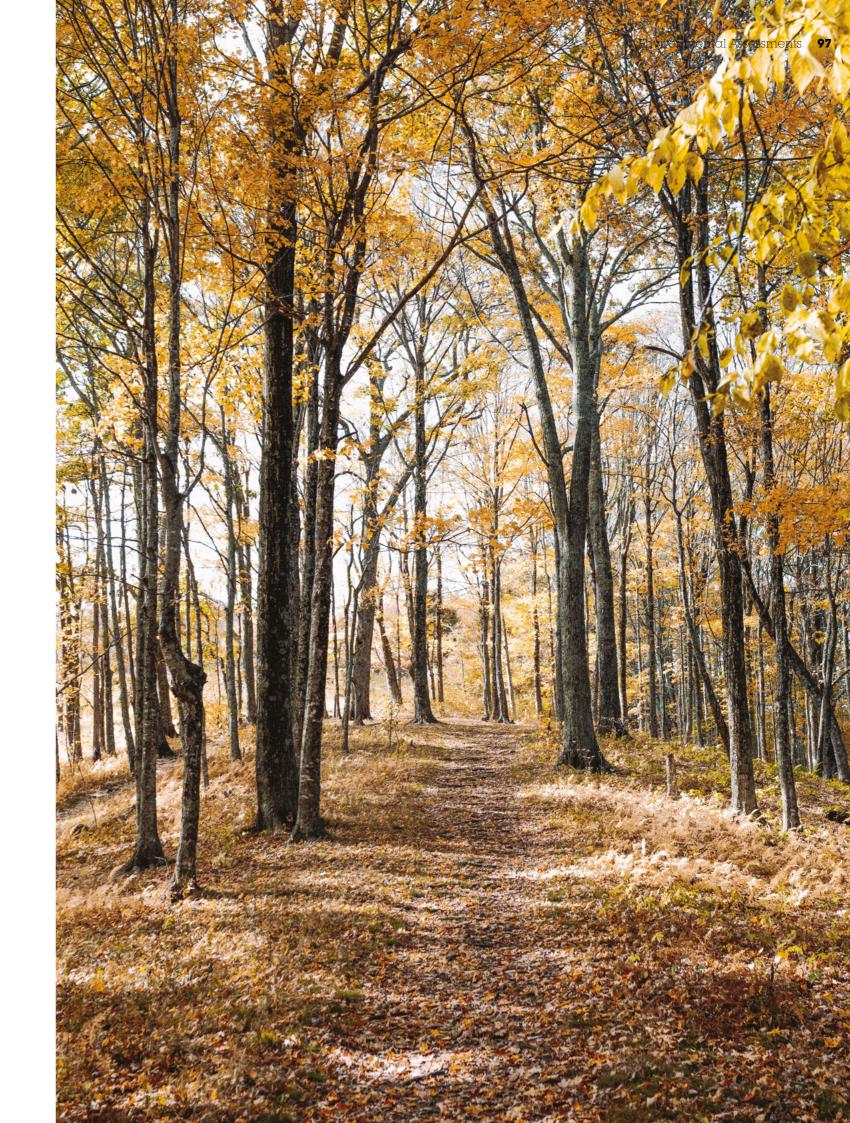
Certification for the entire lifecycle of a building (applicable for nonresidential buildings; residential buildings and detached houses as well as urban planning and development) covers the entire process, from planning and construction, through use. Throughout the lifecycle, sustainability is considered over four key aspects:

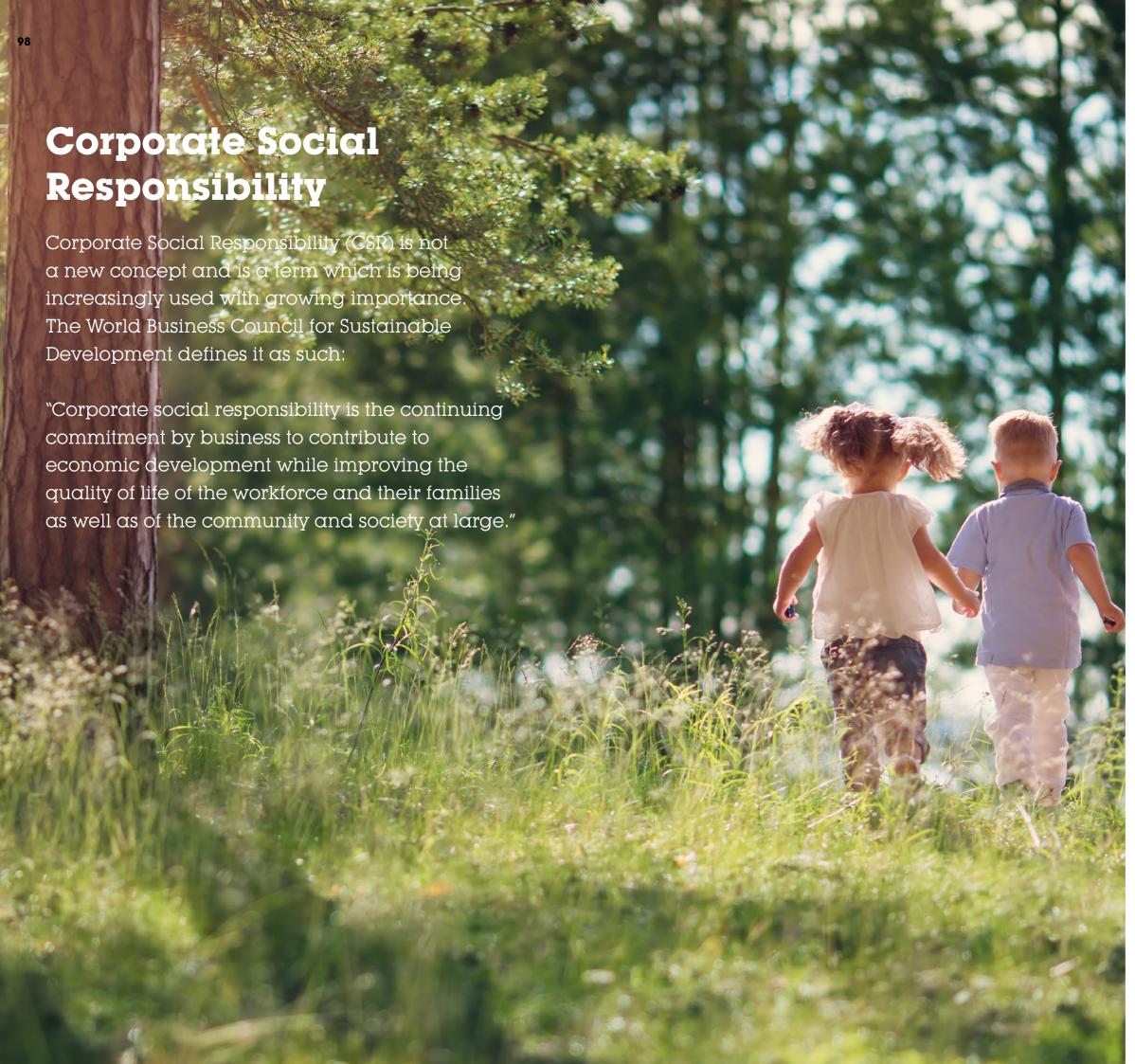
Quality of Life Respect for the Environment Economic Performance Responsible Management

## How Polyflor complies with HQE™

Many of Polyflor floor coverings comply with and contribute to HQE™ projects, by using the INIES FDES, a lifecycle assessment tool much the same as an EPD. For more information on this go to pages 76-77.

Many Polyflor ranges also have Afsset certification for low VOC emissions and some ranges are adhesive free for even better reduced emissions.







"Increasingly, we are all looking to purchase products and use services which come from companies who do the right thing, who are responsible. This is true in our every-day lives, as consumers and in

"Never has there been more demand for corporate social responsibility. Companies should demonstrate their sustainability credentials; encompass social and economic dimensions along with supply chain management and product stewardship. This is particularly true within the flooring industry."

### Sonia Goode,

Sustainability Market Manager, Polyflor Ltd.

# Commitment to our Supply Chain

Polyflor is certified to Quality Management System (QMS) ISO 9001 and ISO 14001, which sets out the criteria for an Environmental Management System (EMS) and maps out a framework for a company to follow in setting up an effective EMS.



Polyflor Supply Chain Management Goal: To communicate and work constructively with the supply chain to deliver sustainable policies and practices.

ISO 9001 and ISO 14001 are recognised globally and are standard practice for many organisations. As such, Polyflor prefers approved and trusted suppliers who are ISO 9001 and 14001 certified or have robust environmental procedures and where possible are local to our manufacturing sites. Polyflor also uses Quality Assessment Questionnaires and follows up with regular meetings and audits.

Additionally, we have a responsible sourcing policy, plus SA 8000 ISO 45001, OHSAS 18001 and BES 6001 certification for responsible sourcing. SA 8000 is an international, auditable social certification standard for decent workplaces, across all industrial sectors. It is based on the UN Declaration of Human Rights, conventions of the ILO, UN and national law, and spans industry and corporate codes to create a common language to measure social performance. BES 6001 is a framework Standard from BRE Global for Responsible Sourcing, which helps Polyflor manage and reduce impacts throughout the supply chain. Polyflor's parent company, James Halstead PLC, also has a Modern Slavery Act Statement, underlining the steps taken to prevent modern slavery and human trafficking in its business and supply chains. Go to www.polyflor.com for more information.

As part of our ongoing BES 6001 objectives, we assess our suppliers on their business procedures and ethics as well as their commitment to the reduction of environmental impacts. With regards to the environmental impacts associated with suppliers' transport operations to and from our business, we encourage the use of energy efficient vehicles and adequate driver training to improve vehicle fuel efficiencies. For main suppliers, Polyflor's target score of more than 90% should be achieved on the following criteria: Supplier vehicles used to deliver raw materials to site have modern Euro V or Euro VI

energy efficient engines and suppliers ensure that adequate driver training has been given to ensure maximum fuel efficiency. In 2020, Polyflor's suppliers achieved beyond our targets with an impressive score of 97% for both criteria.

Another of our objectives is purchasing in bulk to minimise the transport impacts of our products, ensuring >90% of bulk deliveries are above the minimum load size of 23 tonnes. In 2020 we achieved this with 93%

We also work with suppliers with the closest possible proximity to the Polyflor production sites. Our target is 85% of raw materials to be supplied within 500 miles of the factory. For the second year we achieved 77%. We haven't changed our objectives or changed suppliers for any commercial gain outside our policies, other than responding to economic factors outside our control which caused the deviation from our figures.

### **Proximity of Suppliers**

- Within 50 miles = 53%
- Within 100 miles = 55%
- Within 500 miles = 77%

In 2020, 100% of Polyflor's raw material suppliers achieved ISO 9001 (a 1% increase), 92% for ISO 14001 (1% increase), 88% achieved OHSAS 18001 (an increase of 6%) and 99% hold Modern Slavery Act Compliance certification. The commitments shown by our suppliers to improve are very encouraging.



# **BES 6001 Responsibility Matters**

Responsible Sourcing is defined in BS8902 - Responsible sourcing sector certification schemes for construction products – Specification as: 'The management of sustainable development in the provision or procurement of a products.' Sustainable development is further defined as: 'An enduring, balanced approach to economic activity, environmental responsibility and social progress.'

Source: www.greenbooklive.com

For many years now there has been certification for responsible sourcing, including Fair Trade; RFS (Responsible Fishing Scheme) and FSC (Forest Stewardship Council). Whilst the FSC standard provides assurance for products harvested from well managed forests including wood flooring - there hasn't been to date a standard available for all flooring and construction products.

### What is BES 6001?



The BES 6001 standard, from BRE Global, is a means of securing certification to demonstrate through independent, third-party certification, that products certified against the scheme have been responsibly sourced. BES 6001 does not focus on a company's site, but products or ranges manufactured at one or more sites.

BES 6001 is a framework standard for Responsible Sourcing which sets out requirements under three main headings: Organisational Management; Supply Chain Management and Environmental and Social Responsibility Management. To meet the standard, companies must satisfy certain compulsory elements. Additionally, there are higher levels of compliance that can result in a higher performance rating being awarded.

Depending on a company's performance against the criteria, ratings are awarded on a Pass; Good; Very Good and Excellent basis. Polyflor sets the bar high, having been the only certified floor covering manufacturer to achieve an Excellent rating for Version 3 of the standard. By achieving Excellent, Polyflor has satisfied the compulsory sections and conforms to the highest levels of compliance, which has been a massive undertaking for the company - involving production, all other internal departments and its supply chain. Certification is available on www.greenbooklive.com.

### The Importance of BES 6001

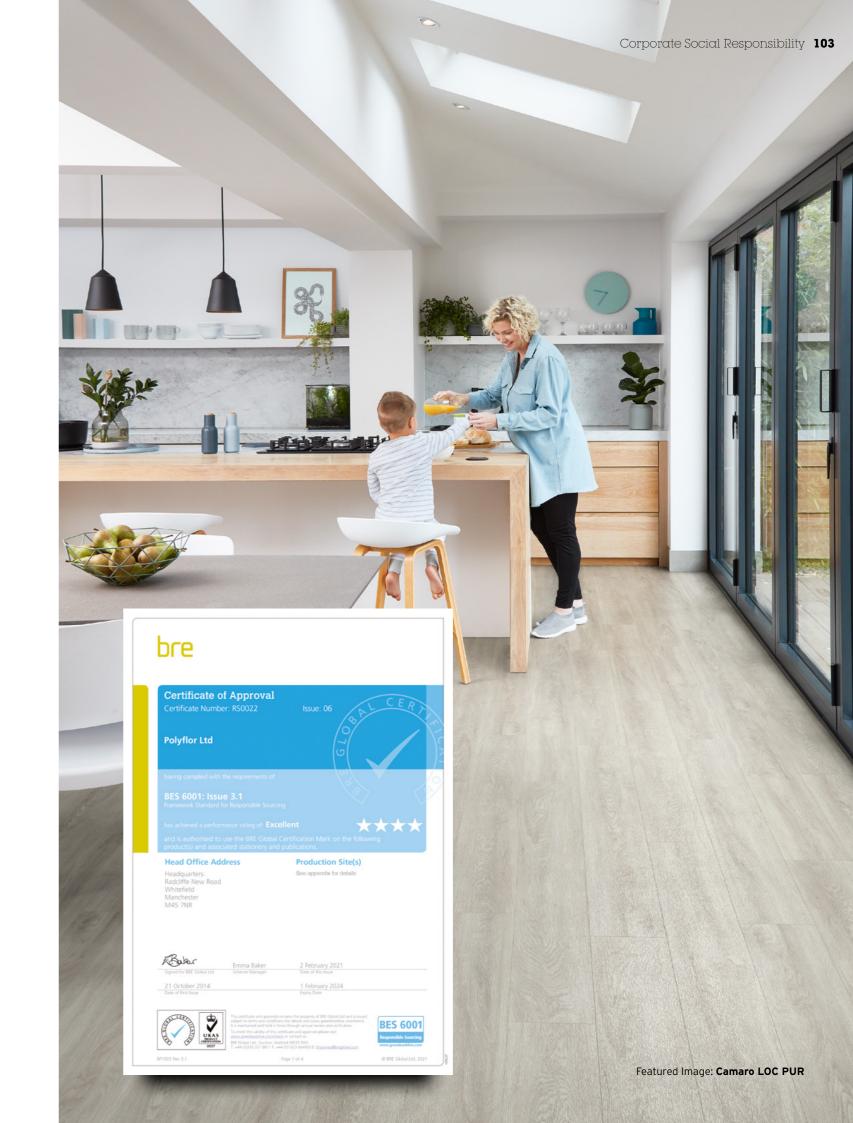
The UK Contractor's Group (representing over 30 leading construction companies who together account for a third of the UK construction industry turnover) state that: 'UKCG members support and give preference to procuring products which are able to demonstrate compliance with a recognised responsible sourcing scheme, certified by a third party.'

BES 6001 is just that. It is an increasingly important and valuable standard for customers who are looking to procure flooring with sound environmental credentials and traceability, from socially aware and ethical suppliers. Without doubt, the standard can help customers make better informed decisions when selecting suppliers.

The hard work and challenges set out by the BES 6001 framework has driven us to scrutinize our own supply chain more than ever before with greater commitment to using trusted, local suppliers who are ISO 9001 and ISO 14001 certified. Additionally, stringent and demanding environmental objectives have been set and managerial procedures and policies improved.

BES 6001 has also given Polyflor more direction with regards to social responsibility management - with a focus on internal procedures regarding employees, as well as how the company engages with local communities and stakeholders in general.

Furthermore, the use of Polyflor products with BES 6001 certification and individual BRE ratings can potentially contribute significantly to the available points in section MAT 03 of a BREEAM Assessment. Where many companies typically contribute 1 point through an environmental management system such as ISO 14001, Polyflor can provide an additional 3.5 points for its BES 6001 Excellent certification. For more information on this, refer to the 'Maximising BREEAM Credits with Polyflor' pages in this document. BES 6001 also secures additional credits within the Code for Sustainable Homes.



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# **Commitment to our Employees**

As a major employer, Polyflor has a responsibility to its employees, ensuring their health and wellbeing as well as reducing labour turnover, which remains low.

In fact, Polyflor has 25 and 40-year clubs for all employees who have been employed by Polyflor for the respective number of years, some of whom have worked for Polyflor for their entire careers, joining straight from school. Retaining an experienced and knowledgeable workforce is extremely important to Polyflor.

Polyflor recruits internally and from the local, surrounding areas, advertising through local media, job centres, recruitment agencies and online. We offer graduate training programmes, internships and apprenticeships, in support of younger people wishing to develop their employment skills. Polyflor's Human Resources Manager is also a volunteer for the Chartered Institute of Personnel and Development's Steps Ahead Mentoring project, which offers jobseekers one-to-one mentoring to improve their employment skills in the local area.

As standard practice, Polyflor has numerous training and development programmes; total compliance to the Equality Act 2010; employment health & safety policies and procedures are in place, along with employee benefits available to all staff including a pension scheme, share scheme, plus enhanced maternity and paternity pay.

Polyflor engages with all its staff through annual Performance and Development Reviews and via our monthly forums, whereby employees are encouraged to voice any issues regarding the workplace through chosen representatives of each department. Meeting minutes are circulated company-wide, so there is full transparency on what has been discussed and any outcomes.

### Recruitment & Retention

- Low staff turnover with 25 and 40-year clubs
- Positions are advertised internally and within surrounding areas
- We employ graduate trainees, internships and apprentices with requirements reviewed on an annual basis

### Training & Development

- An induction programme is undertaken by new employees, including an environmental induction
- Annual appraisals identify areas of strength and opportunities or targets
- Professional development is encouraged through courses and training where both employee and employer benefit

- Promotion or opportunities in different departments are often distributed internally throughout the business, although obtaining the right skill set is important so positions are advertised to external candidates
- Polyflor engages with all staff regarding environmental issues, directly through email or letter as well as indirectly through www. polyflor.com, regular newsletters and this annual report which is circulated throughout Polyflor
- The Polyflor floor fitting school is accessible to employees, which improves their understanding of Polyflor flooring and provides transferable skills for their own homes

### Equality

- · Equal opportunities & diversity policy
- · Modern Slavery Act Statement
- · Anti-bullying & Anti-discrimination policies
- Anti-ageist, 39% of employees aged between 46 & 55, with 27% (the next biggest age group) aged 56+
- Ratio of men to women is 83% to 17%
- 9% of female staff and 15% of male staff hold management and supervisory positions
- Employees are typically local and represent the social demographic of the local area
- Maternity and paternity policy; flexible working hours and return to work

### Employee Health & Safety

- BS OHSAS 18001, SA 8000 and ISO 45001
- · We circulate a 'handling stress at work' policy
- A health & Safety Management procedure is in place in accordance with HSG65, Health & Safety Executive Document Guidance
- Potential safety risks and incidents are reported for action and avoidance
- Accident reporting is in line with OHSAS 18001 guidance all workrelated injuries are recorded and followed up with a risk assessment and remedial action

- · No fatalities have ever been recorded in the company's history
- A Pedestrian Policy is in place including demarcated pedestrian pathways and crossings and high visibility vests are issued to employees or visitors who walk around our warehousing facilities
- Ear plugs are used in production, within hearing protection zones in various locations around the factory
- Occupational Health medical and fitness checks for new employees as well as ongoing health checks for employees, particularly Polyflor fleet drivers
- Work zone assessments are conducted by Polyflor's occupational health nurse

### **Employee Benefits & Wellbeing**

- Pension Scheme for every employee after 3 months of employment with Polyflor
- · Company social club for all employees
- Break out zones, with seating and facilities to buy or prepare food are available on all sites
- · Areas to sit outside are accessible at all Polyflor sites
- We enable and provide time for employees to undertake voluntary work
- Bike sheds and shower facilities are obtainable at the Whitefield site

## 2020 Update

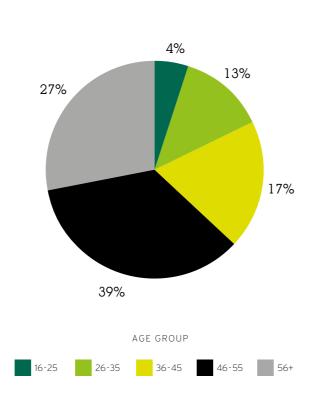
|  | 2016 | 2017 | 2018 | 2019 | 2020 | +/-   |
|--|------|------|------|------|------|-------|
| Employment & Turnover                      |      |      |      |      |      |       |
| Total Employees                            | 515  | 477  | 493  | 485  | 471  | -3%   |
| New Recruits                               | 31   | 21   | 43   | 45   | 22   | -51%  |
| Labour Turnover                            | 13%  | 13%  | 8%   | 11%  | 6%   | -45%  |
| Contracts                                  |      |      |      |      |      |       |
| Full Time Employees                        | 496  | 461  | 482  | 473  | 456  | -4%   |
| Part Time Employees                        | 19   | 16   | 11   | 12   | 15   | 25%   |
| Temporary Employees                        | 9    | 5    | 24   | 10   | 9    | -10%  |
| Apprenticeships                            | 2    | 0    | 0    | 0    | 0    | 0%    |
| Equality                                   |      |      |      |      |      |       |
| Male Employees                             | 432  | 394  | 412  | 400  | 390  | -3%   |
| Female Employees                           | 83   | 83   | 85   | 85   | 81   | -5%   |
| Male Managers                              | 57   | 53   | 57   | 57   | 57   | 0%    |
| Female Managers                            | 10   | 8    | 9    | 7    | 7    | 0%    |
| Retention                                  |      |      |      |      |      |       |
| Internal Promotions                        | 6    | 2    | 4    | 7    | 6    | -14%  |
| Employees Undergone<br>Training Programmes | 75   | 100  | 95   | 103  | 471  | 357%  |
| Total Employees in 25-Year Club            | 81   | 69   | 41   | 73   | 80   | 10%   |
| New Members in 25-Year Club                | 8    | 13   | 1    | 11   | 7    | -36%  |
| Total Employees in 40-Year Club            | 9    | 10   | 10   | 11   | 11   | 0%    |
| New Members in 40-Year Club                | 4    | 2    | 1    | 1    | 0    | -100% |
| Health & Safety                            |      |      |      |      |      |       |
| Loss Time Accident (LTA)                   | 11   | 6    | 14   | 16   | 4    | -75%  |
| Actual Days Lost through LTA               | 348  | 96   | 133  | 111  | 27   | -76%  |

Some key performance indicators for Human Resources were down in 2020 compared to the previous year. However, despite it being a very challenging year, Polyflor still achieved a number of positive outcomes: The company recruited 22 new employees and labour turnover fell by 45%, the best employee retention in 7 years. 6 internal promotions were also offered and employee training programmes increased by over 350%.

As testament to Polyflor's success in retaining valued and experienced employees, 7 new members joined the 25-Year Club, increasing its total by 10% with 80 members. The 40-Year Club remained the same, with 11 members, but cumulatively, the 25 and 40-Year Clubs, made up an amazing 19% of Polyflor's workforce.

### Putting in a Shift!

In 2020, Ian Dalley, a factory process worker, celebrated his 50-year anniversary with Polyflor. A 40-Year Club member, Ian was a valued member of the Polyflor family and an active part of the factory tours until his recent and well-earned retirement.







# Commitment to our Communities

As a responsible manufacturer, Polyflor has a duty of care to ensure that the impact of day-to-day operations from its business to the local community is minimal.

As such the company has procedures and policies to address issues which may arise in line with ISO 14001 and BES 6001, including a robust complaints procedure. These issues are regularly reviewed at Environmental Steering Meetings and it is the responsibility of the Directors to initiate a project in instances where the source of a complaint is persistent and requires a solution. Where a complaint form is received the company has a formalised procedure as per its BES 6001 objectives to respond and action within 7 days of receiving it. The recording of these complaints is audited and reported on annually.

Polyflor's Whitefield site is the original production site and located within a residential area (the site is 100 years old and older than many of the nearby houses). For this reason, continued efforts to reduce noise pollution and emissions remain important for harmonisation between this production site and its neighbouring residents. As well as ensuring HGVs turn off engines during evening and early morning deliveries and collections, investment has also been made into acoustic engineering and into new electric forklift trucks, to help minimise noise levels.

Despite Polyflor's best efforts to prevent complaints in the first instance, they can fluctuate year on year, with the nature of complaints (some unjust, some ongoing) sometimes being difficult to control. Polyflor strives to minimise such complaints and continues to interact closely with the community. 5 complaints were received in 2020 and were promptly handled - this was a 44% reduction against 2019. 2 of the complaints related to noise issues; 2 light pollution and

1 a weight restriction. Given the proximity of the 100s of residents to this 24-hour (Monday to Friday) production site, we believe this is acceptable, but of course we do everything possible to prevent complaints from the outset.

As part of ongoing CSR commitments, Polyflor continues to liaise with and support the local communities in which it operates. It is particularly important to give something back to local communities, as well as contributing to causes further afield. Polyflor encourages its staff to engage with charitable organisations and events, as well as supporting individuals on a charitable basis, either financially or enabling volunteer work.

When we are involved in donating flooring to charitable projects, the marketing, sales and distribution teams invest time through support and communication: They work together in arranging a suitable product, ordering and despatch. There is a duty of care in ensuring the right flooring is specified and followed up with appropriate customer aftercare. Additional time is allocated through volunteer work and 10 hours were accrued in 2020, in the UK alone.

In 2020, Polyflor supported 9 charitable projects by donating £16,450 worth of flooring to numerous individuals, groups and organisations locally in the UK, including Reuben's Retreat, The Basement Recovery Project, Dogs 4 Rescue, Age UK (Sheds for Men) and Children in Crisis.

## **Polyflor's Highlights**

### Reuben's Retreat

Having already donated flooring to the first phase of this inspiring charity's premises in Greater Manchester, several years ago, Polyflor was approached to supply more flooring free of charge to the second phase of the development.

'Reuben's Retreat is a home-from-home for families bereaved of a child and for children with life limiting or threatening conditions and their parents and siblings."

### www.reubensretreat.org

Polyflor was happy to donate Stone fx PUR, Expona Flow PUR and Hydro, as well as necessary weld rods, free of charge to this charity. We are confident the 235m<sup>2</sup> of Polyflor flooring will help create a stylish and relaxing environment.

### The Basement Recovery Project

Another charity project Polyflor helped 8 years ago, with their Head Office's relocation, asked for more help at 'Basement House', a support centre for those struggling with drug or alcohol addiction.

'TBRP offers a self-help pathway from chaos to recovery providing structured day programmes aimed to achieve abstinence, community detoxification services, sober-living accommodation with therapeutic support 24/7 and many community-run projects.' Heath Gray, The Basement Recovery Project, www.thebasementproject.org.uk

Polyflor donated 200m<sup>2</sup> of its Polysafe Standard and weld rods free of charge to the newest phase of this project: TBRP had purchased the building next door to expand their space and capacity to better support their community.

### **Children In Crisis**

Polyflor was approached to provide FOC flooring to a very deserving and inspirational lady in Manchester. Gail Affen, who fosters children (often 5 at a time), needed extensive work doing to her home to improve conditions for the children she cares for (for which she has won numerous awards). Having been let down by several builders, Gilbrides Ltd (Owen & Son) wanted to help her and so did wel. Polyflor donated 12m<sup>2</sup> of Wood fx PUR and 20m<sup>2</sup> of Designatex, plus matching



### The Big Build - Weston-super-Mare (DIY SOS Series 31)

The Sweet family in Weston-super-Mare are happy and truly inspirational in their close-knit community. Louisa (14), Max (11) and Harry (6) were born healthy, and family life was good until Harry was diagnosed with a genetic condition called Ehlers-Danlos syndrome. He is significantly hypermobile and suffers terrible pain in his joints, unsettled sleep and chronic constipation as part of his condition. He is also being assessed for autism

The family had been struggling with Harry's health issues for three years when, in 2017, after genetic testing, Louisa and Max were diagnosed with Friedreich's ataxia, a rare and life-limiting neurodegenerative condition for which there is currently no treatment or cure. It will see them become permanent full-time wheelchair users in their teens, and it may affect their speech, fine motor skills and vision. They also have enlarged hearts and spinal scoliosis, and suffer fatigue as part of their condition, but like Harry

they are children to be truly admired. Amazingly, Max, who is also being assessed for autism, has stated that if he dies he wants to donate his organs to save other children, but his mother Cat just can't face filling in the forms.

Cat can no longer lift the children in and out of the bath or carry them up the stairs. Louisa and Max only manage the stairs by carefully and painfully crawling on all fours, which takes considerable time and effort. Both of the boys are already part-time wheelchair users, and their tiny home will soon have to accommodate three wheelchairs.

All three children now struggle with basic normal life at home, unable to undertake simple tasks without help, and with Louisa rapidly losing her teenage independence instead of gaining it, despite the immense love and care from their inspirational parents Cat and Chris, DIY SOS and kind local volunteers are stepping up to help this truly deserving family.

# Surfability UK transform their Caswell Bay, Swansea Surf Centre

On Thursday, 12th November, Nick Knowles hit our screens with a BBC Children In Need Special of DIY SOS: The Big Build. DIY SOS and their impressive team of volunteers joined forces with Children In Need and unique community interest company, Surfability UK to transform their Caswell Bay, Swansea Surf Centre.

Surfability UK provides surfing lessons and experiences for people with disabilities and learning difficulties however they were operating from a dilapidated out of use bus stop shelter. Ben Clifford, Director of Surfability commented "We started operating from a van in 2013, then in 2016 got our current building. We have loads of problems with flooding, the plaster is falling off and it just isn't suitable for our needs, and those of the people that we support.

Thanks to the hard work of the DIY SOS team the inclusive surf school now operate from their state of the art eco-friendly surf centre which is fully equipped to meet all the needs of those it supports. The building's design is in a surfboard shape, and features colours to fit into its landscape, with blue, grey and driftwood shades. It also features a grassed roof.

The transformation could not have been achieved without the work of the many volunteers involved in the build and the helpful donations made. When it came to choosing the right materials for the flooring, DIY SOS turned to Polyflor as the UK's leading vinyl flooring manufacturer. Polyflor donated Polysafe Quattro PUR, in the shade Cool Pebble to be used across the space. Polysafe Quattro is a safety floor offering sustainable slip resistance in continually wet

areas whether barefoot or shod and was the perfect choice for the establishment, offering protection against slips, trips and falls. The neutral tone of Cool Pebble complemented the aesthetic of the building and Polysafe Quattro's polyurethane reinforcement(PUR) provides low maintenance benefits, ensuring the flooring is easy to maintain and kept looking great.

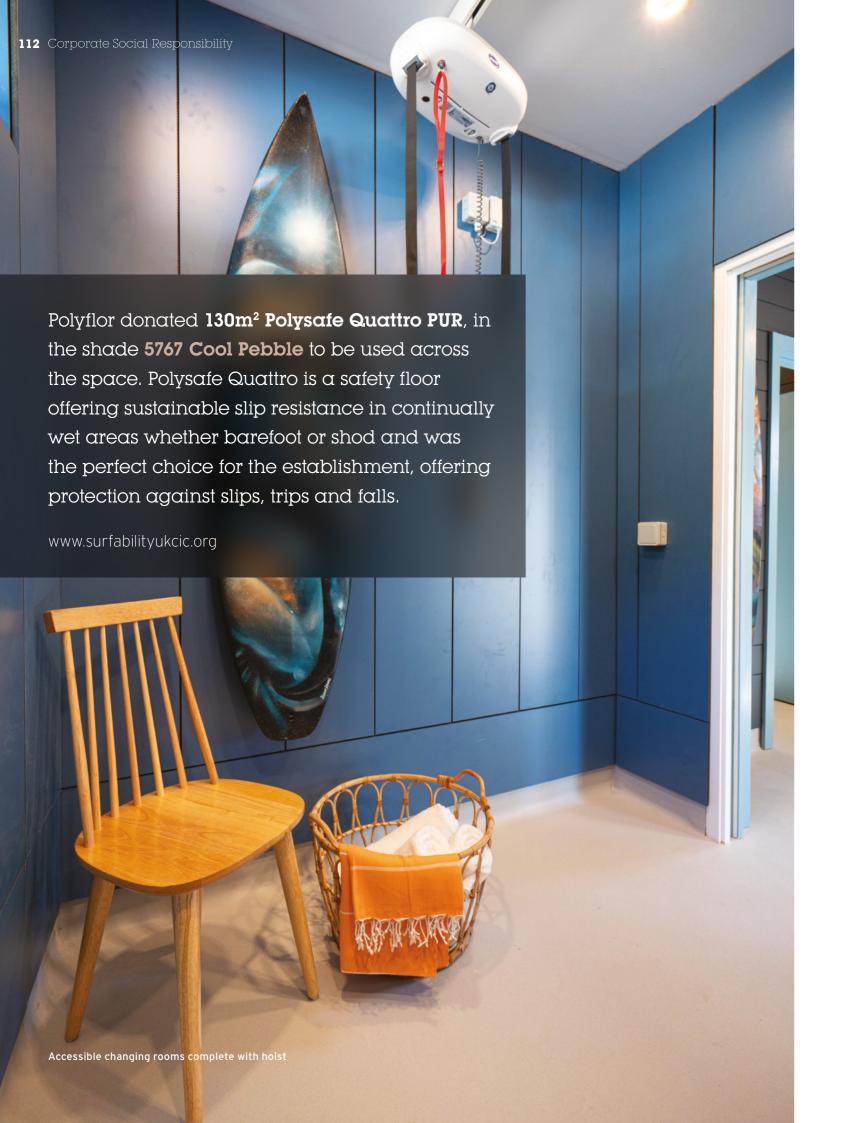
The impressive project was turned around in just 24 days and Polyflor were thrilled to have been able to support such a worthy cause. Before this, the kids were having to be changed in car parks or a bus shelter but now have a lovely and dry place to change in privacy. Nick Knowles, DIY SOS Presenter commented 'We are so grateful and materials to get us here'. The build has taken the operation to the next level, benefiting so many disabled people in Wales and across the UK.



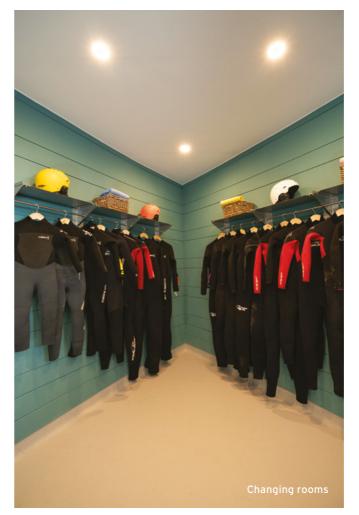


Surfability UK provides surfing lessons and experiences for people with disabilities and learning difficulties











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# **Economic Sustainability**

Over the last 100 years the expansion of Polyflor's parent company, James Halstead PLC, has been managed by four generations of Halstead's. Established by James Halstead himself in 1915, the company's original trade was the waxing and showerproofing of cloth for raincoats, before expanding into flooring in 1934. Today, Polyflor is an increasingly successful company, providing economic and environmental sustainability.

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Our strategic focus remains on flooring, although the strategy evolves over time, focus on sustainable growth is undiminished. This, therefore, underpins job security for Polyflor employees and benefits all stakeholders in the business.

Polyflor goes from strength to strength as a global organisation with a dominant market share in the UK and listed on the AIM market of the London Stock Exchange with a nine-figure turnover, where it celebrates over 70 years as a listed company.

Despite the difficulties faced by many businesses during the Covid-19 pandemic and certain sectors slowing down, the healthcare sector remained robust and Polyflor continued to perform well despite the socio-economic threats playing their part.

"I am very pleased to report [these] improved figures, and all credit to our workforce for their efforts in the face of great uncertainty and major challenge. Trading continues to be solid."

Mark Halstead, The Chief Executive, James Halstead PLC

Polyflor continued to cover the world with a depth of projects spanning the likes of Le Théatre des Folies Bergère, Paris; the World Fashion Center in Amsterdam; Enigma Museum in Poznan; Ibrox Stadium refurbishment, Glasgow; Knock Airport in County Mayo; branches of Toys "r" Us, across Germany; Johnson & Johnson Pharma in Mumbai; Van der Valk hotels in the Netherlands and Expona EnCore Rigid Loc, featured in the BBC renovation show "Your Home Made Perfect".

2020 saw a surge in flooring requirements for the healthcare sector, with global projects from the Mahala Hospital in Gharbia Egypt; the

Kopanong Regional Hospital in South Africa; St. Michael's Hospital in Toronto and the Haugesund hospital in Rogaland Norway, to name a few.

Healthcare has always been an area of core competence for Polyflor's businesses and alongside the urgent demands of the NHS, and particularly the Nightingale hospitals, we supplied flooring to 12 modular hospitals in Argentina; 13 hospitals in Mexico and 11 hospitals in South Africa.

Additionally, we supplied flooring to the Serum Institute of India in Pune for expansion of production of the Astra Zeneca AZD1222 vaccine.

Polyflor's economic sustainability, growth and success are largely attributed to the depth of its customer focus. Polyflor has strong relationships throughout the supply chain and does not price-fix or undermine pricing structures, ensuring economic sustainability for our customers globally.

Polyflor's ongoing commitment to Research and Development through advanced technology has resulted in the creation of innovative and market leading products, with New Product Development at the core of Polyflor's business philosophy.

Polyflor continues its investment in Recofloor, the UK's leading recycling scheme for waste vinyl flooring. Our dedication and investment are implemented through financial and operational support across the scheme. Recofloor is a cost-effective solution for managing waste. It is free if waste is taken to a distributors' drop-off site, or a nominal cost is applied if waste material is collected from a specified site - this offers a saving of up to 70% when compared to landfill, which is financially beneficial for our customers.

Polyflor is a major employer in Greater Manchester and Teesside, providing jobs within sales, marketing, graphic design, human resources, I.T, purchasing and finance, as well as production, engineering, technical, warehousing and distribution. Our uncompromised business ethics ensure that we minimise risk wherever possible, given the responsibility we have within the supply chain and to our employees. As a supplier we try to ensure timely deliveries and as a customer, timely payments, without imposing unrealistic payment terms. As a medium sized UK manufacturing company, we continue to pay fair and competitive salaries to our employees as well as paying tax in the UK, thus fully supporting the UK economy.

# **Our Credentials Guide**

## Sustainability & CSR

Environmental and Corporate Social Responsibility management ensures continual development and progress, where it matters. The external audits and certification listed, assure that this is our priority and that we will continue to report transparently on key metrics regarding our culture, operations and stakeholder engagement.

| Certification  |   | What it means   |
|----------------|---|---|
| ISO 14001      | SGS SGS   | ISO 14001 sets out the criteria for an Environmental Management System (EMS) and maps out a framework for a company to follow in setting up an effective EMS.   |
| ISO 9001       | SGS   | ISO 9001 is a certified quality management system (QMS) for organisations who want to prove their ability to consistently provide products and services that meet the needs of relevant stakeholders.   |
| BES 6001       | BES 6001 Responsible Sourcing www.greenbooklive.com | BES 6001 is a framework Standard from BRE Global, for Responsible Sourcing, along with an associated independent third-party certification scheme. BES 6001 will help organisations manage and reduce the impacts throughout the supply chain. The scheme is recognised by the BREEAM family of certification schemes and the Code for Sustainable Homes where credits can be awarded for construction products independently certified through BES 6001. |
| SA 8000        | 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0             | SA 8000 is an international, auditable social certification standard for decent workplaces, across all industrial sectors. It is based on the UN Declaration of Human Rights, conventions of the ILO, UN and national law, and spans industry and corporate codes to create a common language to measure social performance.  |
| BS OHSAS 18001 | SGS SGS   | BS OHSAS 18001, a framework for an occupational health and safety management system.  |

**What it means to you:** Our certification gives you peace of mind on matters that matter to all of us as businesses and consumers. We all want to purchase best quality products and services from ethical, responsible and caring companies.

## **Environmental Life Cycle Analysis**

Environmental LCAs are important in understanding a product's environmental performance over its entire journey, from materials sourced and used to the end of life. Every product has an environmental impact. An LCA therefore, helps identify each critical step, associated impact and performance.

| Certification |  | What it means  |
|---------------|--|--|
| BRE           | ON THE PROPERTY OF THE PROPERT | The BRE (Building Research Establishment) is an independent organisation which evaluates the environmental impact of a product. Using a Life Cycle Analysis (LCA) over a building life of 60 years, materials are assessed on their impact against a series of environmental criteria and performance is rated from A+ to E. Individual assessments relate to specific production data for the product, whereas generic ratings are derived from industry-wide production data and averaged. |
| IBU EPD       | EPD (Instate Bayer)  | Polyflor's product specific EPDs are verified by IBU (Institut Bauen und Umwelt e.V.) - an independent, environmental organisation which works closely with construction and environmental authorities in Germany. Product specific EPDs available on www.ibu-epd.com/en/published-epds  |

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| ERFMI EPD  | ERFMI.                    | Generic EPDs are available via ERFMI (European Resilient Flooring Manufacturers' Institute), which provide transparency on environmental impacts. Generic EPDs available on www.ibu-epd. com/en/published-epds |
|------------|---------------------------|--|
| INIES FDES | FDES<br>VÉRIFIÉE<br>Inies | INIES provides environmental and health declarations of products for evaluating the performance of construction works. The INIES FDES is an independent third-party audit. To view FDES, visit www.inies.fr    |
| GreenTag   | GREEN TAG<br>CERTIFIED    | GreenTag is Ecospecifier's Conformity Assessment Body (CAB) and Polyflor's products are certificated to meet GreenTag requirements.  |

What it means to you: Our products' LCAs give you a better understanding of all the associated environmental impacts and how they perform, helping you to compare products and make informed choices for specification.

## Recycling

Recycling has always been important to us and continues to be a top priority. In operating our own recycling schemes as well as being part of external recycling initiatives, we are committed to minimising this sector's environmental impact and embracing Circular Economy principals.

| Organisation                                      | What it means  |
|---|--|
| Recofloor Recofloor™                              | Polyflor is co-founder and owner of Recofloor the UK's leading recycling scheme for smooth and safety offcuts and uplifted smooth vinyl flooring. This scheme is also used in Australia, New Zealand and Iceland.                    |
| Polyflor RVF SA POLYFLOR RECYCLING VINYL FLOORING | The Polyflor Recycling Vinyl Flooring scheme is an independent recycling scheme in South Africa, collecting waste Polyflor vinyl flooring.   |
| AgPR AgPR   | We work with AgPR (Arbeitsgemeinschaft PVC-Bodenbelag) to reclaim recycled vinyl flooring waste from Germany/EU.   |
| PVC Next PVC SOURCE NEXT                          | PVC Next is France's national waste vinyl flooring recycling scheme, funded by James Halstead France and 4 other manufacturers within the Kaléi association.   |
| Recovinyl recovinyl plus                          | Recovinyl is a PVC recycling scheme, set up to encourage companies to recycle post-consumer PVC. The aim of the scheme is to increase the amount of PVC recycled by establishing sustainable collection and processing arrangements. |

What it means to you: Using one of our recycling schemes, or an affiliated scheme helps to avoid the concern of needlessly sending waste to landfill. You are improving your carbon footprint and could be saving money too. The Recofloor scheme, for instance, could save up to 70% for arranged collections (compared to landfill), or it is FOC when using one of our participating distributors. Recycling your Polyflor flooring helps with site waste management plans and may contribute towards credits for 'waste' on a BREEAM assessment.

## Health

We want our floor coverings to be healthy for the environment and for our customers. Our ranges are non-shedding and do not harbour dust. They do not contain harmful substances; are REACH compliant and are certified to assure very low VOC emissions for best indoor air comfort and quality.

| Certification & Authorisation  | What it means  |
|--|--|
| IAC Securifies Production Product | Indoor Air Comfort (IAC) product certification by Eurofins, provides compliance to low VOC (Volatile Organic Compounds) emissions requirements of European specifications.  Indoor Air Comfort Gold certification shows a higher level of compliance, meeting criteria of many voluntary specifications issued by most relevant ecolabels and similar specifications in the EU. This is 'best in class' and good for indoor air quality, posing no risk to health. |
| FloorScore® Score  | FloorScore® product certification by SCS Global, ensures that certified flooring meets strict indoor air quality (IAQ) emissions criteria of LEED; CHPS; The Green Guide for Health Care, and is recognised by a long list of healthy building programmes.   |
| Afsset  EMISSIONS DANS L'AIR INTÉRIEUR  A+ A B C   | Afsset (L'Agence Française de Sécurité Sanitaire de L'Environment et du Travail) tests construction products compliance to the French Government's regulations regarding VOC and formaldehyde emissions.   |
| M1 M1 SARAN ONLOW  | M1 is the short version name of the Finnish voluntary emission classification of building materials. M1 is the lowest VOC emission class of that system.   |
| REACH REACH  | REACH is a European Union regulation concerning the Registration, Evaluation, Authorisation & Restriction of Chemicals. No harmful substances added, such as formaldehyde; asbestos and heavy metals. Plasticisers used by Polyflor are not classified substances and do not need authorisation under REACH. A range of mostly non-phthalate and ortho-phthalate plasticisers used across Polyflor's vinyl collection.   |

**What it means to you:** You will also improve well-being and comfort with beautiful designs and clean indoor air quality, attainable through our low VOC products with further reduced VOC emissions from the maintenance regime.

## **Environmental Listings**

Polyflor products are listed on various databases specifically for sustainable products, making specification options easier for green build projects.

| Organisation  |  | What it means  |
|---------------|--|--|
| DGNB Describe | GNB <sup>®</sup> the Geselbulut für Nachhaliges Rauen e.V. Sorranable Building Council | Our EPDs are listed on the DGNB database DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen e.V. / German Sustainable Building Council), which promotes sustainable and economically efficient buildings for the future. |
| BASTA         | BASTA  | Polyflor has registered, approved products on the BASTA database, BASTA is a non-profit organisation owned by IVL Swedish Environmental Research Institute and The Swedish Construction Federation.                      |
| Ecospecifier  | ecospecifier   | Polyflor is registered to Ecospecifier, a guide to eco and health preferable products, materials and technologies for the built environment.   |

What it means to you: You will also improve well-being and comfort with beautiful designs and clean indoor air quality, attainable through our low VOC products with further reduced VOC emissions from the maintenance regime.

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## **Memberships & Associations**

We like to be in the mix and keep abreast of current or potential issues and challenges, both within the industry and on wider environmental matters. This enables us to engage with stakeholders and react better to customer demands.

| Organisation  | What it means  |
|---|--|
| VinylPlus vinyl COMMITTED TO SUSTAINABLE DEVELOPMENT                            | VinylPlus is the voluntary sustainable development programme of the European PVC industry. It aims to create a long-term sustainability framework for the entire PVC value chain.  |
| PVC<br>Stewardship<br>(Australia)  PVC STEWARDSHIP                              | Polyflor Australia is a signatory to The Vinyl Council of Australia Product Stewardship Program. This program has voluntary commitments focused on Best Practice Manufacturing, Safe and Sustainable use of additives, Energy and Greenhouse Gas Management, Resource Efficiency and Transparency and Engagement. The commitments ensure that the entire process from raw materials through to end of life of vinyl products is reviewed and addressed to minimise environmental and safety issues within the vinyl industry, on a local and global scale. Visit www.vinyl.org.au/sustainability/stewardship |
| Kaléi kaléi   | Kaléi works with the government and informs its members on regulations and standards and partakes in environmental policy, with a commitment to sustainable development.   |
| UK Green Building Council  MEMBER 2018-2019  New Zealand Green Building Council | The Green Building Council is a non-profit, non-government, membership organisation covering more than 90 countries. The body's main aim is to facilitate dialogue between industry and government to promote sustainability in the construction sector.   |
| The Carbon Trust  CARBON TRUST  | Polyflor is working with The Carbon Trust to reduce energy consumption.  The Carbon Trust's Energy Management programme provides commercially viable solutions to help UK businesses and the public sector cut carbon, energy and costs.   |
| UKRFA UKRFA   | UKRFA (United Kingdom Resilient Flooring Association) - UK trade association for the resilient flooring sector.  |
| ERFMI.  | ERFMI (European Resilient Flooring Manufacturers' Institute - ensures the maintenance of high ethical standard within the industry.  |
| SAVA Southarn African Yough Association   | The Southern African Vinyls Association (SAVA) is a representative body for the local vinyl industry fulfilling an active role in the sustainability of the industry.  |
| Dementia Action Alliance  | Member of the Dementia Action Alliance which is committed to transforming the lives of those living with dementia in the UK, and partner of the International Dementia Design Network, hosted by the University of Salford.  |

What it means to you: By our involvement and networking with these key stakeholder organisations, we are part of these communities and can stay on top of issues that matter most to you and better meet your demands.

### Awards

Polyflor and our co-owned recycling scheme, Recofloor, have won environmental awards over recent years and while it is not about winning awards - it is about doing the right thing - we are proud to be acknowledged and rewarded for our sustainability efforts and hard work.

### Polyflor Awards





### Polyflor UK

Winner of Made in the North West Green Company 2015 Polyflor South Africa Winner of SAVA's Innovation in PVC Recycling 2017 Polyflor South Africa
PVC Stewardship Excel Award
2018-2019

### Recofloor Awards



Winner of CIWM (Chartered Institute of Wastes Management) Award for Environmental Excellence in the category of SME Innovative Practice, 2010



Winner of Let's Recycle Award - Excellence in Recycling & Waste Management 2016



Winner of Gold International Green Apple Environment Awards 2013, for Environmental Best Practice



Winner of MEN (Manchester Evening News) Environmental Business of the Year Award 2014



Winner of BCE (Business Commitment to the Environment) Premier Award 2011

What it means to you: Our awards provide further credibility and confidence in what we say and do.

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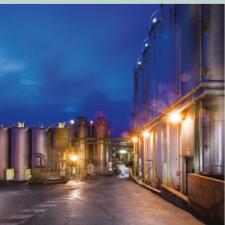
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