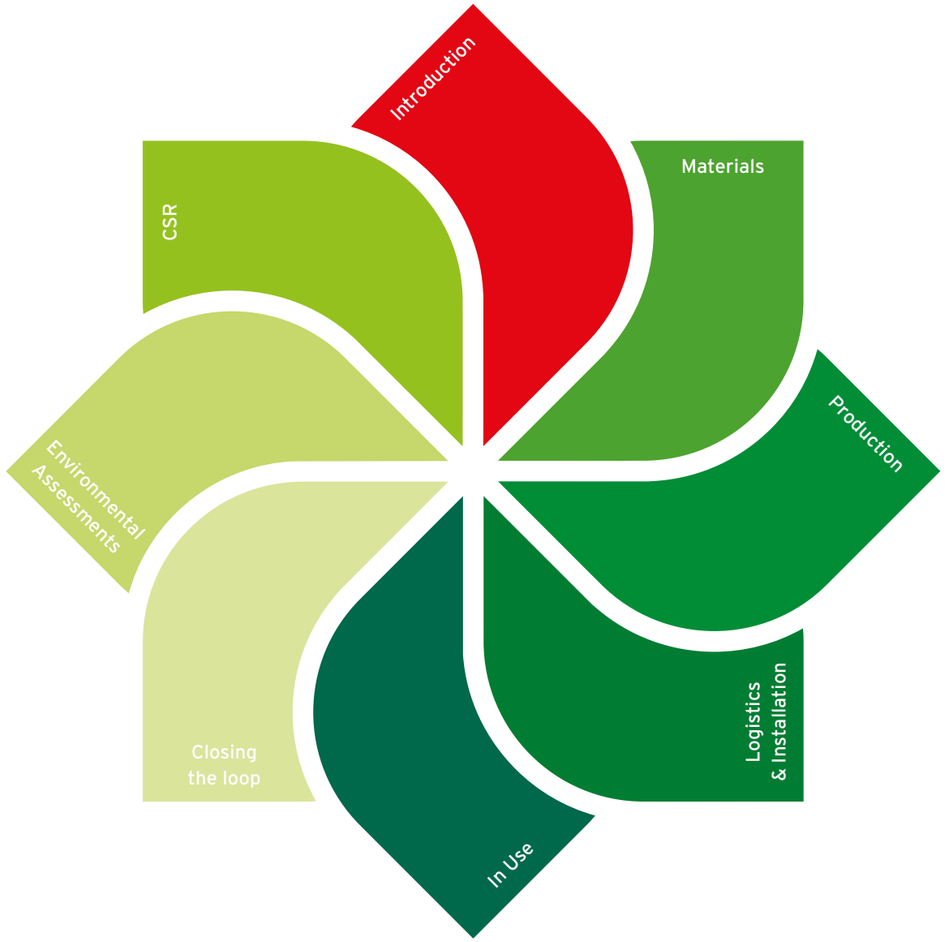
POLYFLOR™
COVERING THE WORLD

# Sustainability Report **2015**

Environmentally Preferable Flooring

# Contents





# Introduction

## Welcome to Polyflor's 10th report

The aim of this brochure is to clearly report Polyflor's sustainability performance for 2014. We have sound environmental, quality, responsible sourcing and CSR (corporate social responsibility) credentials and policies in place, but it is important to continue to build on this and openly communicate to all stakeholders.

Transparency is central at a time where environmental issues are of paramount importance and companies seek commercial advantage wherever they can. The term 'greenwashing' is one that we are all aware of and something that we want to avoid.

Polyflor's goal is to be as transparent and informative as possible, operating an open communication policy with all stakeholders. We will continue to report everything, regardless of outcomes. For instance, we recycled less post production vinyl waste in 2014 compared to 2013. This may be viewed negatively, but the fact is our commitment to minimise waste from the outset has and continues to have a positive impact on our waste management targets.

Furthermore, this is the first report to include data from our new manufacturing site in Teesside. While this is new and exciting, it is a big step and there will be some instances where the statistics vary considerably based on the figures of 2013 and beyond.

In recent years Polyflor has achieved many great accomplishments, including being the first vinyl manufacturer to achieve individual BRE A ratings (now A+ ratings); being the first commercial flooring manufacturer to achieve GreenTag LCARate certification and also being the cofounding member of Recofloor, the UK's market leading recycling scheme for vinyl flooring. In 2014 Polyflor was the first vinyl flooring manufacturer to achieve the BRE's standard for Responsible Sourcing, BES 6001 for many of its products, obtaining a 'very good' rating.

Despite such positive credentials, Polyflor recognises the need to continually improve its sustainability performance. Like all manufacturers, we have an environmental impact and we also have an important responsibility to minimise this impact. This report sets out to highlight our endeavours in doing so with further substantiation via BRE and EPD LCA (life cycle analysis) documentation.

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# From 1915 to the present date

## 1915

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

## 1950

Post production vinyl is recycled.

## 1992

ISO 9001 quality certificate attained.

## 1998

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

## 2000

Polyflor gains ISO 14001 environmental certification.

Polyflor signs up to the Vinyl 2010 commitment.

## 2003

First Environmental Brochure produced.

## 2005

First products are individually assessed by BRE Global.

First VOC emissions tests.

## 2006

AirStar system is introduced to production – fitted on reverse jet filters - reducing compressed air and carbon emissions.

## 2007

Polyflor joins a working group to recycle post consumer waste vinyl flooring.

Polyflor joins Recovinyl.

Installation of an automatic shutdown on granulators and presses.

## 2008

First VOC emissions certificates available.

Voltage optimisation on all lighting systems and automatic switch off of light on lighting levels.

Installation of Motorstar units on large extractor fans, reducing energy consumption.

## 2009

Polyflor cofounds and invests heavily in the Recofloor vinyl flooring recycling scheme for post consumer waste.

Recofloor™ Vinyl Take-Back Scheme

Recyclable paper packaging used, replacing plastic roll wrap.

Polyflor products go onto Ecospecifier database.

FloorScore VOC certification is achieved.

## 2010

LVT ranges achieve BRE A+ individual ratings.

PowerStar is implemented across the site, enabling voltage reduction without compromising supply. Annual energy consumption decreases by 12.8%.

First products achieve GreenTag LCARate certification.

## 2011

Polyflor's fleet has Euro 5 compliant engines for reduced emissions.

Polyflor joins Vinyl Plus.

AirStar system reduces Polyflor's carbon footprint by 20% since its installation in 2006.

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

vinyl plus

## 2012

SimpLay, loose lay LVT is launched – adhesive free for reduced environmental impact.

3rd party EN15804 EPDs available.

Indoor Air Comfort Gold VOC certification is available.

AFSSET indoor air quality labelling starts.

Recofloor has 1st Annual Awards Ceremony.

## 2013

Product Specific EPD's for three LVT collections; Expona Design; Commercial and Domestic. Generic EPD's for all 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 24m$^2$.

SA 8000 certification is achieved.

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

BES 6001 Responsible Sourcing www.greenbooklive.com

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

New fuel efficient trailer boxes added to the fleet, along with new driver efficiency policy, driver trainers and an increase of bulk loads and backhaul procedures to decrease carbon emissions.

Temperature control system fitted on all cooling towers automatically switching off cooing tower fans when ambient temperature is cold.

New variable speed compressor is installed to make further reduction on energy.

## 2014

Launch of 'Maximising BREEAM Credits with Polyflor' document.

Polyflor becomes a member of the BREEAM EPD verification scheme.

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

15,000m$^2$ of new improved roofing is installed at Teesside to provide better insulation and save energy.

Product Specific EPD for SimpLay, loose-lay LVT.

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

Camaro Loc PU is launched – adhesive free for reduced environmental impact.

Product Specific EPD for SimpLay, loose-lay LVT.

Recofloor has a record year, recycling 501 tonnes of waste vinyl flooring.

## MATERIALS

BES 6001 Responsible Sourcing
www.greenbooklive.com

'very good' rating

**1st flooring manufacturer** to obtain this standard and achieve 'Very Good' rating

UP TO 40%
recycled material

UP TO 85%
sustainable material

**REACH compliant:** NO Registered or banned substances

## IN USE

Low VOC - Indoor Air Comfort Gold; FloorScore; AgBB

POLYFLOR PUR LIFETIME POLISH FREE
Less energy & chemicals required

55%
Less water

20+
**YEAR LIFE**
Extremely durable with fewer replacements required

£ £ £ UP TO 60%
Saving on maintenance costs

Designatex — Textile backed luxury vinyl sheet flooring
Secura — luxury vinyl sheet flooring
CAMARO LOC FLOORING COLLECTION
SimpLay — Loose Lay vinyl floor tiles

Adhesive free ranges available

## PRODUCTION

11%
reduction in energy consumption

9,000
tonnes of $CO_2$ reduced since 2012

**15%** less energy than linoleum to manufacture and **50%** less than ceramic flooring

6%
waste reduction in 2014 from 2012 despite production increase

96%
water supply from recycled water

4% from mains

## DISTRIBUTION

Product wrapped in paper with recycled content

27%
reduction in $CO_2$ emissions from increased bulk loads

Polyflor owns its own efficient fleet


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## REUSE & RECYCLE

Recofloor™ Vinyl Take-Back Scheme

**Polyflor is a cofounder of Recofloor.**
Recycle smooth and safety offcuts, plus smooth uplifted vinyl

100%
Polyflor vinyl is recyclable

FREE
use of distributors' drop-off sites...

£ £ £ SAVE UP TO 75%
...or arrange project or contractors' site collections

2,177 tonnes collected since scheme started in 2009, that's 18,141 x 20m rolls - enough to cover...

100

THIRD-PARTY VERIFIED EPD Institut Bauen und Umwelt e.V.
A+ BRE ENP 415•429•472 ENVIRONMENTAL RATING
ISO 14001 SGS ISO 9001 SGS

# Our Vision

Polyflor's vision is to minimise carbon emissions as much as possible, 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 Environment, People and Economic sustainability.

The avoidance of emissions to the ecosystem

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

Active participation in industry initiatives and projects that improve environmental impact

Careful selection of materials, processing techniques and state of the art technology to reduce environmental impact

Compliance with circular economy principals

- Reduction of waste to a minimum
- Conservation of resources by use of recycling

Engaging and raising environmental awareness by regular and open communication with all stakeholders

To go above and beyond in the communities in which we operate

Best practice procurement and business ethics


# Sustainable Progress

Polyflor has for many decades been recognised as a leading global manufacturer of high quality, high performance floorcoverings, but in the 2014 Palmer Market Research Report for resilient flooring, Polyflor was also recognised as the leading sustainable company by flooring contractors.

## Polyflor's highlights for 2014:

### Energy Efficiency

- Improvements made to the Teesside plant included 15,000m$^2$ of new roofing for better insulation and lighting, plus installation of new burners on the plant boiler for more efficient heating (reducing costs by 10%)
- Reductions of 11% in energy consumption and 9,000 tonnes of $CO_2$ since 2012

### Waste Management

- Despite an increase in production, the waste tonnage actually fell by 6% compared to 2012
- Waste as a percentage of manufactured vinyl flooring fell by 1% to 3% in 2014.
- Recofloor continued to grow, as per the following KPIs:
  - Record year where 501 tonnes of post consumer waste vinyl flooring were recycled – enough to cover 23 football pitches
  - $CO_2$ savings equal to driving 48 times around the equator or taking 99 cars off the road for a year
  - 3 new drop-off sites and 111 new collectors, taking the total to 71 drop-off sites and 620 collectors
  - Won Manchester Evening News Environment Award for Environmental Business of the Year

### NPD

- Launched in September 2014, Camaro Loc PU is Polyflor's first locking system flooring and requires no adhesive. It can be recycled and comes with 40% recycled content; EN 15804 EPD; BRE A+ and BES 6001 certification
- Polyflor became a local and national member of the Dementia Action Alliance and partnered up with the International Design Network, hosted by the University of Salford

### Transport

- Targets in the previous MAN KPI system were attained: Polyflor Drivers achieved an overall B rating on their Driver KPI, where previously an overall C rating was attained
- A further decrease in carbon emissions from transportation has largely been due to the 8.5% volume increase of bulk load orders from 2013 to 2014. 2014 saw reductions of 6.02 kgs (16%) and 11.65 kgs (27%) of carbon emissions per tonne despatched, against 2013 and 2012 respectively
- Polyflor's backhaul operation increased by 32%, saving many unnecessary trips and increasing efficiency

### Assessments

- SimpLay gained a product specific EN 15804 EPD
- Polyflor became the first (and at time of print the only) flooring manufacturer to obtain BES 6001 certification for Responsible Sourcing, notably achieving a Very Good rating for many of its products
- Polyflor became a member of the BRE EPD verification scheme
- For the Australian and New Zealand markets GreenTag LCARate certification was achieved on the Polyclad PU Plus; Polysafe Verona PUR and Expona Supertile ranges

### CSR

- 2014 saw a significant boost in numbers to the 25 Year Club and the 40 Year Club, with 76 and 6 members respectively
- Staff turnover was higher in 2014, largely attributed to the number of retirees
- Despite this there were many positive outcomes with a 16% increase on new recruits and female employees
- There was a 20% increase on internal promotions compared with 2013
- In 2014 employees undergoing further training more than doubled 2013's figure
- Polyflor went beyond its BES 6001 targets – to liaise with and support at least 1 charity in each of its 3 operational sites across the UK. Polyflor assisted 4 local charities as well as 2 national charities

# Materials

"

PVC makes a major contribution to the quality, safety & cost-effectiveness 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*

# About Vinyl

Vinyl is a cost effective multi faceted plastic - a necessity in everyday life due to its flexibility, durability, performance and functionality. Used in flooring, cables, windows, packaging and medical equipment including blood bags and surgical tubing, this material is irreplaceable for many of its lifesaving applications.

It is important not to make decisions on a product's environmental performance, based solely on emotional rationale, but to view with an open mind and scientific approach. A life cycle analysis for instance, represents a holistic approach which cannot be dismissed. 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 is an environmentally sound choice. Over its whole life cycle, vinyl floorcovering performs comparably or better than competing materials across a range of 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. Landfill is the last option, but a safe one as vinyl remains chemically inert without producing leachate.

It is important to note that PVC is not a significant contributor of dioxin emissions. Power stations and the steel industry are the biggest man made producers 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. 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 occur naturally in the environment, for instance with natural fires and wood biodegradation.

Vinyl 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.
9. Can be recycled into more construction products than any other polymer.
10. Comes with a 10 year proven European-wide voluntary commitment.



# Polyflor Materials

Vinyl 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.

Polyflor floorcoverings predominantly use sustainable materials. The homogeneous range of products for example, uses up to 85% sustainable materials with the average being 71% across the range. This includes calcium carbonate filler. The high abundance of this material in the earth's crust makes it a sustainable material and its use diminishes the polymer content, thus reducing the usage of oil. The unique composition of vinyl flooring means that it is extremely practical, durable and has a typical life span of 20 years or more. It is incredibly efficient to recycle, which subsequently minimises the use of raw materials.

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 uses ortho-phthalates and non phthalate alternatives, including bio plasticisers.

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.

All raw materials used in the manufacture of Polyflor vinyl flooring are responsibly sourced from suppliers who, like Polyflor, are ISO 14001 certified or demonstrate robust environmental management. Polyflor follows the strictest industry regulations ensuring no harmful substances, such as formaldehyde; lead; cadmium; mercury or hexavalent chromium are included in our vinyl. All Polyflor products are REACh (Registration, Evaluation, Authorisation & restriction of Chemicals) compliant.

In addition to using suppliers and materials for best practice, Polyflor considers suppliers with the closest possible proximity to its production sites and purchases in bulk to minimise the transport impacts of its products, as part of the ongoing BES 6001 objectives:

- Where feasible to source bulk raw materials as close as possible to our business sites measured as distance (miles) from the factory.
  - 59% of all raw materials supplied within 100 mile radius (by Kg)
  - 82% of all raw materials supplied within 500 mile radius (by Kg)
  - 99.9% of all raw materials supplied within 1000 mile radius (by Kg)
- Ensuring 95% of bulk deliveries are above the minimum load size.

# Production

"

Sustainable Production includes the following elements:

1. Efficient use of natural resources, including materials, water & energy

2. Minimization of wastes & emissions, including those discharged to water, air or on land

3. Reduction of risks to humans & environment from use of chemicals and disposal of chemicals used in industry.

"

*United Nations Industrial Development Organisation*

# Energy Efficiency

From 2000 to 2011 Polyflor made significant progress in its energy consumption, making reductions of over 43%. Subsequently carbon emissions were also reduced by 15,236 tonnes in this time. This reduction in energy used has had a positive impact on greenhouse gas emissions and ultimately climate change. This has been and continues to be as a result of hard work on the company's environmental objectives.

## Polyflor 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 1 kg of frosted cornflakes, both at 1.9kg $CO_2$. Recycled PVC is just 0.3kg $CO_2$. Here are some other every day examples:

- 1kg Lamb = 14kg $CO_2$
- 1 kg Cheese = 11kg $CO_2$
- 1 kg Aluminium = 10kg $CO_2$

- 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'
- Typical life of 20-25 years means fewer replacements so less energy to produce flooring for the life of the building

2012 onwards includes data from our new production site at Teesside and during this time (2012 to 2014) Polyflor consumed 11% less energy per square metre of flooring produced, as well as reducing carbon emissions by 9,000 tonnes. In its first year of full data on energy consumption and carbon emissions, the Teesside plant was running at a lower capacity during this initial set up phase. However, much progress has been made over the last 3 years at our north east manufacturing site with production output and yield increasing significantly. Due to increased efficiency and a reduction in downtime of 2.7%, the amount of energy required to produce a square metre of flooring has reduced by 9.1% during this period.

During 2013 and 2014 a number of projects helped reduce energy consumption particularly at the Teesside site, including:

- In 2013 a new variable speed compressor was installed which generates the compressed air for the site, generating enough air to meet the variable demand depending on which equipment is running. A 5% reduction on energy has been realised compared to the old fixed speed compressor
- In the same year at the Whitefield site, a temperature control system was fitted on all cooling towers, automatically switching off fans when ambient temperature is cold
- In 2014 15,000$m^2$ of roofing was replaced with new improved roofing to provide better insulation and increase lighting
- Installation of new burners on the plant boiler provided more efficient heating and reduced costs by 10%

In previous years Polyflor has made numerous energy saving changes to support ongoing $CO_2$ reduction targets:

- The installation of the AirStar system at Whitefield reduced compressed air and significantly our carbon emissions by 20% in its first 5 years
- Powerstar implemented a voltage optimisation system, which uses a patented triple wound transformer, enabling voltage reduction without compromising supply. From this, results have shown that the site's annual energy consumption has been reduced by 12.8%
- Automatic shutdown systems for machinery and lighting - when not in use - were set up
- Motorstar units were fitted on large extractor fans

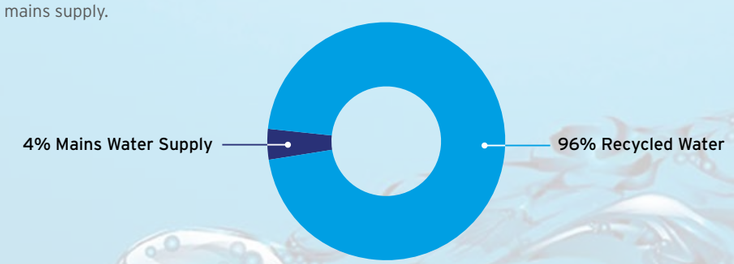
Working with

CARBON TRUST

# Water Use

Water is a natural resource which must be protected. Water usage can be high in many manufacturing plants, but Polyflor has taken a number of steps to ensure that water usage is minimised.

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.




In recent years the following steps have been taken to ensure that water usage is minimised throughout production:

- Optimisation of steam pressure
- Improvement of the efficiency of pumps and automatic controls
- Regular steam trap surveys
- Optimisation of cooling water temperature

In 2014 a filtering system was installed to filter lodge water for one of the production line's Cooling Towers, with the aim of substituting mains water with lodge water for process cooling. It is predicted that this has a potential to reduce annual mains water usage in 2015 by 10%-15%. This is an extremely positive step, given our objective to reduce water usage by up to 2% as $m^3$ per $m^2$ of flooring produced.

Water used on site from the mains supply is largely for steam and cooling tower usage and is linked to overall production volumes. 2014 saw a 5% reduction in water use compared with that of 2012.

| Year | $m^3$ |
|---|---|
| 2012 | 36,752 |
| 2013 | 34,347 |
| 2014 | 34,985 |

# 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.

In accordance with BES 6001, Polyflor's objectives to reduce waste to landfill in 2014 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.

### Production Waste Material Tonnes

Gross Waste (including waste recyled)


Vinyl material production volumes were up significantly in 2014 when compared with previous years. Despite the increase in production, our gross waste figure decreased in 2014 by 6% and 3% against 2013's and 2012's waste figures. Limiting the potential for waste at the outset will continue to be a priority.

The net waste material tonnage for 2014 actually fell by 6% compared to 2012 and net waste as a percentage of manufactured vinyl flooring fell from 4% in 2012 to 3% in 2014.

Investment is continually made to improve storage and handling facilities for subsequent waste on site, plus recycling will remain an important part of our waste management process. In fact Polyflor has been recycling vinyl since the 1950s, when we pioneered the manufacture of homogeneous flooring. It has always been considered a perfectly 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 off-cuts as well as recovered dust. We also recycle glass which is post consumer waste, combined with the aggregates, into many of our Polysafe products. Post consumer waste is returned to Polyflor, via the Recofloor recycling scheme, which operates throughout the UK, Eire, Australia and New Zealand.

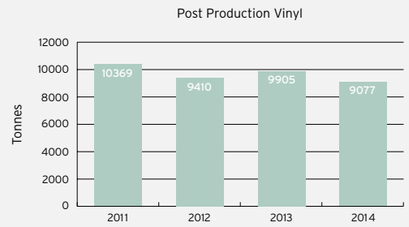
It is evident that there can be few materials better suited to recycling than vinyl flooring. Vinyl is 100% recyclable and can be recycled many times over without losing any of its performance properties, furthermore recycled vinyl requires 85% less energy to manufacture than virgin PVC.

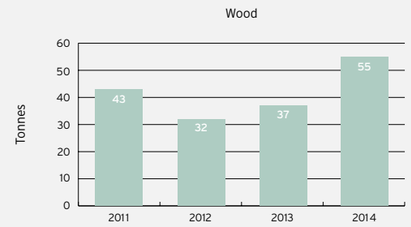
- Vinyl flooring is most suitable for recycling and is 100% recyclable
- 25% average recycled content across Polyflor ranges
- Up to 40% recycled material content
- Up to 5% post consumer waste is recycled across many Polyflor ranges

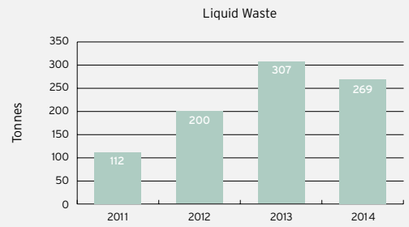
It is important to note that as a business with electrical and electronic equipment to dispose of, we are fully compliant with the Waste Electrical and Electronic Equipment (WEEE) Directive and therefore recycle such waste accordingly.

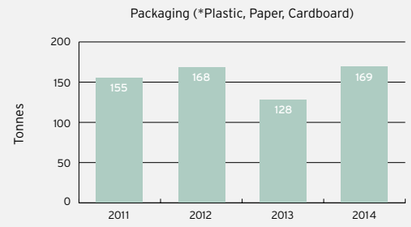
In 2014 there were some minor fluctuations with Polyflor's recycling data, compared with 2013, 2012 and 2011. Within the waste stream some of the recycled materials were down against 2013, with the exception of Packaging and Wood waste. Overall, waste recycled from Polyflor's production sites was 8% lower in 2014 versus 2013 and as a percentage of the total waste stream, 2014 was the same as 2012, but marginally lower than in 2013.

### Production Waste Material Recycled Tonnes

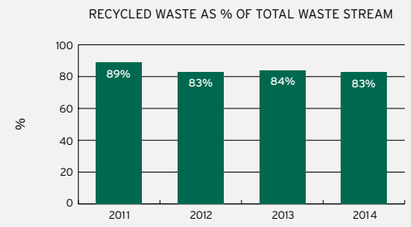


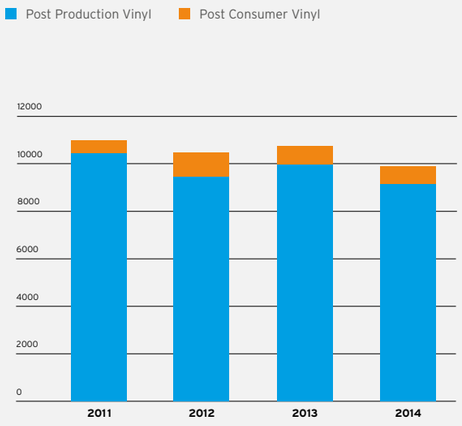








### Waste Vinyl Recycled Tonnes




With regards to recycled vinyl, there have been decreases in the tonnages of post production and post consumer vinyl – cumulatively 8% and 6% less in 2014 than in 2013 and 2012 respectively. Manufacturing has made progress in reducing waste which explains the lower tonnages for 2014 and even though Recofloor had a record year reclaiming 501 tonnes of post consumer waste vinyl flooring, we have obtained less post consumer waste from other sources than in previous years.

## In the Future

Whilst significant investment has been made over recent years to improve our recycling capacity and capability, we will continue to develop further, both on site and via the investment we make in Recofloor.

We will continue to fully utilise all options available in the recycling of post consumer waste back into new product, although we must be mindful of legacy additives in this waste material which should be managed effectively. Returned material identification will be a key factor in preventing materials being used in Polyflor flooring that may not be included.

# Logistics & Installation

"
At Polyflor we are constantly improving our products for a variety of sustainability reasons. In addition to being technically fit for purpose and economically viable, positive environmental impact is built into our products' entire life cycles.

Sustainability within the NPD (New Product Development) process comes from the recycled materials we use and renewable materials we ethically and responsibly source. Importance is also placed on encouraging low energy and water consumption in manufacture and in use, as well as reducing VOC emissions and extending product life. Recycling will always be the final chapter for products in Polyflor's closed loop process. "

*Bob Smith,*
*Polyflor Technical Director*

# 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.

## 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.


## Distribution

As a UK manufacturer, Polyflor distributes product from its central distribution centre in the North West of England through a network of wholesalers throughout the UK and around the world, a model that ensures efficiency through the transportation of full, bulk loads.

## Transportation

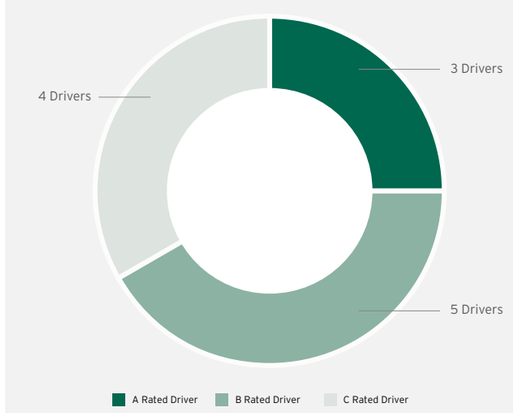
Polyflor operates its own transport fleet in the UK which is maintained and updated as often as possible to ensure the most fuel efficient vehicles are used. Presently all Polyflor HGVs are Euro 5 compliant and we have an aim to move to Euro 6 compliant vehicles in 2016/2017. As well as improving the HGV fleet, further reductions of the fleet's environmental impact were achieved by improving driving efficiencies, using the shortest routes possible and increasing bulk loading and backhauling volumes. Ongoing reviews are also in place for alternative transport methodologies and technology.


## Achievements for 2014

In 2014, the 21 vehicles in Polyflor's fleet travelled 1,611,624 kilometers and used 472,752 litres of fuel, which in turn produced 1,257,542 kgs of carbon emissions.

- Polyflor moved the Driver KPI system over to its Telematic's provider, Haultech, effectively enabling the correlation of information.
- The Telematic function within the Polyflor HGV fleet improved vehicle and driver efficiencies. Driver CPC Training and MAN Driver Training were used to facilitate driver improvement.
- An additional driver was appointed as a Driver Trainer. Polyflor's 2 Driver Trainers both received MAN Profidrive Training to permeate 'Best Practice' throughout the Polyflor Fleet.
- Targets in the previous MAN KPI system were met: Polyflor Drivers achieved an overall B rating on their Driver KPI, where previously an overall C rating was attained.

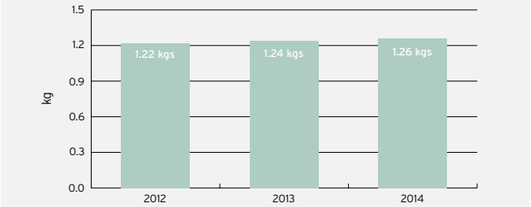
### In 2014 the drivers scored as follows:




12 drivers equate to 24.9 rating value. A value rating of 2.0825 per driver is an average B.

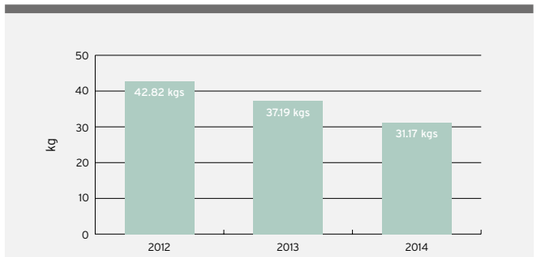
- From 2013 to 2014, a decrease in carbon emissions from transportation has largely been due to the 8.5% increase in bulk load orders. Polyflor's bulk load activity will continue to drive its reduction in carbon emissions per tonne of material despatched:
- Vehicles are being loaded more efficiently so there is more weight, increasing carbon emissions per mile:

### Carbon Emissions per Mile




- However, carbon emissions per tonne of product despatched decreased (these figures do not include our Backhaul gross weight carried, which would reduce Polyflor's emissions per tonne even further):

### Carbon Emissions per Tonne




**2014 saw reductions of 6.02 kgs (16%) and 11.65 kgs (27%) of carbon emissions per tonne despatched, against 2013 and 2012 respectively.**

- Overall, carbon emissions have fallen due to more bulk load orders.
- In addition to this, supplier collections including Recofloor, increased by 32% helping to maximise the use of empty Polyflor vehicles and reducing suppliers vehicles on the road.

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

# Installation and R&D

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.

## Dementia Action Alliance

In 2014, Polyflor became a local and national member of the Dementia Action Alliance which is committed to transforming the lives of the 800,000 people living with dementia in the UK.

This means that Polyflor has an action plan of commitment to improve outcomes for people with dementia in terms of support activity to the community and can feature the 'Working to become Dementia Friendly' logo on appropriate literature.

A dementia friendly community is a city, town or village where people with dementia are understood, respected, supported and confident they can contribute to community life.

Polyflor is also a partner of the International Dementia Design Network, hosted by the University of Salford. Polyflor has an objective to continually offer products that can contribute to a positive interior environment and make the experience of the person living with dementia more comfortable, adding to their quality of life whether at home or in care.

Find out more about the DAA at **www.dementiaaction.org.uk**

DAA Dementia Action Alliance

Working to become Dementia Friendly 2014-2015

Launched in September 2014, the Camaro Loc PU collection with its unique locking system requires no adhesive for an even more environmentally preferable and simple installation. Camaro Loc PU can be recycled and contains 40% recycled material. The range comes with EN 15804 EPD, BRE A+ and BES 6001 certification.

NEW LOC

Camaro Loc is part of the new generation of luxury vinyl design flooring offering the patented LOC system.

- Adhesive free
- Quick and easy to install

# In Use

"It was vital for us to avoid a clinical look by creating a safe but homely environment for Anya Court residents that would suit their various needs. We are continually impressed with the range of attractive and fit for purpose flooring options available from Polyflor which meant we could use their products throughout this new care home and others in our portfolio."

*Jacqueline Farguson,*
*Design Manager at Hallmark Care Homes*

Anya Court Care Home

# Fit for Purpose

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

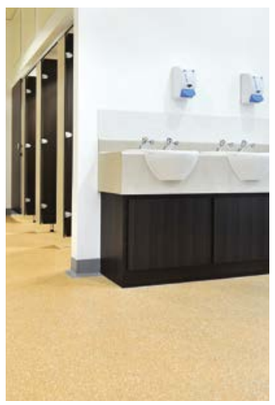
The majority of Polyflor 2.0mm floorcoverings obtain the highest Use Area Classification of 23/34/43 to EN 685, making them suitable for heavy domestic, very heavy commercial and heavy or light industrial use. In comparison, a greater thickness is required for linoleum to achieve a similar recommendation, 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.

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 there is no reason that our customers need to compromise on performance, choice or budget in order to use products with the lowest environmental impact.

We do not manufacture a specific range of environmental flooring, we manufacture vast ranges of the highest quality, BRE rated commercial flooring with a level of performance and benefits in use which also result in class leading environmental features. This philosophy carries on into all our new product developments, where the demands of the customer, the facility and environmental requirements are built into the product specification from day one without compromising supply.

- 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



# Low Maintenance

### Market leading 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.

Poor maintenance 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. 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.

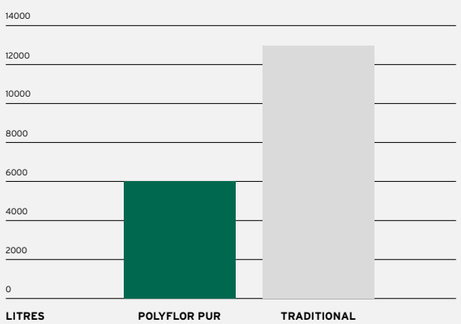
- All Polyflor products are designed with low maintenance features
- PUR reinforcement is cross-linked and UV cured for superior cleaning benefits, enhanced protection and optimum appearance retention
- Environmentally sustainable using less energy, polish, water and cleansing chemicals
- Polyflor homogeneous 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 flooring*

### Creating clean and hygienic environments

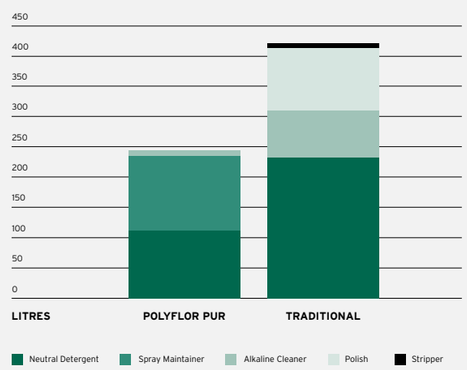
Vinyl sheet flooring can be welded at the seams, forming an impervious base that facilitates ease of cleaning by eliminating gaps and cracks where dirt can gather.

Polyflor flooring also stands up to the test where 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).

WATER USAGE 1 year 1000m² PUR vs Traditional vinyl




CHEMICAL USAGE 1 year 1000m² PUR vs Traditional vinyl




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

# Dementia Friendly Flooring

In a dementia-led facility, flooring can work hand in hand with other interior elements to provide a comfortable environment for residents living with the condition.

A floor that is dementia friendly can contribute to the reduction of anxiety and stress of someone living with dementia who may be experiencing changes to their sense of sight and struggling to find their way around.

The following aspects of 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 promotes 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 confusion
- 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 and floors, as well as floors and furniture can help those who are visually impaired
- 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 residents
- Acoustic flooring is recommended to absorb noise and reduce impact sound levels between rooms as noise can cause agitation for patients

**Visit the Healthcare Sector at www.polyflor.com for more information.**

Anya Court Care Home

# Safety Peformance

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

## Sustainable Slip Resistance

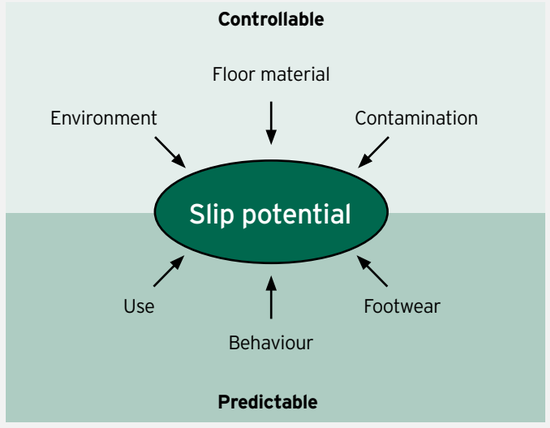
Polyflor safety flooring can be used in a variety of internal use areas and this also includes locations where hazards are potentially much higher, for instance in kitchens, stairwells and showers where slipping is likely if incorrect flooring is specified and where the consequences of doing so are the 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. Some of the 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 goes hand in hand with ease of cleaning and many ranges in the collection feature 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. Compared to other materials vinyl flooring is slow to ignite in a fire – 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 United Kingdom workplace, accounting for 1 in 3 major injuries per annum (37% of all occupational injury accidents)
- 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

# 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 is a key consideration when selecting building products, and Polyflor vinyl flooring makes a significant contribution towards creating indoor environments with very low VOC (volatile organic compounds) emissions. All of 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; GBCA Compliant (GreenTag approval); 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.

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.

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 (cleanroom test certification for non-shedding is available on most ranges). Polyflor vinyl is favoured for its superior 'cleanability' over other flooring products and is used in the strictest of hygiene zones throughout hospitals.

- No negative contribution to indoor air quality
- Passed all the most stringent international VOC emissions tests, including AgBB, Indoor Air Comfort Gold, Afsset and FloorScore®
- E1 Declaration conformance to EN 14041:2004

# CE Mark

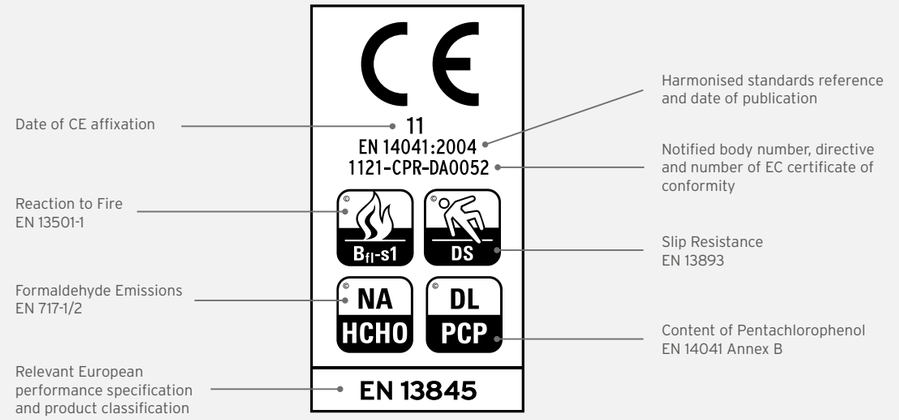
As a manufacturer of vinyl flooring it is Polyflor's responsibility to clearly label its product with the CE Mark and declare conformity with all of the legal requirements to achieve CE marking. Polyflor is therefore ensuring the validity for that product to be sold throughout the European Economic Area.

EN 14041, the European standard relevant to the CE mark for floorcoverings, has been adopted and is now legally binding. Tests specified in EN 14041:2004 include:

- Reaction to fire (EN 13501-1)
- Content of Pentachlorophenol – PCP (EN 14041 Annex B)
- Formaldehyde emissions (EN 717-1 and/or EN 717-2)
- Water tightness (EN 13553)
- Slip resistance (EN 13893)
- Electrical behaviour (Antistatic EN 1815 or ISO 6356 – Static dissipative/Conductive floors EN 1081 or ISO 10965 dependent on product)
- Thermal conductivity (EN 12667)

Once the product is placed on the market with a CE mark the manufacturer must issue and sign a Declaration of Conformity, 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 market.



# Closing the Loop

"We've increased the number of collections at Cardiff and Recofloor is very good at responding to our requirements. We encourage our customers to take part and give them free Recofloor sacks to keep their vans and site tidy. They can then drop off waste vinyl at any of our depots – it's a free service. It's important to emphasise the benefits because it really is a 'win-win' situation for everybody."

*Andy Nichols,*
*Managing Director of 3D Flooring Supplies Ltd, Cardiff*

# Product Stewardship

**It is important that we are responsible in the chain of custody of our products. With landfill being expensive and the least ecological option for waste management, recycling is a key element of Polyflor's closed loop operations and circular economy principals.**

Polyflor is fully committed to the recycling of its post production waste and its post consumer waste, supporting voluntary industry-wide commitments. We are active members of various initiatives including EPFLOOR, the European Flooring Manufacturers' Sector Group, which was formed to increase post consumer waste recycled in Western Europe and 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:

- Recycle 800,000 tonnes/year of PVC by 2020
- Exact definitions and reporting concept is available
- Develop and exploit innovative technology to recycle 100,000 tonnes/year of difficult-to-recycle PVC material (within the overall 800,000 tonnes/year recycling target) by 2020
- Address the issue of legacy additives and deliver a status report within each annual VinylPlus Progress Report

Specific to vinyl flooring, Polyflor is also a proud funding and founding member of Recofloor, the waste vinyl flooring recycling scheme which is available throughout the UK. 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. We also recycle glass, which is post consumer waste combined with the aggregates into many of our Polysafe products.

### 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

The majority of our collections currently 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 of recycling.

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) 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.

As a member of SFEC (Syndicat Français des Enducteurs Calandreurs), James Halstead France (Polyflor's French subsidiary company) helps finance the French vinyl flooring recycling scheme, PVC Next, along with four other manufacturers within the SFEC association. Contractors must first register with PVC Next and at present there are 23 major contractors officially registered with PVC Next. Thereafter, smooth vinyl flooring off-cuts and certain uplifted smooth vinyl flooring can be recycled at one of 20 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 €70-€90. 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.

In 2014 around 800 tonnes of waste vinyl material was collected through PVC Next, a figure that should increase in the future as further marketing promotes the scheme, encouraging more contractors to register and actively recycle their recyclable waste vinyl flooring.

Polyflor Australia and Polyflor New Zealand continue to operate the Recofloor collection scheme which is running very effectively, with 12 drop-off sites in Australia and 2 drop-off sites in New Zealand, enabling Polyflor to recycle an average 31 tonnes per year. Similarly in Ireland, the facility to recover waste from larger projects has been put in place and with the Recofloor scheme now up and running in Ireland - with various distributors on board and drop off sites available - logistically it is relatively simple for this waste to be delivered to Polyflor for recycling.

Polyflor South Africa has made great progress with recycling commitments. One of many members of the Southern African Vinyl Association (SAVA), a commitment to increase responsibility and sustainability within the PVC industry as a whole is very positive, but similar to the VinylPlus scheme in Europe, one of the key challenges outlined within this product stewardship programme is the commitment to increase recycling.

# Recofloor

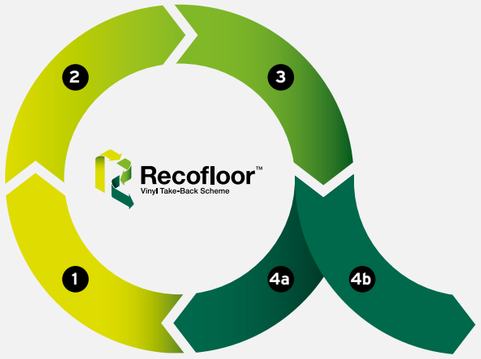
**The flooring industry is not bound by law to recycle waste, but Polyflor is actively seeking to recover and recycle its post consumer waste vinyl flooring to minimise the flooring industry's environmental impact and close the loop of our products' life cycles.**

## 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 and safety installation off-cuts, 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 everyone:
    - For smaller volumes, drop-off sites at distributors are available at no charge
    - 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 75%

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

Alternatively contact Recofloor directly on 0161 426 7731 or www.recofloor.org




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

*BRE Global*

**1.** Uplifted flooring or off-cuts
**2.** Placed in bags
**3.** Collected for recycling
**4a.** Recycled into new flooring
**4b.** Recycled into useful products

| Yes Please ☑ |
|---|
| Post installation, clean vinyl off-cuts (smooth or safety vinyl) |
| Old stock vinyl roll-ends & samples (smooth or safety vinyl) |
| Smooth uplifted flooring – depending on condition and quality |

**Please ensure all material for collection is as clean as possible**

| No Thanks ☒ |
|---|
| Non vinyl flooring including linoleum, laminate, carpet, or flooring with jute/fabric backing |
| Cushion vinyl flooring |
| General waste including asbestos, rubble, wood, blades, nails, screws etc |
| Liquids |

## In The Beginning

A major challenge in the recycling of post consumer waste was the logistics of retrieving the material, rather than actually recycling it. To try and tackle this issue and actively encourage recycling more waste vinyl flooring, a working group was formed in 2007 which encompassed all vinyl flooring manufacturers, 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.

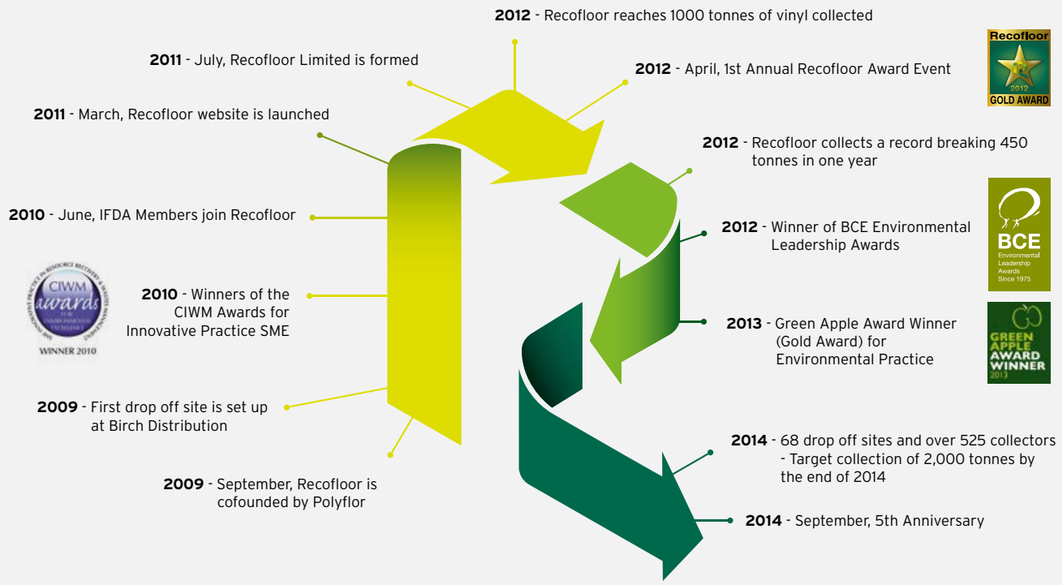
## Recofloor's Progress

Since 2009 Recofloor has achieved a great deal and is now the UK's industry leading facilitator for efficiently reclaiming vinyl flooring. 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 2,177 tonnes being collected since the scheme started (figure correct as at 1st January 2015). This volume equals nearly 725,667m$^2$ or 18,141 x 20m rolls - enough vinyl flooring waste to cover 100 football pitches. This is a saving of 1,741,600 kg or 1.7 thousand tonnes of $CO_2$ which equates to driving the average family petrol car 207 times round the equator or taking 430 cars off the road for a year.

Many thanks go to our customers who have keenly taken advantage of this unique scheme. In particular, 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 for Recofloor to collect and recycle it. Furthermore, $CO_2$ emissions have been reduced by minimising needless drop-off and pick-up journeys.

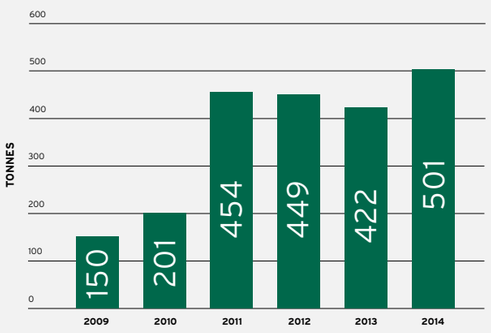
## Recofloor Timeline



# Recofloor in 2014

2014 was a successful, record-breaking year for Recofloor, collecting 501 tonnes – a 19% increase on tonnage collections from the previous year. This fantastic achievement coincided with Recofloor's 5th Year Anniversary, which enjoyed a marketing campaign to promote the scheme – including the opportunity to win an iPad mini - as well as organising 11 'Birthday Party Events' at distributors throughout the UK in September. Undoubtedly the marketing support surrounding this event contributed to the increased awareness of the scheme and subsequently the significant rise in the number of collections.

**Fig 1:** Tonnages Collected 2009-2014




2014 saw 111 new collectors signing up to Recofloor, taking the end of year total to over 620 collectors. Additionally, Recofloor gained 3 new drop-off sites at distributors' premises, which boosted the end of year figure to 71 UK-wide sites.

**Figure 2** shows the amount of material collected from each type of site for the past 3 years. In 2014 material collected by distributors marginally decreased by 4%, despite the increase of drop-off sites. However, all other categories saw a significant increase in the volume of material collected. In particular, volumes collected from constuction sites increased significantly by 41 tonnes compared to 2013. Material was collected from 21 construction projects in 2014, compared to 14 in 2013. Contributing towards this was the increase in the number of hospital projects, including the new East Cramlington Emergency Care and West Cumberland Hospital, which went from 4 in 2013 to 6 in 2014.

As shown in **Figure 3** the volume of uplifted flooring collected in 2014 slightly decreased compared to the previous two years. Only 75 tonnes of uplifted flooring was collected, a reduction of 16% compared to 2013 and almost half of the amount collected in 2012. Safety off-cut material from the installation process represented almost half of the material collected in 2014. Smooth off-cut material increased significantly compared to previous years, with 160 tonnes collected in 2014 representing 32% of the total.

2014 saw its 3rd annual Recofloor Awards ceremony, held at Aston Villa Football Club and hosted by football pundit, Mark Lawrenson. The event proved a massive success, where many of our distributors and contractors involved with Recofloor walked away with an award and / or certificate for their dedication and commitment. Recofloor was also a recipient of another environmental award, winning MEN (Manchester Evening News) Environment Award for Environmental Business of the Year.

Another success story from 2014 was the Recofloor Design Competition, which was opened up to design and engineering students at 2 universities. In line with the Circular Economy, the brief was to recycle off-cuts into other consumer items. Response was fantastic and 2 joint winners were announced, with EPFLOOR providing funding to create a prototype of 1 of the winning projects (to be announced in 2015).

**Fig 2:** Tonnages Collected 2009-2014

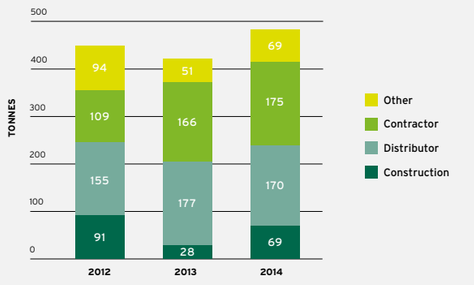
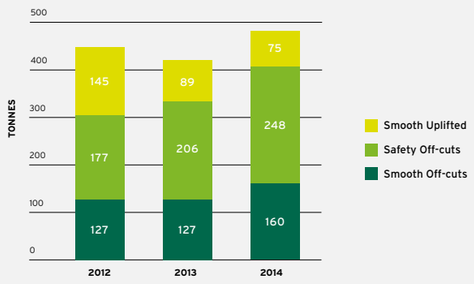



**Fig 3:** Tonnages Collected 2009-2014




## 2014 - Recofloor in Numbers

- Record year with 501 tonnes of waste vinyl flooring collected and recycled - enough to cover 23 football pitches
- $CO_2$ savings equal to driving 48 times around the equator or taking 99 cars off the road for a year
- 19% increase on tonnage collections compared to 2013
- 85% of material collected was off-cuts and 15% uplifted flooring
- 3 new drop-off sites and 111 new collectors
- Recofloor now has 71 UK-wide drop-off sites and 621 collectors
- Attended 6 trade shows and member events
- Organised 11 5th Year Anniversary Events at distributors throughout the UK during September
- 3rd successful Recofloor Awards ceremony held at Aston Villa Football Club

## 2015 Key Targets

- To collect at least 520 tonnes of waste vinyl flooring
- To recruit at least 2 new construction projects
- To increase collections from distributors (drop-off sites) by a further 10%
- To win at least 1 environmental award

## 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 75% 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 new contracts
- 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 flooring waste recycled
- Recofloor can be specified as an outlet for vinyl waste in tenders
- Could help achieve extra points on BREEAM & LEED assessments



# Environmental Assessments

"Environmental considerations have been a prominent issue in this new build project where we aimed to achieve no less than a BREEAM very good rating. We chose Polyflor as the ranges are A+ rated and 100% recyclable via Recofloor, the industry leading recycling scheme."

*Peter Woods,*
*Vice Principal of Holy Cross College*

Holy Cross College

# About EPD

## 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 also 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 performance.

- 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 (France) and Green Tag (Australia)
- Since 2013, EPDs are part of the Construction Products’ Regulation (CPR)
- EPDs provide a system that is open to all of Europe without creating barriers to trade
- Generic and product specific EPDs are available - ERFMI generic profiling is available across all resilient flooring categories
- The information is reported in the same way across all building products

EPD’s 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:

- **7** Environmental Impact Indicators
- **10** Resource Indicators
- **3** Waste Indicators
- **4** Output Flow Indicators

Critically the 7 Environmental Impact Indicators include:

- **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



# Polyflor EPD's

Products can be individually assessed or ERFMI generic profiling is available. In 2012 Polyflor was part of the ERFMI EN 15804 generic data set for the creation of industry EPDs for the following categories:

- EN 10581 PVC Homogeneous
- EN 10582 PVC Heterogeneous (compact)
- EN 651 PVC Heterogeneous (foam backed)
- EN 13845 PVC Safety Flooring
- EN 649 Luxury Vinyl Tiles
- EN 1817 Rubber (smooth)

In addition to the generic EPDs, Polyflor also 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.

**In 2014 Polyflor made further progress with its EPDs, by obtaining a product specific EPD for its loose-lay LVT range, SimpLay. Polyflor also registered to the BRE EPD scheme.**

## Using EPDs on BREEAM & 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 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

| SAFETY | EN 15804 EPD Specific | EN 15804 EPD Generic |
|---|---|---|
| Polysafe Astral PUR | | EPD-ERF-2013611-E |
| Polysafe Mosaic PUR | | EPD-ERF-2013611-E |
| Polysafe Corona 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-2013211-E |
| Polysafe Wood fx Acoustix PUR | | EPD-ERF-2013311-E |
| Polysafe Modena PUR | | EPD-ERF-2013611-E |
| Polysafe Arena PUR | | EPD-ERF-2013611-E |
| Polysafe Verona PUR | | 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 |
| HOMOGENEOUS | | |
| Pearlazzo PUR | | EPD-ERF-2013111-E |
| 2000 PUR | | EPD-ERF-2013111-E |
| Classic Mystique PUR | | EPD-ERF-2013111-E |
| Mystique PUR | | EPD-ERF-2013111-E |
| Prestige PUR | | EPD-ERF-2013111-E |
| Standard XL | | EPD-ERF-2013111-E |
| XL PU | | EPD-ERF-2013111-E |
| Polyflex Plus PU | | EPD-ERF-2013111-E |
| HETEROGENEOUS | | |
| Harmony fx PUR | | EPD-ERF-2013211-E |
| Forest fx PUR | | EPD-ERF-2013211-E |
| Mineral fx PUR | | EPD-ERF-2013211-E |
| Acoustix Harmony fx PUR | | EPD-ERF-2013311-E |
| Acoustix Forest fx PUR | | EPD-ERF-2013311-E |
| Acoustix Gallery fx PUR | | EPD-ERF-2013311-E |
| LVS | | |
| Secura | | EPD-ERF-2013411-E |
| Expona Flow | | EPD-ERF-2013411-E |
| Designatex | | EPD-ERF-2013411-E |
| LVT | | |
| Simplay | EPD-JHA-20140178-ICA1-EN | |
| Expona Design PUR | EPD-JHP-2013111-E | |
| Expona Commercial PUR | EPD-JHP-2013211-E | |
| Expona Control PUR | | EPD-ERF-2013611-E |
| Bevel Line PUR | | EPD-ERF-2013511-E |
| Camaro PUR | | EPD-ERF-2013511-E |
| Camaro Loc PU | | EPD-ERF-2013511-E |
| Colonia PUR | | EPD-ERF-2013511-E |
| RUBBER | | |
| Diamant | | EPD-ERF-2013711-E |

To view EPDs, please go to www.polyflor.com/environment or www.bau-umwelt.de.
For more information, contact Polyflor on 0161 7671111 or info@polyflor.com.

# About BRE Global

**The BRE (Building Research Establishment) is an independent organisation which evaluates the environmental impact of a product from 'cradle to grave'. 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 low-nutrient 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 ($NO_x$, 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 ($SO_2$) 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 $SO_2$ and $NO_x$. This includes acidification due to fertilizer.

**Copy taken from www.bre.co.uk**

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 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**

*This excludes the Polyflor Sport & Polyclad ranges.

## BRE Individually Assessed Ratings

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

Each product which is 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.

Polyflor's safety, homogeneous, heterogeneous and LVT ranges have been individually assessed by BRE Global to measure their environmental impact. The rating scheme is based on A+ to E rankings, with A+ being the most desirable rating, having achieved the best ecopoints. A better rating helps to maximise a building's BREEAM score, which is achievable through our 26 A+ ratings.

The BRE Global rating scheme is categorised by end use areas, as the environmental impact in each can vary. The reason for this is that various products will be 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, for example. Overall, Polyflor's certified ratings are impressive, particularly in the key areas of health and education, where BREEAM ratings are linked to government funding. For verification and more information on our certification and environmental profiles, visit **www.greenbooklive.com** and click on the 'search GBL' link. For quick reference to a specific product and certificate, just enter the digits of a BRE certificate number (do not include the ENP prefix) 472; 415 or 429 into the 'Cert No' search box (see certification numbers in the table below), or simply enter 'Polyflor' into the 'Company Name' search box.

| SAFETY | Cert. | Health | Education | Retail (fashion) | Retail (Durability) | Office | Domestic |
|---|---|---|---|---|---|---|---|
| Polysafe Astral PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Polysafe Mosaic PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Polysafe Corona PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Polysafe Vogue Ultra PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Polysafe Standard PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Polysafe Wood fx PUR | ENP415 | A+ | A+ | A+ | A | B | B |
| Polysafe Wood fx Acoustix PUR | ENP415 | A+ | A+ | A+ | A | B | B |
| Polysafe Hydro | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Polysafe Ultima | ENP472 | A+ | A+ | A+ | A+ | A | A |
| **HOMOGENEOUS** | **Cert.** | **Health** | **Education** | **Retail (fashion)** | **Retail (Durability)** | **Office** | **Domestic** |
| Pearlazzo PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| 2000 PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Classic Mystique PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Mystique PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Prestige PUR | ENP472 | A+ | A+ | A+ | A+ | A | A |
| Standard XL | ENP472 | A+ | A+ | A+ | A+ | A | A |
| XL PU | ENP472 | A+ | A+ | A+ | A+ | A | A |
| **HETEROGENEOUS** | **Cert.** | **Health** | **Education** | **Retail (fashion)** | **Retail (Durability)** | **Office** | **Domestic** |
| Harmony fx PUR | ENP415 | A+ | A+ | A+ | A+ | A | A |
| Forest fx PUR | ENP415 | A+ | A+ | A+ | A+ | A | A |
| Mineral fx PUR | ENP415 | A+ | A+ | A+ | A+ | A | A |
| Acoustix Harmony fx PUR | ENP415 | A+ | A+ | A+ | A | A | B |
| Acoustix Forest fx PUR | ENP415 | A+ | A+ | A+ | A | A | B |
| Acoustix Gallery fx PUR | ENP415 | A+ | A+ | A+ | A+ | A | A |
| **LVT** | **Cert.** | **Health** | **Education** | **Retail (fashion)** | **Retail (Durability)** | **Office** | **Domestic** |
| Expona Design PUR | ENP429 | A+ | A+ | A+ | A | B | B |
| Expona Commercial PUR | ENP429 | A+ | A+ | A+ | A+ | A | B |
| Bevel Line PUR | ENP429 | A+ | A+ | A+ | A | A | A |
| Camaro PUR | ENP429 | * | * | A+ | * | A | A |
| Colonia PUR | ENP429 | * | * | * | * | * | A |

* Product not suitable for use area and has therefore not been rated for the particular use area.

## BRE Generic Ratings

Where Polyflor products have not been individually certificated by BRE Global, generic ratings are available. Generic ratings apply to specific categories of flooring installed into defined use areas. For example, homogeneous flooring to EN649 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 EN 649 EN ISO 10581 | Heterogeneous EN 649 EN ISO 10582 | Acoustic EN 651 | LVT EN 649 | Safety EN 13845 | Rubber (smooth) EN 1817 | Rubber (profiled) EN 12199 | LVS EN 653 |
|---|---|---|---|---|---|---|---|---|
| Health | A+ | A+ | A+ | A+ | A+ | A+ | A+ | - |
| Element | 821570038 | 821570039 | 821570053 | 821570054 | 821570055 | 821570056 | 821570057 | - |
| Education | A+ | A+ | A+ | A+ | A+ | A+ | A+ | - |
| Element | 821570065 | 821570066 | 821570010 | 821570013 | 921570010 | 821570014 | 821570015 | - |
| Commercial | A | A | A | A | A | A | A | - |
| Element | 821570038 | 821570039 | 821570041 | 821570042 | 821570043 | 821570044 | 821570045 | - |
| Retail | A+/A+ | A+/A+ | A+/A | A+/A | A+/A | A+/A+ | A+/A+ | - |
| Element | 821570038 | 821570039 | 821570053 | 821570054 | 821570055 | 821570056 | 821570057 | - |
| Domestic | A | A | A | A | B | A | A | A |
| Element | 821570065 | 821570066 | 821570010 | 821570013 | 921570010 | 821570014 | 821570015 | 821570002 |

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:**

**Safety**
Modena PUR
Hydro Evolve
Ecomax
Arena PUR
Expona Control PUR
Verona PUR
Apex

**Homogeneous**
Polyflor SD
Finesse SD
OHMega EC
Polyflor EC
Polyflor ROF
Polyflex Plus PU

**LVT**
SimpLay
Camaro Loc PU

**LVS**
Secura
Designatex

**Heterogeneous**
Expona Flow

**Rubber (smooth)**
Diamant

**Rubber (profiled)**
Noppe Stud Tile

# Maximising BREEAM Credits

**Polyflor's vast range of products, technical support and best value flooring, means you can maximise 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:

1. **Outstanding:** Less than top 1% of UK new non-domestic buildings (innovator)
2. **Excellent:** Top 10% of UK new non-domestic buildings (best practice)
3. **Very Good:** Top 25% of UK new non-domestic buildings (advanced good practice)
4. **Good:** Top 50% of UK new non-domestic buildings (intermediate good practice)
5. **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 points: BES 6001 'very good' –** Polyflor can contribute 3 points for the use of ranges which are certified to BES 6001, achieving 'very good'.

**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 'Very Good' and ISO 14001 certification, contribute 4 of a maximum of 5 points (80% 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

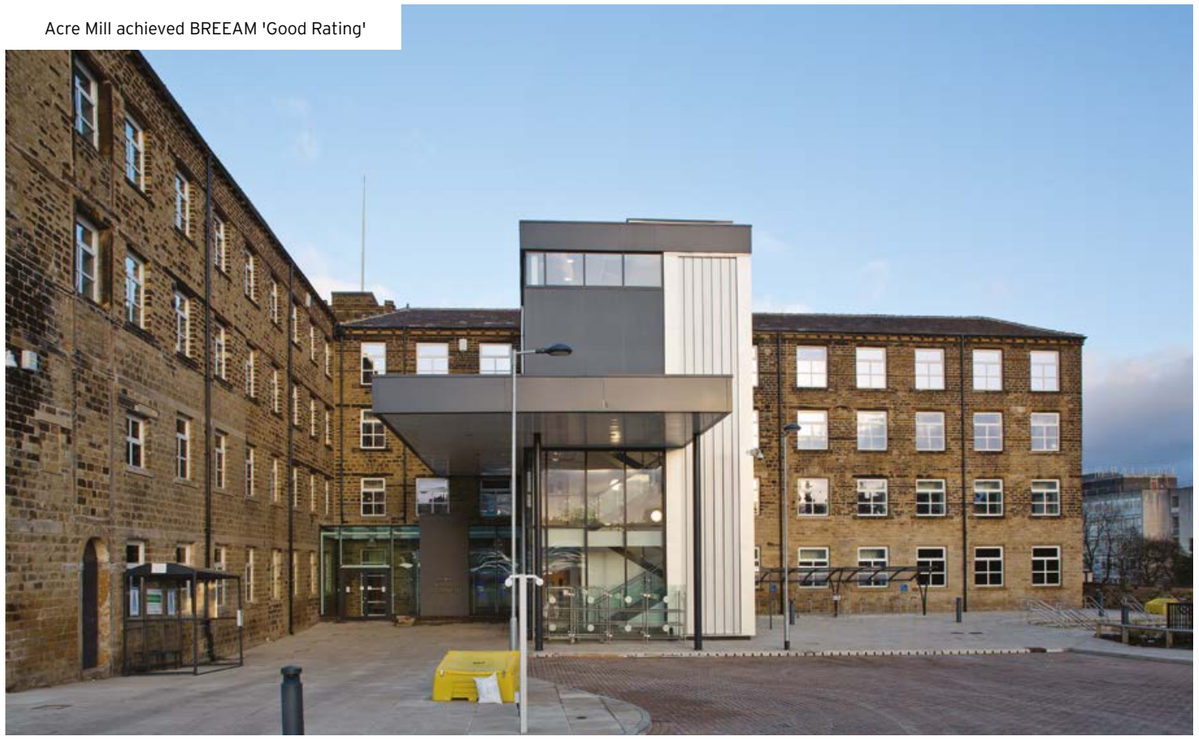
**Aim:**
To recognise and encourage a healthy environment through specification and installation of appropriate ventilation, equipment and finishes.

**1 credit: Minimising sources of VOCs and formaldehyde –** Polyflor can contribute towards this credit through demonstrating conformance to EN 14041:2004. Polyflor floorcoverings are REACH compliant and do not contain formaldehyde, conforming to the E1 declaration and confirmed within product CE marking. 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

Acre Mill achieved BREEAM 'Good Rating'



**BRE A+** in major use areas such as Health


# LEED®

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 in order to achieve LEED certification. In doing so, specifiers will seek to use the most sustainable options available for the project.

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

There are four levels of certification available.
The number of points achieved establishes the level of LEED certification for that project (see above).

Polyflor floorcoverings have the potential to
contribute to LEED® credits, with a detailed explanation of how our products fulfil the requirements outlined below:

## LEED v4

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 floorcoverings have the potential to contribute to LEED credits on such projects.

## Materials & Resources

**Building Product Disclosure and Optimization- Environmental Product Declarations.** Polyflor can contribute to the LEED credit through its product-specific environmental product declaration (EPD), which can provide 1 point; or its generic EPD which may contribute 0.5 points.

**Building Product Disclosure and Optimization-Sourcing of Raw Materials.** Polyflor flooring contains up to 40% recycled material, which typically includes post-consumer waste from the project site as well as pre-consumer (or post-production) waste, including process and sampling waste for instance. Polyflor is 100% recyclable and post consumer waste, including off-cuts and smooth uplifted waste can be recycled. Alternatively, Polyflor SimpLay can be reused as it does not require adhesive for installation.

**Construction and Demolition Waste Management.** The Recofloor scheme (of which Polyflor is a founder and funding member) complies with site waste management legislation and diverts vinyl flooring waste (off-cuts and uplifted) from going to landfill.

## Indoor Environmental Quality

**Low Emitting Materials**
Polyflor can contribute to this credit through certification of its low emitting products. Particularly relevant to LEED assessments, most Polyflor floorcoverings have achieved FloorScore® certification (certificates are available online at www.polyflor.com and www.scscertified.com). VOC certification is also available via alternative test methods, including AgBB and Indoor Air Comfort Gold.



# Ecospecifier

The Ecospecifier scheme is described as a guide to eco and health preferable products, materials and technologies for the built environment. Polyflor is registered to the scheme in Australia and New Zealand, whereby Polyflor homogeneous PUR ranges are in the top 15% of resilient finishes based on their environmental impact.

Assessment of materials is based on a life cycle approach and measuring the impact of products, outlined in the following critical areas:

- Reduction of energy and greenhouse gases
- Habitat and land degradation
- Resource depletion and efficiency
- Occupant and contractor health
- Toxicity to land, air and water

Due to the strong performance in minimising the environmental impact in these categories, Polyflor products are 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.

Furthermore, Polyflor was the first commercial vinyl flooring organisation to achieve Ecospecifier's GreenTag LCARate certification across all of its key ranges and achieves GreenRate level A, scoring maximum points in the Materials-Flooring Calculator IEQ-VOC sections of the Green Star rating tools.

Visit **www.globalgreentag.com/certified-products-australianz** to view certificates.

| SAFETY | LCA Rate | Green Rate | Eco-Point |
|---|---|---|---|
| Polysafe Standard PUR | Gold PLUS | Level A | 0.47 |
| Polysafe Astral PUR | Gold PLUS | Level A | 0.48 |
| Polysafe Corona PUR | Gold PLUS | Level A | 0.47 |
| Polysafe Mosaic PUR | Gold PLUS | Level A | 0.48 |
| Polysafe Vogue Ultra PUR | Gold PLUS | Level A | 0.46 |
| Polysafe Verona PUR | Silver PLUS | Level A | 0.53 |
| Polysafe Hydro | Silver PLUS | Level A | 0.53 |
| Polysafe Ultima | Silver PLUS | Level A | 0.56 |
| Polysafe Wood fx PUR | Silver PLUS | Level A | 0.52 |
| Polysafe Modena PUR | Silver PLUS | Level A | 0.52 |
| Polysafe Arena PUR | Silver PLUS | Level A | 0.52 |
| Polysafe Apex | Silver PLUS | Level A | 0.57 |
| Polysafe Wood fx Acoustix PUR | Gold PLUS | Level A | 0.40 |
| **HOMOGENEOUS** | **LCA Rate** | **Green Rate** | **Eco-Point** |
| Pearlazzo PUR | Gold PLUS | Level A | 0.50 |
| Prestige PUR | Gold PLUS | Level A | 0.48 |
| Mystique PUR | Gold PLUS | Level A | 0.50 |
| Classic Mystique PUR | Gold PLUS | Level A | 0.50 |
| 2000 PUR | Gold PLUS | Level A | 0.50 |
| XL PU | Gold PLUS | Level A | 0.45 |
| Standard XL | Silver PLUS | Level A | 0.53 |
| Polyclad PU Plus | Silver PLUS | Level A | 0.56 |
| **HETEROGENEOUS** | **LCA Rate** | **Green Rate** | **Eco-Point** |
| Forest fx PUR | Silver PLUS | Level A | 0.52 |
| Mineral fx PUR | Silver PLUS | Level A | 0.52 |
| Harmony fx PUR | Silver PLUS | Level A | 0.52 |
| Acoustix Forest fx PUR | Gold PLUS | Level A | 0.40 |
| Acoustix Gallery fx PUR | Gold PLUS | Level A | 0.40 |
| Acoustix Harmony fx PUR | Gold PLUS | Level A | 0.40 |
| **LVT** | **LCA Rate** | **Green Rate** | **Eco-Point** |
| Expona Design PUR | Silver PLUS | Level A | 0.60 |
| Expona Domestic PUR | Silver PLUS | Level A | 0.56 |
| Expona Superplank | Silver PLUS | Level A | 0.58 |
| Expona Supertile | Silver PLUS | Level A | 0.58 |
| Camaro PUR | Silver PLUS | Level A | 0.54 |

Polyflor has achieved maximum rating points in the Green Building Council Australia (GBCA) and New Zealand Green Building Council (NZGBC) Green Star rating tools. Green Star rates the environmental and sustainable performance of a building as with LEED and BREEAM; using Polyflor products certified by Ecospecifier's GreenTag scheme can therefore help the specifier achieve maximum points. Potential for points on a Green Star assessment is further improved using Polyflor's Homogeneous flooring ranges for achieving 'PVC Best Practice', as audited by NCS International Pty Ltd to meet the GBCA best practice guidelines.

# Corporate Social Responsibility

"Corporate social responsibility is the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce & their families as well as of the community & society at large."

*World Business Council for Sustainable Development*

# 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.

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 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, along with an associated independent third-party certification scheme. BES 6001 will help Polyflor manage and reduce impacts throughout the supply chain and is recognised by the BREEAM family of certification schemes.

### Supply Chain & Procurement

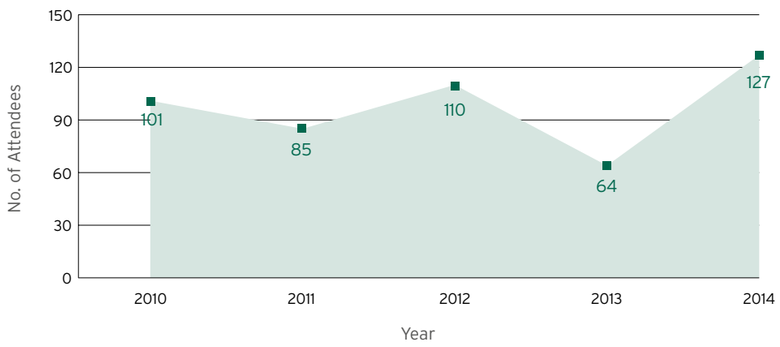
- Responsible sourcing policy
- SA 8000 & BES 6001 certified
- ISO 9001 & ISO 14001 certified
- Polyflor has a database of approved and trusted suppliers, most of whom are local to our manufacturing sites
- We use Engagement Supplier Surveys and Quality Assessment Questionnaires and follow up with regular meetings and discussions with existing suppliers
- We use suppliers with ISO 9001 & ISO 14001 certification (or with robust environmental policies, procedures and objectives)
- Local printing companies with sound environmental credentials, using solvent free inks, plus FSC and Carbon Capture® accredited paper sources

### Going One Step Further

Ensuring that we go one step further as a responsible company, it is important that we go beyond producing quality product and encourage best practice throughout the flooring sector as a whole. Polyflor's established Training School significantly contributes to the value chain and continued to deliver high quality 2 and 3 day training courses throughout 2014 at its purpose built facility, offering a comprehensive insight into laying the perfect vinyl floor; preparing sub-floors; conditioning; using the correct adhesives to setting out and fitting.

2014 was an impressive year for the amount of attendees partaking in courses at the Polyflor Training School – doubling the total number of attendees in 2013. Over the last five years Polyflor has provided valuable floor fitting training to 487 industry associates.

Further to the Training School and as previously outlined within this report, product stewardship is pivotal. Polyflor is cofounder of Recofloor, the UK's leading waste vinyl flooring recycling scheme. It is important that we invest in, promote and support this scheme to the fullest and engage with all our customers, including architects; specifiers; contractors and distributors, to manage their waste Polyflor material via Recofloor.




# BES 6001 - Responsibility Matters

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 business.

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.

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.

BES 6001 from BRE Global, now in its 3rd issue, 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, organisations 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. **At present, Polyflor continues to set the bar high and is the only flooring manufacturer to obtain this standard, achieving a Very Good rating.** By achieving this Polyflor has satisfied the compulsory sections and conforms to higher levels of compliance, which has been a massive undertaking for the company - involving production, all internal departments and supply chain. Certification is available on **www.greenbooklive.com**.

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 will become an increasingly important standard and will be extremely valuable to customers looking to procure flooring with sound environmental credentials and traceability, from socially aware and ethical suppliers. Without doubt it will help customers make better informed decisions when selecting suppliers.

**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 points for its BES 6001 Very Good certification. For more information on this, refer to the 'Maximising BREEAM Credits with Polyflor' pages in this document.

# Commitment to our Employees

As a major employer, Polyflor has a responsibility to its employees, ensuring their health and wellbeing as well as reducing high labour turnover, which remains extremely 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 from local and surrounding areas and advertises through local media, job centres, 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, designed to help young people 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 pension schemes, free share schemes, plus enhanced maternity and paternity pay.

## Recruitment & Retention

- Exceptionally low turnover with 25 and 40 year clubs
- Employees are recruited from local and surrounding areas, through advertising in local media, job centres and online
- We employ graduate trainees and have internships
- Polyflor employs apprentices with requirements reviewed on an annual basis.

## Training & Development

- A 3 day induction programme is undertaken by new office 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, for example our finance team attend Association of Accounting Technicians Courses (AAT). MBAs and NVQs are frequently requested and attained
- We enable and provide time for employees to undertake voluntary work, upon request
- Promotion or opportunities in different departments are often distributed internally throughout the business, although obtaining the right skill set is important so positions also open up to external candidates
- Polyflor engages with all staff regarding environmental issues, directly through email, letter and booklet as well as indirectly through www.polyflor.com, regular newsletters and this annual report which is circulated throughout Polyflor
- Members of the Recofloor team frequently present to the sales, marketing and distribution departments, so they have a better understanding of achievements, goals and their part in its important process
- The Polyflor floor fitting school is opened up to employees, which improves their understanding of Polyflor flooring and provides transferable skills for their own homes

## Equality

- Equal Opportunities & Diversity Policy
- Anti bullying policy
- Anti-discrimination policy
- Ratio of men to women is 85% to 15%
- 12% of female staff and 13% 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

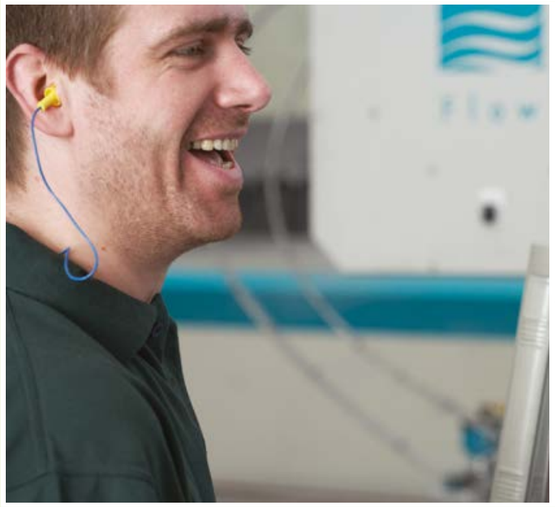
## Employee Health & Safety

- 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 so as to be actioned and avoided
- Accident reporting is in line with OHSAS 18001 guidance - all work related 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
- Shares for every employee after 2 years of employment with Polyflor
- Company social club for all employees, enables group activities from hiking to theatre visits and encourages inter departmental bonding
- 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
- Bike sheds and shower facilities are obtainable at the Whitefield site

Improving the quality of life of the workforce & their families as well as of the community and society at large



## 2014 Update

Regarding Polyflor personnel, overall 2014 was a consistent year with many positive results.

| | 2014 | 2013 | 2012 |
|---|---|---|---|
| Total Employees | 548 | 561 | 562 |
| Full Time Employees | 527 | 533 | 535 |
| Part Time Employees | 21 | 28 | 27 |
| Temporary Employees | 16 | 17 | 17 |
| Male Employees | 467 | 482 | 485 |
| Female Employees | 81 | 79 | 77 |
| Male Managers | 61 | 61 | 60 |
| Female Managers | 10 | 10 | 9 |
| New Recruits | 37 | 32 | 29 |
| Internal Promotions | 6 | 5 | 4 |
| Employees Undergone Training Programmes | 40 | 19 | 13 |
| Apprenticeships | 2 | 2 | 0 |
| Total Employees in 25 Year Club | 76 | 58 | 47 |
| New Members in 25 Year Club | 18 | 9 | 12 |
| Total Employees in 40 Year Club | 6 | 4 | 4 |
| New Members in 40 Year Club | 3 | 2 | 0 |
| Loss Time Accident (LTA) | 10 | 7 | 13 |
| Actual Days Lost through LTA | 287 | 166 | 213 |
| Turnover | 9.60% | 7.38% | 5.06% |

There was a decline in the number of total employees and a higher turnover rate, but there were a number of retirees in 2014 which will have contributed to this. Despite this there were many positive outcomes with a 16% increase on new recruits and subsequently an increase with the number of female employees.

Regarding retained staff, there was a high number of internal promotions reflecting ongoing talent recognition and reward, plus more than double 2013's figure for employees undergoing further training.

Polyflor's 2 apprentices have continued to develop within their respective roles. Polyflor's Engineering apprentice successfully completed his apprenticeship programme, obtaining NVQ level 3 Extended Diploma in Mechanical Manufacturing Engineering (Fitting and Assembly). Our apprentice in Finance continues to make significant progress and will be completing the AAT Level 4 in August 2015.

As testament to Polyflor's success in retaining its employees, a staggering 18 new members joined Polyflor's 25 Year Club in 2014, taking the total membership figure to 76. Perhaps more incredibly were the 3 new members who joined the 40 Year Club in 2014, doubling membership to a total of 6. All new members to the aforementioned clubs received recognition of their achievements with a presentation and afternoon tea with Geoffrey Halstead, Chairman of Polyflor's parent company, James Halstead.

Pictured: Geoffrey Halstead and Robert Stocker

*"Having joined Polyflor in November 1989, I have worked in several different roles including Facilitator on 2 of our production units; Training and finally within our Customer Technical Services Department where I have worked for 15 years. I particularly enjoy this role as I get to assist customers with technical enquiries and work with our local community by installing trial floorings.*

*"In 2014 I joined the '25 Year Club' and gained recognition of the contribution I have made to the company with a memorable presentation by James Halstead's Chairman, Geoffrey Halstead."*

Robert Stocker, Customer Technical Support Engineer



# 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 strives to minimise such complaints and continues to interact closely with the community. Over the last 5 years the average number of complaints has been 11 per year with complaints being made about Polyflor's Whitefield site, which 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 in particular and its neighbouring residents. Despite Polyflor's best efforts to prevent complaints in the first instance, they can fluctuate year on year and often the nature of the complaints (some unjust, some ongoing) are sometimes difficult to control. 18 complaints were received, but promptly and successfully actioned in 2014. Although the highest number of complaints in 5 years, it was still a low figure given the proximity of the 100s of residents to this 24 hour (Monday to Friday) production site.

As part of ongoing CSR commitments, Polyflor continues to liaise with and support the local communities in which it operates. It is important to give something back to local communities in particular, as well as contributing to causes further afield. In 2014 Polyflor supported various individuals, groups and organisations in the UK and globally – here are some of 2014's highlights:

## Supporting our North Manchester communities

- **Creative Living Centre** – Polyflor provided free flooring to Prestwich based charity, Creative Living Centre, which supports mental health and wellbeing. The centre, for people who are mentally or emotionally distressed and are seeking support offers a wide range of creative, leisure and learning activities. Individual support and social opportunities are on offer and enable members to be actively involved in improving their own well-being.

- **Rochdale Children's Moorland Home** - Rochdale Children's Moorland Home offers services during school term time, with children from schools in underprivileged areas attending or extra support for children with learning or physical difficulties. The facilities are also available during school holidays when children are selected by the local social services department, who take the children to the home on Monday, returning them safely home on Friday. In spring 2014 a new log cabin was built, and Polyflor happily donated the flooring for this worthwhile new project.

## Supporting our Teesside community

- **North East Autism Society** - In 2014 the North East Autism Society refurbished Thornbeck College Apprentice Centre, an all-encompassing facility where young people with autism have the opportunity to learn and develop skills that enable them to participate in society as independent and valued citizens, enjoying equal rights and opportunities. Working with architects, Greenwell Design, Polyflor donated Polysafe Standard in colour 'Twilight' which met the design obligations in terms of performance and appearance, achieving a safe, clean and minimalist environment for the NEAS.

**Additional National support**


- **Save the Children - Christmas Jumper Day** – Polyflor raised £324.40 for Save the Children's'Christmas Jumper Day', in December. Staff raised £162.20 through a fabulous Cake Sale; a Snow Sweepstake and of course, wearing a Christmas Jumper to work, with Polyflor matching its employees' contribution.

- **Bolton Deaf Society** – As part of an ongoing refurbishment project, Polyflor provided Bolton Deaf Society with flooring for its building's stairs and entrance.




• **Grace's Place** – Close to Polyflor's Whitefield site, Grace's Place in Radcliffe is a dedicated children's hospice which provides a magical place to support children from Oldham, Rochdale, Middleton, Heywood and Bury who need palliative and end-of-life care. Children suffering from cancers, neurological illnesses, genetic illnesses and mental and physical disabilities will receive specialist care from a dedicated team.

Valuing the importance and significance of this project within its community – given there is no specialist children's hospice service in North Manchester - Polyflor donated flooring throughout the new facility, helping to create a warm and homely feel.

Radio presenter and TV personality, Sara Cox tweeted:

*"We love you @Polyflorltd thank you for the beautiful floors you gave us @GracesHospice x"*

• **Frere Academic Hospital (South Africa)** – Polyflor SA partnered up with the television programme, Carte Blanche and its 'Making a Difference' campaign. The Making a Difference Trust identified a much needed revamp of the Frere Hospital Paediatric theatre complex, a government academic hospital, which serves some of South Africa's most desperate communities. Polyflor SA saw this as an opportunity to give something back to the community and help make a lasting difference where it was most needed.

*"Thanks to the generous sponsorships provided by corporates such as Polyflor SA, the complex now boasts two new state-of-the-art, dedicated paediatric operating theatres, complete with recovery and nurse stations, management offices, sterilisation rooms and more."*

Karolina Andropolous,
Patron of Making a Difference Trust

## International Support

• **Bringing Calyn Home Project (Australia)** – Polyflor Australia donated flooring, including Expona Design, to a very worthy cause which had received publicity on TV programme, 'Sunday Night': An eight year old boy named Calyn bravely saved his younger brother's life by pushing him out of the way of an oncoming vehicle, but was sadly hit himself. Calyn suffered serious injuries as a result and was hospitalised for nearly six months, but this amazing Superhero battled on and defied the odds. Calyn and his family were required to move in with his grandparents as their home was not equipped to meet Calyn's needs.

The 'Bringing Calyn Home Project' was started by hundreds of people volunteering their time, products and services to help this deserving family renovate their home.

*"I love working for a company where we are able to support those less fortunate and in need. As this was a top secret project very few within Polyflor knew about it, so when I announced it to everyone, the feedback was fantastic. Our sales team in particular felt this really boosted morale and made them so proud to work for Polyflor."*

Sharon White-Hill, Polyflor Australia Marketing Manager

• **Bedfordview Scout Hall (South Africa)** - Polyflor SA gave vinyl sheet flooring to the Bedfordview Scout Troop, who needed some help with their 'home' – an old prefab building with 30 year old vinyl floor tiles. The Scouts were thrilled with their new floor and the difference it had made to the centre, which is also used for dance lessons and various community activities.

• **Warmbron Pre-School (South Africa)** - Established in 1980, Warmbron pre-primary school continues to service the poorest children aged between one and five years in Ou Dorp community of Montagu. These children are from families with little to no income, which places a huge financial burden on the school - consequently there are no funds available for improvements. Polyflor SA assisted by donating and installing flooring throughout.

*"We are hugely thankful to companies like Polyflor who are willing to support our efforts. Our school now looks neat and new and all the children, parents and teachers are deeply appreciative for what you've done."*

Dinah Pekeur, Principal of Warmbron Pre-School

• **Guide Dogs South Africa** – Polyflor South Africa announced its partnership with Guide Dogs SA by 'adopting' Asia, a black Labrador and retriever cross puppy. Raising and training these special dogs requires significant time and financial resources – the training process can take eighteen months before a guide dog is ready to be placed. By sponsoring Asia, Polyflor is covering all the necessary veterinary costs, including vaccinations; micro-chipping and of course, food.

*"We feel very excited and privileged to be part of this journey that is preparing Asia to become somebody's trusted companion and to aid that person to walk and navigate his or her path in life."*

Tandy Coleman-Spolander, Polyflor South Africa Marketing Director

# Economic Sustainability

Founded in 1915, James Halstead PLC, the parent company of Polyflor Ltd. was originally a northern textile company, until the 1950s when it pioneered the development of homogeneous vinyl floor coverings. One hundred years later and still a major manufacturer and employer at the same site in Manchester, England, the company continues to go from strength to strength.

Today, Polyflor is a global organisation with a dominant market share in the UK and is listed on the AIM stock exchange with a nine figure turnover. From 2000 to 2010 turnover doubled and Polyflor continues to increase its turnover and profits as well as dividends to shareholders year on year. The group is also experiencing impressive financial growth within its intended markets and Polyflor continues to 'cover the world', recently reaching the Sjøskrenten student hostel in Longyearbyen on the Svalbard archipelago, probably Polyflor's most northern contract to date and in an area where polar bears outnumber people.

Commenting on James Halstead PLC's interim results for the financial half-year ended 31st December 2014, the Chief Executive, Mark Halstead, commented:

*"After 100 years of manufacturing, 67 years as a quoted company and in our 40th year of increased dividend I am reminded of the famous Kipling quote "Gardens are not made by sitting in the shade". We have grown and prospered and I have confidence in the full year result."*

Polyflor's economic sustainability, growth and success are largely attributed to the depth of its customer focus. Polyflor's ongoing commitment to Research and Development through the use of 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.

Substantial investment has been made in long term projects to enable further growth and employment, notably an additional 165,000m$^2$ manufacturing site in Teesside, which continues to expand Polyflor's production and warehousing capability in the UK. Sales, marketing and distribution also relocated into a new 20,000m$^2$ facility in Oldham, several years ago, increasing and improving its warehouse facility and customer service. Cumulatively, these new sites allow us to produce and hold even more stock, as well as employing more people and boosting the local economies in which we operate. In 2014, Polyflor invested considerably into new international market developments in the Middle East, India and Canada.

In 2009 Polyflor made a significant investment with the establishment of Recofloor, the UK's pioneering and leading recycling scheme for waste vinyl flooring. As one of two founder and funding members, our continuing dedication and investment in this important and innovative initiative is implemented through financial and operational support across the scheme. This includes its management and logistics, our onsite recycling facility and marketing communications to actively promote the programme and engage with our customers. Recofloor's popularity has generally seen a continual increase in reclaimed post consumer waste vinyl with 2014 being a record year - collecting 501 tonnes of waste - while providing efficient and cost effective solutions for the flooring contractor. Where landfill costs are increasing, disposing vinyl flooring waste through Recofloor can be free if waste is taken to one of our distributors' drop-off sites. Alternatively, if the waste material is collected a cost is applied which offers a saving of up to 75% when compared to landfill - a substantial and positive outcome for our customers.

Polyflor is a major employer in Greater Manchester and also in Teesside, employing 548 people - 527 of whom are full time, 21 are part-time with permanent contracts and 16 are temporary. Employment is provided 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 tax in the UK, thus fully supporting the UK economy.

The outlook for Polyflor remains optimistic, with Geoffrey Halstead, Chairman of James Halstead PLC commenting:

*"There are many positives to our outlook and in the difficult times of recent years we have delivered the gains we had targeted. Once again we have increased our market share but the current strength of Sterling to near record levels presents more challenges and headwinds in the coming months. That said, the quote of Churchill that "Kites rise highest against the wind, not with it" will be our mantra."*

# Polyflor Credentials

## We continue to be involved with the development of products that will be environmentally sustainable, easier to use and multi-functional.

- **ISO 14001 certification since 2000**

  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.

- **BES 6001 certification**

  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 certification**

  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.

- **BRE Global**

  A+ rating certification on 26 individually assessed ranges within the homogeneous, safety, heterogeneous and LVT flooring categories (ENP427, ENP415 & ENP429). Also 20 ranges with generic BRE Global A+ rating.

  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 (A+ being the best and E being the worst). Individual assessments relate to specific production data for the product, whereas generic ratings are derived from industry-wide production data and averaged.

- **EN 15804 EPDs** (written to standard ISO 14025) verified by **IBU**

  Created by the European working group CEN TC 350, EPDs (Environmental Product Declarations) provide transparent and reliable data for environmental criteria throughout a product's life cycle.

  IBU (Institut Bauen und Umwelt e.V.) is an independent, environmental organisation which works closely with construction and environmental authorities in Germany.

- **Registered approved products with Ecospecifier - GreenTag GreenRate Level A across homogeneous, safety, heterogeneous and LVT ranges (LCARate certification Gold and Silver)**

  Polyflor is registered to Ecospecifier, a guide to eco and health preferable products, materials and technologies for the built environment. GreenTag is Ecospecifier's Conformity Assessment Body (CAB) and Polyflor's products are certificated to meet GreenTag requirements.

- **Registered approved products on the BASTA database, EPDs also listed on the DGNB database and can also contribute to LEED points**

  **BASTA** is a non-profit organisation owned by IVL Swedish Environmental Research Institute and The Swedish Construction Federation.

  **DGNB** (Deutsche Gesellschaft für Nachhaltiges Bauen e.V. / German Sustainable Building Council), promotes sustainable and economically efficient buildings for the future.

  **LEED** (Leadership in Energy & Environmental Design) is a sustainable building certification programme which rewards best-in-class building strategies and practices.

- **Member of the UK Green Building Council, Green Building Council of Australia and New Zealand Green Building Council**
  The Green Building Council is a national 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.

- **Member of the Dementia Action Alliance** which is committed to transforming the lives of the 800,000 people living with dementia in the UK, and partner of the **International Dementia Design Network**, hosted by the University of Salford.

- **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.

- **Active member of UKRFA and ERFMI**

  **UKRFA** (United Kingdom Resilient Flooring Association) – UK trade association for the resilient flooring sector.

  **ERFMI** (European Resilient Flooring Manufacturers' Institute – ensures the maintenance of high ethical standard within the industry.

- **Fully support VinylPlus**

  **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.

- **Active member of EPFLOOR & Recovinyl**

  **EPFLOOR** (European PVC Flooring Manufacturers Sector Group) has a mission to recycle post-consumer PVC flooring waste in Western Europe.

  **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.

- **As a member of SFEC (Syndicat Français des Enducteurs Calandreurs), James Halstead France (Polyflor's subsidiary) helps finance the French vinyl flooring recycling scheme, PVC Next.**

  **SFEC** works with the government and informs its members on regulations and standards and partakes in environmental policy, with a commitment to sustainable development.

  **PVC Next** is France's national waste vinyl flooring recycling scheme, funded by James Halstead France and 4 other manufacturers within the SFEC association.

- **A founder and funding member of Recofloor vinyl take-back scheme**

  Recofloor is the UK's leading recycling scheme for uplifted smooth vinyl flooring and for smooth and safety off-cuts.

  - **Winner of CIWM** (Chartered Institute of Wastes Management) Award for Environmental Excellence in the category of SME Innovative Practice, 2010
  - **Winner of BCE** (Business Commitment to the Environment) Premier Award 2011
  - **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.

- **Up to 40% recycled content**

- **Up to 85% sustainable material**

- **REACh compliant:**

  Plasticisers used by Polyflor are not classified substances and do not need authorisation under **REACh**. A range of ortho-phthalates and non-phthalate alternatives were used across Polyflor's vinyl collection.

  No harmful substances added, such as formaldehyde; lead; cadmium; mercury or hexavalent chromium. **REACh** is a European Union regulation concerning the Registration, Evaluation, Authorisation & Restriction of Chemicals.

- **Passed the most stringent international VOC tests, including AgBB, Indoor Air Comfort Gold and FloorScore®**

  **AgBB** (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten) is a committee for health-related evaluation of building products.

  **Indoor Air Comfort** (IAC) product certification by Eurofins, provides compliance with low VOC (Volatile Organic Compounds) emissions requirements of all European specifications. Indoor Air Comfort Gold certification shows a higher level of compliance.

  **FloorScore** 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.

100 years

POLYFLOR™
COVERING THE WORLD

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