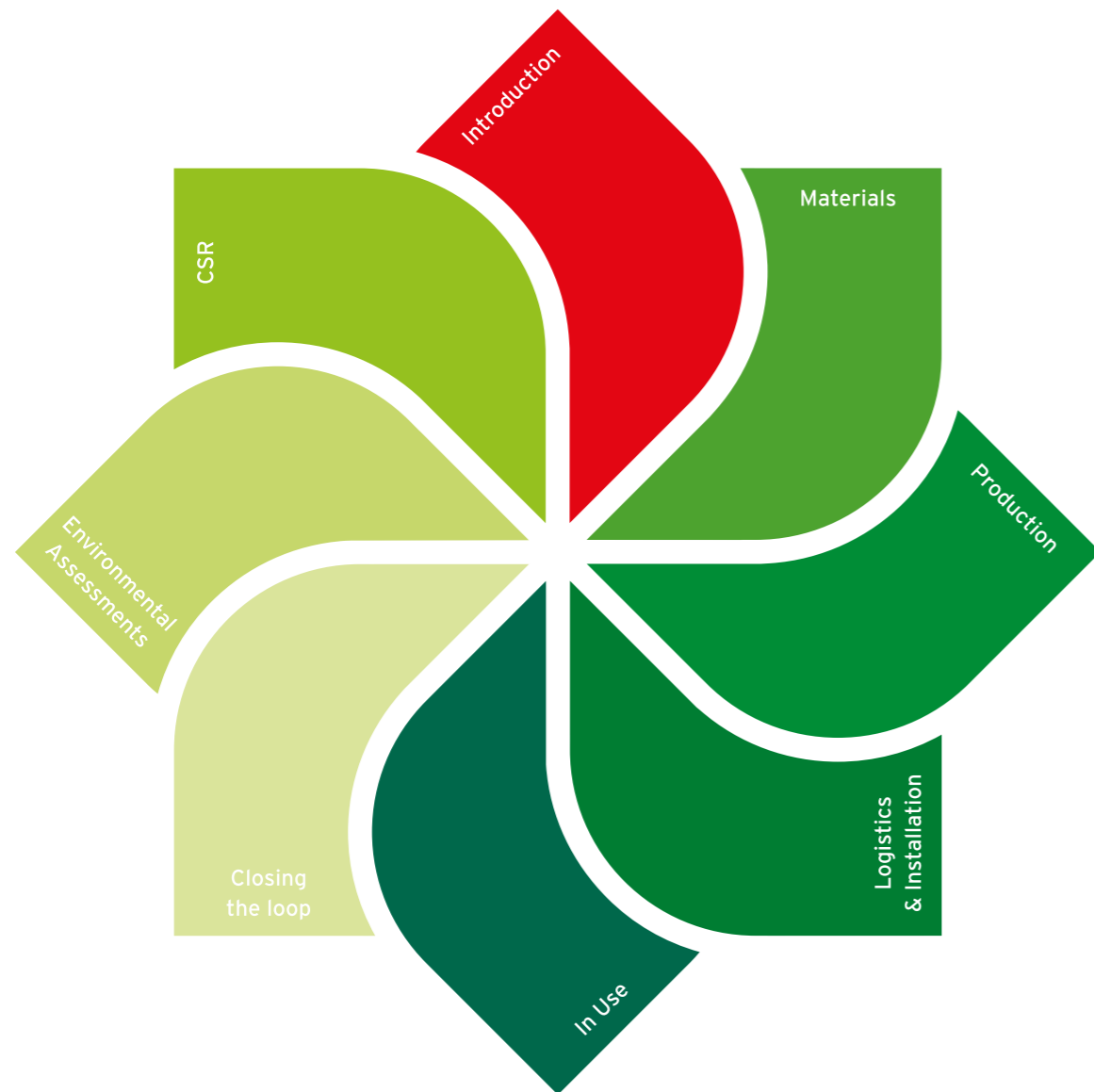




# Sustainability Report 2016

Environmentally Preferable Flooring





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# Introduction

## Welcome to Polyflor's 11th report

2015 was an important year for Polyflor, which celebrated a century of manufacturing in Manchester, UK, where this family-run company was born and is still flourishing as a global business.

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

The aim of this brochure is to clearly report Polyflor's sustainability performance for 2015. 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 liquid waste in 2015 compared to 2014. 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. For that reason our liquid waste tonnage fell in 2015 compared to that of 2014.

In recent years Polyflor has achieved many great accomplishments, including being the first vinyl flooring manufacturer to achieve individual BRE A ratings (now A+ ratings); being the first commercial

flooring manufacturer to achieve GreenTag LCARate certification; the first vinyl flooring manufacturer to achieve BES 6001, the BRE's standard for Responsible Sourcing, for many of its products (obtaining a 'very good' rating, no less) and also being the cofounding member of Recofloor, the UK's market leading recycling scheme for vinyl flooring.

There were some significant achievements for Polyflor in 2015, including a 26% increase against 2014 for ranges individually assessed and certified by the BRE - of which 33 achieved A+. Another positive for the year was winning 'Made in the North West - Green Company 2015', an award which recognised Polyflor's environmental achievements.

Polyflor vinyl floorcoverings are highly durable with 20-25 year lifespans if suitably maintained, although potentially it can be greater than this. In fact our most recent example comes from Palmerston North Hospital, New Zealand, where Polyflor Standard XL was installed in 1974 and still looks good today. Effective maintenance and longevity are elements of the product's lifecycle that Polyflor are keen to constantly develop and improve. So much so, Polyflor launched its Floor Cleaning & Maintenance Course in 2015 to promote sustainable cleaning processes, and maximise Polyflor floorcoverings' longevity.

Despite the positive efforts made by Polyflor, there is recognition for ongoing improvement of the company's sustainability performance. Like all manufacturers, Polyflor has an environmental impact and an important responsibility to minimise this impact. This report sets out to highlight its 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.



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.



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.

Recofloor set up in Australia and New Zealand

2009

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



Recyclable paper packaging used, replacing plastic roll wrap.

Polyflor products go onto Ecospecifier database.

FloorScore VOC certification is achieved

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.

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.

2006

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

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 24m².

SA 8000 certification is achieved.

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



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 cooling 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.

15,000m² of new improved roofing is installed at Teesside to provide better insulation and save energy.

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.

2015

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

8 additional products individually assessed by the BRE - 34 ranges assessed and certified, 33 achieving A+.

Floor Cleaning & Maintenance Course launched to promote sustainable cleaning processes and maximise Polyflor floorcoverings' longevity.

Recofloor has a record year, recycling 508 tonnes of waste vinyl flooring from the UK.

Recofloor rolled out to Iceland.

Achieved BS OHSAS 18001.



MATERIALS

IN USE



'very good' rating

1<sup>st</sup> flooring manufacturer to obtain this standard and achieve 'Very Good' rating

UP TO 40% recycled material

UP TO 85% sustainable material



Low VOC - Indoor Air Comfort Gold; FloorScore; AgBB



Less energy & chemicals required



Less water

20+ YEAR LIFE

Extremely durable with fewer replacements required

UP TO 60% Saving on maintenance costs

REACH compliant:



Registered or banned substances

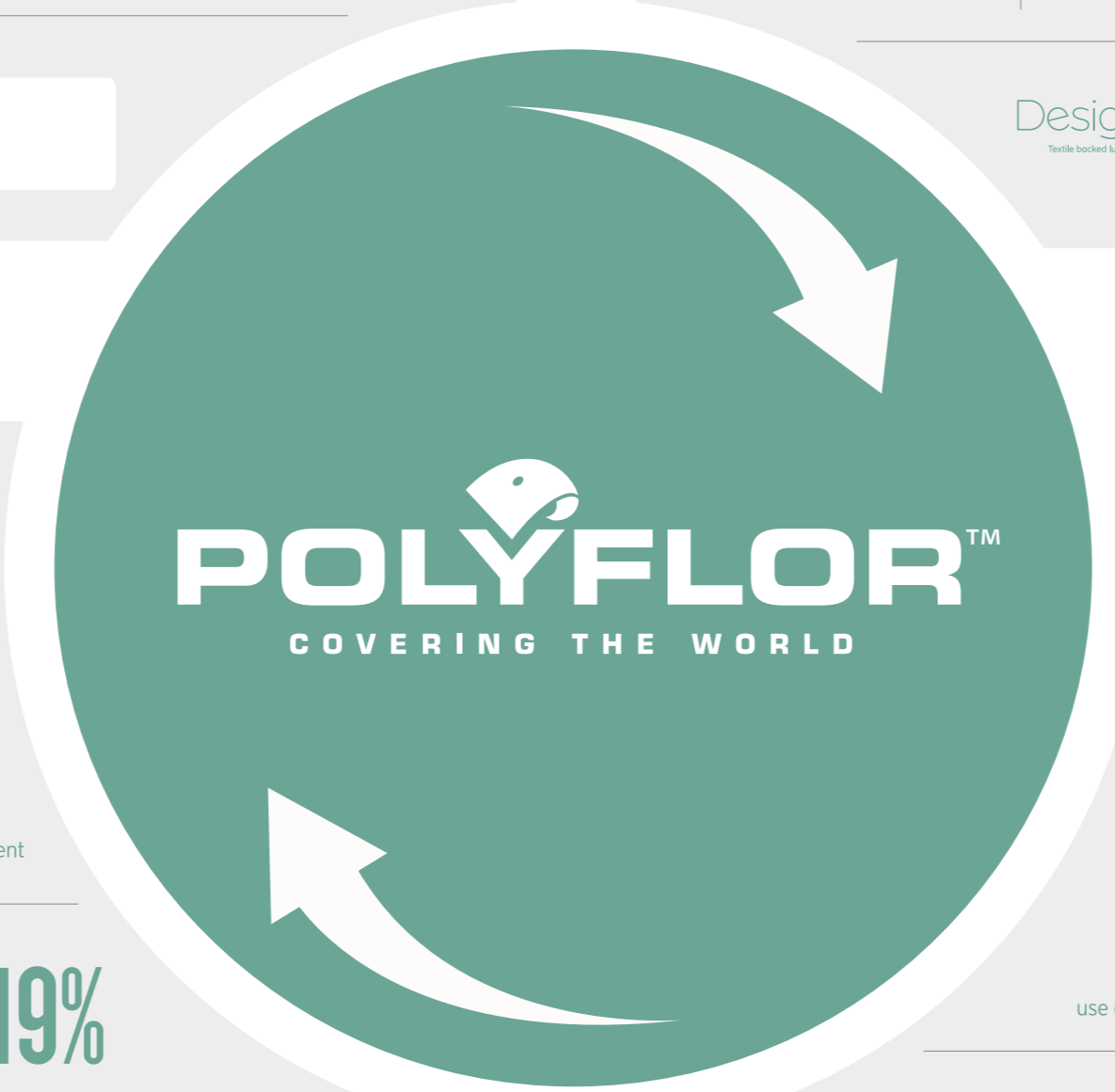
Designatex Secura CAMARO<sup>™</sup> LOC expONA SimPLay

Adhesive free ranges available

PRODUCTION

DISTRIBUTION

REUSE & RECYCLE



8% reduction in energy consumption since 2014

reduction in energy consumption since 2014

16,249 tonnes of CO<sub>2</sub> saved since 2012

tonnes of CO<sub>2</sub> saved since 2012

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

12% waste reduction in 2015 from 2014 despite production increase

waste reduction in 2015 from 2014 despite production increase

96% water supply from recycled water

water supply from recycled water

4% from mains



Product wrapped in paper with recycled content

19% reduction in CO<sub>2</sub> emissions from increased bulk loads since 2013

reduction in CO<sub>2</sub> emissions from increased bulk loads since 2013

Polyflor owns its own efficient fleet



Backhauling removed in excess of 261 HGV journeys



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

100% Polyflor vinyl is recyclable

Polyflor vinyl is recyclable

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

use of distributors' drop-off sites...

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

...or arrange project or contractors' site collections



2,660 tonnes collected since scheme started in 2009, that's 22,158 x 20m rolls - enough to cover...

122



# 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 is now also recognised for its sustainability.

## Polyflor's highlights for 2015:

### Waste Management

- Despite an increase in production, the net waste tonnage fell by 12% compared to 2014.
- Net waste as a percentage of manufactured vinyl flooring decreased to 2.6% in 2015 - a 16% improvement on 2014.
- Recofloor continued to grow, as per the following KPIs:
  - Record year where 508 tonnes of post consumer waste vinyl flooring were recycled - enough to cover 23 football pitches.
  - CO<sub>2</sub> savings equal to driving 48 times around the equator or taking 100 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.
  - Recofloor expanded its operations into Iceland.

### Energy Efficiency

- Saved 4,749 tonnes of CO<sub>2</sub> since 2012 - an improvement of 8% since 2014.

### Transport

- Since 2014 Polyflor’s fleet reduced the kilometres travelled by 7%, reducing fuel by 6% and carbon emissions by 7%.
- Overall, carbon emissions fell due to the increase of bulk load orders and backhaul operations:
  - 8.8% increase in bulk load orders resulted in CO<sub>2</sub> reductions per tonne despatched of 4% and 19% against 2014 and 2013 respectively
  - Polyflor’s backhaul operation has removed at least 261 HGV journeys from the road networks. Supplier collections alone increased by 33% on 2014.

### NPD

- Launched in September 2015, Affinity<sup>255</sup> is a unique 2mm gauge LVT which uses fewer materials, although it is designed for heavy commercial areas. It has a PUR reinforcement for low maintenance, can be recycled and comes with 40% recycled content.

### Assessments & Awards

- Polyflor achieved BES 6001 v3 for many of its products.
- 26% increase against 2014 with 8 additional ranges individually assessed by the BRE. In total we now have 34 ranges assessed and certified, 33 achieving A+.
- Polyflor won 'Made in the North West - Green Company 2015', an award which recognised Polyflor’s environmental achievement.



### CSR

- Polyflor launched a free, 1 day Floor Cleaning & Maintenance Course to help customers get the best out of their Polyflor flooring and maximise longevity.
- Achieved OHSAS 18001 for health and safety management in the workplace.
- In comparison to 2014, loss time accident (LTA) and actual days lost through LTA fell by 20% and 50% respectively.
- Staff turnover was 10% lower in 2015 compared to 2014.
- The company recruited 11% more and had a 1% increase for total employees. Importantly, full time contracts increased by 1% in 2015 and apprenticeships rose by 50% since 2014.
- There were 22 new members to our 25 Year Club and 2 new members to our 40 Year Club, totalling 75 and 8 members respectively.
- In 2015 employees undergoing further training increased 2014's figure by 72%.
- Polyflor surpassed 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 12 local charities as well as supporting 6 national charities in many different ways.



# Materials

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PVC makes a major contribution to the quality, safety and 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 and 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.

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

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

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, although this is a 'one hit wonder' and not the favoured disposal route. For Polyflor, landfill is seldom used and is the last option, albeit 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. 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. 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. 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.

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

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

1. Safe in use.
2. More variation in uses than any other plastic.
3. Best use of natural resources.
4. Low energy consumption.
5. Low carbon emissions.
6. Best cost : performance ratio.
7. Excellent energy efficient ratings.
8. Excellent BRE ratings.
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 non-endocrine disrupting plasticisers - 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.

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.

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

Up to 85% Sustainable Material

Up to 40% Recycled Content





# Production

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Sustainable Production includes the following elements:

1. Efficient use of natural resources, including materials, water and energy.
2. Minimization of wastes and emissions, including those discharged to water, air or on land.
3. Reduction of risks to humans and environment from use of chemicals and disposal of chemicals used in industry.

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*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<sub>2</sub>. Recycled PVC is just 0.3kg CO<sub>2</sub>. To put these figures into an everyday context:

- 1kg Lamb = 14kg CO<sub>2</sub>
- 1kg Cheese = 11kg CO<sub>2</sub>
- 1kg Aluminium = 10kg CO<sub>2</sub>

- Less energy to produce than other plastics, at least 15% less energy than linoleum and 50% less energy than ceramics, due to their lengthy processes in 'ovens'.
- 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, as well as Whitefield. For both sites, from 2012 to 2015, Polyflor has saved 16,249 tonnes of CO<sub>2</sub>, or saved 164% more CO<sub>2</sub> emissions in 2015 than in 2012. To try and put this into everyday context, 16,249 tonnes of CO<sub>2</sub> is equivalent to:

- An average car could be driven for 76 years non-stop.
- The energy use of an average house could be met for 1,250 years.
- Taking 3,186 cars off the road for a year.

In total, Polyflor saved 4,749 tonnes of carbon emissions in 2015, which was a significant 8% increase in savings compared to 2014. Most notably, much progress has been made over the last 5 years at our Teesside manufacturing site with production output and yield increasing significantly. Due to increased efficiency and an improved reduction in downtime of 3.8% (from 2.7% in 2014), the amount of energy required to produce a square metre of flooring

has reduced by 9.1% since 2014. During this period, the kWhr per square metre has also reduced by 13.5%.

Throughout 2015 a number of projects helped reduce energy consumption, which included:

- A further 2000m<sup>2</sup> of roofing was replaced, providing better insulation and improved daylight.
- Daylight ports have been included to maximise natural lighting.
- A programme was initiated to replace existing lighting with new LED lighting, operated with sensors.
- There was an introduction of intelligent, high frequency chargers for all fork lift trucks which optimises electricity usage during charging.
- Upgrade of domestic hot water system with the replacement of storage heaters for direct demand heater units.
- Relining of the incinerator which reduces gas usage.

In previous years Polyflor has made numerous energy saving changes to support ongoing CO<sub>2</sub> reduction targets:

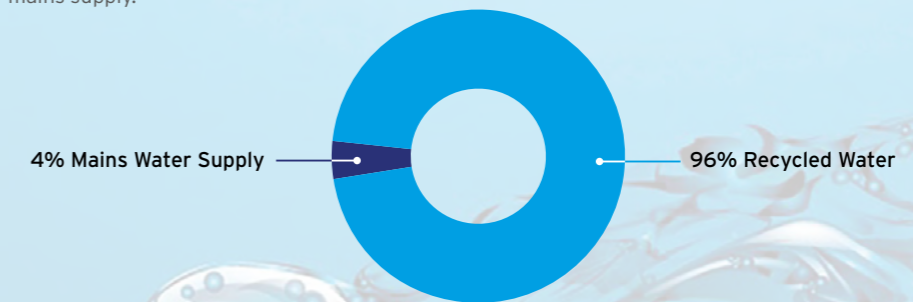
- The installation of the AirStar system at Whitefield reduced compressed air and significantly our carbon emissions by 20% in its first 5 years.
- Powerstar implemented a voltage optimisation system, which uses a patented triple wound transformer, enabling voltage reduction without compromising supply. 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.



# 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

Water used on site from the mains supply is largely for steam and cooling tower usage and is linked to overall production volumes. 2015 saw an overall increase of 9% in water use compared with that of 2014, or a 4% increase compared to 2012. However, water used at our Teesside manufacturing plant fell by 27%, compared with 2014.

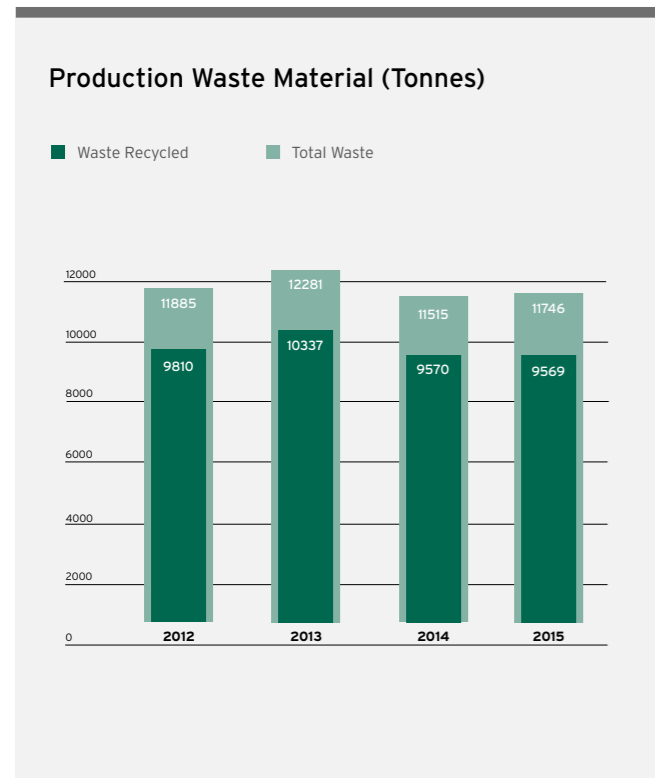
Overall, the water used on site has remained fairly consistent. While there has been an increase of water used throughout 2015, production was also at its highest ever.

Year	m <sup>3</sup>
2012	36,752
2013	34,347
2014	34,985
2015	38,279

# 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 2015 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. Limiting the potential for waste at the outset will continue to be a priority



For another year, our production volumes were up significantly in 2015 when compared with previous years. Our total waste figure increased in 2015 by 2%, but this was 4% less than 2013. More importantly, our net waste tonnage figure (excluding the waste we recycled) for 2015 was 12% less than 2014. Given production's increase and our net waste decrease, the net waste as a percentage of manufactured vinyl flooring decreased to 2.6% in 2015 - a 16% improvement on 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 offcuts 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, New Zealand and most recently, Iceland.

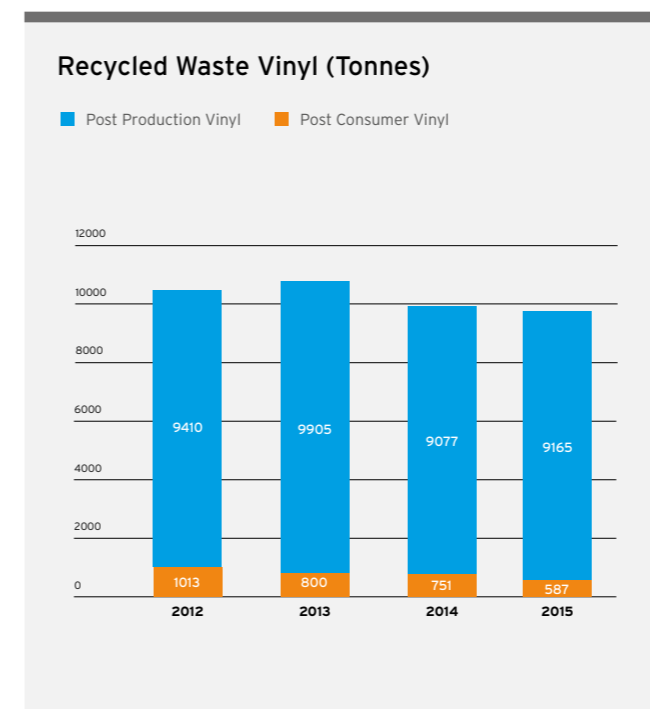
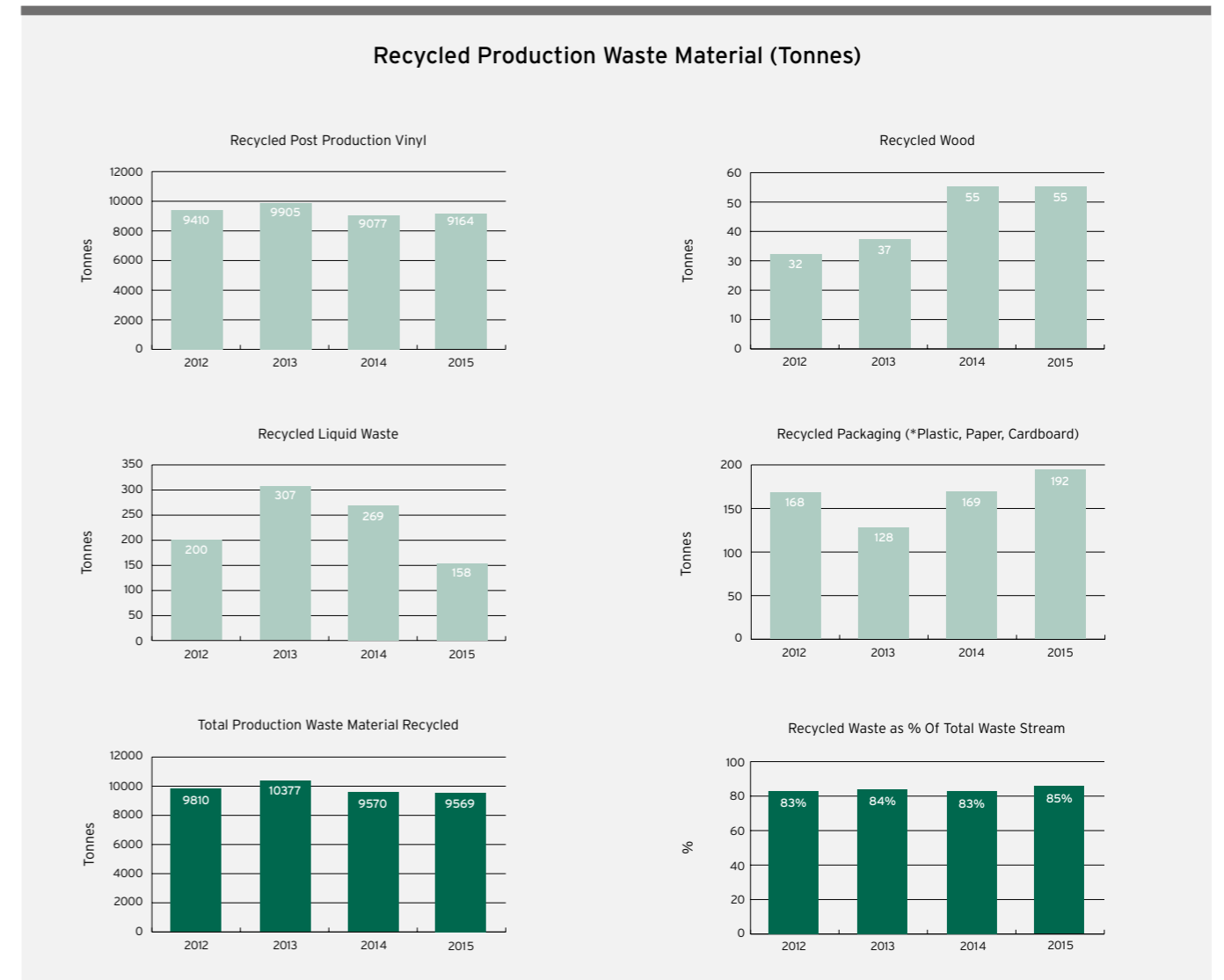
It is evident that there can be few materials better suited to recycling than vinyl flooring. Vinyl is 100% recyclable and can be recycled many times over without losing any of its performance properties, furthermore recycled vinyl requires 85% less energy to manufacture than virgin PVC.

- 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 2015 there were many positives with Polyflor's recycling data, compared with previous years. More post-production vinyl and packaging waste material was recycled than in 2014 and the amount of wood we recycled remained the same - the highest figure in years. Our liquid waste tonnage fell compared to what we recycled in 2014, but this is attributed to engineering solutions greatly reducing the amount of waste plastisol produced for the wear layer.

Overall, waste recycled from Polyflor's production sites was the same in 2015 as it was in 2014, and impressively 85% of the total waste stream was recycled - an improvement of the last 4 years.



Although we increased the tonnage of post-production vinyl recycled by 1%, we were unable to increase recycling efforts of post-consumer vinyl which were down by 22% compared to 2014. This may fluctuate depending on how post-consumer material is distributed by Recofloor. Plus the amount of post-consumer waste we receive independently to our Recofloor scheme may also vary year on year - although as a company we do everything possible to engage with our customers and encourage recycling, particularly through Recofloor. Cumulatively then, for post-production vinyl and post-consumer vinyl, there was a decrease of 1% in 2015 since 2014.

## In the Future

Significant investment has already been made over recent years to improve our recycling capacity and capability, and we have committed 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 the 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 following a fleet review in September, 16 vehicles will be renewed in 2016 and will have Euro 6 engines. 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.



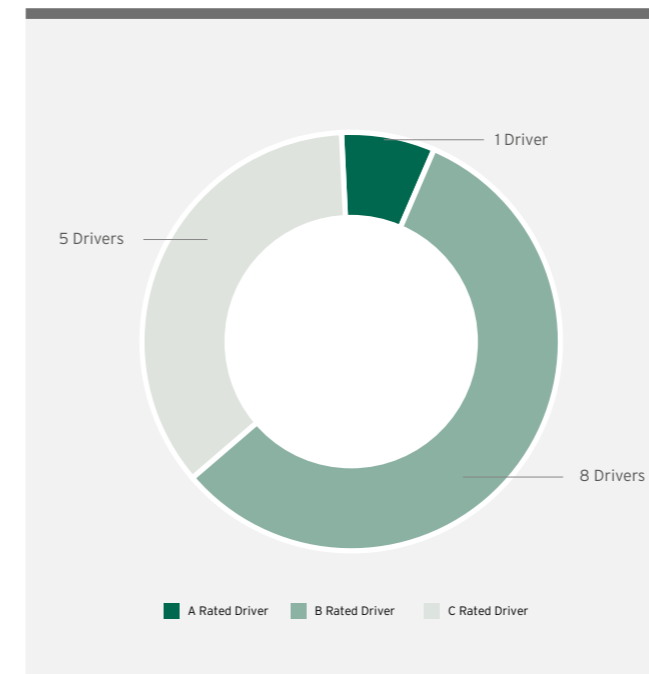
## Achievements for 2015

In 2015 Polyflor made progress in relation to logistical operations and will continue to do so in line with ongoing BES 6001 and ISO 14001 environmental objectives. These objectives are reinforced within UK Transport Planning - all personnel within the department are conversant with SEMP 3, Schedule of Requirements for Transport Procedures and the Reduction of Transport Impacts.

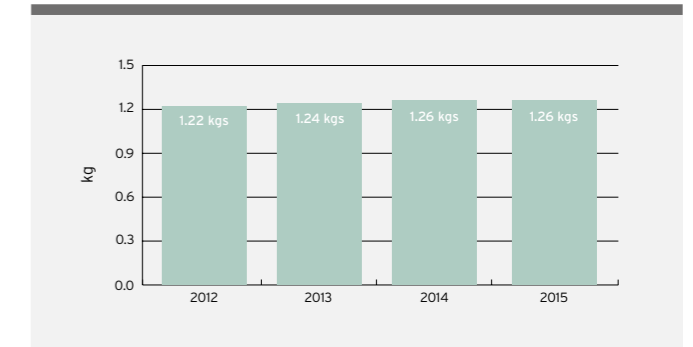
Overall, carbon emissions have fallen due to the increase of bulk load orders and backhaul operations. Vehicle and driver efficiencies have also played a part in this.

- The 21 vehicles in Polyflor's fleet travelled 1,500,299 kilometers and used 442,562 litres of fuel, which in turn produced 1,172,233 kgs of carbon emissions.
  - Since 2014, that was a decrease in kilometers of 7%
  - A 6% reduction in fuel
  - 7% less carbon emissions
- 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. Regarding the MAN KPI system Polyflor drivers scored as follows:

## 2015 drivers' scores

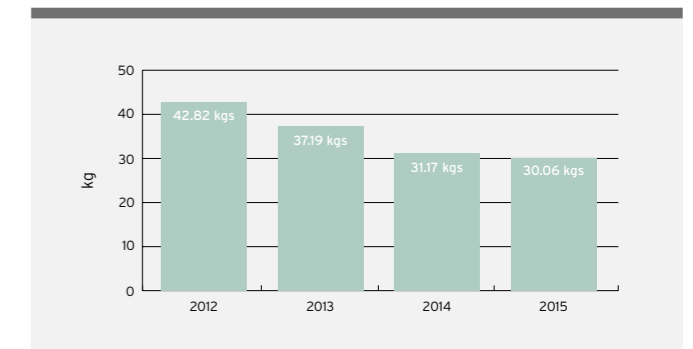


- From 2014 to 2015, a decrease in carbon emissions from transportation has largely been attributed to the 8.8% increase in bulk load orders. Polyflor's bulk load activity will continue to drive its reduction in carbon emissions per tonne of material despatched.
- Vehicles are being loaded more efficiently 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

2015 saw reductions of 1.11 kgs (4%) and 7.13 kgs (19%) of carbon emissions per tonne despatched, against 2014 and 2013 respectively.

- In addition to this, Polyflor's backhaul operation has removed a minimum of 261 HGV journeys from the road network.
- Supplier collections (including Recofloor) increased by 33%, against 2014 helping to maximise the use of empty Polyflor vehicles and reducing suppliers' vehicles on the road. Polyflor's backhauling has therefore a further 205 supplier journeys from the roads.

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.

## New Product Development

Launched in September 2015, Affinity 2<sup>55</sup> is the newest addition to our family of environmentally sound LVTs. With a unique 2mm gauge, it is thinner than other LVTs thus requiring fewer materials, although it has been designed to perform in heavy commercial areas. It has been developed with a PUR reinforcement to ease maintenance, further reducing environmental impact of its in use phase. Affinity 2<sup>55</sup> contains 40% recycled material and comes with EN 15804 EPD and BRE A+.

Polyflor continues to develop and improve installation methods for its flooring ranges, with the increased use of solvent-free adhesives and adhesive-free vinyl flooring, such as Camaro Loc, Expona SimpLay, Secura and Designatex. The added benefit of adhesive-free flooring is potentially product may be reused as well as recycled.

## NPD with Dementia in mind

Polyflor continues to be a local and national member of the Dementia Action Alliance which is committed to transforming the lives of the 850,000 people living with dementia in the UK (Alzheimer's Society 2015).

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](http://www.dementiaaction.org.uk)

Our research into dementia-friendly flooring and development of products suited to the healthcare sector has been recognised by our invitation to join the Society of British and International Design (SBID) Healthcare Design Advisory Council. This is a collaboration of designers, educators and healthcare and industry professionals looking at how healthcare design can be used to meet the needs and make a real difference to the lives of our growing, ageing community. Flooring is a known factor that can contribute to intelligent and carefully planned healthcare design, with medical experts now recognising the importance of the interior as part of the healing process (SBID, 2015).

**DAA** Dementia Action Alliance





## In Use

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We are delighted with the finished result at Lido Ponty where the flooring perfectly complements and enhances the new look of the lido. Thanks to the Polysafe Arena and Modena ranges we were able to create a safe and sustainable slip resistant environment for visitors without having to compromise on our creative vision for the interior design.

//

*Amy Griffiths,  
Assistant Site Manager on the Lido Ponty project*



Lido Ponty, National Lido of Wales



# 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.

Polyflor vinyl floorcoverings are also exceptionally durable with a lifespan of 20-25 years, if suitably maintained. Although in many instances it has been known to last much longer than this: Our most recent example comes from Palmerston North Hospital, New Zealand, where Polyflor Standard XL was installed in 1974 - and is still looking great today!

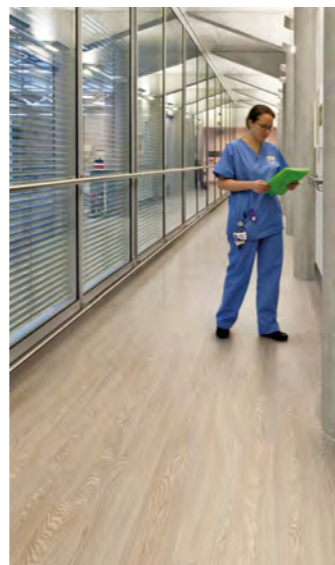
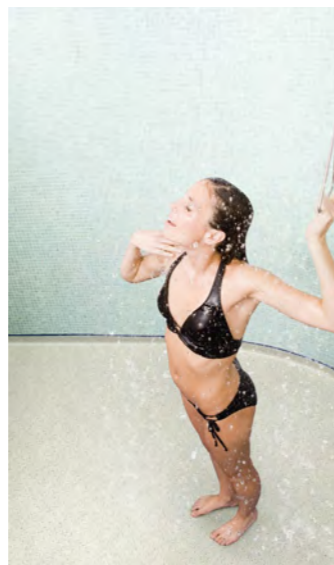
Another of vinyl's strengths is its much greater resistance to water, whereas many alternative materials are not suitable for

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 covered. 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.



# Safety Performance

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

# Low Maintenance

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

## Market leading low maintenance

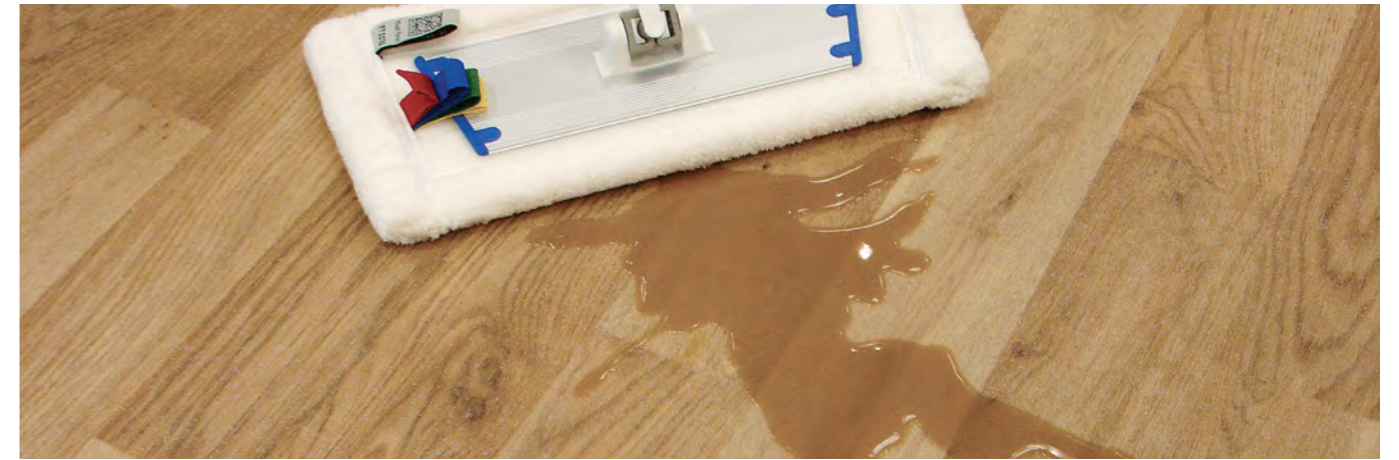
A poor maintenance regime damages aesthetics, impairs performance, shortens the durability and creates hygiene problems in critical areas. The in-use phase of the resilient flooring life cycle accounts for at least 80% of its environmental impact, given Polyflor floor covering's potential 20-25 year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

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.\*

## Floor Cleaning & Maintenance Course

In 2015 Polyflor launched a free, 1 day Floor Cleaning & Maintenance Course to help customers get the best out of their Polyflor flooring and help maximise its longevity.

## Creating clean and hygienic environments

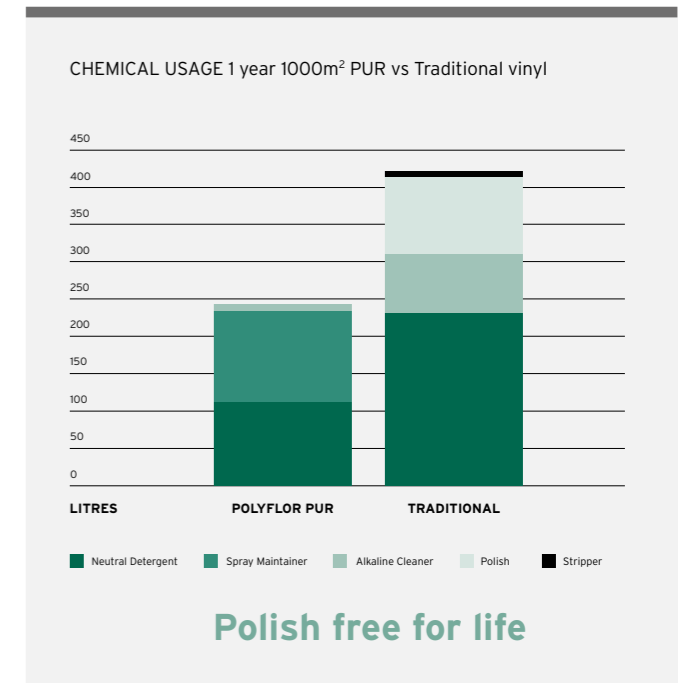
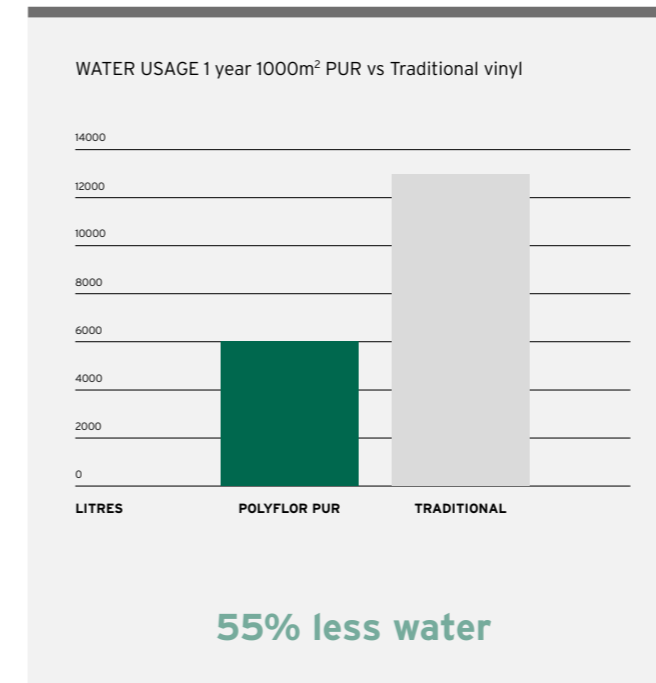
Vinyl sheet flooring can be welded at the seams, forming an impervious base that facilitates ease of cleaning by eliminating gaps and cracks where dirt can gather.

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).

The in-use phase accounts for at least 80% of its environmental impact



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



# Dementia Friendly Flooring

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

With more than 850,000 people currently living with dementia in the UK alone (Alzheimer's Society, 2015), and the rate of diagnosis increasing, our building design of tomorrow needs to be future proofed – Implementing dementia friendly environments will be beneficial in the longer term, ensuring flexibility in design and prolonging the life cycle of a building. By providing dementia-friendly places and spaces through good design there is real opportunity to make a significant difference.

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

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

Professor Marcus Ormerod, University of Salford

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.
- 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 flooring is a homely, easy to clean solution and the perfect complement to our bright dementia-friendly care zone. The finish of the floor is more matt and the tone of the floor is not too dark or too light, helping to avoid patients being distracted so that they become unbalanced. Some of our patients were immediately less anxious about this replacement floor, contributing to a more peaceful space that offers comfort and familiarity of home.”*

Jeff Moore, Project Manager at Croydon University Hospital



*“We are continually impressed with the array of dementia-friendly flooring ranges available from Polyflor which means we can use their products throughout our homes to add to the positive ambience.”*

Jaqueline Farguson, Design Manager at Hallmark Care Homes

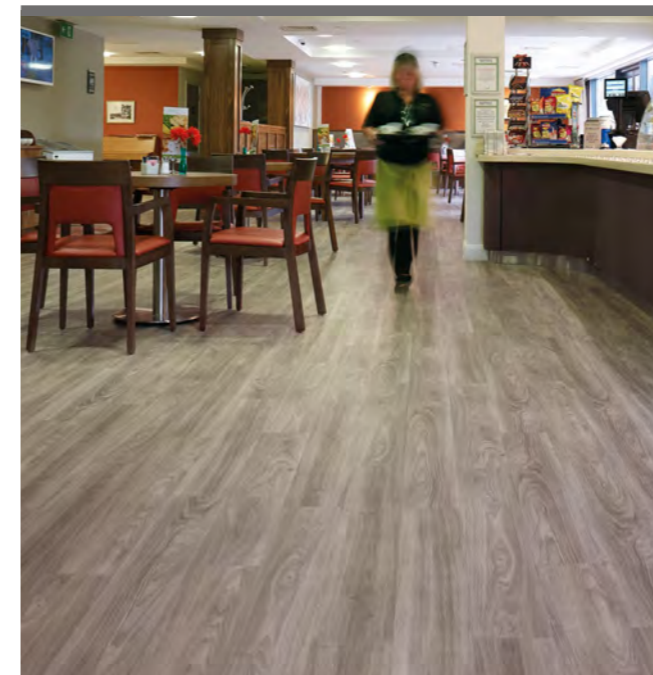
- Use a product without sparkle as this can also make the floor look wet.
- The use of effects that replicate natural outdoor materials such as wood and stone promotes a homely, fresh feel which is less clinical than a traditional healthcare environment.
- Many patterns and textures on the floor should 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.

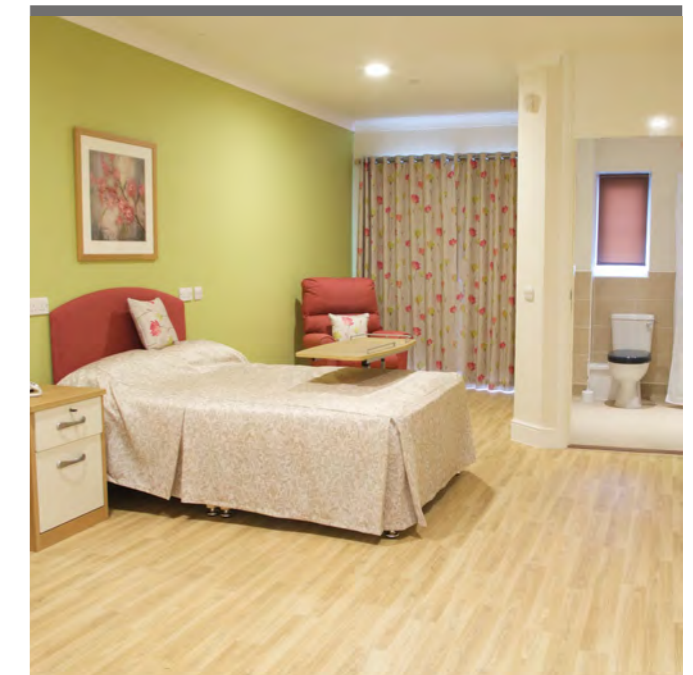
Visit the **Healthcare Sector** at [www.polyflor.com](http://www.polyflor.com) for more information.

**Polyflor also has a dedicated brochure and CPD, both of which cover our commitment to the dementia care sector.**



*“The natural look of the flooring is familiar to our residents living with dementia, so it helps to project a relaxing and calming environment, contributing to reduced anxiety levels.”*

David Pointon, Business Support Manager at CLS Care Services



*“The flooring chosen from Polyflor makes a real contribution to the overall space, helping create an airy feel that encourages residents to live as independently as possible.”*

Stephen Traves, Project manager at the Seren Group

# Air Quality

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

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

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

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

Indoor air quality should be considered 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 (clean room 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. An additional benefit of Polyflor's low maintenance PUR products is the minimised VOC emissions from reduced cleaning chemicals.

- 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
- Reduced VOC emissions by low maintenance (less cleaning chemicals) routine



# CE Mark

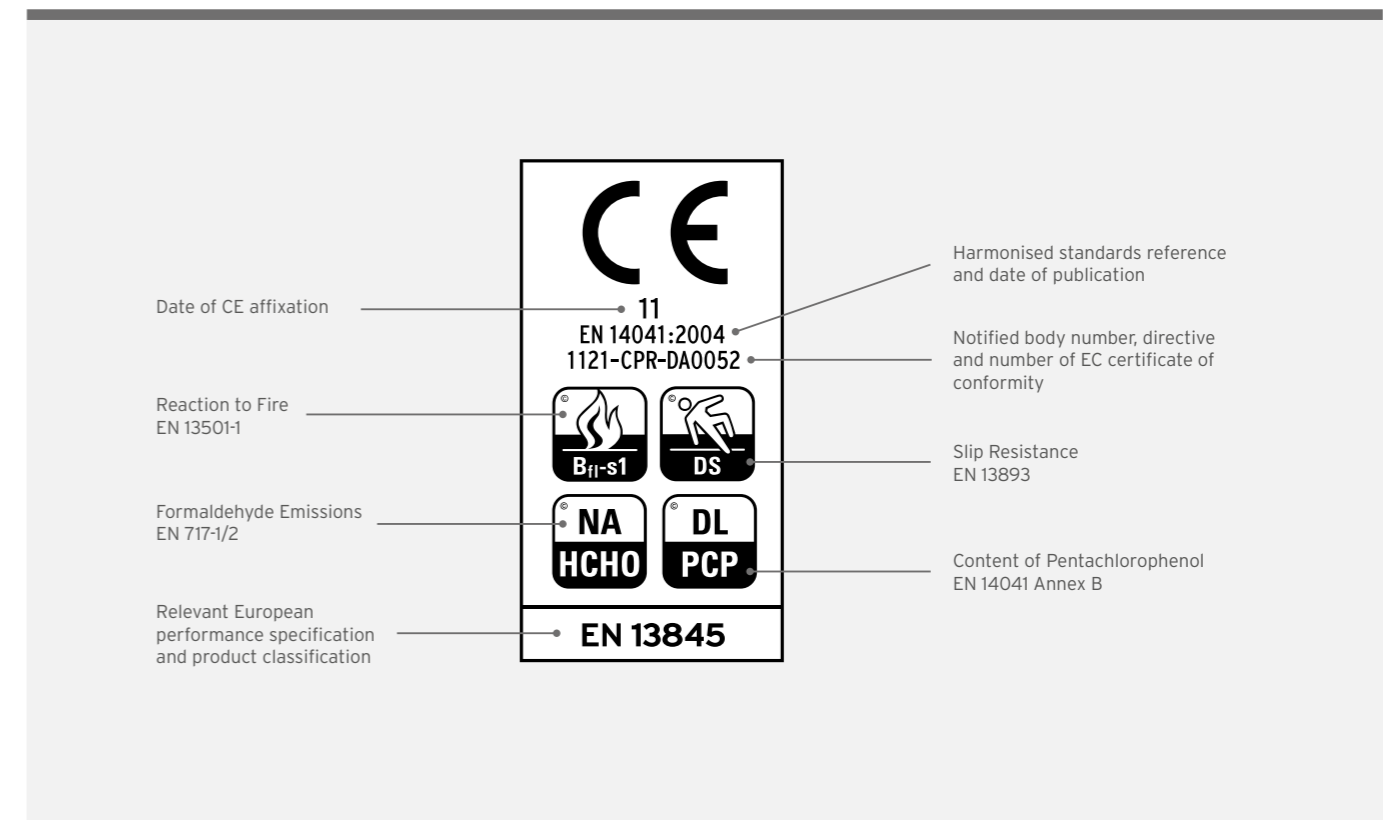
As a manufacturer of vinyl flooring it is Polyflor's responsibility to clearly label its product with the CE Mark and declare conformity with all of the legal requirements to achieve CE marking. Polyflor is therefore ensuring the validity for that product to be sold throughout the European Economic Area.

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



Participating in Recofloor has reduced our waste disposal costs as well as the amount of material we send to landfill. The collection services are efficient and it's good to be doing our bit for the environment by sending back recyclable material for recycling.

Recofloor has helped us to win new clients and importantly reduce costs. The scheme is now an integral part of our waste management. All our vinyl waste is brought back to our premises so it can be segregated correctly and recycled. We actively promote Recofloor throughout our business, whether it's to our clients, managers or apprentices.



*Anthony Francis,  
Managing Director of Mayfield Floors, Stockport*



## 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.

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

Polyflor 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.
- 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 per year of PVC material (within the overall 800,000 tonnes per 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 Calandriers), 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 offcuts 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 2015 around 500 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 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.

Polyflor Australia and Polyflor New Zealand continue to operate the Recofloor collection scheme which is running effectively, with 4 drop-off sites in Australia and 2 drop-off sites in New Zealand, enabling Polyflor to recycle on average 22 tonnes per year. Similarly in Ireland, the facility to recover waste from larger projects remains in place, and with the Recofloor scheme in operation in Ireland with various distributors' drop-off sites available, logistically it is relatively simple for this waste to be delivered to Polyflor for recycling.

In 2015, Polyflor's main Icelandic distributor started to review the logistics of recycling Polyflor vinyl waste. With the help of Recofloor, the waste vinyl can be sent back to the UK and recycled at Polyflor.



# Recofloor

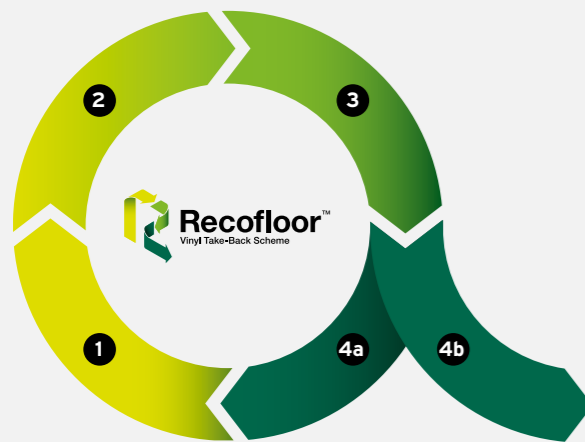
Although the flooring industry is not bound by law to recycle waste, Polyflor is actively seeking to recover and recycle its post consumer waste vinyl flooring to minimise the flooring industry's environmental impact and close the loop of our products' life cycles.

## 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 offcuts, smooth uplifted flooring and old stock roll-ends and samples
- This material is recovered and recycled into new flooring or other useful products such as traffic cones
- Customers must register with the scheme and then request smaller or larger bulk bags to gather their waste vinyl

- Regardless of waste material volumes, there is an outlet accessible for 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/sustainability](http://www.polyflor.com/sustainability)  
Alternatively contact Recofloor directly on 0161 355 7618 or [www.recofloor.org](http://www.recofloor.org)



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

*BRE Global*

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

### Yes Please

- Post installation, clean vinyl offcuts (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 - recycling Polyflor is easy and something we have been doing since day one, back in the 1950s. To try and tackle this issue and actively encourage recycling more waste vinyl flooring, a working group was formed in 2007 with all vinyl flooring manufacturers on board, managed and coordinated by a waste management company. Funding for this recycling initiative came from WRAP (Waste & Resources Action Programme).

Once the trial period and government funding ceased, members had to review the scheme's future. Polyflor continued to run the scheme with another UK manufacturer and in 2009 Recofloor was formed. As a founding and funding member of Recofloor, Polyflor has helped develop the scheme into the success that it is today - supporting financially, driving the scheme through sales and marketing, as well as logistically supporting with collections, sorting and ultimately recycling.

## Recofloor's Progress

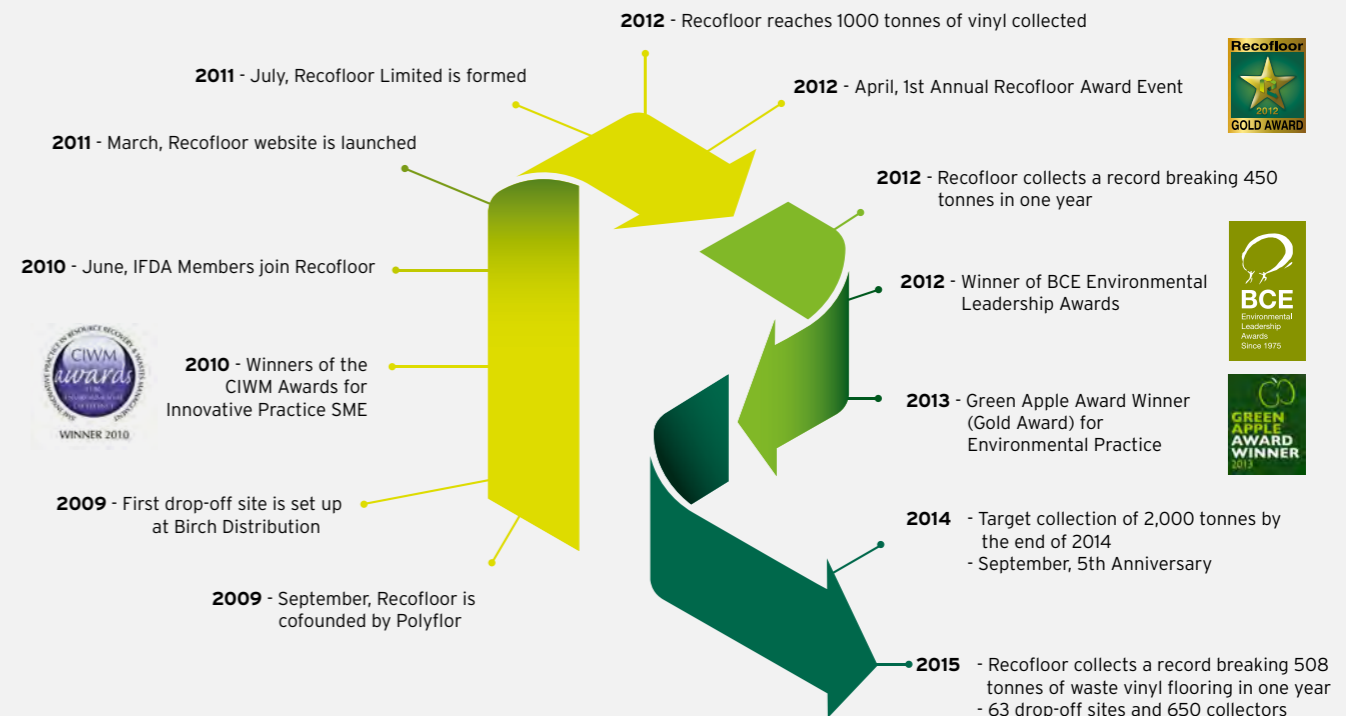
Since 2009 Recofloor has achieved a great deal and is now the UK's industry leading facilitator for efficiently reclaiming vinyl flooring. 2010 was a real turning point for the scheme, which saw Recofloor winning the CIWM (Chartered Institute of Wastes Management) Award for Environmental Excellence in 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 2,660 tonnes being collected since the scheme started in 2009 (figure correct as at 1st January 2016). This volume equals nearly 886,333m<sup>2</sup> or 22,158 x 20m rolls - enough vinyl flooring waste to cover 122 football pitches - and this is a saving of over 2000 tonnes of CO<sub>2</sub>.

Many thanks go to our customers who have embraced and supported 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. The drop-off sites have also facilitated Recofloor's collection and recycling process. Furthermore, CO<sub>2</sub> emissions have been reduced by minimising needless drop-off and pick-up journeys.

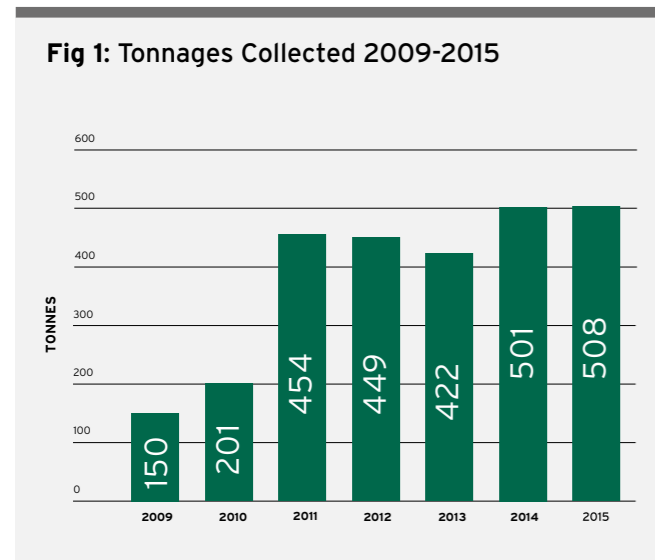
## Recofloor Timeline



# Recofloor in 2015

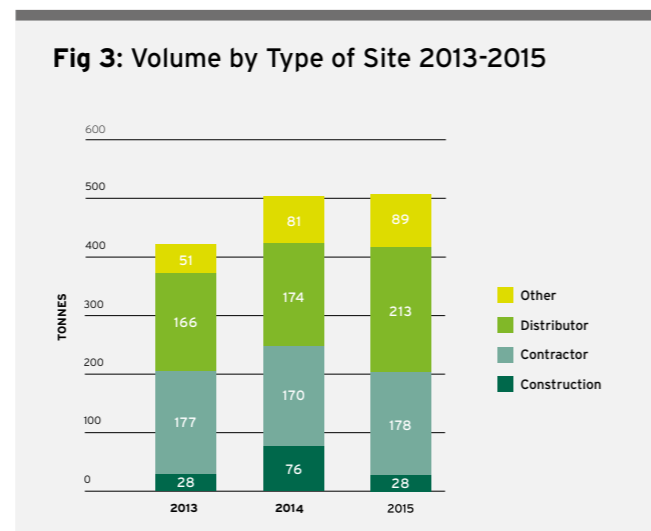
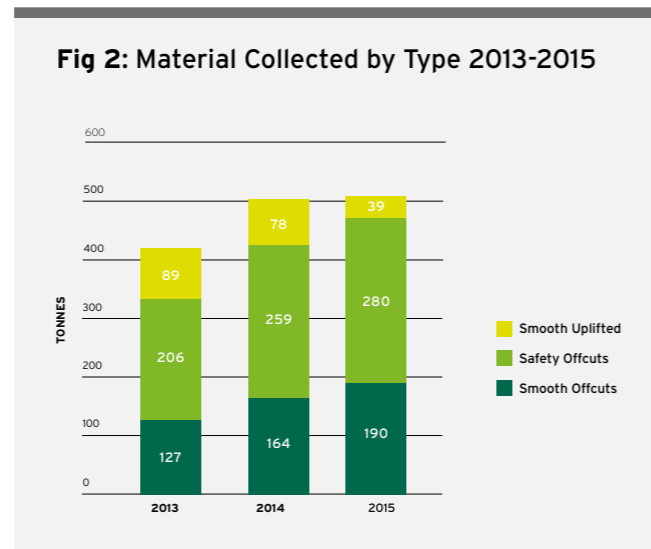
2015 was a successful, record-breaking year for Recofloor, collecting 508 tonnes. We made a pleasing 1.4% volume increase compared to 2014's year-end figure of 501 tonnes. Recofloor's success was sustained through ongoing, supportive marketing campaigns to promote the scheme, including the Love2shop promotion, events and tradeshows, plus continuous communication via trade publications, social media and eshots.

**Figure 1** shows volumes collected by Recofloor each year. In 2015 there was an increase of 7 tonnes compared to 2014, with a total of 508 tonnes of material collected by the scheme.



As shown in **Figure 2** the volume of uplifted flooring collected in 2015 continues to decrease compared to the previous two years. Only 39 tonnes of uplifted flooring was collected, half of the amount collected in 2014. Offcut material from the installation process represents 92% of the material collected in 2015. Safety offcut material alone represents over half of the material collected this year, with 280 tonnes of Safety offcuts having been collected.

Frequent contact with Recofloor members has proved to be essential in maintaining awareness of the scheme. **Figure 3** shows the amount of material collected from each type of site for the past 3 years. In 2015 volumes collected from distributors' sites increased by 23% compared to 2014. This can be attributed to site visits, Bacon Butty Events and invitations from flooring distributors to attend their trade events which resulted in more drop-off site users.



2015 saw the 4th annual Recofloor Awards ceremony, held at Leicester Tigers Rugby Union Club and hosted by rugby legend, Bill Beaumont. The event proved a big hit with our distributors and contractors involved with Recofloor, who walked away with an award and / or certificate for their dedication and commitment. Recofloor was also a finalist for MRW (Materials Recycling World) National Recycling Awards for the category of Resource Management Business of the Year.

## 2015 - Recofloor in Numbers

- Record year with 508 tonnes of waste vinyl flooring collected and recycled - enough to cover 23 football pitches.
- CO<sub>2</sub> savings equal to driving 48 times around the equator or taking 100 cars off the road for a year.
- 1.4% increase on tonnage collections compared to 2014.
- 3 new drop-off sites and 111 new collectors.
- Recofloor now has 63 UK-wide drop-off sites and 650 collectors.
- Attended 6 trade shows, 6 bacon butty events and carried out 14 visits across the UK and Ireland.
- Successful Love2shop promotion ran throughout August, with 3 members each winning £100 (this was by far Recofloor's best month in terms of waste tonnages, with a total of 37.5 tonnes in 43 collections being sent for recycling).
- 4th triumphant Recofloor Awards ceremony held at Leicester Rugby Union Club.

## 2016 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

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'Is this product better than that product' for planetary and human health?' It is only at the product level that we get a valid answer. Only at the product level can we answer questions like what sort of maintenance or cleaning or replacement schedule is required or end of life reuse/recycling options are available.

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

In our experience of doing just that and hundreds of LCAs for products to be certified, sometimes the results are counter-intuitive. What we think is more 'sustainable' is not always so.

//

*David Baggs,  
CEO & Program Director of Global GreenTag Pty Ltd and CEO of Integreco Pty Ltd,  
a sustainability and BCA Energy Compliance certification consultancy*



North Chadderton School achieved BREEAM 'Very Good Rating'

# 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.

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

There are 24 environmental indicators within the assessment process of the EPD, which are broken down into the following categories:

- 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 EPDs

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.

## 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-2013211-E
Polysafe Arena PUR		EPD-ERF-2013211-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
Expona Control PUR		EPD-ERF-2013511-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
Acoustix Harmony fx PUR		EPD-ERF-2013311-E
Acoustix Forest fx PUR		EPD-ERF-2013311-E
Acoustix Gallery fx PUR		EPD-ERF-2013311-E
Expona Flow		EPD-ERF-2013211-E
LVS		
Secura		EPD-ERF-2013411-E
Designatex		EPD-ERF-2013411-E
LVT		
Expona SimpLay	EPD-JHA-20140178-ICA1-EN	
Expona Design PUR	EPD-JHP-2013111-E	
Expona Commercial PUR	EPD-JHP-2013211-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
Affinity2 <sup>55</sup>		EPD-ERF-2013511-E
RUBBER		
Diamant		EPD-ERF-2013711-E

To view EPDs, please go to [www.polyflor.com/sustainability](http://www.polyflor.com/sustainability) or [www.bau-umwelt.de](http://www.bau-umwelt.de).

# 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<sub>x</sub>, 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<sub>2</sub>) 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<sub>2</sub> and NO<sub>x</sub>. This includes acidification due to fertiliser.

Copy taken from [www.bre.co.uk](http://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 Tecnológico 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 ratings are A+ to E, with A+ being the

best rating, having achieved the lowest ecopoints. A better rating helps to maximise a building's BREEAM score, which is achievable through our 33 A+ ratings.

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

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](http://www.greenbooklive.com) and click on the 'search GBL' link. For quick reference to a specific product and certificate, enter the BRE certificate number (do not include the ENP prefix) 472; 415 or 429 into the 'Cert No' search box (see cert. no.s in the table on page 54), or simply enter 'Polyflor' into the Company Name search box.

Polyflor's new product ranges were assessed in 2015 and have been included on recent certification: These are Expona Flow PUR; Secura; Polysafe Modena PUR; Polysafe Arena PUR; Polysafe Verona PUR; Polysafe Ecomax, Polysafe Hydro Evolve and Polysafe Apex. Furthermore, some of our existing product ranges, including Acoustix Forest fx PUR; Acoustix Harmony fx PUR; Polysafe Wood fx

PUR and Polysafe Wood fx Acoustix PUR improved on their previous assessment B ratings, achieving A ratings for the Domestic and Office sectors. Classic Mystique PUR also improved, achieving A+ for Domestic, where it had previously scored A. Polysafe Ultima was the only product which went from an A+ to A for Retail (Durability) and from an A to B in the Domestic sector. Overall the ratings are extremely pleasing.

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 Ecomax	ENP472	A+	A+	A+	A+	A	A
Polysafe Verona PUR	ENP472	A+	A+	A+	A+	A	A
Polysafe Modena PUR	ENP415	A+	A+	A+	A+	A	A
Polysafe Arena PUR	ENP415	A+	A+	A+	A+	A	A
Polysafe Wood fx PUR	ENP415	A+	A+	A+	A	A	A
Polysafe Wood fx Acoustix PUR	ENP415	A+	A+	A+	A	A	A
Polysafe Hydro	ENP472	A+	A+	A+	A+	A	A
Polysafe Hydro Evolve	ENP472	A+	A+	A+	A+	A	A
Polysafe Apex	ENP472	A+	A+	A+	A+	A	A
Polysafe Ultima	ENP472	A+	A+	A+	A	A	B
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
Expona Flow PUR	ENP415	A+	A+	A+	A+	A	A
Secura	ENP415	A+	A+	A+	A+	A	A
Acoustix Harmony fx PUR	ENP415	A+	A+	A+	A	A	A
Acoustix Forest fx PUR	ENP415	A+	A+	A+	A	A	A
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

## 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	LVS EN 653	LVT EN 649	Safety EN 13845	Rubber (smooth) EN 1817	Rubber (profiled) EN 12199
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+	A	B	A	A
Element	821570065	821570066	821570010	821570002	821570013	921570010	821570014	821570015

For more detail about how these ratings are arrived at by BRE Global visit [www.bre.co.uk/greenguide](http://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	Homogeneous	LVT	LVS	Rubber (smooth)	Rubber (profiled)
Expona Control PUR	Polyflor SD	Expona SimpLay	Designatex	Diamant	Noppe Stud Tile
	Finesse SD	Camaro Loc PU			
	OHMega EC	Affinity2 <sup>55</sup>			
	Polyflor EC				
	Polyflor ROF				
	Polyflor Plus PU				

# 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

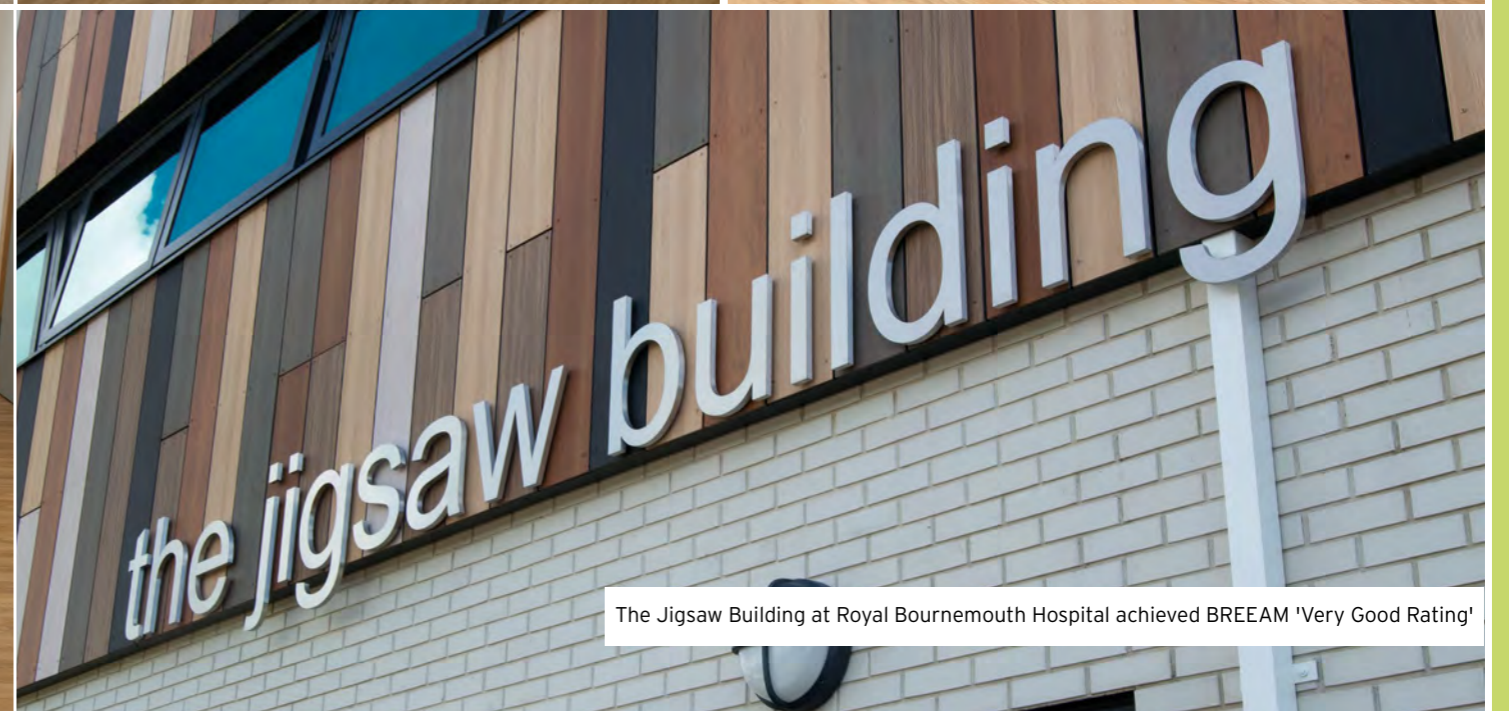


## Polyflor In Situ

In 2015, Polyflor supplied flooring to many BREEAM projects, some of which are still ongoing. A couple of our favourite completed projects include a new block at Llwynrwn Junior School in Beddau, Pontypridd and the Jigsaw Building at Royal Bournemouth Hospital. Both of these fantastic buildings achieved BREEAM Very Good ratings.

Polyflor's Forest fx PUR, Polysafe Hydro and Polysafe Verona PUR ranges were installed throughout the new £4m sustainable, 7 classroom building at the Junior School in Pontypridd.

Polysafe Modena PUR and Wood fx PUR ranges were installed in the new £5.7m Jigsaw Building at Bournemouth Royal. The 21,000 sq.ft building will provide a centre of excellence for women's health.



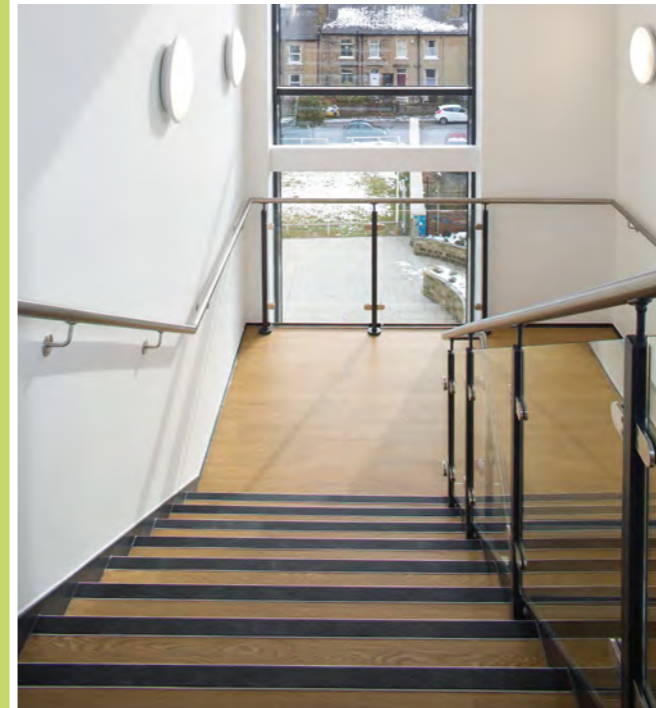
The Jigsaw Building at Royal Bournemouth Hospital achieved BREEAM 'Very Good Rating'



Llwynrwn Junior School achieved BREEAM 'Very Good Rating'



Acre Mill achieved BREEAM 'Very Good Rating'



# 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 centres; 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

**MR Credit: 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**.

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

Polyflor flooring contains up to 40% recycled material, which typically includes post-consumer waste from the project site as well as pre-consumer (or post-production) waste, including process and sampling waste for instance. Polyflor is 100% recyclable and post-consumer waste, including offcuts and smooth uplifted waste can be recycled. Alternatively, our Expona Simplay, Secura and Designatex can be reused as they do not require adhesive for installation. **1 point available.**

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

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

**MR Credit: Construction and Demolition Waste Management.**

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

## Indoor Environmental Quality

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

Polyflor can contribute to both options of this credit through certification of its low emitting products. VOC certification is available via alternative test methods, including AgBB and Indoor Air Comfort Gold. Particularly relevant to LEED assessments, most Polyflor floorcoverings have achieved FloorScore® certification (certificates are available online at [www.polyflor.com](http://www.polyflor.com) and [www.scs-certified.com](http://www.scs-certified.com)). Along with other materials used on the project, Polyflor products can contribute towards **1 point - possibly up to 3 points**.



# SKArating®

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

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

The SKA scheme comprises over a hundred 'good practice' measures, incorporating energy, CO<sub>2</sub> emissions, materials, waste, water, wellbeing, pollution and transport. The percentage score for the assessment across the given criteria, provides the fit-out project with a bronze, silver or gold label.

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

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

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

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

For more details on SKA Ratings, visit [www.rics.org](http://www.rics.org)





# Global GreenTag<sup>Cert</sup>™

The Ecospecifier Global GreenTag<sup>Cert</sup>™ scheme operated by Global GreenTag P/L is a third party ecolabel program that rates sustainable products for the built environment. Polyflor's many products certified under the scheme in Australia and New Zealand, with Polyflor homogeneous PUR ranges typically in the top 50% of resilient finishes based on their GreenTag Ecopoints.

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

- Reduction of energy and greenhouse gases.
- Habitat and land degradation.
- Resource depletion and efficiency.
- Occupant and contractor health & conditions.
- 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](http://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 'Sustainable Products' and IEQ-VOC sections of the Green Star rating tools.

Polyflor's Homogeneous flooring ranges achieve 'PVC Best Practice', as audited by NCS International Pty Ltd, to meet the GBCA best practice guidelines. Because of this, potential for points on a Green Star assessment is further improved.

Visit [www.globalgreentag.com/certified-products-australianz](http://www.globalgreentag.com/certified-products-australianz) to view certificates.

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

*Since then numerous BAT PVC products have been certified, mostly at Silver or Gold level, and can easily be compared to other flooring types with both similar, but also worse, eco-point scores and ratings. Then the collaboration between the Vinyl Council of Australia (VCA) and GBCA recognised BAT under the Best Practice PVC Standard (BPPVC) Guidelines adopted in 2011."*

David Baggs, CEO & Program Director of Global GreenTag Pty Ltd



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	0.53
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
HETEROGENEOUS	LCA Rate	Green Rate	Eco-Point
Forest 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 Commercial PUR	Silver PLUS	Level A	0.58
Expona Superplank	Silver PLUS	Level A	0.58
Expona Supertile	Silver PLUS	Level A	0.58
Camaro PUR	Silver PLUS	Level A	0.54
Colonia 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 BREEAM and LEED. Therefore, using Polyflor products certified by Ecospecifier's GreenTag scheme can help the specifier achieve maximum points



# 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 and their families as well as of the community and 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, which helps Polyflor manage and reduce impacts throughout the supply chain.

As part of our ongoing BES 6001 objectives, we work with suppliers with the closest possible proximity to the Polyflor production sites.

- 55% of all raw materials supplied within 50 mile radius (by Kg)
- 59% of all raw materials supplied within 100 mile radius (by Kg)
- 74% of all raw materials supplied within 300 mile radius (by Kg)

- 100% of all raw materials supplied within 500 mile radius (by Kg)

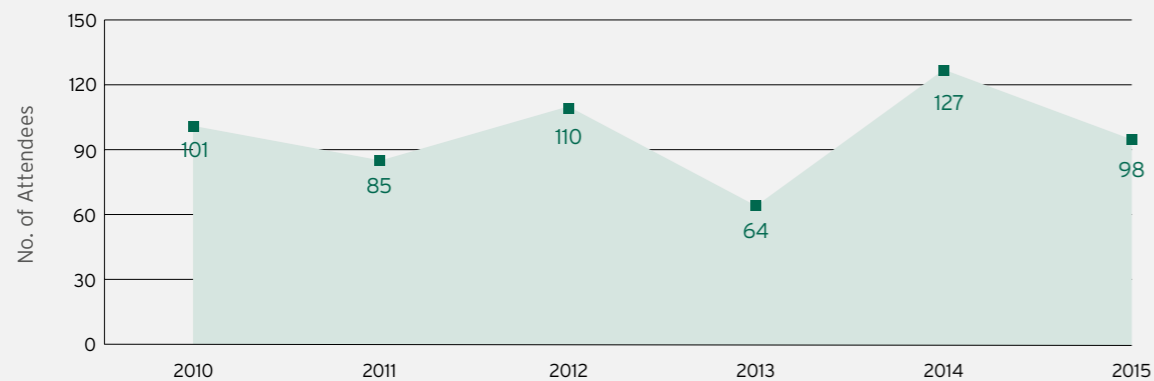
Another of our objectives, which we met in 2015 is purchasing in bulk to minimise the transport impacts of our products, ensuring 95% of bulk deliveries are above the minimum load size.

In 2015, over 90% of Polyflor's raw material suppliers had achieved ISO 9001 and ISO 14001 approval. In addition to this, 45% of our suppliers had OHSAS 18001 approval in 2015 - a 13% increase compared to 2014. Polyflor will continue to encourage suppliers in obtaining OHSAS 18001 approval, as well as ISO 14001.

## Supply Chain & Procurement

- Responsible sourcing policy.
- ISO 9001, OHSAS 18001 & SA 8000 certified.
- ISO 14001 & BES 6001 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.

## Polyflor's Flooring Training School



## 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 Flooring Training School significantly contributes to the value chain and continued to deliver high quality 2 and 3 day training courses throughout 2015 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. Over the last 6 years Polyflor has provided valuable floor fitting training to 585 industry associates.

In 2015, Polyflor also created a new Floor Cleaning and Maintenance Course. This free course is aimed at facilities management staff and

others in the healthcare, education, housing, retail and commercial sectors. The day-long course aims to educate how to get the best from a Polyflor vinyl floorcovering by using the correct cleaning methods and products. Correct maintenance facilitates a longer life, reducing costs and frequency of purchasing new flooring.

Further to the Training Schools 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.

## What is Responsible Sourcing?

Responsible Sourcing is defined in BS8902 - Responsible sourcing sector certification schemes for construction products - Specification as: 'The management of sustainable development in the provision or procurement of a products.'

Sustainable development is further defined as: 'An enduring, balanced approach to economic activity, environmental responsibility and social progress.\*'

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

## What is BES 6001?

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

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

Depending on a company's performance against the criteria, ratings are awarded on a Pass; Good; Very Good and Excellent basis.

Polyflor continues to set the bar high, having been the only certified flooring manufacturer in 2015, achieving a Very Good rating for Version 3 of the standard. By achieving Very Good, 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](http://www.greenbooklive.com).

## The Importance of BES 6001

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

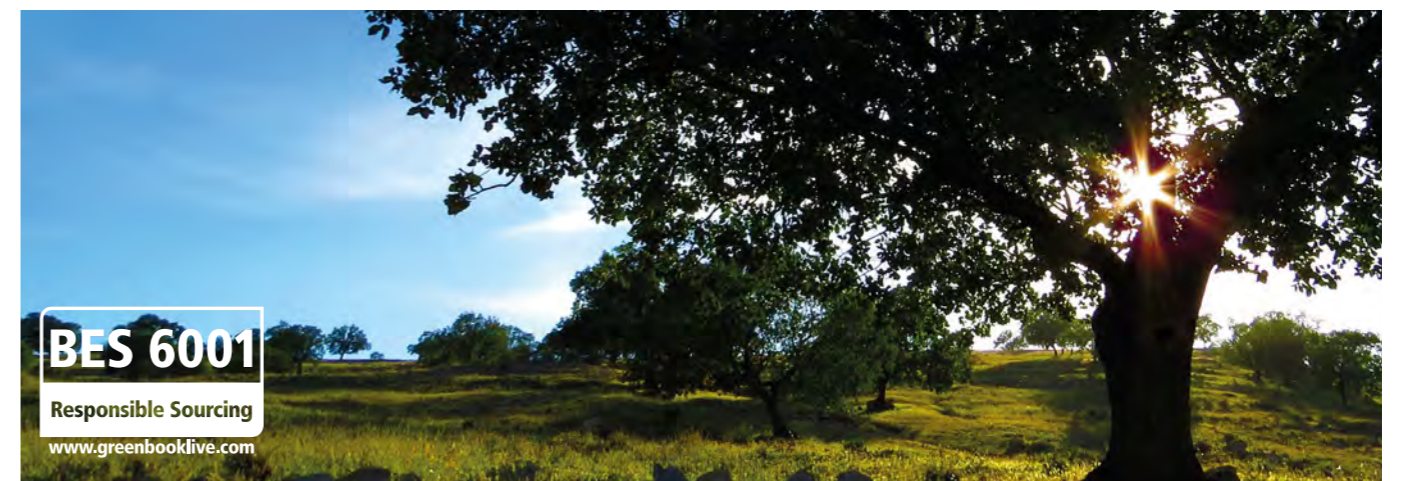
BES 6001 is just that. It is an increasingly important and valuable standard for customers who want to procure flooring with sound environmental credentials and traceability, from socially aware and ethical suppliers. Without doubt the standard helps customers make better informed decisions when selecting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

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

BES 6001 has also given us more direction with regards to social responsibility management - with particular focus on internal procedures regarding employees, as well as how we engage with our local communities and stakeholders in general.

Furthermore, the use of Polyflor products with BES 6001 certification and individual BRE ratings can potentially contribute significantly to the available points in section MAT 03 of a BREEAM Assessment. Where many companies typically contribute 1 point through an environmental management system such as ISO 14001, Polyflor can provide an additional 3 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. BES 6001 also secures additional credits within the Code for Sustainable Homes.

\* Source: [www.greenbooklive.com](http://www.greenbooklive.com)



# Commitment to our Employees

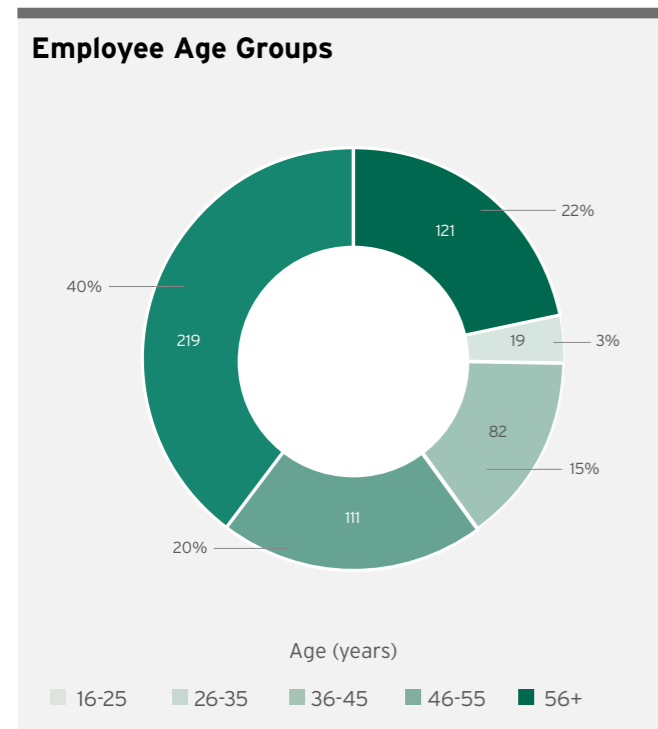
As a major employer, Polyflor has a responsibility to its employees, ensuring their health and wellbeing as well as reducing labour turnover, which remains extremely low. In fact, Polyflor has 25 and 40 year clubs for all employees who have been employed by Polyflor for the respective number of years, 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](http://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 and Anti-discrimination policy.
- 40% of employees aged between 46 & 55, with 22% (the next biggest age group) aged 56+.
- Ratio of men to women is 85% to 15%.
- 13% of female staff and 11% of male staff hold management and supervisory positions.
- Employees are typically local and represent the social demographic of the local area.
- Maternity and paternity policy; flexible working hours and return to work.



## Employee Health & Safety

- BS OHSAS 18001
- 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.
- 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.



## 2015 Update

Regarding Polyflor personnel, overall 2015 was a consistent year with many positive results.

	2012	2013	2014	2015	+/-
<b>Employment &amp; Turnover</b>					
Total Employees	562	561	548	552	+1%
New Recruits	29	32	37	41	+11%
Labour Turnover	5%	7%	10%	9%	-10%
<b>Contracts</b>					
Full Time Employees	535	533	527	534	+1%
Part Time Employees	27	28	21	18	-14%
Temporary Employees	17	17	16	8	-50%
Apprenticeships	0	2	2	3	+50%
<b>Equality</b>					
Male Employees	485	482	467	472	+1%
Female Employees	77	79	81	80	-1%
Male Managers & Supervisors	60	61	61	54	-11%
Female Managers & Supervisors	9	10	10	10	-
<b>Retention</b>					
Internal Promotions	4	5	6	4	-33%
Employees Undergone Training Programmes	13	19	40	69	+72%
Total Employees in 25 Year Club	47	58	76	75	-1%
New Members in 25 Year Club	12	9	18	22	+22%
Total Employees in 40 Year Club	4	4	6	8	+33%
New Members in 40 Year Club	0	2	3	2	-33%
<b>Health &amp; Safety</b>					
Loss Time Accident (LTA)	13	7	10	8	-20%
Actual Days Lost through LTA	213	166	287	143	-50%

2015 was a positive year with regards to our commitment to employees. Key performance indicators significantly reflect this with an increase in the number of permanent-contract employees and new recruits, plus a reduction in labour turnover.

While we have reduced the number of temporary employees, we continue to encourage and support apprenticeships with Polyflor's 3 apprentices developing in different areas of the business, with 1 apprentice studying for AAT Level 4 in Finance and 2 apprentices undergoing an Engineering Advanced Apprenticeship in our Teesside Engineering Department.

The figures corresponding with employee retention remain very encouraging. Most impressively, employees who took part in training programmes increased by 72% in 2015, compared to 2014's figures (note the vast growth compared to 2012's figures). Talent recognition continued with internal promotions throughout the year - although this was down against the previous year, it remained on par with 2012.

As testament to our success in retaining employees, Polyflor had another phenomenal year with 22 new members joining Polyflor's 25 Year Club, taking the total membership figure to 75. Moreover, 2 new members joined the 40 Year Club, increasing its total by 33%

against 2014. New members to both clubs received recognition of their achievements and had the opportunity of a presentation and afternoon tea with Geoffrey Halstead, Chairman of Polyflor's parent company, James Halstead.



Some of the newest members to join the 25 year club

## 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 4 years the average number of complaints has been 11.8 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 in 2015,

with many promptly and successfully actioned. This was the same amount of complaints as 2014 and given the proximity of the 100s of residents to this 24 hour (Monday to Friday) production site, we believe this is acceptable. Additionally, out of 18 complaints logged, there were only 6 unique complaints.

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.

Polyflor encourages its staff to engage with charitable organisations and events. In 2015 staff held a hugely successful coffee morning for MacMillan Cancer Support and Polyflor's Social Club held a fund raiser for Help for Heroes. Additionally, the sales and marketing team invests a lot of time working with charities, through support and communication. For instance a substantial amount of time can be allocated to sales representatives assisting charitable projects where we are involved in donating flooring. As with any project Polyflor is involved in, there is a duty of care to ensure the right flooring is specified and that it is followed up with appropriate customer aftercare.

In 2015 Polyflor supported numerous individuals, groups and organisations in the UK and globally. Here are some of our highlights

### Supporting our Greater Manchester & Teesside communities

#### Chapelfield Primary School, Radcliffe

Polyflor donated 15 iPads to Chapelfield Primary School in Radcliffe, Greater Manchester, as part of the ongoing commitment to support our local community. The iPads have been allocated to Year 5 students as interactive learning aids in the classroom. We chose to donate the iPads, which were formerly used by our salesforce, to the school as it is local to our Whitefield manufacturing site.

"We are very thankful to Polyflor for their generous donation. The students love using their iPads and they are a great teaching tool the whole class can now benefit from."

Headteacher, Malcolm Gate



Supporting our local communities



Oldham Athletic

For a 3rd consecutive season Polyflor sponsored Oldham Athletic's Junior Supporter's Club, Boundary Blues. 2015 also saw Polyflor signing up as a partner of the Oldham Athletic Community Trust 'Kicks' Project, which works within disadvantaged areas to reduce anti-social behaviour and to provide positive opportunities through sport. As part of the sponsorship, the Polyflor logo will feature on the front of the Kicks kit which is worn at the various tournaments and friendly games that the Kicks participants take part in.



Fat Lads on Bikes for Millie's Wet Room

The charity group Fat Lads on Bikes started their own DIY SOS style project to renovate the home of 8 year old Millie Mai Mann who has cerebral palsy. As Millie lives on the doorstep of our Teesside manufacturing plant, we decided to help the Fat Lads by donating wet slip resistant Polysafe Hydro Evolve safety flooring for her new wet room and Camaro flooring for her storage room



Salford Children's Holiday Camp

The Prestatyn-based holiday camp, which has been attended by thousands of Salford's children over past decades, needed help and donations to secure its survival for future generations. Polyflor was pleased to provide flooring for the refurbishment of this worthwhile project.



Reuben's Retreat

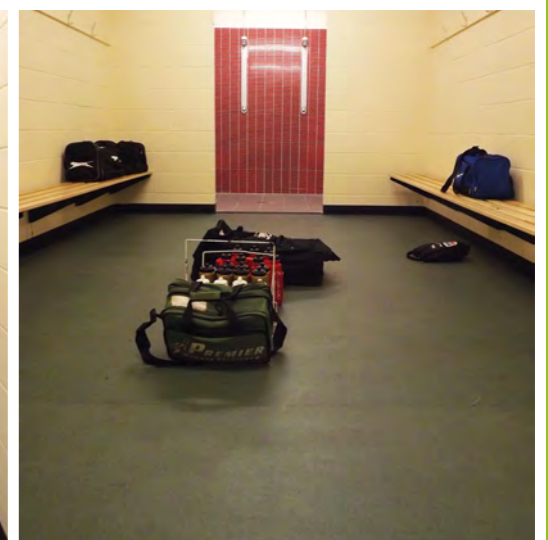
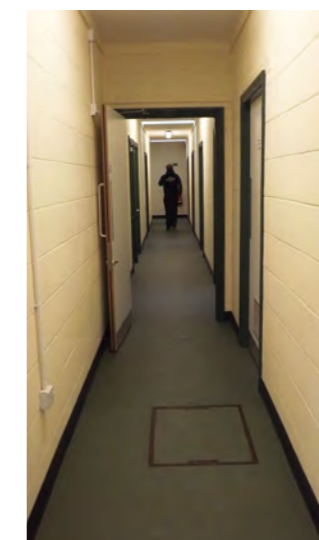
This local charity was born in memory of Reuben Michael Graham who tragically passed away aged just 23 months.

The project's goal is to provide a retreat in the North West of England that offers emotional support for families and their close friends who have suffered the bereavement of a child or have a child suffering from a life limiting or life threatening illness. Polyflor donated flooring to the first phase of the retreat.



West Hartlepool RFC

Being close to Polyflor's production site in Teesside, we were pleased to support our local community and help West Hartlepool RFC spruce up its club house ready for hosting the Webb Ellis Trophy visit, prior to the 2015 Rugby World Cup. More importantly, we wanted to help improve facilities for the many adults' and children's rugby union teams which play there every week.



## Polyflor's Christmas Appeal

### Wood Street Mission

We also donated £1,000 worth of Christmas gifts to local charity, Wood Street Mission, which helps struggling families in Manchester.

*"Such a fantastic company – well done Polyflor!"*  
Forever Flooring

### Text Santa

Christmas 2015 saw Polyflor engage with employees and customers to raise money for a number of great charities. Urged to 'do their bit in a Christmas knit' in aid of Christmas Jumper Day for the Text Santa appeal, Polyflor staff made individual contributions, while customers were asked to post their Christmas Jumper selfies with a £1 contribution from Polyflor for every selfie. All the money raised went to 3 amazing charities - Macmillan Cancer Support, Make-A-Wish® UK and Save the Children



## International Support

### Renovating Sydney Children's Hospital, Australia

Polyflor Australia was honoured to take part in the Sydney Children's Hospital project that was co-ordinated by Australian Channel 9's TV programme 'A Current Affair'. The project helped transform the lives of Australia's most deserving children. Flooring in the therapy and rehabilitation rooms was replaced with Polyflor's Classic Mystique and 2000 PUR vinyl sheet flooring ranges.



### Spin4Kids, Canada

For a consecutive 3rd year, Polyflor Canada made a financial contribution to the Spin4Kids event for the GoodLife Kids Foundation, a charity which raises funds to support national and local programmes that provide sustainable physical activity opportunities for all children aged between 5 and 17. To date GoodLife Kids Foundation has positively impacted the lives of over 235,000 Canadian children through physical activity opportunities

### CEO Sleep-out, South Africa

Polyflor South Africa's Marketing Director, Tandy Coleman-Spolander joined 244 business leaders in a cold and uncomfortable overnight 'sleep-out' in Johannesburg, to help raise over 25 million Rands (£1,086,321) for the charity organisation, Girls & Boys Town. A charity which offers support to children in need and residential care to those whose own families cannot cope, or don't do well in foster care.

### Eveleigh Projects, Australia

Polyflor Australia provided flooring at cost price to Eveleigh Projects, which helped restore an old 1937 locomotive. The newly refurbished train will do trips in and around the Sydney area - somewhat of a tourist attraction and boost for the community.

### Asia, Superstar Guide Dog, South Africa

Polyflor South Africa continued its support of Asia, the black Labrador and retriever cross. Asia successfully completed her guide dog training and graduated as a fully-fledged Guide Dog for Guide Dogs South Africa. This is the ultimate in trusted relationships - Asia is now someone's trusted companion and we could not be prouder.



## 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 floorcoverings. Celebrating its centenary in 2015, Polyflor remains a major manufacturer and employer at the same site located in Manchester, England.

*"Having traded through world wars, severe recession, the three-day week and financial crises our endurance is evident."*

Geoffrey Halstead, Chairman of James Halstead PLC

Playing its part in the 'North West Powerhouse', the company continues to go from strength to strength and today, Polyflor is a global organisation with a dominant market share in the UK and listed on the AIM stock exchange with a nine figure turnover. From 2000 to 2010 turnover doubled, yet Polyflor goes on increasing 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', with impressive projects including The Stade des Lumières, built in Lyon, France, for Euro 2016; Matru retail stores in Chennai, India and Queenstown International Airport in New Zealand.

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

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<sup>2</sup> 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<sup>2</sup>

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. Polyflor continues to invest into new international territories in 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 2015 being a record year - collecting 508 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 552 people on permanent contracts with 534 of these full time and just 18 part time. There were only 8 temporary employees in addition, throughout 2015. 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.



# Polyflor Credentials

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

- ISO 9001 certification**  
 ISO 9001 is a certified quality management system (QMS) for organisations who want to prove their ability to consistently provide products and services that meet the needs of relevant stakeholders.
- 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.
- BS OHSAS 18001 approval**  
 BS OHSAS 18001, a framework for an occupational health and safety management system.
- BRE Global**  
 A+ rating certification on 33 individually assessed ranges within the homogeneous, safety, heterogeneous and LVT flooring categories (ENP427, ENP415 & ENP429). Also 13 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.
- Passed the most stringent international VOC tests, including AqBB, Indoor Air Comfort Gold and FloorScore®**  
**AqBB** (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.

## Memberships

- 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 offcuts.
  - 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.
- 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.
- REACH compliant**  
**REACH** is a European Union regulation concerning the Registration, Evaluation, Authorisation & Restriction of Chemicals.  
  
 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.
- 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 Calandriers), 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.







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