

































introduction

Welcome to Polyflor's 7th report

The aim of this brochure is to clearly report Polyflor's environmental performance for 2011's trading period. We have sound environmental credentials and systems in place, but it is important to continue to build on this.

Transparency is crucial at a time where environmental issues become increasingly important and companies seek commercial advantage wherever they can. The term 'greenwashing' is one that we are all aware of and one that we want to avoid.

Polyflor operates an open communication policy with all stakeholders. Our aim is to inform - whether this is reporting on something very positive or something which may not have been as good or successful as we would have liked. For instance in 2009 we recycled 210 tonnes of liquid waste, but in 2010 this figure dropped to 164 tonnes - the reason for this being that we had less waste to recycle. However such a comparison might be misconstrued but we didn't sidestep reporting it.

Whilst having achieved a great deal in recent years Polyflor is by no means 'perfect'. Like all manufacturers, we have an environmental impact and we also have a responsibility to minimise this impact.







To develop an environmentally and econonomically sustainable business and be as carbon neutral as possible.

The avoidance of emissions to the ecosystem.

Reduction of waste to a minimum.

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.

Conservation of resources by use of recycling.

Active participation in industry initiatives and projects that improve environmental impact.

Raising environmental awareness by regular and open communication with employees, suppliers, customers, shareholders, etc.

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

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Sustainable Progress

Polyflor has for many decades been recognised as a leading global manufacturer of high quality, high performance floorcoverings. As pioneers of commercial vinyl flooring, we have recently been awarded a third Queen's Award for Enterprise, for International Trade 2011.

Since the last report Polyflor has made particular progress in a number of key areas, including:

Recycling

The Recofloor waste vinyl flooring take-back scheme really started to build up momentum in 2011, increasing the amount of post consumer vinyl being recycled.

Transportation

In 2011 Polyflor moved to a fleet of LGVs with Euro 5 compliant engines for lower emissions.

Installation & NPD

SimpLay, a new loose-lay product was launched for easy, adhesive free installation, further minimising Polyflor's environmental impact and VOC emissions.

Air quality

Many of our flooring ranges were certificated through the Indoor Air Comfort Gold scheme, with the VOC emissions' results being exceptionally low. This was great news as this is the most comprehensive and stringent test on the market - even including an odour test where our products performed exceptionally well.

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About Vinyl

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

It is important not to make decisions on a product's environmental performance, based solely on emotional rationale, but to view with an open mind and scientific approach. A life cycle analysis for instance, represents a holistic approach which cannot be dismissed. Through modern manufacturing vinyl has a low environmental impact and is exceptionally beneficial within a multitude of uses, where no other material could perform as well or cost effectively.

A Greener Option

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 also means that energy intensive cleaning is not required and harsh chemical cleansers, polish, strippers and water usage are massively reduced, if needed at all.

As a material it 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 with energy recovery. Landfill is the last option, but this is done safely and so the vinyl remains chemically inert without producing leachate.

A Safer Option

Vinyl is the most thoroughly researched, 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.

Key Sustainability Credentials of PVC for use within the construction industry

- 1. Safe in use.
- $2. \ \mbox{More variation}$ 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 agreement.

"There is absolutely no evidence that vinyl damages human health or the environment. PVC is durable, low maintenance, recyclable and performs well in LCA tests."

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 natural materials. The homogeneous range of products for example, uses up to 85% natural 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 twenty 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. Regarding plasticisers used by Polyflor, our products consist of ortho phthalates and phthalate free options. Ensuring that we get the right balance between what is best for product performance, the environment and what our customers want is critical and something which is constantly evolving.

All raw materials used in the manufacture of Polyflor vinyl flooring are responsibly sourced from suppliers who, like Polyflor, are ISO 14001 accredited or are well underway to achieving this environmental management system. Polyflor follow the strictest industry regulations and no harmful substances are included in the formulations – we are REACH (Registration, Evaluation, Authorisation & restriction of CHemicals) compliant.



Energy Efficiency

The amount of energy required per m² of material produced has continued to fall year on year down to 2.84KwHr per m² representing a 43% drop since 2000. This reduction in energy used has been as a result of hard work on the company's environmental objectives.

- Less energy to produce than other plastics, at least 15% less energy than linoleum and 50% less energy than ceramics.
- Typical life of 20-25 years means fewer replacements so less energy to produce flooring for the life of the building.
- Energy consumption in manufacture reduced by over 43% in the last 11 years.
- Carbon emissions reduced by 16,410 tonnes since 2000

Energy Saving initiatives

- 1 Installation of automatic shutdown systems to ensure machinery is switched off when not in use.
- 2 The implementation of lighting optimisers has continued across the site, which produces a saving of around 25% on energy used.
- 3 Installation of automatic lighting in the offices.
- 4 The metering and monitoring systems used in the factory for air, steam and all energy consumption has been crucial in identifying areas of leakage, unnecessary use and ways to cut the energy required.

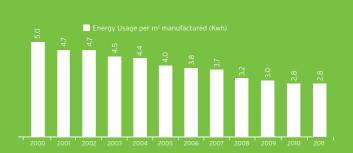
Vinyl is exceptionally energy efficient to produce and embedded energy is further reduced when recycled material is used in place of raw materials. PVC has a relatively low carbon footprint, to put this into context it is equivalent in weight to 1 kg of frosted cornflakes, both at 1.9kg CO2. Recycled PVC is just 0.3kg CO2. Here are some other every day examples:

- 1kg Lamb = 14kg CO2
- 1 kg Cheese = 11kg CO2
- 1 kg Aluminium = 10kg CO2

Our carbon emissions were reduced by 1,174 tonnes in 2011 and 1,091 tonnes in 2010. The total 16,410 tonne reduction in carbon emissions reported has been independently audited – Polyflor is working with the Carbon Trust's Energy Management programme, which provides commercially viable solutions to help UK businesses and the public sector cut carbon, energy and costs.

Two significant contributors to our recent progress have come from the following initiatives at our Whitefield manufacturing site:

- The installation of the AirStar system, which reduces compressed air. This has had a massive impact on carbon emissions – reducing our carbon footprint by 20% in 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%.



16,410 tonne reduction in carbon

Water Reduction and alter a Water reduction is an important step in improving the environment and protecting natural resources. On site, rainwater is collected and stored in a designated area known as 'lodge water'. This is used to substitute mains supply, saving a valuable natural resource. The following steps have been taken to ensure that energy and water usage is greatly reduced: • Optimisation of steam pressure • Regular steam trap surveys • Optimisation of cooling water temperature • Installation of water economisers on toilets Recycled water 96% Mains supply water 4%

Waste Management

Even with an increase in production throughout 2011 there has been continual progress on site in reducing both wet and dry waste.

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.

Improvements on recycling initiatives meant that dry waste fell from 7.5% of production volume in 2002 to 1.7% in 2011, equating to a significant reduction in dry waste of 77% in nine years. Wet waste in 2011 was 60 tonnes, an impressive 91% reduction when compared to 2000's figures.

Tonnes of wood of cardboard liquid waste*

Tonnes of liquid waste*

*Plasticiser condensate from factory ovens

plastic rollwrap

Tonnes of

With the exception of paper tonnages, our 'waste recycled' figures for 2011 fell compared with 2010's figures. However, this is understandable given the importance we place on reducing potential waste in the first place. As production increases, investment is continually made to improve storage and handling facilities for subsequent waste on site. Limiting the potential for waste at the outset will continue to be a priority with reusing or recycling being the final legacy as part of our commitment for 'zero production waste to landfill' by the end of 2012.



Recycling

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.

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

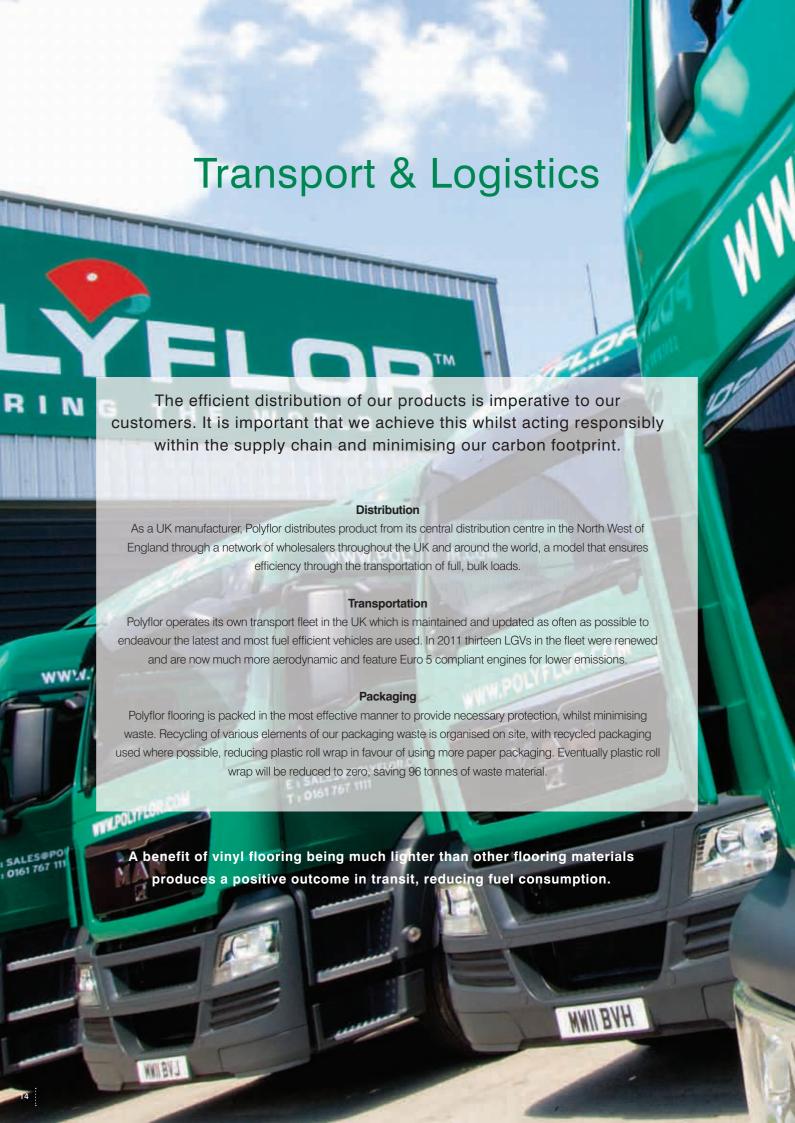
Post Production Waste

Post production waste vinyl is generated on site from scrap material produced during and after production, this comprises vinyl chippings, clean trims and off-cuts as well as recovered dust. We also recycle glass which is post consumer waste, combined with the aggregates, into many of our Polysafe products.

In the Future

With recycling being at the heart of Polyflor's operations, we will continue to invest significantly in the development of a much greater recycling capacity and capability, and fully utilise all options available in the recycling of post consumer waste back into new product.

The figure of 25% average recycled material is made up of both production waste and post consumer waste. We believe that quoting an average percentage is far more helpful to our customers than using the highest figure we achieved on one particular range or production run.



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 minimise environmental impact.

In the area of installation for example, we are currently working to ensure the compatibility of our products with newer, solvent free and low VOC adhesives to minimise any environmentally negative elements whilst maintaining key performance criteria. Significant trials are also underway to assess easy release adhesion or adhesive free systems with our products for easier end of life waste recovery. 2011 saw the launch of Polyflor's SimpLay, a range of loose lay luxury vinyl floor tiles, eliminating the use of adhesives for a reduced environmental impact. This is also extremely beneficial to the Recofloor scheme, as it facilitates easier uplift at end of life without contamination, therefore cleaner and simpler to recycle.

For a number of years our R&D commitment to environmental matters has been significant and increasing year on year. In terms of affiliations we have been working with Manchester University's Chemical Engineering team on carbon footprint models to understand how we can minimise the environmental impact of our processes. We are also further investigating materials used in our products for the most environmentally sound and safe vinyl flooring we can offer.



Fit for Purpose

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

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

The 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-light industrial use. In comparison, a greater thickness is required for linoleum to achieve a similar recommendation, but even at 2.5mm thick it is not recommended for class 43 areas. Under the Agrément (UPEC) system only 3.2mm thick linoleum had the same wearability as most of the accredited Polyflor products.

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

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

We do not manufacture a specific range of environmental flooring, we manufacture vast ranges of the highest quality, BRE rated commercial flooring with a level of performance and benefits in use which also result in class leading environmental features. This philosophy carries on into all our new product developments, where the demands of the customer, the facility and environmental requirements are built into the product specification from day one.



Maintenance

Designed with low maintenance features.

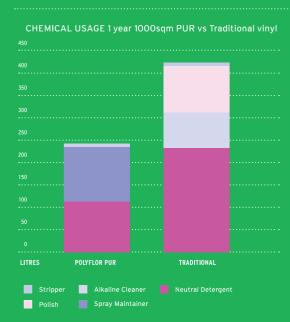
PUR reinforcement is cross-linked and UV cured for superior cleaning benefits, enhanced protection and optimum appearance retention.

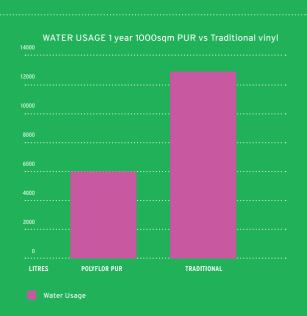
Homogeneous PUR facilitates a lifelong polish free maintenance regime and consumption of energy, water and chemicals are significantly reduced, giving a 48% maintenance cost saving over a 20+ year life when compared to untreated homogeneous vinyl flooring.

Polysafe PUR and Supratec PUR achieve superior cleaning benefits and optimum appearance retention with a 60% maintenance cost saving over a 20+ year life when compared to untreated safety vinyl flooring.

The in-use phase of the resilient flooring life cycle accounts for at least 80% of its environmental impact. Because of this we have focused our efforts on developing products which greatly reduce the need for energy intensive cleaning. The easier to clean PU and PUR ranges also ensure that use of polish, water, strippers and chemical cleansers significantly reduced.

All new ranges are launched with the greatest maintenance and environmental benefits built in and existing ranges have had these benefits added. Continuously improving technologies enables us to raise the standard in terms of durability, maintenance and performance, sought by our customers. Furthermore, low maintenance flooring considerably improves eco audit results of a building throughout its entire life cycle.



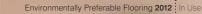












WARDS

Infection Control

MEDICAL WARDS
PSYCHIATRIC WARD
HIGH CARE

A very positive contribution to creating a clean and hygienic indoor environment. Seamless welding and coving is critical in infection control. Independent tests demonstrate that the growth of bacteria such as MRSA is inhibited on Polyflor flooring.

Polyflor vinyl floorings play a significant role in creating and maintaining a hygienic environment within healthcare and consequent to that, an important role in the global fight against Hospital Acquired Infections.

In addition to the independent certification concerning the inhibition of bacterial growth on the floor, vinyl flooring exemplifies the case that it is the multifaceted elements of performance and inherent product features that all combine to offer positive benefits in terms of creating a safer, more hygienic environment.

Air Quality

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

No negative contribution to indoor air quality.

Passed all the most stringent international VOC emissions tests, including AgBB, Indoor Air Comfort Gold and FloorScore®.

Indoor air quality is a key consideration when selecting building products, and Polyflor vinyl flooring makes a significant contribution towards creating indoor environments with very low VOC (volatile organic compounds) emissions. All of our flooring ranges have already passed key international standards but we continuously look to reformulate our ranges to ensure their VOC emissions are kept to the lowest levels achievable. Independent and rigorous VOC tests Polyflor ranges have undergone include AgBB, Swedish B.P.D (FLEC test), Finland M1 test, GBCA Compliant (GreenTag approval) and FloorScore® (certification in accordance with SCSEC-10.2-2007 'Indoor Air Quality Performance' through the Scientific Certification Systems Indoor Air Quality Programme, conforming to Collaborative for High Performance Schools (CHPS) criteria and California 01350 Specification. Certificates are available on the SCS website, www.scscertified.com).

The most recent test method is 'Indoor Air Comfort Gold'. This new test by Eurofins is the most comprehensive and stringent on the market and tests for all known emissions. It also includes a 'smell test', where our vinyl flooring performs well – better than some other types of flooring. That is to say there is a very low or unnoticeable odour which could also affect the internal environment of a building and quality of life for the resident or employee.

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 and is favoured for its superior 'cleanability' over other flooring products and is used in the strictest of hygiene zones throughout hospitals. Furthermore it is non-shedding, whereby most allergies are caused by airborne dust. Clean room test certification for nonshedding is available on most ranges.

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. Regarding Polyflor specifically, stringent audits are carried out on the manufacturing site to ensure that all emissions fall well under EU industry standards – this is particularly important to us as manufacturing is in operation within a residential area. Most waste vinyl is recycled – either into new flooring or other useful products, such as road traffic cones. It does not get incinerated - although incinerating our vinyl would not be detrimental or risky with properly managed, modern, quality incinerators which are very clean. If incinerated, vinyl waste has an appreciable calorific value, producing energy - this contributes to domestic heat in Sweden. Where in the past vinyl has gone to landfill, this has been a safe method of disposal as it does not breakdown and cause harmful gases in landfill site, but it is obviously not ideal.







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.

Safety

Slip Resistant

Polyflor flooring can be used in all internal use areas and this also includes areas where hazards are potentially much higher, for instance in kitchens and stairwells where slipping is likely and where the consequences of doing so are the most dangerous. Polysafe flooring complies with and exceeds the Health and Safety Executive (HSE) guidelines and is independently assessed by the British Board of Agrément and meets the European standard, EN 13845. Polysafe helps prevent accidents and injuries with its slip resistance properties, which are made up of a combination of aggregates including quartz, aluminium oxide, silicone carbide and recycled glass, along with the surface emboss which provides the required roughness to create the necessary friction.

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:

CONTROLLABLE

Environment

Slip Potential

Contamination

Use

Dobaviour

PREDICTABLE

- 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.

Product Stewardship

It is important that we are responsible in the chain of custody of our products. With landfill being both expensive and the least green of options for waste, recycling is a key element of Polyflor's closed loop operations.

Polyflor is exceptionally committed to the recycling of its post production waste and its post consumer waste, supporting voluntary industry-wide commitments. We are active members of various initiatives including EPFLOOR, the European Flooring Manufacturers' Sector Group, which was formed to increase post consumer waste recycled in Western Europe and Recovinyl, a scheme which provides financial incentives to support the collection of PVC waste from the non-regulated PVC waste streams. Recovinyl is also an initiative of VinylPlus (formerly Vinyl 2010*), 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 to be available by end 2011

Develop and exploit innovative technology to recycle 100,000 tonnes/year of difficult-to-recycle PVC material (within the overall 800,000 tonnes/year recycling target) by 2020.

Address the issue of legacy additives and deliver a status report within each annual VinylPlus Progress Report.

Specific to vinyl flooring, Polyflor is also a proud funding and founding member of Recofloor[†], the waste vinyl flooring recycling scheme which is available throughout the UK. By providing an accessible and efficient facility for waste vinyl to be reclaimed and recycled, Recofloor helps prevent post consumer waste from going to landfill. We also recycle glass which is post consumer waste, combined with the aggregates, into many of our Polysafe products.

In the Future

Polyflor will stay committed to recycling end of life vinyl through VinylPlus and the Recofloor scheme, which joined the voluntary WRAP led 'Halving Waste to Landfill', a programme that aims to halve construction waste sent to landfill by 2012. 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.*





* Vinyl 2010 achieved its 10 year target of recycling 240,000 tonnes of post consumer construction vinyl – it actually recycled 260,842.

†See pages 24 & 25 for more information about Recofloor

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 a varying progress in recycling, especially where distances are large and logistics of any recycling operation 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 have established schemes to collect and recover vinyl waste from site. This material may either be delivered to Polyflor on return transport for recycling or often more practically, the waste has been sent to other local vinyl flooring manufacturers for them to recycle into new flooring. In Germany the AgPR 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.

Recently Polyflor Australia has set up a local collection scheme which is running very effectively. Similarly in Ireland, the facility to recover waste from larger projects has been put in place and with the Recofloor* scheme now up and running in Ireland, with various distributors on board and drop off sites available, logistically it is relatively simple for this waste to be delivered to Polyflor for recycling.

Polyflor South Africa has made great progress with recycling commitments. One of many members of the Southern African Vinyl Association (SAVA), a commitment to increase responsibility and sustainability within the PVC industry as a whole is very positive, but similar to the VinylPlus scheme in Europe, one of the key challenges outlined within this product stewardship programme is the commitment to increase recycling. By 1st January 2013, SAVA aims to achieve the following:

Recycle 99% of all waste produced by PVC resin manufacturers.

Recycle 95% of all waste produced by primary converters in the PVC industry.

Recycle 90% of all waste produced by secondary converters in the PVC industry.

Increase recycling of post consumer PVC-P to 15,000 tonnes per annum.

Increase recycling of post consumer PVC-U to 5,000 tonnes per annum.



Recofloor

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





- We are a founding and funding member of Recofloor, the industry's vinyl take-back scheme for recycling end of life post consumer vinyl flooring.
- We recycle installation off-cuts, uplifted flooring and old stock roll-ends and samples.
- We recover and recycle into new flooring or other useful products such as traffic cones.

Yes Please

Post installation, clean vinyl off-cuts (smooth or safety vinyl)

Old stock vinyl roll-ends & samples (smooth or safety vinyl)

Smooth uplifted flooring – depending on condition and quality

No Thanks

Cushion vinyl flooring

Non vinyl flooring including linoleum, laminate, carpet, or flooring with jute / fabric backing

General waste including asbestos, rubble, wood, blades, nails, screws etc

Liquids









In The Beginning

The challenge with recycling post consumer waste has been the logistics of retrieving the material, rather than actually recycling it. To try and tackle this issue and actively encourage more waste vinyl flooring to be recycled a working group was formed in 2007 with all vinyl flooring manufacturers on board and managed and coordinated by waste management company, Axion Consulting. Funding for this reclaim and recycle initiative came from WRAP (Waste & Resources Action Programme). Once the trial period and government funding had ceased, members had to decide upon the scheme's fate. 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 and logistically supporting with collections, sorting and ultimately recycling.

Recofloor's Progress

Since 2009 Recofloor has achieved a great deal and is now the industry leading facilitator for efficiently reclaiming. 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. Recofloor also signed up to the voluntary commitment 'Halving Waste to Landfill', which aims to half construction waste sent to landfill by 2012. Another great initiative was Recofloor's 'Cost Calculator', which allows contractors to calculate how much it would cost to send their waste to landfill, so they can see the savings they will generate by using Recofloor instead.

Increasing the reclaimed volume of quality vinyl waste for recycling is continuously improving (a key challenge has been to educate members about the importance of the material they send back through the Recofloor scheme, avoiding contamination – not always easy on a busy building site). Volumes are up year on year, with 700 tonnes being collected since the scheme started (figure correct as at January 2011), saving 0.56 million kilos of CO2. This equates to driving the average family petrol car 1.6 million miles (nearly 67 times round the equator) or taking 138 cars off the road for a year.

Many thanks go to our customers who have keenly taken advantage of this unique scheme, but getting distributors on board has certainly contributed to Recofloor's success. By acting as drop-off sites for their customers, distributors have increased the accessibility of Recofloor, making it even easier for contractors to dispose of their waste vinyl flooring and for Recofloor to collect and recycle it. Minimising needless drop-off and pick-up journeys also reduces CO2.

Why Take Part?

- Recofloor comes at an important time given the Government's recent legislation of site waste management plans
- Customers are keen to see their flooring recycled at the end of its life
- Certificates of commitment are awarded to impress and gain new contracts with their green credentials
- Recofloor Awards Gold, Silver and Bronze awards are issued to members who have significantly recycled
- Recofloor specified as an outlet for vinyl waste in tenders
- Could help achieve extra waste credits for BREEAM & CSH
- Using our drop-off sites is free of charge for collections and timed collections there are nominal fees, but this could still save our members around 60% by recycling through Recofloor, rather than landfilling

Achievements for 2011

- 360+ tonnes of waste vinyl flooring were collected and recycled – that's enough to cover 17 football pitches
- This is a 92% increase compared to 2010
- Recofloor Limited was formed
- Successful marketing campaigns continued, helping build momentum and recruit more members, both contractors and distributors
- Launched Recofloor website
- 'Bacon Butty' events held at various distributors to engage customers

BRE Global

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.

About the BRE & BREEAM Assessment Method

BRE (Building Research Establishment)

Countless 'green' claims for building materials are constantly made, but customers want validation of a claim's accuracy, which is why everything we do is externally audited and if applicable, certificated. This includes our environmental standard, ISO 14001 certification and test certificates for VOC emissions for example. The plethora of environmental information required and available is probably overwhelming and confusing to most of us, so making the specification process a simpler one is crucial, thus freeing up time and resources whilst providing assurance that the selected materials and products are environmentally sound to meet specification requirements.

There are many international schemes which assist specification of environmentally sound building materials, but the BRE (Building Research Establishment) Global environmental assessment reviews 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 climate change, water extraction, mineral resource extraction, stratospheric ozone depletion, human toxicity, ecotoxicity to freshwater, nuclear waste, ecotoxicity to land, waste disposal, fossil fuel depletion, eutrophication, photochemical ozone creation and acidification.

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.

BREEAM (Building Research Establishment Environmental Assessment Method)

This is the most widely used environmental assessment method for buildings and sets the standard for best practice in sustainable design. BREEAM provides the following functions*:

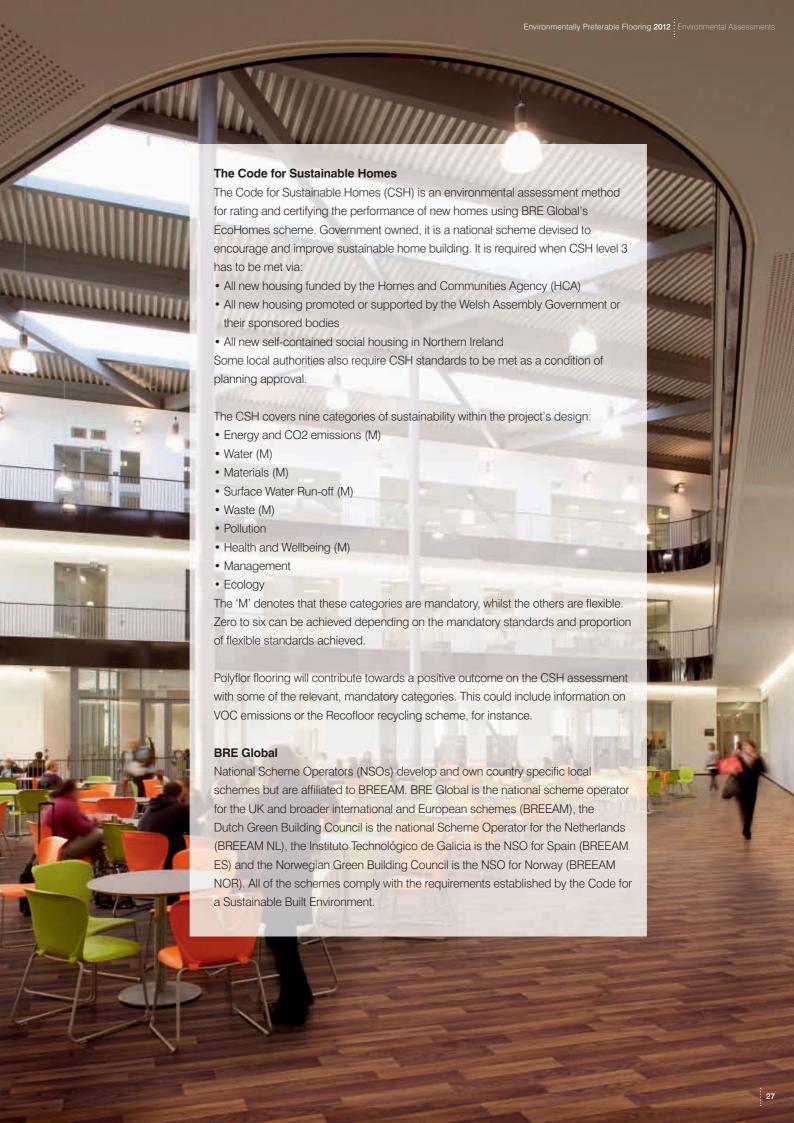
- Market recognition for low environmental impact buildings
- Assurance that best environmental practice is incorporated into a building
- Inspiration to find innovative solutions that minimise the environmental impact
- A benchmark that is higher than regulation
- A tool to help reduce running costs, improve working and living environments
- A standard that demonstrates progress towards corporate and organisational environmental objectives

When a building project is undergoing a BREEAM assessment Polyflor can help maximise your BREEAM score, by using our A+ rated floorcoverings (A+ achieves 3 point credits and A rating achieves 2 point credits). We also have experience to help with any question you may have relating to your BREEAM assessment and have all the information and further declarations or certification you may require. Further product specific detail may include recycled content and VOC information for example. Regarding formaldehyde testing (EN14041), we declare E1 without any testing as there is no formaldehyde or formaldehydecontaining materials in our products.

BRE has developed a free tool called SMARTWaste which helps implement and manage site waste management plans (SWMPs) in respect to the legal requirements. This can help achieve waste credits for BREEAM and the Code for Sustainable Homes. Polyflor's customers can use the Recofloor scheme to recycle end of life vinyl flooring, which will help facilitate BRE's SMARTWaste plan.

For more information on BREEAM, go to www.breeam.org

BREEAM bullet points from www.bre.co.uk



BRE Global Certification - certification for customer confidence

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 – a 'cradle to grave' assessment – 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 new rating scheme is based on A+ to E rankings, with A+ being the

most desirable rating, having achieved the best ecopoints. A better rating helps to maximise a building's BREEAM score, which is achievable through our 25 A+ ratings.

The BRE Global rating scheme is categorised by end use areas, as the environmental impact in each can vary. The reason for this is that various products will be available in the different sectors, which are subject to a pre-determined spread of ratings across the categories A+ to E. Therefore more options may be available within the domestic sector, for example. Overall, Polyflor's certified ratings are impressive, particularly in the key areas of health and education, where BREEAM ratings are linked to government funding. For more information on our certification ENP336, ENP415 and ENP429, visit www.greenbooklive.com and enter 'Polyflor' into the search box.

SAFETY	Certificate	Health	Education	Retail	Industrial Shed	Office	Domestic
Polysafe Astral PUR	ENP336	A+	A+	A+	А	Α	В
Polysafe Mosaic PUR	ENP336	A+	A+	A+	A+	А	А
Polysafe Corona PUR	ENP336	A+	A+	A+	А	А	В
Polysafe Hydro	ENP336	A+	A+	A+	А	А	В
Polysafe Standard PUR	ENP336	A+	A+	A+	A+	А	Α
Polysafe Strata	ENP336	A+	A+	A+	A+	А	А
Polysafe Ultima	ENP336	A+	A+	A+	А	В	В
Polysafe Vogue Ultra PUR	ENP336	A+	A+	A+	A+	А	А
Polysafe Wood fx PUR	ENP415	A+	A+	A+	A+	А	А
Polysafe Wood fx Acoustix PUR	ENP415	A+	A+	A+	A+	Α	А
HOMOGENEOUS	Certificate	Health	Education	Retail	Industrial Shed	Office	Domestic
Pearlazzo PUR	ENP336	A+	A+	A+	A+	Α	Α
2000 PUR	ENP336	A+	A+	A+	A+	Α	A
Classic Mystique PUR	ENP336	A+	A+	A+	A+	A	A
Mystique PUR	ENP336	A+	A+	A+	A+	А	A
Prestige PUR	ENP336	A+	A+	Α+	A+	А	А
Standard XL	ENP336	A+	A+	A+	A+	А	А
XL PU	ENP336	A+	A+	A+	A+	А	А
						0.44	
HETEROGENEOUS	Certificate	Health	Education	Retail	Industrial Shed	Office	Domestic
Forest fx PUR	ENP415	A+	A+	A+	A+	A	A
Mineral fx PUR	ENP415	A+	A+	A+	A+	A	A
Acoustix Forest fx PUR	ENP415	A+	A+	A+	A+	Α	A
Acoustix Gallery fx PUR	ENP415	A+	A+	A+	A+	A	A
LVT	Certificate	Health	Education	Retail	Industrial Shed	Office	Domestic
Expona Design PU	ENP429	A+	A+	A+	А	В	В
Kudos PU	ENP429	A +	A+	A+	A+	А	В
Bevel LinePU	ENP429	A +	A+	A+	Α	А	А
Camaro PU	ENP429	*	*	A+	*	А	А
Colonia Homeline	ENP429	*	*	*	*	*	А

^{*} Product not suitable for use area and has therefore not been rated for the particular use area

BRE Global Generic Ratings

Where Polyflor products have not been individually certificated by BRE Global, generic ratings are also available.

These 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, achieves a generic BRE Global A+ rating. Vinyl flooring achieves on average a generic BRE Global A+ rating for most vinyl varieties across the categories shown below.

Standard	Homogeneous EN 649	Heterogeneous EN 649	Acoustic EN 651	LVT EN 649	Safety EN13845	Rubber (Smooth) EN1817	Rubber (Profiled) EN12199	Linoleum EN548
Health	A+	A+	A+	A+	A+	A+	A+	A+
Element	821570038	821570039	821570053	821570054	821570055	821570056	821570057	821570058
Education	A+	A+	A+	A+	A+	A+	A+	A+
Element	821570065	821570066	821570010	821570013	821570010	821570014	821570015	821570017
Commercial	Α	Α	Α	Α	Α	Α	Α	Α
Element	821570038	821570039	821570041	821570042	821570043	821570044	821570045	821570047
Retail	A+/A+	A+/A+	A+/A	A+/A	A+/A+	A+/A+	A+/A+	A+/A+
Element	821570038	821570039	821570053	821570054	821570055	821570056	821570057	821570058
Domestic	Α	Α	Α	Α	В	Α	Α	Α
Element	821570065	821570066	821570010	821570013	821570010	821570014	821570015	821570017

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

Polyflor ranges not individually assessed by BRE Global can be included within the appropriate generic ratings, shown below:

Homogeneous ESD flooring Polyflex Plus PU Rubber (smooth)
Diamant

Rubber (profiled)
Noppe Stud Tile



LEED®

For North America, Polyflor has produced a separate guide to demonstrate where Polyflor floorcoverings have the potential to contribute to LEED® points, with a detailed explanation of how our products fulfill the below requirements:

WATER EFFICIENCY

WE Credit 3.2: Water use reduction (30% reduction)
In production Polyflor uses only 4% of its water supply from mains, with 96% being recycled from the lodge water. The easier to clean PU and PUR ranges ensure that the use of cleaning chemicals, strippers and water are significantly reduced. Polyflor's Polysafe PUR and Polysafe Supratec PUR floorcoverings use 60% less water than non PUR vinyl and Polyflor's homogeneous PUR floorcoverings use 55% less water.

ENERGY & ATMOSPHERE

EA Credit 1: Optimise energy performance

Polyflor flooring is energy efficient in the production phase of its life cycle, using 43% less energy than 11 years ago and in that time reducing carbon emissions by 16,410 tonnes. Over the in use phase of its life cycle, our low maintenance families (PU, PUR & Supratec PUR) will save energy through reduced usage of cleaning machinery. Along with its 20-25 year life span, energy consumed and carbon dioxide emissions are significantly reduced.

MATERIALS & RESOURCES

MR Credit 1.1: Building reuse (maintain 75% of existing floors) Polyflor ranges have excellent durability. Vinyl flooring is renowned for its longevity of life compared to many alternative resilient floorcoverings – typically 20-25 years.

MR Credit 2.1: Construction Waste Management (divert 50% from disposal)

MR Credit 2.2: Construction Waste Management (divert 75% from disposal)

Dedicated to the 'Halving Waste to Landfill' commitment, the Recofloor scheme (of which Polyflor is a founding and funding member) complies with site waste management legislation and diverts vinyl flooring waste (off-cuts and uplifted) from going to landfill.

MR Credit 4.1: 10% Recycled content (post-consumer + ½ pre-consumer)
MR Credit 4.2: 20% Recycled content (post-consumer + ½ pre-consumer)
Polyflor homogeneous ranges contain an average of 25% recycled material, which includes process waste, sampling

waste, materials from site and from the distribution chain. In 2011 we recycled 10,314 tonnes of production waste and over 547 tonnes of post consumer waste back into new product.

MR Credit 5.1: Regional Materials
(10% extracted, processed & manufactured regionally)
MR Credit 5.2: Regional Materials
(20% extracted, processed & manufactured regionally)
As a global company, Polyflor flooring is manufactured in the
UK, across Europe and Asia and raw and recycled materials

INDOOR ENVIRONMENTAL QUALITY

are locally sourced.

IEQ Credit 4.1: Low emitting materials (adhesives and sealants) In North America, Polyflor recommend Mapei Eco 350 and 360 for all homogeneous sheet floorcovering. For our luxury vinyl tile ranges, we recommend Mapei Eco 300 and 360. For Polysafe ranges, Polyflor recommend the use of Mapei G 212 – part polyurethane, which is solvent free. These adhesives are rated 'extremely low TVOC' and are low odour, non flammable and solvent free. They also meet the Carpet and Rug Institute (CRI) low VOC emission criteria, achieved through the Indoor Air Quality Adhesive Testing Programme.

IEQ Credit 4.3: Low emitting materials (carpet systems)
All of our ranges have passed key international standards but over the last few years we have reformulated all our ranges to ensure their VOC emissions are kept to the lowest levels achievable. The VOC emissions on our range of flooring products have been tested by independent laboratories and are all below the strictly set, acceptable levels of the AgBB test method. Polyflor has also achieved FloorScore® certification and has had key homogeneous, safety and luxury vinyl tile ranges evaluated - certificates for these products are available at www.scscertified.com.

IEQ Credit 5: Indoor chemical & pollutant source control
The in use phase of the resilient flooring life cycle accounts for
at least 80% of its environmental impact. The easier to clean
PU and PUR ranges ensure that the use of cleaning chemicals,
strippers and water are significantly reduced. Furthermore
Polyflor's homogeneous PUR facilitates a life long polish free
maintenance regime.





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

Supporting the wider community

Neighbours - Polyflor is a socially aware company with its manufacturing site being in the heart of a residential area. Duty of care to our neighbours is critical to ensure a happy living environment is provided to our neighbours. Reducing noise pollution and emissions was pivotal, so emissions checks are constantly monitored on site and £500,000 has been invested on minimising noise, through acoustic engineering within the factory. We also ensure that LGVs always turn off their engines during evening and early morning deliveries and collections. The site is also encapsulated by trees and greenery, which is aesthetically pleasing to local residents, as well as encouraging biodiversity.

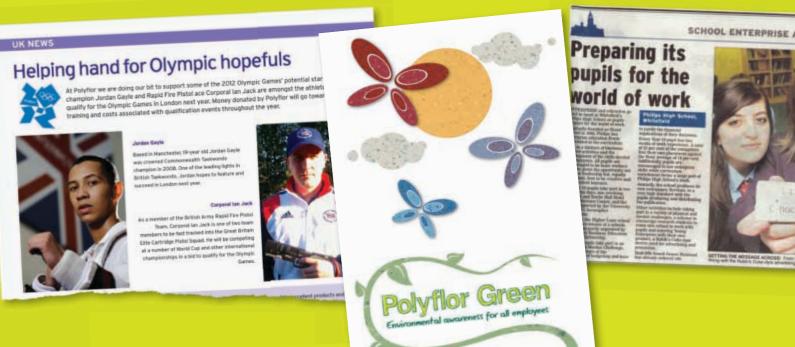
Charity & Donations - Polyflor contributes to charitable donations or worthy causes. This may be financial or supportive with a donation of flooring. In the last 12 months Polyflor has been involved with a number of fantastic programmes. One of which was working with Anita Cormac OBE on her latest project, The Cooking School in Halifax. This was to become a flagship, high specification kitchen for a teaching academy, raising the profile of cooking education. Polyflor realised that this was a great initiative aimed at educating the educators in empowering them with valuable information about nutrition and cooking, which is important in a modern society consuming an ever increasing amount of convenience foods. We were delighted to offer product for the use area (flooring and walls). Following on from a day at The Cooking School, staff from Shibden Head Primary School decided they wanted to introduce cooking into the curriculum and converted a classroom into a kitchen. Again Polyflor was requested and we were happy to oblige in providing their flooring.

We have also been supporting Olympic hopeful Jordan Gayle with his training and other costs associated with qualification events. Based in Manchester, the 20-year old Commonwealth taekwondo champion hopes to feature and succeed in the London games this year.

Flooring Industry - Polyflor's involvement with the Recofloor scheme of which it is a founding and funding member, also has a social aspect. It operates an education programme for the sector, engaging with flooring contractors about the scheme, the importance of it and why they should get involved. We are promoting the Recofloor scheme at 'grass roots', providing information to more (floor laying) training colleges, apprentice schemes and our own floor fitters' training school at Polyflor. Once signed up to Recofloor contractors are issued with a Certificate of Commitment. This helps prove their green credentials to potential customers whilst ensuring that they are doing their bit for the environment. The Recofloor scheme also has awards for customers - Gold, Silver and Bronze awards, depending on the volume and quality of recycled material submitted.

Education - We are involved at all levels of education with local schools and colleges. Polyflor supports schools by participating in work placements and the Young Enterprise Scheme and we actively support training colleges throughout the country as well as sponsoring FITA, the industry training body. We also have a dedicated training school on site, enabling contractors to learn best practice for fitting vinyl flooring.

Internationally - Polyflor was also approached by a Lions Club member, as they are helping 1000s of blind people in Uganda to see again. They converted a bus into a mobile cataract surgery, allowing people in rural areas of Uganda access to ophthalmic facilities. We provided free flooring to this project.



Polyflor Australia

Polyflor Australia donated flooring to a number of worthwhile, local projects including 'Young Care' - who provide assistance to young people with high demand needs so that they don't have to live in aged care facilities. Jamie Oliver's 'Ipswich Ministry of Food' truck fitout also benefitted, which achieved recognition as being one of the 'greenest kitchens in Australia'.

Polyflor New Zealand

Polyflor New Zealand contributed to Youthline's new Community Centre in Aukland and to two churches, one in Western Samoa and one in American Samoa. Following on from the tsunami, which struck Samoa, Polyflor also helped with the rebuild and repair. Polyflor flooring was provided on all of these projects.

Polyflor South Africa

Polyflor South Africa provided flooring to refurbished Children's Wards at Chris Hani Baragwaneth Hospital in Soweto and to 'The Making a Difference' campaign, which was set up by TV programme, 'Carte Blanche'. Polyflor South Africa participated in all major projects, helping upgrade paediatric units in three state hospitals. The campaign's next big project will also follow shortly...

Internally at Polyflor

Good corporate social responsibility is promoted within Polyflor - globally - from our CSR policy, health & safety policy, our compliance with EU Regulations regarding employees' rights and our audits for SA8000 accreditation. We provide family friendly flexibility and we have a dignity at work policy, preventing bullying at all levels. Polyflor staff are also encouraged and supported regarding personal development and training through MBAs, AAT and NVQs

for example. Socially, we have our 25 and 40 year clubs for employees who have been with Polyflor for the respective number of years and there is a social club for all employees to join and partake in various activities and events, from sporting events to theatre trips.

We encourage environmental awareness, issuing a 'Green Guide' for employees - offering advice on reducing their carbon footprint at home and work. Responding to employee feedback, bike sheds were improved and showers were installed to encourage the local workforce to cycle to work.

The long and established relationships we have with customers are based on honesty and trust. It's important that we have this reputation, especially when communicating our environmental message. This is a sensitive subject so unsubstantiated or embellished claims would jeapordise our position and ethics.

The relationship with our suppliers is just as important - we have reliable and trusted suppliers. These relationships cannot be taken for granted and constant auditing by Polyflor ensures our suppliers are trading ethically - this is important to our customers. With regards to our suppliers, we are stringently audited by Achilles and SGS for ISO14001 certification. Achilles is a CSR audit which means we are included amongst other responsible manufacturers and suppliers of building products on the 'Building Confidence' list. This assures member companies including Sir Robert McAlpine, Bovis Lend Lease and Balfour Beatty, that suppliers on this list trade ethically, of which the suppliers they use themselves are also scrutinised, ensuring responsible sourcing of materials.

































Polyflor Credentials

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

ISO 14001 accreditation since 2000.

First manufacturer to achieve BRE Global A+ rating certification (ENP336, ENP415 & ENP429) across 25 key ranges within the homogeneous, safety, heterogeneous and LVT flooring categories.

Registered approved products with Ecospecifier and BASTA, Green Tag Certified Gold (Green Rate Level A) and can also contribute to LEED® points.

Active member of UK RFA and ERFMI.

Member of the UK Green Building Council, Green Building Council of Australia and New Zealand Green Building Council.

Fully support VinylPlus.

Active member of EPFLOOR & Recovinyl.

A founding and funding member of Recofloor vinyl take-back scheme Recofloor committed to 'Halving Waste to Landfill' Runner up in the Sustainable FM Awards 2010 Winner of CIWM Award for Innovative Practice (SME) 2010.

Plasticisers used by Polyflor are not classified substances and do not need authorisation under REACH.

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

Polyflor is working with the Carbon Trust's Energy Management programme, which provides commercially viable solutions to help UK businesses and the public sector cut carbon, energy and costs



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