

About Vinyl

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

It is important not to make decisions on a product's environmental performance, based solely on emotional rationale, but to view with an open mind and scientific approach. A life cycle analysis for instance, represents a holistic approach which cannot be dismissed. Through modern manufacturing processes 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.

A Greener Option

Vinyl is an environmentally sound choice. Over its life cycle, vinyl floorcoverings perform 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 need for harsh chemical cleansers, polish, strippers and water usage is massively reduced, if needed at all.

As a material vinyl is ideally suited to being recycled. It is 100% recyclable and can be recycled many times over without losing any of its performance properties. If it is not recycled, vinyl has a high calorific value and may be safely incinerated generating energy recovery. Landfill is the last option, but a safe option as 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. 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.

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 product performance characteristics through a range of operational temperatures. Softening the vinyl is important in making it the flexible and versatile product that it is. Polyflor uses ortho-phthalates and non phthalate alternatives. Ensuring that we get the right balance between what is best for product performance, the environment and what our customers want is critical and something which is constantly evolving.

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

