

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

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

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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 - 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 26 A+ ratings.

The BRE Global rating scheme is categorised by end use areas, as the environmental impact in each can vary. The reason for this is that various products will be available in the different sectors, which are subject to a pre-determined spread of ratings across the categories A+ to E. Therefore more options may be available within the domestic sector, for example. Overall, Polyflor's certified ratings are impressive, particularly in the key areas of health and education, where BREEAM ratings are linked to government funding. For verification and more information on our certification and environmental profiles, visit [www.greenbooklive.com](http://www.greenbooklive.com) and click on the 'search GBL' link. For quick reference to a specific product and certificate, just enter the digits of a BRE certificate number (do not include the ENP prefix) 472; 415 or 429 into the 'Cert No' search box (see certification numbers in the table below), or simply enter 'Polyflor' into the 'Company Name' search box.

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

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

## BRE Generic Ratings

Where Polyflor products have not been individually certificated by BRE Global, generic ratings are 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. Vinyl flooring achieves on average a generic BRE Global A+ rating for most vinyl varieties across the categories shown below:

Standard	Homogeneous EN 649 EN ISO 10581	Heterogeneous EN 649 EN ISO 10582	Acoustic EN 651	LVT EN 649	Safety EN 13845	Rubber (smooth) EN 1817	Rubber (profiled) EN 12199	LVS EN 653
Health	A+	A+	A+	A+	A+	A+	A+	-
Element	821570038	821570039	821570053	821570054	821570055	821570056	821570057	-
Education	A+	A+	A+	A+	A+	A+	A+	-
Element	821570065	821570066	821570010	821570013	921570010	821570014	821570015	-
Commercial	A	A	A	A	A	A	A	-
Element	821570038	821570039	821570041	821570042	821570043	821570044	821570045	-
Retail	A+/A+	A+/A+	A+/A	A+/A	A+/A	A+/A+	A+/A+	-
Element	821570038	821570039	821570053	821570054	821570055	821570056	821570057	-
Domestic	A	A	A	A	B	A	A	A
Element	821570065	821570066	821570010	821570013	921570010	821570014	821570015	821570002

For more detail about how these ratings are arrived at by BRE Global visit [www.bre.co.uk/greenguide](http://www.bre.co.uk/greenguide)

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

Safety	Homogeneous	Rubber (smooth)	Rubber (profiled)	LVT	LVS
Modena PUR	Polyflor SD	Diamant	Noppe Stud Tile	SimpLay	Secura
Hydro Evolve	Finesse SD			Camaro Loc PU	Expona Flow
Ecomax	Finesse EC				
Arena PUR	Polyflor EC				
Expona Control PUR	Polyflor ROF				
Verona PUR	Polyflex Plus PU				
Apex					