

Environmental Advantages

Product Components :

The **core board** of Berry laminate flooring is made of high-density wood fiber board (HDF). Our HDF boards consist of about 90% wood fiber and some 10% environmentally friendly glue resin. The wear surface on the HDF boards is generally made up of several layers of high-quality paper impregnated with transparent melamine resin.

The **underside** is covered with backing paper. Our laminate floor coverings are therefore made mainly of the fibers from renewable raw material, along with a relatively minor amount of synthetic resin. They are manufactured in modern production plants which fully meet today's requirements in respect of emissions and environmental protection measures.

The **melamine resin** used for the impregnation of the surface layer paper is water-based, which means that it contains very low organic solvents and once cured, it provides a surface which is extremely resistant to chemicals, water, organic solvents, light and temperature.

The **decors** are printed using modern technology with inks and pigments which are not harmful to health. The top surface layer of the floor covering panel contains a natural mineral-based substance (Aluminum Oxide also known as Corundum) which provides extra protection against wear.

All the components of Berry Floor are produced without any addition of pesticides, organo-chlorinated compounds or harmful heavy metals. Moreover, the surface layers do not contain any plasticizing agents.

Eco-Efficiency :

Berry Floor is long-lasting and wear resistant. These floor coverings can easily be replaced or repaired thanks to the glueless click connections by Valinge. Berry Floor can also be lifted and re-used in other areas several times. This greatly contributes to the overall Eco-Efficiency of our laminate floors, making them one of the best choices available. In 2005, BASF in conjunction with Dr. Peter Saling of the Competence Center for Eco-Efficiency Analysis conducted a study which took into consideration the entire life-cycle of several categories of floor coverings. The "cradle to the grave" analysis considers everything from the production process, installation and cleaning, heating/cooling and consumption behavior by end-users as well as recycling and disposal options.

Ratings are based on both ecological and economic factors and areas of consideration include energy consumption and balance, consumption of resources, greenhouse gas potential and recycling effectiveness. In the laminate category, the longevity of the product made a significant difference to its overall rating.

Additionally, Berry Floor can be disposed of as regular waste without any separation for harmful construction waste as it releases no toxins in decomposition and it is suitable for material recycling or thermal recycling (burned as fuel).

LEED – Leadership in Energy and Environmental Design

Berry Floor is FSC certified, at least 50% of the wood fiber used in Berry Floor is FSC certified. Berry floor can contribute to overall LEED points in the Material and Resources category as well as the Indoor Environmental category. In addition they have an EPLF certificate for quality standards including an E1 emission rating.



Exceeds the E1 Harmonized European Standard for formaldehyde emissions by 10 times.

The E1 standard is 0.1 parts per million (ppm). The attached test results show the emission level of Berry Floor at 0.01 ppm, with the test duration being 195 hours. This amount is negligible enough to be considered virtually zero, however the stringent standards of the European Commission will not allow an E0 rating. To put a tangible perspective on these results, look at the excerpt from an industry technical bulletin below.

Formaldehyde in Perspective

To put the 0.1 ppm emission level in perspective, it might be helpful to realize that formaldehyde is always present in outdoor air.^[1] It is produced naturally by many processes, including the combustion of wood, cigarettes, gasoline and other organic compounds; photo-chemical reactions; and biologic activity. Formaldehyde is present naturally at rather high levels in many foods, including apples and onions; and it is even a natural "chemical building block" in the human body. In fact, human blood normally contains about 3 ppm formaldehyde.^[2] Therefore, this chemical is always present to some degree in the environment, and the very low levels which might be associated with phenolic resin-bonded wood panel products should constitute no problem.

Résumé	
Characteristic	Summarized assessment
Composition	<ul style="list-style-type: none">-Contains up to 90% wood fiber-Water-based resins-No biocides and organo-chlorinated containing additives-No harmful heavy metals-Surface layers do not contain any plasticizing agents
Product profile	<ul style="list-style-type: none">-Environmentally friendly production-Full recycling materials in production cycle-Favorable life-cycle environmental performance data
Emissions	<ul style="list-style-type: none">-Negligible formaldehyde emissions-Negligible VOC emissions
Hygiene	<ul style="list-style-type: none">-Easy to clean and maintain-Advantageous in terms of allergy sensitivity
Disposal	<ul style="list-style-type: none">-Long-lasting and wear resistant-Suitable for material or thermal recycling

[1] Indoor Pollutants. National Academy Press, Washington, D.C. 1981.

[2] Heck, H. d'A, *et al.* «Formaldehyde (CH₂O) Concentrations in the Blood of Humans and ischer-344 Rats Exposed to CH₂O Under Controlled Conditions.» American Industrial Hygiene Association Journal 46:1-3 (1985).