

CEMBRIT

SUSTAINABILITY IN CEMBRIT

EPD FAQ

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WHAT IS AN EPD?

An EPD (Environmental Product Declaration) is an independently verified and registered document that communicates quantitative, objective, and verified information about the environmental impact of (construction) products through its entire life cycle.

EPDs are based on the harmonised European standard (EN 15804:2012 + A2:2019) and the international standard (ISO 14025). As such, EPDs provide an unbiased method for documenting the energy and resource consumption, the waste generation and the environmental impacts derived from the production, use, transport and disposal of a construction product.

An EPD is based on an LCA (Life Cycle Assessment), in which the environmental impact of the construction product is mapped throughout its life cycle from its manufacturing to its reuse or disposal.

WHAT DOES AN EPD DOCUMENT?

An EPD documents the environmental footprint of the construction product (including its impact on global warming, its acidification potential, its eutrophication potential, etc.). The EPD also quantifies the consumption of energy resources (including use of renewable and non-renewable energy, and energy recovery) as well as the generation of waste streams (such as the amount of waste being disposed of and waste being recycled or reused).

WHAT ARE THE DIFFERENT TYPES OF EPDs?

In general, there are two types of EPDs: product-specific EPDs and sector-specific EPDs. A sector-specific EPD represents an average for a well-defined industry/product type, e.g. concrete elements, structural wood or brick / tile. Such an EPD is typically based on average industry data (e.g. data covering a dominant share of representative manufacturers).

Product-specific EPDs are designed for a specific product from a manufacturer, e.g. air-cured and coated fibre cement façade cladding panels from Cembrit Holding A/S. A product-specific EPD may also contain a product range, e.g. if different types of coatings are added to 'one product'. In such a situation, 'multiple products' can be included in one product-specific EPD.

In addition, for both types of EPDs, different system boundaries can be applied: *cradle to gate*, *cradle to gate with options* or *cradle to grave*.

WHO USES EPDs?

The quantitative information contained in EPDs on the

environmental performance of construction products makes them valuable to a wide range of stakeholders: planners, architects, construction companies, investors, facility managers, and, the manufacturing companies themselves.

HOW ARE EPDs APPLIED TO REAL-LIFE CASES?

EPDs are used as a verified form of documentation of the environmental impacts, the resource consumptions and the waste generations for a construction product. It is an environmental declaration - not a label or an environmental claim, and the EPD does not say anything directly about the sustainability profile of the construction product.

Caution should be applied when comparing EPDs for similar products with similar end-use application, and comparison of the environmental performance and resource use of construction products using the EPD information should always be based on the product's use in and its impacts on the building.

In the sustainability certification of buildings (certification systems such as DGNB, BREEAM and LEED), EPDs can be used as input or documentation when preparing the Life Cycle Assessment for the building. In addition, having EPDs also qualify for earning points in the certification system.

In addition, the LCA that forms the basis of the EPD may contribute to better understanding of the manufacturing impact on the environment and lead to production optimisation / product development in relation to environmental sustainability within the company – including among other things as documentation regarding an environmental management certification of the company.

HOW DOES CEMBRIT USE THE EPDs?

In Cembrit we work proactively with our EPDs, to ensure a more sustainable production and product development.

The information in the LCA behind the EPD is used to assess opportunities for lowering our environmental footprint (such as reducing the total CO₂ emission). This information is also used when identifying green and sustainable business models for the reuse and recycling of waste streams inside our factories as well as from building sites and from building demolition. Furthermore, the information in the LCA provides valuable input to our procurement activities when e.g. making procurement choices and setting standards for our suppliers.