



BHMA Product Category Rules

Frequently Asked Questions

What is a product category rule (PCR)?

A product category rule (PCR) is a set of specific rules, requirements and guidelines that determine what data should be gathered and how it will be evaluated when conducting the life cycle assessment (LCA) of a product.

What is a life cycle assessment (LCA)?

An LCA is the process of assessing the environmental impacts associated with all the stages of a product's life from “cradle to grave” – in other words, from raw material extraction to disposal or recycling. The life cycle assessment of a product is required for any manufacturer looking to develop an environmental product declaration (EPD).

What is an environmental product declaration (EPD)?

An EPD is an independently verified and registered document that educates consumers and building professionals about a product and its environmental impact. These documents offer a standardized way of quantifying:

- The impact that the acquisition of a product's raw material has on the environment;
- The product's level of energy use and efficiency;
- How much of the product's content is made up of materials vs. chemical substances;
- How many emissions to air, soil and water are caused by the manufacturing of a product;
- How much waste generated from the product at the end of its lifetime.

Product and company information is also included within an EPD. All of these elements make it easier for contractors, specifiers, architects and designers to compare products that fulfill the same function. In order to maximize the benefits that these products can contribute to their projects, trade professionals can access a list of existing EPDs and PCRs at <http://environdec.com>, the website of the International EPD® System.

Why are product category rules important?

PCRs are important because they provide a set of common criteria by which LCAs are developed—this allows for a meaningful comparison among products. Since LCAs are required to develop an environmental product declaration (EPD), PCRs are an imperative part: they are the starting point, if you will, of the EPD process.

In short, PCRs help manufacturers to simplify and streamline the evaluation of the large amount of data about their products and eliminate some of the redundancy in the data-gathering procedures. The PCR also ensures that the data collected is analyzed in the same way as other products in the same category.

Why did BHMA develop a product category rule for builders hardware?

Specifying architects are frequent customers of BHMA members. They are increasingly seeking information about the impact that building materials have on the environment. In many cases, those seeking LEED and other certifications consider building products based on their EPD, or environmental product declaration (EPD). Product category rules (PCRs), the first step in developing an EPD, are a crucial part of the EPD process. Recognizing that there was no robust, credible and uniform way to compare the environmental impact of builders hardware products, BHMA took the initiative to develop a PCR for this product category to allow builders hardware manufacturers to develop EPDs and, in turn, better meet the growing sustainability needs of the building industry. The resulting builders hardware PCRs meet all requirements applicable for products made for use in North America and are aligned with the corresponding PCR developed for European builders hardware.

What products are covered by the BHMA PCR?

The BHMA Product Category Rules establish rules for 27 product subcategories of builders hardware, including automatic and revolving doors. These subcategories cover most of the builders hardware products included in the ANSI/BHMA 156 standards:

How does my company prepare an LCA?

A life cycle assessment (LCA) must be prepared according to the product category rule (PCR). Considerable expertise is required to prepare the LCA, so most companies will engage a certified consultant for this purpose, either directly or through a Program Operator. LCA consultants may be found by an internet search or a referral.

The LCA process is governed by ISO Standards 14040 and 14044. To view the rules for preparing an LCA for your builders hardware product, download the BHMA PCR online at www.buildershardware.com/bhma-pages/bhma-sustainability.

How does my company prepare an EPD?

An environmental product declaration (EPD) requires that a life cycle assessment (LCA) be conducted on a product to determine the environmental impacts associated with all the stages of its life, from “cradle to grave.” The rules for preparing an LCA can be found in the BHMA PCR, available for download at www.buildershardware.com.

Conducting an LCA requires independent verification by an accredited organization or individual. Once the LCA is verified, the EPD must also be verified before it is registered and published. EPDs are available to the general public, and may be updated as necessary. It is also important to note that the products in the EPD must be re-certified after a specified period of time.

Where can I find the BHMA Product category rules?

You can find the BHMA Product category rules for builders hardware on our website at www.buildershardware.com/bhma-pages/bhma-sustainability.