



Product Category Rule (PCR) Guidance for Building-Related Products and Services

Part B: Flooring EPD Requirements

UL 10010-7

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Product Category Rules for Flooring EPD Requirements, UL 10010–7

Second Edition, Dated September 28, 2018

Summary of Topics

The Second Version of the Product Category Rules for Flooring EPD Requirements, UL 10010–7 has been issued.

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Publisher:
UL Environment

Tracking of versions

Version	Comments	History
Addendum v1 and v 1.1	North American addendum for PCR Part B for Flooring from the Institut Bauen und Umwelt e.V., Floor coverings, v. 1.5 October 2013.	August, 2014
2.0	Creation of North American PCR Part B for flooring to conform with International Standards Organization (ISO) 21930:2017, Underwriters Laboratories (UL) Part A, and align with NSF Flooring PCR v2. This PCR has been updated to align with international standards with the intent of allowing manufacturers to create EPDs which are global in scope.	September, 2018

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These Product Category Rules (PCR) are valid for a period of five (5) years, set to expire in September, 2023.

I. Background Information and Acknowledgements

This sub-category PCR was developed to address the product specific rules for the creation of Environmental Product Declarations (EPD) for flooring products. When used to self-reference this document, "PCR" refers to "sub-category PCR."

Other PCRs and documents considered in the original development of this PCR include:

- PCR Guidance-Texts for Building-Related Products and Services, From the range of Environmental Product Declarations of Institute of Construction and Environment e.V. (IBU), *Part B: Requirements for the EPD for Floor coverings, v1.6, November 2017*
- Product Category Rule for Environmental Product Declarations, Flooring: Carpet, Resilient, Laminate, Ceramic, Wood. Version 2. NSF.
- Part A: Life Cycle Assessment Calculation Rules and Report Requirements UL Environment (September 2018, version 3.2)
- ISO 21930:2017 - Sustainability in building construction -- Environmental declaration of building products
- EN 15804 + A1:2013 - Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction product.

The scope of this PCR differs from the previously published IBU PCR in that it expands geographic consideration to the North American (NA) market and differs from the NSF PCR in that it conforms with ISO 21930:2017 and a Part A/Part B structure. This PCR assumes a 75 year building service life to be consistent with ASHRAE 189.1 (2014, Section 9.5.1).

Interested Parties

This Part B has been prepared with input from the following stakeholders:

Trade associations

- Resilient Floor Covering Institute, Inc. (RFCI)
- Carpet and Rug Institute, Inc. (CRI)
- Tile Council of North America, Inc. (TCNA)
- National Wood Flooring Association (NWFA)
- North American Laminate Floor Association (NALFA)

Manufacturers/Consultants

- | | |
|----------------------------|-------------------------|
| • Armstrong Flooring, Inc. | • Mohawk |
| • Crossville, Inc. | • nora systems, Inc. |
| • DalTile | • Roppe Holding Company |
| • Florida Tile | • Shaw |
| • Interface | • Tarkett |
| • Mannington | • thinkstep |
| • Mapei | • Michael Overcash |
| • Milliken | |
| • Mondo | |

Governance

There are a number of trade associations and representatives of flooring manufacturers participating in the update of this PCR for flooring products. These parties represent a majority of the companies in their particular sector of the flooring industry. Moreover, the manufacturing parties participating in the PCR update represent the vast majority of the flooring sold in North America in the five product categories included in this PCR. The very purpose and function of a trade association is to inform its members of important industry developments and to represent their interests in projects such as the update of a PCR affecting their products. This is important because it effectively demonstrates that a large percentage of the flooring industry is represented in the effort to renew the PCR for flooring products.

The role of participants is to establish requirements and procedures to be applied in the development of EPDs for flooring products. This is an update to an existing PCR, and therefore, this effort begins with the vetting of required changes in scope and structure. A fundamental aspect of the utility of an LCA is understanding a product's environmental impact, so maintaining applicability of EPDs certified under the existing PCR is a critical consideration for participants. In the development of this document, Part B, participants are responsible for ensuring alignment with Part A and conformance with the scoped standards: ISO 21930, EN 15804, and ISO 14025.

Involvement of Interested Parties

UL Environment shall be responsible for producing the PCR document by establishing an open consultation process that includes the involvement of interested parties (ISO 21930 Section 5.2 and 6.2.1). Reasonable efforts were made to achieve a consensus throughout the process (ISO 14020:2000, 4.9.1, Principle 8 and cited in both ISO 14025 and ISO 21930), demonstrated by a vote of participating interested parties.

Flooring trade associations informed their memberships of the PCR creation through their regularly scheduled association committee meetings, newsletters, e-mail messages, and similar types of outreach. Trade associations operate at the behest of their members, and the fact that trade associations are participating in the update of a PCR for flooring products is an indication that their memberships are aware of this project and have authorized their association to represent them in this important endeavour.

UL Environment posted an open call for participation in this PCR update in January 2018 via its standards website, social media outlets, and outreach to original committee stakeholders.

Update Process

The PCR is valid for a duration of five (5) years from the publication date, at which time it may be revised at the request of industry stakeholders. The PCR may be revised before the five year date if the following occurs in the industry:

- The industry desires an update
- Core governing standards ISO 14040, 14044, 14025, 21930, or EN 15804 are updated with substantial material changes

Note: When the PCR is updated, the Program Operator shall communicate with the original committee, any new EPD participants, and initiate a new public call for interested parties.

Public Consultation

Public consultation was utilized during the PCR review process. The public consultation of the completed draft PCR included a minimum 30-calendar-day period for comments to be submitted to UL Environment. After public comments were submitted, the PCR committee reviewed and developed responses for all comments. All comments from the review panel and public consultation were addressed and satisfactorily resolved by the PCR committee prior to the publication of this PCR.

Review

The review process of this Part B PCR included a review through public consultation in May 31 - July 2, 2018 and a panel review, comprised of the following individuals:

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II. Scope

This document contains the PCR requirements for Flooring Product EPDs published in coordination with the EN 15804 and ISO 21930 standards. The requirements for the background Life Cycle Assessment (LCA) project report used to inform the EPD are contained in UL Environment's Part A: Life Cycle Assessment Calculation Rules and Report Requirements. This Part B document, coupled with the Part A, conforms to the ISO 21930, EN 15804, and ISO 14025 sustainability standards for EPD reporting in addition to the US Green Building Council PCR Guidance.

This PCR has been updated to align with international standards with the intent of allowing manufacturers to create EPDs which are global in scope.

General Guidance

The scope of this PCR applies to the product group "flooring products" and includes all residential and commercial installed flooring products according to the standard product specifications or technical data documentation shown under Section 8, including ceramic tile, carpet, laminate, resilient, and wood floor coverings.

Flooring refers to a broad category of products, including, but not limited to:

- Carpet/Textile floor coverings (broadloom, carpet tiles, flocked)
- Ceramic tile (glass, porcelain, pressed, mosaic, gauged and quarry)
- Laminate floor coverings
- Resilient floor coverings manufactured from plastics, linoleum, cork or rubber, excluding loose-laid mats

- Wood flooring (pre-finished or unfinished engineered wood flooring and solid wood flooring)

This PCR applies to the entirety of a packaged product intended for individual sale, including but not limited to adhesives and sealants.

Applicable Products

The following United Nations Standard Products and Services Code (UNSPSC) covers the scope of this Part B:

- 30161700

The following Construction Specification Institute (CSI) Masterformat codes cover the scope of this Part B:

- 09 60 00 – Flooring
 - o 09 62 00 Laminate Flooring
 - o 09 64 00 Wood Flooring
 - o 09 65 00 Resilient Flooring
 - o 09 66 00 Terrazzo
 - o 09 68 00 Carpet
- 09 30 00 – Tile
 - o 09 31 00 Ceramic Tile
 - o 09 33 00 Quarry Tile
 - o 09 35 00 Glass Mosaic
 - o

Non-Applicable Products

Stone products are excluded from the scope of this PCR. Products that provide the same function but are fluid-applied are not within the scope of this PCR. These excluded CSI codes are:

- 09 67 00 – Fluid Applied Flooring
- 09 67 50 – Resinous Flooring

System Boundary

The system boundary for EPDs created using this PCR is cradle to grave.

The EPD requirements include conformance with:

- ISO 21930:2017 standard
- EN 15804 standard (if desired)
- ULE General Program Instructions v 2.3, February 2018 (available upon request)
- The calculation rules for the Life Cycle Assessment and Requirements on the Project Report are specified in a separate document as Part A v3.2 of the Product Category Rules, available at <http://industries.ul.com/environment/transparency/product-category-rules-pcrs>

III. Industry-Average EPD Requirements

Industry-Average EPD Scope

The products represented within a single industry-average EPD created using this PCR are limited to the primary materials defined in the product specification standards in Section 9 that characterize the specific product in commerce.

Involvement of Interested Parties

A call for involvement of interested parties in the creation of an industry-average EPD shall be published in at least one industry trade publication. At a minimum, at least three (3) different manufacturing locations from no less than three (3) companies should be involved and represented in an industry-average EPD, unless otherwise justified. The method for determining representativeness shall be justified and described per the requirements listed in Section 2.2.4.1.

Industry-Average EPD Participation

A manufacturer qualifies for participation in an industry-average EPD created using this PCR if the manufacturer provides LCA data used to calculate the EPD average.

Retroactive participation:

A manufacturer desiring retroactive inclusion in the industry average EPD shall provide the manufacturing and product data information submitted in the original industry average EPD to the LCA practitioner. The LCA practitioner will then recommend to the Program Operator a determination for inclusion in the industry average on the basis of results falling within a reasonable range for any impact category. The maximum and minimum should be reported in the LCA background report for each impact category based on the highest and lowest impact product or facility within the original industry-wide LCA.

When determining a manufacturer's participation eligibility, the EPD Program Operator shall follow the recommendations of the primary sponsor(s) of the industry average EPD and participating manufacturers unless the Program Operator has information to the contrary, in which case the Program Operator, LCA practitioner, primary sponsor of the industry average EPD, and manufacturer shall confer in an effort to reach consensus.

Governance

An industry organization, such as a trade association, shall inform possible industry participants through association meetings, newsletters, e-mail messages, and similar types of outreach, including public notices in the trade press publications. Confidential business information shall be collected by a third party. Data from the third party shall be provided to the facilitator as aggregated data with no trace to the original source of data.

The development of an industry-average EPD and or update of an EPD should involve a series of meetings and exchanges in which all participants are invited and kept apprised of the developments. Notices of these meetings should be given to all possible participants regardless of their commitment to active involvement. Minutes of meetings, along with meeting notices, should be preserved as documentation of the process and due diligence observed in the creation or renewal of the EPD.

Data Responsibility/Ownership

Trade associations that lead the development of industry-average EPDs may need to collect confidential business information from individual members. This data can include proprietary chemical formulations and processes or other confidential information. In this case, a designated third-party entity such as an LCA practitioner shall be identified as the "industry agent". The industry agent shall be responsible for activities including collection, secure storage and analysis of such data needed for the EPD development, and will preserve the privacy of individual company information while executing these duties.

Per ISO 21930 Section 5.4, the manufacturer, or group of manufacturers, of the construction product is the sole owner of the EPD and is responsible for developing the EPD of the construction product according to the PCR. Only the manufacturer or group of manufacturers is authorized to declare the environmental performance of the construction product using an EPD.

The group of manufacturers responsible for developing an industry-average EPD shall be responsible for, including but not limited to, ensuring industry-average EPD updates are made based on the most recent LCA modeling software version and impact assessment version available.

Industry-Average EPD Updates

Industry-average EPDs created using this PCR shall expire five (5) years after publication. An update to the existing EPD, or new EPD, may need to be developed prior to the five years if the EPD's primary sponsor determines that: 1) significant changes have occurred in the manufacturing process; 2) new industry participants; 3) significant changes or alterations in raw materials; 4) major regulatory changes that mandate or trigger changes to operational procedures; or 5) major technological changes would also justify creation of an updated EPD.

Additional companies may be added to an existing industry-average EPD at the scheduled review by submitting data required for retroactive participation. However, this shall not automatically trigger a recalculation of the industry average impacts.