

It has arrived...the EPD for North American-made ceramic tile

Making its debut at Coverings 2014, the North American ceramic tile EPD (Environmental Product Declaration) is the newest tool for sustainable design and understanding ceramic tile's environmental footprint

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The next chapter in specifying sustainable flooring is here. Specifiers and other building design and construction industry professionals seeking sustainable flooring options can now look to the North American ceramic tile EPD (Environmental Product Declaration), the first in the industry, to evaluate and understand ceramic tile's environmental footprint. An EPD is a report that quantifies the environmental impacts of a product throughout its lifecycle. It contains information about a product's carbon footprint and resource depletion potential, among other things.

An EPD is not intended to be a claim of environmental superiority. Rather, it is similar in concept to nutrition reporting. An EPD tells a product's complete environmental story in a standardized format that allows products to be compared to each other, much as nutritional labels allow food products to be compared. As a result, EPDs have become increasingly popular, a "must-have" for some, because they provide the detail

The North American ceramic tile EPD applies to over 95% of the tile produced in North America, so there are many options to select from when transparency is desired.

and transparency needed to facilitate informed buying decisions.

Making its debut at Coverings 2014, the North American tile EPD is a comprehensive analysis of over 95% of the ceramic tile produced in North America, based on data collected by PE International and verified/certified by UL Environment, well established leaders in the field of sustainability assessment and certification. The North American tile EPD brings immediate benefits:

- Tiles made by the North American manufacturers whose products and operations were evaluated for the composite EPD will contribute towards points in LEED and other green building standards/rating systems, including future versions of the International Green Construction Code (IgCC).
- Having submitted data for the composite EPD, participating manufacturers will start to develop and release product-specific EPDs, which will qualify those products to additionally contribute towards points in LEED and other green building standards/rating systems.
- The sustainability and environmental impacts of North American tiles can be directly compared to other flooring products that have an EPD.
- Transparency and technical detail on the sustainability of North American tiles, based on industry-wide lifecycle data, will be available for the first time. This is being requested by the green building community.

The tile EPD is based principally on a lifecycle assessment (LCA), which addresses myriad aspects of ceramic tile: sourcing and extraction of raw materials; manufacturing processes; health, safety and environmental aspects of production and installation; production waste; product delivery considerations like distances to typical markets; use and maintenance of the flooring; and end of product life options such as reuse, repurposing and disposal.

To ensure products are compared fairly and definitively, product category rules are used. These rules establish the framework for how evaluations must be made, what information must be reported, and how declarations must be organized within a

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common category of products. This prevents green washing because the rules require that all included parameters and impacts be reported, not just those for which a product type performs the best. The ceramic tile EPD follows the same product category rules used for carpet, resilient tile, laminate and wood flooring, to establish a level playing field for these flooring products when their sustainability is being considered.

Because the product category rules require consistent reporting, end-users can select products based on the specific criteria of importance to them.

Developing a North American ceramic tile EPD was a natural next step for the Tile Council of North America (TCNA), which launched Green Squared® in 2012 to provide multi-attribute sustainability evaluation criteria for tile and installation materials and a means — Green Squared Certification — of easily identifying the most sustainable tile products available.

When selecting sustainable products, two important considerations can now be made: 1) Compliance with multi-attribute criteria; and 2) Evaluation based on a life-cycle assessment as reported through the North American ceramic tile EPD. Together, they serve as useful product selection tools that make the design professional's job easier when building green. **TILE**

Learn More About the Tile EPD at From the Article Authors at Coverings. LEED v4 and its Relevance to Tile: April 30, 2014; 9:15 to 10:15 a.m.

Breaking News: Announcing an Environmental Product Declaration for Tile: April 29, 2014; 1:45 to 2:45 p.m. Information will also be available at the TCNA booth (#9061)

ABOUT THE AUTHORS



Bill Griese, Standards Development and Green Initiative Manager for Tile Council of North America, develops ASTM, ANSI, ISO, and other industry standards and leads TCNA's sustainability work, working closely with the TCNA Lab in performing these functions. Griese served two terms as Chairman of ASTM Committee C21 on Ceramic Whitewares and Related Products and is Chairman of ASTM Subcommittee C21.06 on Ceramic Tile. He is also active in ASTM Committee E60 on Sustainability and is Chairman of the ASTM Committee on Technical Committee Operations' Subcommittee on Regulations. Griese participates in the World Ceramic Tiles Forum and is the U.S. delegate for several global standardization initiatives. He is a regular speaker at national and international events and authors for trade publications regularly. Griese is a LEED Accredited Professional (LEED AP) with a specialty in Building Design and Construction (BD+C) and earned his Bachelor of Science degree in Ceramic and Materials Engineering from Clemson University.



Heather Gadonniex, LEED AP BD+C leads PE International's building and construction sector. PE is the global market leader in software solutions and services in the field of enterprise sustainability and life cycle assessment. With more than 20 years of experience and 20 offices around the globe, PE International offers two leading software and data solutions - GaBi for product sustainability and SoFi for corporate and supply chain sustainability. Over 1500 companies and institutions worldwide put their trust in PE International. This value-chain view allows for seamless development and delivery of transparent information via product and building life cycle assessment, product declarations (EPD/HPD) and supplier engagement programs.