

INTRODUCING GREEN SQUAREDSM, OUR INDUSTRY'S NEW MEASURING STICK FOR PRODUCT SUSTAINABILITY

BY BILL GRIESE, LEED AP BD+C
STANDARDS DEVELOPMENT AND GREEN INITIATIVE MANAGER, TCNA

Products Covered by Green SquaredSM



Ceramic Tiles (Porcelain, Pressed Floor, Quarry, Mosaic and Glazed Wall) and Glass Tiles (Cast, Fused, and Low Temperature-Coated)



Dry Powder Installation Materials (Cement-based Mortar and Grouts, etc.)



Liquid and Paste Installation Materials (Mastic and Epoxy Adhesives, Epoxy Grouts, Pourable and Trowelable Membranes, etc.)



Panel Installation Materials (Backer Boards, Panel Underlayments, etc.)



Sheet Installation Materials (Membranes and Underlayments, etc.)

In 2011, the Tile Council of North America (TCNA) put the finishing touches on the world's first multi-attribute product sustainability certification program developed exclusively for the tile industry, Green Squared. With so many different brands of "green," and with such a large variation in sustainability claims being made today, the need for an authentic,

tile industry-recognized mechanism for acknowledging products which are truly sustainable is long overdue. With the new Green Squared program, tiles and related installation materials can be certified as meeting a stringent set of multi-attribute sustainability criteria which have been developed by tile industry members in partnership with leaders in the green building community.

The Green Squared Certified Mark

Tiles and related installation materials that are certified under the Green Squared program are allowed use of the Green Squared Certified mark. This single, easily recognizable mark means that an independent third-party evaluation covering a spectrum of modern-day sustainability criteria has



TCNA is pleased to announce that the first independent third party certification bodies to participate in Green Squared are Underwriter Laboratories (UL) Environment, Scientific Certification Systems (SCS), and NSF International.

been made and that the marked product meets all necessary criteria. Certified architects, specifiers, and consumers

conformance to these criteria enables architects, specifiers, and consumers

to choose products knowing that their sustainability needs are being met.

In a marketplace wary of green product claims, a Green Squared Certified marking will provide authenticity and instill consumer confidence that the product they are purchasing is the “real deal.” Green Squared certification is the North American tile industry’s go-to strategy for evaluating product sustainability. While single attribute claims will continue to be made, the marketplace will soon develop a new view towards product sustainability: “If it doesn’t meet the multi-attribute criteria of the Green Squared standard well then, sorry, it isn’t green.”

How the Green Squared Program is Structured

The Green Squared certification program was developed by the TCNA in accordance with the principles of ISO Type 1 (ISO 14024) environmental labeling and declaration requirements. It was developed

as part of the TCNA's ongoing initiative to support the efforts of producers, purchasers, and policy makers to improve the environmental and social sustainability of products and services. Green Squared is based on the sustainability demands of the North American marketplace and applicable to products manufactured in any part of the world.

TCNA provides and maintains the Green Squared certification program, including all associated logos and certification marks. TCNA requires all products bearing the Green Squared Certified mark to undergo a comprehensive and independent assessment by a recognized third-party certification body to determine conformance to the industry's



If a Green Squared authorized certification body verifies that a product is in conformance with the ANSI A138.1 standard, the Green Squared Certified mark may be used in conjunction with that product.

newly approved product sustainability standard, ANSI A138.1.

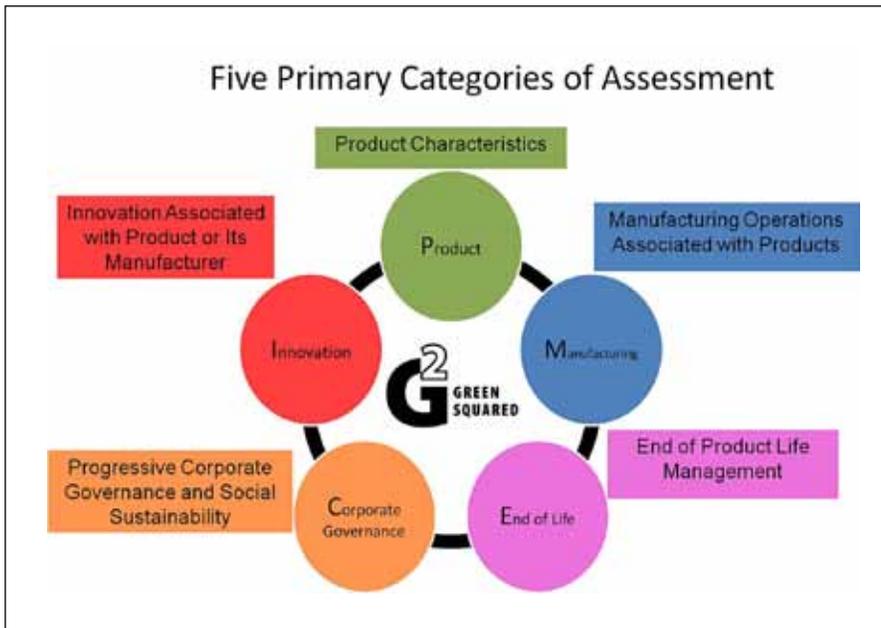
Currently, third party certification bodies participating in Green Squared include NSF International, Scientific Certification Systems (SCS), and Underwriter Laboratories (UL) Environment. All three organizations are highly regarded within the North American architectural community and have operations worldwide. Participation by organizations such as these in Green Squared makes possible true third-party validation of products and brings added value to the Green Squared Certified mark.

The ANSI A138.1 Standard

The ANSI A138.1 standard, which is the basis for Green Squared certification, was created to provide a means by which to define and measure the sustainable attributes of tiles and related installation materials.

ANSI A138.1 is five standards in one, covering a variety of products including tiles (ceramic and glass), powder goods (grouts, mortars, etc.), liquid/paste installation products (trowelable membranes, liquid polymer additives, etc.), panel installation products (backer boards, underlayments, etc.), and sheet installation products (crack isolation membranes, waterproof membranes, etc.). This allows the industry to offer installed "systems" of Green Squared Certified products, which is the

Five Primary Categories of Assessment



Establishing sustainability criteria for products throughout their full lifecycle, the Green Squared standard ANSI A138.1 is divided into five categories, each addressing a different phase of assessment.

first offering of its kind by any building material industry.

To establish sustainability criteria for products throughout their full lifecycle, ANSI A138.1 is divided into five sections: General Environmental Characteristics (product characteristics), Environmental Product Manufacturing (including raw material extraction), End of Product Life Management, Progressive Corporate Governance, and Innovation.

The standard addresses a wide range of environmental and social issues. While there are some familiar requirements, such as recycled content and VOC emission criteria, the standard includes multi-attribute criteria which previously were important but not yet standardized by the green building community. For example, certain aspects of closed-loop manufacturing, including water efficiency, are addressed. Objective requirements for the types of energy used to manufacture a product are established. Sustainable product packaging criteria are established. Criteria for plant worker health and safety and corporate community involvement are also established to ensure that products are associated with socially sustainable operations. There are far too

many criteria to list, but chances are that if a concept has been discussed among green building community members, then it's addressed by ANSI A138.1.

There are various paths a manufacturer may take towards demonstrating their product's conformance with ANSI A138.1. Some criteria are mandatory, and others are elective. To meet ANSI A138.1, a product must meet all mandatory requirements and a certain amount of elective requirements — a bit like obtaining a diploma.

Timeline for Implementation

ANSI A138.1 was approved by the ANSI A108 Committee in November, 2011. When the Green Squared certification program was announced both domestically and internationally, it received a tremendous amount of industry support. Tile and related installation material manufacturers interested in participating in Green Squared are already in the process of creating new products and/or determining which of their existing products might qualify. These manufacturers are currently in discussion with participating certification bodies and are taking the preliminary steps towards certifying their products.

It's expected that Green Squared will hit the marketplace in full force in April, 2012. At Coverings, TCNA plans to announce the inaugural class of Green Squared Certified products.

What Green Squared Means for Our Industry

With the establishment of the Green Squared certification program, the industry has taken its most significant step thus far in providing market clarity as to which products are truly sustainable. With the Green Squared Certified mark, the marketplace can easily identify products with the full range of social and ecological attributes most important to the North American green building community.

For the first time, the North American ceramic tile industry has a unified position and consistent interpretation of what it means for a product to be "green." In the future, it is expected that Green Squared/ANSI A138.1 will be acknowledged by various architectural standardization bodies and incorporated into green building standards, codes, and rating systems. Thus, TCNA is hopeful that Green Squared will provide a smooth avenue on which the tile industry can drive its effort to increase market share, especially in green building projects. **TILE**

ABOUT THE AUTHOR



Bill Griese, Standards Development and Green Initiative Manager for the Tile Council of North America, is involved in the development and

revision of ASTM, ANSI, ISO, and other industry-specific standards, and the coordination of TCNA's environmental efforts. He serves as Chairman for the ASTM C21 Committee on Ceramic Whitewares and Related Products, and also works closely with TCNA's Product Performance Testing Laboratory. Griese is a LEED Accredited Professional and earned a Bachelor of Science degree in Ceramic and Materials Engineering from Clemson University in Clemson, SC.