

LEED® PROGRAM GUIDE

Shake, Slate & Barrel Tile

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Sustainability at Brava

Brava turns recycled plastics into beautiful and durable roofing material. Our composite products avoid depleting natural resources such as quarries for slate or lumber for wood shakes. And no energy is wasted mining slate, extracting clay, or harvesting trees. Any scraps from the installation can be recycled into new material. What's more, our composite tiles have a lower carbon footprint than traditional roofing shingles, when considering their complete life cycle.

There is an enormous amount of waste flowing out of the roofing industry, and we aim to avoid that cycle. An eco-friendly solution, our composite roof tile is made of compressed, recycled plastics and other sustainable/recyclable materials. This creates a composite tile that is much lighter in weight than traditional roofing systems, which reduces the weight of motor vehicles that transport them, increasing fuel efficiency and lowering emissions.

Choosing synthetic roofing materials can contribute to environmental conservation by reducing the demand for natural resources. Brava Roof Tile is committed to producing eco-friendly, sustainable tiles. Brava's products contain up to 50% recycled plastic, are fully recyclable, and have high solar reflectance that can help reduce energy demands on homes. Brava Sustainability Video

What is LEED?

LEED (Leadership in Energy and Environmental Design) is the world's most widely used green building rating system. LEED certification provides a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social, and governance benefits.

What Does "LEED Certified" Mean?

Being "LEED Certified" is sometimes used interchangeably to refer to both buildings and LEED professionals. Officially, people earn LEED accreditation (or "LEED credentials"). Buildings are considered LEED-certified, not products or people.



What are the Benefits of LEED?

LEED buildings provide a range of economic, environmental, and social benefits, making them a desirable choice for both developers and occupants. LEED-certified buildings offer several benefits, including:

Environmental sustainability: LEED buildings are designed to minimize energy consumption, reduce water usage, and promote environmentally friendly materials, contributing to a healthier planet.

Cost savings: By using energy-efficient systems and sustainable materials, LEED buildings typically have lower operating costs, saving money over time on utilities and maintenance.

Healthier indoor environment: LEED certification emphasizes indoor air quality, daylighting, and access to natural views, which can improve occupant health and productivity.

Marketability and brand enhancement: LEED certification demonstrates a commitment to sustainability, which can attract tenants, customers, and investors who value environmental responsibility.

Regulatory compliance and incentives: Some jurisdictions offer incentives, tax breaks, or expedited permitting for LEED-certified projects, encouraging developers to pursue sustainable building practices.

Selecting a LEED Rating System

LEED is for all building types and all building phases including new construction, interior fit outs, operations and maintenance and core and shell. However, most LEED projects with Brava products will typically fall under these two rating systems.

LEED Homes is used for residential single-family homes, low-rise multi-family (one to three stories) or mid-rise multi-family (four or more). Homes and residential buildings that are greater than four stories may also use LEED BD+C.

LEED BD+C (Building Design & Construction) is used for new buildings and major renovations. It is the standard for green building design, construction, operations, and performance: a more streamlined user experience and more goal-oriented credits.











For more information on selecting a LEED rating system, please follow the <u>LEED Rating System Selection</u> <u>Guidance</u>.





Certification Steps

- **1. Determine your project type** (new or existing space, building, or city or community). Review the rating systems.
- **2. Select priorities** for your project based on outcomes outlined in the LEED rating system (ex. human health, energy efficiency, carbon reduction, etc.). Review priorities in the <u>credit library</u>.
- **3. Check the requirementnts and options.** <u>Minimum Program Requirements</u> (MPRs) are the basic requirements that let you know if your project can pursue LEED. LEED credits allow project teams to customize how they pursue LEED. By fulfilling credits, project teams earn points that, once added together, determine a project's certification level.
- **4. Choose your rating system.** For the new construction of whole buildings, start by finding the option that best fits your project by exploring the BD+C offerings. For residential projects (both single-family and multi-family) review the options specific to that sector.
- 5. Review the tools and resources available for LEED projects. Access tools.
- **6. Document** achievement of rating system requirements and credits. <u>Go to LEED Online</u> or view <u>sample</u> forms.
- 7. Submit for review in LEED Online.

How to Achieve LEED Certification

To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health, and indoor environmental quality. Projects go through a verification and review process by GBCI and are awarded points that correspond to a level of LEED certification:













LEED Tools & Support

There are a number of tools and resources available to support you when working on your LEED project, including:

- LEED for Homes v4
- Introducing LEED v4
- LEED Credit Library
- LEED v4.1 BD+C Guide
- Education
- View all of the tools













Compliance & Eligibility

Compliance can be complicated, so this information is meant to help you understand some basic requirements and how Brava roofing products can help you comply with LEED requirements and contribute towards LEED certification.





LEED Homes

Sustainable Sites Credit: Heat Island Reduction

Ensure that at least 50% of hardscapes and roofs, but not including common roads that serve multiple buildings, on the project site meet one or more of the following requirements. Points are awarded according to Table 1.

Percentage of Hardscape Area	Points
50-75%	1
>75%	2

As of June 1, 2022, no Energy Star certified roofing products are available to the market. The Cool Roof Rating Council (CRRC) recommends construction specifiers update any references to Energy Star with a reference to the CRRC-1 program to ensure the solar reflectance, thermal emittance, and/or solar reflectance index (SRI) values used for compliance are independently obtained, verified, and publicly accessible.

Credit Options

Option 2. Nonabsorptive materials (1–2 points)

Install light-colored, high-albedo materials or vegetation-covered hardscapes. Acceptable strategies include the following:

- Use ENERGY STAR* qualified roof products in appropriately sloped applications (or performance equivalent for projects outside the U.S.).
- Use paving materials with a three-year aged solar reflectance (SR) of at least 0.28. If three-year aged value information is not available, use materials with an initial SR of at least 0.33 at installation.

Brava's Eligible Products

BRAND AND MODEL	PRODUCT TYPE	COLOR	SOLAR REFL INITIAL	ECTANCE 3 YEAR	THERMAL EI	MITTANCE 3 YEAR	SRI INITIAL	3 YEAR
Brava Cedar Shake - Cool Weathered	Polymer / Composite	Tan, Black, Brown, Multicolor	0.30	0.28*	0.92	0.90*	33	29*
Brava Cedar Shake - Cool Lake Forest	Polymer / Composite	Tan, Gray, Brown	0.25	0.24*	0.92	0.90*	26	24*
Brava Spanish Barrel Tile - Terra Cotta	Polymer / Composite	Red	0.37	0.39	0.89	0.91	41	44
Brava Spanish Barrel Tile - French Clay	Polymer / Composite	Orange	0.33	0.34	0.88	0.89	35	37



LEED Homes (Continued)

Materials & Resources: Environmentally Preferable Products

Credit Requirements	Credit Options				
Use building component materials that meet one or more of the criteria below. A material must make up 90% of the component by weight or volume, except as noted. A single component that meets Option 1 and Option 2 can earn points for each (0.5 point per item).	Option 2. Environmentally preferable products (1 point roofing) Use products that meet the following criteria. 1. The product contains at least 25% postconsumer or 50% preconsumer content.				

Brava's Eligible Products

All Brava roof tile profiles. This includes Brava Shake, Slate and Barrel tiles. Brava tiles contain up to 50% preconsumer recycled plastic and are 100% recyclable.

- Brava Cedar Shake
- Brava Slate
- Brava Spanish Barrel Tile

LEED v4.1 Building Design & Construction

SS Credit: Heat Island Reduction

Credit Requirements				Credit Options							
High-Reflectance Roof Use roofing materials that have an aged SRI equal to or greater than the values in Table 1. If aged SRI is not available, the roofing material shall have an initial SRI equal to or greater than the values in Table 1.				Low-sloped roof Steep-sloped roof			Slope Initial S ≤ 2:12 82 > 2:12 39			Aged SRI 64 32	
Brava's Eligible Products											
Brava cool roof c	olors- <u>CRRC rated produ</u>	<u>icts</u>									
	BRAND AND MODEL	PRODUCT TYPE	COLOR	SOLAR REF	3 YEAR	INITIAL	3 YEAR	SRI	3 YEAR		
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Additional Resources

For more information on LEED, please visit https://www.usgbc.org/leed.

Brava provides training, installation guidance, resources, and product certification documents for all products at https://www.bravarooftile.com/technical-support/.

Brava's CRRC listings: https://coolroofs.org/directory/roof?keywords=brava

Questions?

If you have any questions regarding Brava Roof Tile products and accessories, call 844-290-4196 and ask for Technical Support.

Or contact us through our website at https://www.bravarooftile.com/contact-brava/.

