

# Levelrock® Floor Underlayment

## Is Misinformation About Green Underlayments Making You Red-Faced?

Many poured flooring underlayment manufacturers are promoting a focus on green products and the fact that their products meet stringent environmental standards. Yet false claims are almost everywhere these days. Here is information to help you separate fact from fiction, counter misinformation in the marketplace and learn why LEVELROCK® poured floor underlayments, sound mats and sound boards are truly the green flooring system solutions.

### **What makes an underlayment green?**

Despite ongoing efforts to create measurable and clear green performance standards, there is simply no magic definition of what makes an underlayment sustainable, environmentally friendly or green—terms that are often used interchangeably. In reality, many different factors impact whether a poured floor underlayment is green. These include the product's recycled content (whether it is made from post-industrial/pre-consumer or post-consumer materials), its manufacturing location, where the raw materials were sourced, the level of VOCs (volatile organic compounds) and whether it contains and/or emits any formaldehyde and many other attributes including toxicity and durability. The majority of LEVELROCK products score very well in all of these categories, making the LEVELROCK brand the leader in green poured floor underlayments.

### **What is the relationship between LEED and sustainability?**

While many people are familiar with the U.S. Green Building Council's LEED® (Leadership Energy and Environmental Design) Green Building Rating System, it is important to remember that products alone are not classified as green within the LEED rating system. Instead, products can help contribute to specific LEED credits and may help a *building project* qualify for LEED certification. This is a key distinction and the subtlety is very important. Just remember that the LEED system does not rate specific products.

### **What areas of LEED apply to poured floor underlayments?**

There are several LEED categories that pertain to underlayment materials and sources, most notably Materials and Resources (MR) and Indoor Environmental Quality (EQ). MR credit 4.1 and 4.2 cover recycled content and MR 5.1 and 5.2 apply to the use of regional materials. In addition, EQ credit 4 focuses on low-emitting materials, while EQ 3.1 and 3.2 apply to construction management, new construction and major renovation. There is also a new LEED standard outlining minimum STC (sound transmission class) and IIC (impact isolation class) levels for schools. Consequently, high-performance sound boards and sound mats can help qualify for credits. USG offers the industry's widest range of acoustical products – all of which are designed to provide optimum performance with LEVELROCK floor underlayments.

### **How can recaptured gypsum and sound mats/boards help contribute to LEED credits?**

The high recaptured gypsum content of many LEVELROCK products can help contribute to LEED credits. LEVELROCK recaptured gypsum (also called recycled or synthetic gypsum) floor underlayments made in Gypsum, Ohio, satisfy LEED MR 4.1 and 4.2 requirements for high recycled content because they contain 90% recycled pre-consumer content that is an industrial processed product made at some coal-fired utility plants. Use of recaptured gypsum reduces overall environmental impact by reducing the amount of material that would otherwise be disposed of in landfills. Similarly, several LEVELROCK sound mats and sound boards also are environmentally friendly because they have high pre-consumer recycled content levels.

### What about the use of fly ash?

Some underlayment manufacturers incorporate various percentages of fly ash—which is also a waste material from a different coal-fired power plants' stack cleaning process—in their products. Make sure to confirm that the fly ash conforms to one of the ASTM International specifications pertaining specifically to fly ash. Note that LEVELROCK products do not contain any fly ash.

### How else are poured floor underlayments sustainable?

LEED categories MR 5.1 and 5.2 cover the use of regionally processed and manufactured materials. Materials mixed on the job site are considered manufactured on-site for MR 5 calculations. Many LEVELROCK floor underlayments are mixed on the job site using locally obtained sand and water, which can contribute to these credit areas. The amount of applicable credit depends upon the percentage of locally supplied sand. In addition, pre-sanded floor underlayments are also environmentally beneficial and can contribute to helping qualify for LEED credit in these categories because they often utilize sand that has been obtained near the manufacturing location (LEED requirements dictate that the sand must be obtained within a 500-mile radius of the job site, so it is important to confirm this requirement with the manufacturer). Finally, LEVELROCK floor underlayments use up to 33% less water than competitive products, which contributes to a lower relative humidity and facilitates faster drying time, optimizing construction scheduling and it also reduces the depletion of one of our most cherished resources (potable water). As a result, LEVELROCK poured floor underlayments can help earn EQ 3.1 and 3.2 credits related to construction management, new construction and major renovation.

### What about VOCs?

LEED category EQ 4 pertains to low-emitting materials, which are very harmful to the environment. Unlike some competitive products, LEVELROCK floor underlayments, primers and sealers contain low VOCs (volatile organic compounds). Make sure you compare manufacturer information including MSDS sheets and specifications for complete information.

### Are product life cycles part of the sustainability equation?

A poured floor underlayment's durability is definitely an important element in the system's overall sustainability. Floor failures generally occur more frequently at lower strengths; a floor that must be replaced after a few years can hardly be defined as sustainable. The higher the underlayment's compressive strength, the more likely the floor will provide outstanding service for many decades. LEVELROCK floor underlayments are up to the task, offering the industry's highest compressive strengths—up to 8,000 psi providing you with one of the most durable products available.

### What are the most reputable testing organizations?

There are several reputable testing organizations that test and certify the attributes and performance levels of poured floor underlayment systems. Make sure that the organization you are evaluating is truly independent and relies on CHPS (Collaborative for High Performance Schools) testing protocols, which are rapidly becoming the industry's gold standard for sustainable performance. CHPS' mission is to facilitate the design, construction and operation of high-performance schools, creating environments that are not only energy and resource efficient, but also healthy, comfortable, well lit and contain the amenities for a quality education.

#### Product Information

See [levelrock.com](http://levelrock.com) for the most up-to-date product information.

#### LEED Information

For the most up-to-date information on LEED rating systems, project certification and the U.S. Green Building Council, please visit [usgbc.org](http://usgbc.org).

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#### Safety First!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

