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Save the date! On June 5th, we will host a family fun day and rally with the [Eastern Panhandle Green Coalition](#). Join us for a day of family fun from 1-4 pm at Sam Michael's Park. More details to come soon!



Eco-Friendly Insulation Guide: *Alternatives to Rockwool*

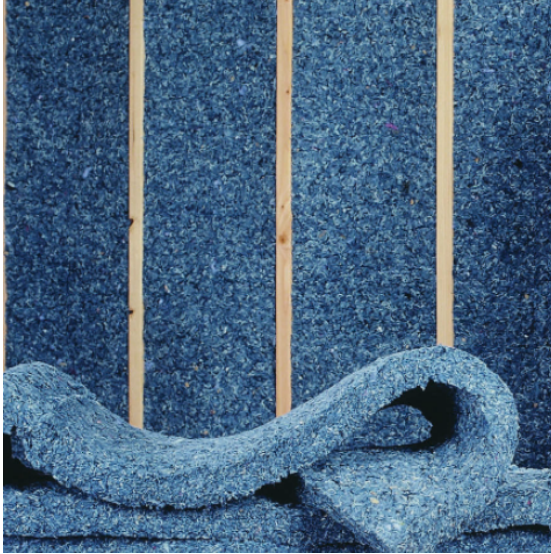
PC: *The Dirt Doctors.*

Even though Rockwool markets itself as an environmentally friendly company by producing products that address climate change challenges, the mineral wool manufacturing process is harmful to humans, wildlife, and the environment. The process is very fossil fuel and resource intensive. It involves melting stone in 2,600-degree furnaces powered by coal and petroleum coke, then spinning the molten stone into fibers that are bound using toxic chemicals— including the neurotoxin Formaldehyde. Because of this, the manufacturing process results in by-products that are hazardous. They are stored on site in containers or lagoons that are susceptible to leaks and spills. The mineral wool manufacturing process also releases greenhouse gases, volatile organic compounds (VOCs), and hazardous fine particulate matter (PM 2.5).

Even though mineral wool insulation is often marketed as 100% natural, the process involves taking natural materials and turning them into a hybrid material that will remain in that form forever. The new material is not biodegradable and will end up sitting in landfills for a very long time. In addition, manufacturers add in a phenol formaldehyde or a urea-extended phenol formaldehyde binder, a known human carcinogen. The product itself is also potentially harmful to your health. New blocks can contain dust and loose fibers that can get in your eyes, mouth, skin and lungs.

Cotton Batt Insulation:

As the building industry evolves towards becoming more sustainable, new insulation products are continually hitting the market. One of the most eco-friendly options currently on the market is cotton batt. Cotton batt is made from denim jeans and other clothing that are shredded and recycled into thick batts.



The cotton is then treated with a borate solution, a low toxicity biodegradable flame-retardant. This solution is free from VOCs and formaldehyde. This type of insulation was developed in the 1990s from the enormous amount of scrap denim sourced from clothing manufacturers. Some upsides to using this kind of insulation are that it doesn't contain formaldehyde, doesn't cause respiratory problems, is biodegradable, and is a natural

insect repellent. It has superior sound absorption qualities, 30% higher than fiberglass. It also allows homeowners to reuse materials that would otherwise end up in landfills. The manufacturing process is cleaner than what is used for making traditional insulation products. One reason it consumes less energy is because you are starting with an existing product. It's also a zero-waste production, since any scraps from the manufacturing process can be shredded and returned to the raw material supply.

One downside is that it's more expensive than traditional insulation products. However, when it comes to performance, traditional insulation materials like fiberglass outperform cotton batt only slightly.

Where can you find cotton batt insulation?

Cotton batt insulation is widely distributed across the U.S. You can find it in places like Lowe's, the Home Depot, and Amazon.

Thermacork Insulation:

Another alternative is thermacork, which is made from pruned branches of oak trees that are native to the western Mediterranean and Northern

Africa. The trees live between 150-250 years, and the bark can be harvested every nine years without damaging the tree. Thermacork actually has a negative carbon footprint.



The only materials involved are the bark itself and steam from a high temperature boiler. The process involves steam-heating cork granules, which are then pressed into a board, causing the cork to expand. This activates a natural binder known as suberin, which fuses the granules. No other binders or chemicals are used in the process. It's renewable, recyclable, and biodegradable.

Thermacork utilizes cork that

would have been wasted, having been deemed insufficient for use in the wine industry. No cork goes to waste during the manufacturing process. Any waste gets fed back into the production cycle. Due to cork's high insulation value and stability, cork insulation drastically reduces energy consumption and its energy saving qualities last decades.

Where can you find thermacork insulation?

Cork has been used extensively in Europe as insulation for decades and is becoming more popular in North America. [Small Planet Supply](#) is the exclusive stocking distributor of thermacork for the western United States and Canada.

Hemp Insulation:

Hemp insulation is generally made up of hemp and some type of textile fiber binder, usually flax, polyester, or kenaf fibers. It doesn't contain any toxic additives or VOCs.

Hemp insulation comes in the form of batts made from the inner fibrous layer of the hemp plant. Generally, growing hemp doesn't require any pesticides or insecticides. It consumes very little water, which results in a lower environmental footprint to cultivate. One advantage of hemp insulation is that it's durable and resilient and can last the life of the building. It's a renewable resource that supports diversity of life within the soil if grown sustainably. Hemp insulation is also hypoallergenic, repellent to mold, pests, and insects. The only drawback is its current lack of availability. It's not widely available across North America yet.



Where can you find hemp insulation?

The Idaho-based company, [Hempitecture](#), is a leader in the field of hemp home insulation in the U.S. They also produce Hempcrete, which is an eco-conscious concrete alternative.

Attending local government meetings is another important way you can be active in the community. Your presence helps to hold our officials accountable to the values and concerns of Jefferson County's citizens. "Think global, act local!"

View This Week's Meetings

Please consider a gift to support our critical work if you are able to. We greatly appreciate every donation. All proceeds benefit JCV's efforts to lead legal, political, and community action to support sustainable growth, without heavy industry, and to empower our citizen's voices to ensure a clean, transparent government in Jefferson County.

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