

The Power of Basalt



What is the fuzzy brown stuff in the DeckProtect Frame?

It may not look like much, but it has a storied past, starting deep below the earth's crust as molten magma. When magma rises to the surface as lava and then cools rapidly, it hardens into various different forms of volcanic rock.

Molten rock that cools slowly below the surface hardens and crystallizes with large crystals. Granite is an example. When it erupts in a Volcano, it cools quickly which results in smaller crystals. Basalt is fast-cooling volcanic rock. Basalt is the most common volcanic rock, but not all basalt is the same. Depending upon its origin, basalt has varied make up.



Basalt Fiber

The best basalt for producing fiber has high silica content and low iron content. So how do we get fine filament from rock? The basalt is crushed, washed, then fed into a furnace. It has to reach a temperature of 1400 to 1600 degrees Celsius or about 2,500 to 3,000 degrees Fahrenheit. Now here is the amazing part: The molten basalt is poured into hoppers, then pressed through bushings with many tiny openings to produce what is called "basalt continuous fiber" or BCF. The resulting filament or fiber has a diameter between 10 and 20 micrometers. A micrometer is one millionth of a meter. To give you an idea of how fine that is, human hair

varies from the finest examples at 17 micrometers to 181 micrometers. In other words, the basalt filament coming out of the bushings is much finer than most examples of human hair. However 10 micrometers is above the respiratory limit of 5 micrometers. This makes basalt safe, and very different from asbestos.

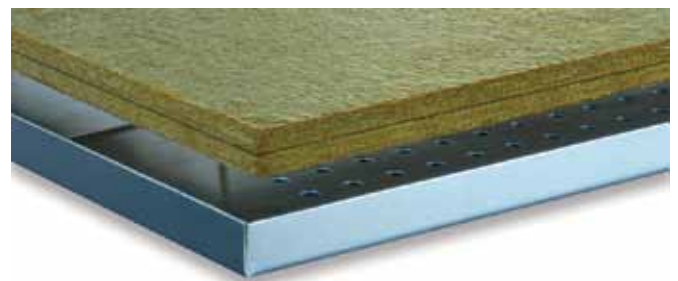
Applications

Production of basalt fiber, unlike glass fiber does not involve the addition of any additives or chemicals... just the basalt rock. After the BCF is produced, it can be transformed into a number of different and valuable forms, all of which involve cold processes meaning that the production of basalt products is relatively environmentally friendly.



Basalt is known for its extreme resistance to heat and its insulating quality as well as its value in adding strength to various construction materials. For example, chopped basalt fiber can be added to cement to make it stronger.

The fiber can be spun into yarn or bundled into roving which is like yarn but not twisted. Then it can be woven on industrial looms into fabric. Basalt fabric is superior to fiberglass in a variety of ways and is less expensive than carbon fiber. And while carbon fiber has greater strength, it is very brittle. In a way basalt is stronger because it is much less brittle and less likely to crack or shatter.



The basalt tiles in DeckProtect™ are made by compressing the non-woven fiber into a semi-rigid board structure 3/8" thick using a heat-resistant binder. The two layers in multiple "tiles" are part of why DeckProtect™ has no equal when it comes to keeping your deck safe.

Fire Pit Tips and Ideas



Ways to Start a Wood Fire

Fire needs three things to get started: **1.)** fuel (in this case wood **2.)** Oxygen and **3.)** Ignition. At left: the Log Cabin system. Below: Sloppy log cabin and the TeePee system. All of these methods allow for plenty of air circulation, which is key. Below Left: Fatwood, a 100% natural fire starter.



What is Fatwood? After a pine tree has been cut down for timber, the remaining stump is rich with sap or resin, a viscous liquid that contains terpene and is very flammable.

The Perfect Ash Scoop

Buy an empty 1-gallon paint can. (about \$6 at Home Depot)

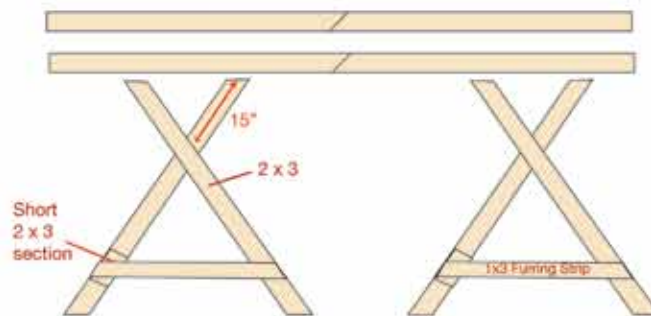
A.) Cut off the top part of the can just below the handle using a metal shear or grinder. **B.)** Cut vertical cuts and cut near the bottom rim. The very thin metal of the paint can bends easily and perfectly conforms to the shape of a round-bottom fire pit.



Build a Saw Jack.

If you have ever had to saw a tree limb or branch by trying to hold it steady on the edge of a table or work bench, you know what a challenge that can be. A simple saw jack will hold the branch firm and steady. All you

need is two 2x3's and three or four 1x3's. Very low cost 1x3's are known as furring strips. Cut each 2x3 in half at approximately a 30-degree angle. Connect them in an X configuration using 2-1/2" outdoor screws. Use the 1x3's to stabilize the X as shown above and to connect the two X's about 12-14" apart as shown at right. Sawing tree limbs and branches to fire pit length will be a breeze.



Limited Warranty

All DeckProtect™ products carry a one-year limited warranty. Allendale Fibertech Corp. will replace your DeckProtect™ if it is defective in workmanship or materials for a period of one year from date of purchase. This warranty extends only to the original purchaser of the product

If you find your DeckProtect™ to be defective, you must contact the seller by email: info@thefirepitstore.com. Allendale Fibertech will send a UPS return label so that you can return the defective DeckProtect., assuming you have saved the original shipping carton. Customers who have not saved the original shipping carton will be responsible for packaging and shipping the item. Allendale Fibertech will send a replacement DeckProtect at no cost to the customer, once the original item has been returned.

This warranty is limited to the purchase price of the product and does not cover damage to your deck or other property. DeckProtect™ is designed only to protect your decking surface from radiant heat under a professionally manufactured fire pit, fire table, or chiminea that safely contains burning materials 2” or more above the surface of the DeckProtect™. Users must select a DeckProtect that is large enough to cover the area under the hot surface of the fire pit or chiminea.

No guarantee is expressed or implied that burning a fire will not be a hazard or create a risk of fire. Users are urged to follow the instructions for their fire pit or chiminea and to exercise caution and common sense whenever fire is involved.

Allendale Fibertech Corporation
2275 Bluff Road, Allendale, SC 29810
DeckProtect is marketed by
The Fire Pit Store • thefirepitstore.com

PLEASE READ BEFORE USING
YOUR DECKPROTECT™
Instructions and Disclaimer

DeckProtect™ users are advised to review the directions for the use of their fire pit or chiminea before using it with our product.

DeckProtect™ is designed to protect your decking surface from radiant heat under a fire pit or chiminea. Any other use or misuse of the DeckProtect™ product voids any expressed or implied guarantee of safety or prevention of fire or heat damage to property or surroundings.

Your fire pit or chiminea must be placed at a safe distance from structures and bushes. Users should never burn a fire in strong winds, and never leave a fire unattended. Allendale Fibertech Corporation will not be responsible for any damages due to wind or open flame. DeckProtect™ is manufactured to protect wood decking, composite decking, or a patio surface beneath a heat source that is raised at least 2 inches above its surface and is not intended for any other purpose. DeckProtect™ is not designed to protect a deck from flying embers unless the embers actually land on the DeckProtect™. Do not remove the rubber feet from the bottom of the frame. Please keep in mind that safety is our number one goal.

CAUTION: The volcanic rock fibers that make up our thermal barrier can be a mechanical (not chemical) irritant to your skin. Users should wash their hands after handling the product or use rubber gloves if the barrier board needs to be handled. Children should not be allow to play on or with the surface of the product. The irritation to skin is not a health hazard, but it can be uncomfortable.

We take pride in creating a quality product. Please feel free to email us at sales@deckprotect.com with any questions or comments that you may have. Thank you again for your purchase of DeckProtect™

Allendale Fibertech Corporation
2275 Bluff Road, Allendale, SC 29810

Note: DeckProtect™ is manufactured by Allendale Fibertech Corp.
and Marketed by The Fire Pit Store

CAUTION:

DeckProtect is not intended for use on a lawn. It is designed for use on a hard surface such as a deck or patio where its hard rubber feet will provide airflow.

DeckProtect does not protect your deck from flying embers if they land farther away than the surface of the DeckProtect. It is best to burn hard wood that is dry and keep the burning logs from rising much above the top of the fire bowl. Use a spark screen whenever you can.

PLEASE KEEP THE BOX:

If you need to return your DeckProtect for any reason, you will need the box it came in.

CUSTOMERS OFTEN ASK:

CAN DECKPROTECT BE LEFT OUTDOORS? WHAT IF IT GETS WET?

It is normal for the basalt board to absorb water because it is fibrous. It should dry out on sunny, dry days. It will still protect your deck when the basalt has absorbed water. If you leave the DeckProtect outside for a year or more, it may develop a greenish tinge on the surface. Moss can grow on rock. The greenish tinge is algae and is harmless, though unsightly. The surface of the basalt can be cleaned with a 50/50 dilution of bleach. (Use gloves.) If you know there will be a month or more when you will not be using your fire pit, it would be a good idea to leave the DeckProtect in the garage to give it a chance to thoroughly dry out.

YOUR OPINION:

Homeowners often have an opinion about a product that they share with friends and family. It could be a complaint of some kind. Your opinion, positive or negative is gold to us as we strive to improve, not only the product, but how we describe it.

Send your email to info@thefirepitstore.com