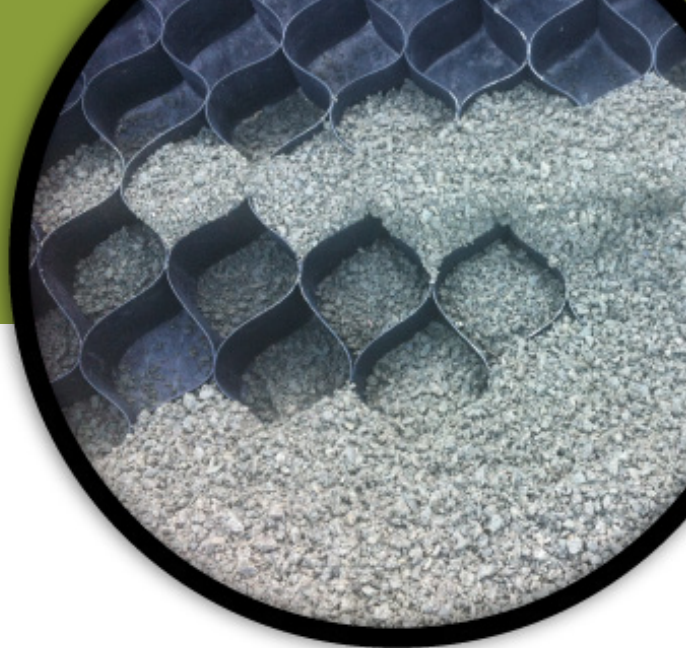


# LIGHTHOOF

## Installation Guide



Installing LIGHTHOOF is a simple process that creates a safer, healthier, and more beautiful environment for your horse.

1. Prepare the site.
2. Lay landscape fabric on the ground.
3. Stretch the LIGHTHOOF panel and anchor it on the ground.
4. Pour gravel into the cells of the LIGHTHOOF panel.
5. Repeat those steps with the next LIGHTHOOF panel, using special ties to connect them.
6. Finally, compact the gravel to create a secure, long-lasting base.

*Before you begin, be sure you have all the tools and materials you need.*

### Materials

- 1-2 yards of gravel per panel (only use angular crushed rock with fines, see below)
- Landscaping or geotextile barrier fabric (72-80 sqft/panel)
- LIGHTHOOF panels (each panel expands to be 6' wide by 12' long)
- 40 EnviroLock ties that come free with each LIGHTHOOF panel
- Depending on your installation you might also want to use some kind of landscaping lumber such as railroad ties, logs or 4 by 4s for a border.

Let's take a moment to discuss gravel. Be sure to use angular crushed rock with fines. This gravel type is absolutely essential to a successful LIGHTHOOF installation. The "fines" are smaller particles mixed in with the gravel-sized rocks. Fines fill in the gaps between rocks and hold the gravel in place within the LIGHTHOOF cells.

**Do NOT use gravel that has rounded edges or has been washed or sifted. Do NOT use pea gravel, drain rock, washed gravel, clear gravel, or straight river or beach sand.** These types of gravel will not firm up within your LIGHTHOOF cells. Choose a gravel mix that will compact solidly and contains a mix of particles no larger than 1/2" to prevent hoof bruising.

Depending on where you live, your best angular gravel mix might be called something different. Be sure to ask the gravel seller for angular crushed rock that compacts well and tell them that stability is your priority. If you have questions about what gravel to use, please contact us for help. We are happy to review what is offered at your local gravel yards and make a recommendation.

For questions or help contact Lighthoof at [info@lighthoof.com](mailto:info@lighthoof.com) or 800-279-4716

Your choice of landscaping fabric is less crucial, but you will want something that isn't going to tear apart while you are working on it. Your best choice is a six to eight ounce non-woven geotextile fabric -- that's tougher than the stuff you typically find at a garden store. If you have trouble finding a geotextile, construction, or erosion control supplier in your area, let us know so that we can pull a name from our address book for you.

## Tools

- Sharp scissors in case you need to cut panels to fit your area
- Equipment for spreading the gravel such as rakes, shovels, and a tractor or a wheel barrow
- Between six and twelve metal or wood stakes and a hammer or mallet to drive them into the ground
- Plate compactor, which you can rent for the day at your local home and garden store or tool rental shop.

*With all of these tools and materials, you're ready to get started!*

## 1. Prepare the Site

Temporarily fence horses out of the area where you'll be working.

Remove any very large rocks or debris from the area, but don't sweat the small stuff. There is no need to remove old footing or level the ground. Because LIGHTHOOF panels are flexible, you can lay them right over roots, smaller rocks, weeds, dips, swales, bumps, and hills.

If the perimeter of the area has no wall or fence, you need to set up edge protection for the Lighthoof panels.

One way to protect the edges of LIGHTHOOF panels is to lay landscape lumber along the perimeter as a border. You can use railroad ties, telephone poles, or something similar that's durable and can be anchored to the ground. This makes the transition from Lighthoof to no Lighthoof more visible to the horse and protects the edge of the panels from being stepped on.

Another method for protecting panel edges is to dig into the terrain four to five inches to let the panels slope down so that the top is level with the ground.

## 2. Lay Landscape Fabric

Lay landscaping fabric where your LIGHTHOOF panels will go. The fabric provides a barrier between the panels and the mud below. For best results, overlap the edges by eighteen inches.

## 3. Stretch and Stake

Cut the ties that keep your LIGHTHOOF panel folded. Open it up and pre-stretch the panel by playing a bit of tug-of-war with it.

Place the panel on the ground. Secure one end with three or four metal or wood stakes. Drive the stakes in deep.





Pull the opposite end of the panel out as far as you can, opening all of the cells. Stake that end of the panel to keep it stretched open.

If your LIGHTHOOF panel is too large to fit in the area where you need it, simply cut the panel with a sharp pair of scissors.

If you're laying multiple panels, fasten them together using the EnviroLock ties. The ties wrap around the edge cells of the two panels where they meet. Tuck the excess tie material into the cells or cut it with scissors.

#### 4. Fill with Gravel

Dump gravel onto the panel and spread it to fill every cell. Once the cells are filled, be sure to pour two more inches of gravel on top of the cells. The extra gravel will settle when you compact it.

Remove the stakes. You might need to hit them on the sides with a hammer or mallet to loosen them.

#### 5. Repeat Steps 1-4 with the Next Panel

Repeat the site prep, the landscaping fabric, the LIGHTHOOF stretching and staking, and the gravel spreading for the remainder of the area.

It's perfectly safe to drive a truck or tractor over the existing Lighthoof panels as long as there is plenty of extra gravel over the tops of the cells -- at least two inches extra.

#### 6. Compact

Once you've finished laying and filling all of the panels, you're ready to compact the gravel. The best way to do this is with a plate compactor. You can rent one from your local home and garden store or tool rental business.

If your gravel is dry, hose it down. It takes a lot of water to penetrate three inches of dry gravel, so be generous.

Run the compactor very slowly over every inch of the installation, making sure to include the edges. If the tops of any cells become exposed, pour more gravel and then compact that fresh gravel. Be patient! Thorough compacting is a key to successful installation. The compactor should sink just a little bit as it runs over the gravel. If it doesn't, add more water.

If you don't have access to a plate compactor, you can compact the gravel using water and a tractor or truck, though it's harder to do a thorough job this way. Wet the gravel generously (3-5 minutes of hosing per panel) and then run the truck or tractor back and forth over every inch of the installation. If you use this method, it's best to wait a few days (preferably rainy days) for things to settle before letting horses walk on the area.



Once the base is compacted, you might choose to add another couple of inches of loose gravel, sand, or your preferred footing on top for a softer surface. A sandy area is especially nice for rolling. You know your horses, so you know what they like best.

## **Maintaining Your LIGHTHOOF Area**

To keep new mud from forming on top of your LIGHTHOOF footing, you must remove manure, hay, and other organic matter frequently. Daily removal is best, but you can probably get away with every second or third day.

As contents settle and the unsupported gravel layer over the cells gets carried off bit-by-bit by hooves or by sticking to the manure you remove, you will start to see exposed cell tops. Don't worry; this is normal. LIGHTHOOF panels continue to perform when exposed up to one quarter of an inch. If you see any more than one quarter inch of the cell tops, be sure to add gravel. If you don't add gravel, your horse can cause wear and tear on the tops of the cells.

Maintaining one to two inches of gravel over the tops of the cells makes using a manure fork easier and looks better too. Prolong the life of your Lighthoof foundation by adding gravel right away when coverage starts to thin. It's always a good idea to have a little extra gravel on hand.

If you have a horse who's a persistent digger and goes to work on the same place every day, consider putting a rubber mat over that spot. A perforated mat lets water drain through and keeps you from having to constantly add more gravel over your digger's favorite spot.

With proper maintenance, your LIGHTHOOF installation can last a lifetime. That means years and years of mud-free living for your horse. By installing LIGHTHOOF you can be happy knowing that you've improved the quality of your horse's life and given him a healthy environment for many years to come.

***Remember, if you have any questions about installing LIGHTHOOF, we're here to help. Contact us at 800-279-4716 or [info@lighthoof.com](mailto:info@lighthoof.com).***

***Thank you for joining the many horse lovers who have made LIGHTHOOF an essential part of their horse keeping success!***