

# LIGHTHOOF

## Gravel Guide

### How to Choose the Right Gravel for Your Lighthoof Installation

The success of your Lighthoof installation depends heavily upon your choice of gravel. Lighthoof panels provide the framework for your mud-free paddock. Gravel is the bulk that fills in that framework and solidifies the installation. What makes Lighthoof work is the gravel compacted inside the panel cells.

It's absolutely critical that you use the type of gravel that compacts well for your Lighthoof installation. Use gravel made up of small pieces of crushed rock, with no pieces larger than about ½". Use an **angular** crushed rock or aggregate, meaning that the pieces are jagged, not smooth. The jagged pieces lock together to make a sturdy base. Be sure that the gravel contains a mix of different sized pieces, especially **finer**, which are sand- and dust-sized particles mixed in with the rocks. These smaller pieces fill in the gaps between larger pieces and hold the gravel in place within the Lighthoof cells.

Use This Gravel	Don't Use This Gravel
Angular crushed rock pieces	Round stones, drain rock, pure sand, or pea gravel
Has no pieces larger than about ½"	Has stones much larger than ½"
Includes a mix of different sized pieces	All stones are the same size
Contains fines (small particles and dust)	Is washed or clear
Clumps when you moisten and squeeze it	Doesn't hold together when compressed

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 do not firm up within your Lighthoof cells. Choose a gravel mix that compacts solidly and contains a mix of particles. To prevent hoof bruising, avoid stones larger than about 1/2".



In many areas of the USA, our preferred gravel type is commonly called "3/8 inch minus angular crushed rock." 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.

**Pro Tip:** Sometimes when you mention horses to gravel sellers they send you straight to rounded stones or pea gravel. This won't compact inside the cells of your Lighthoof panels and provide a solid base. Don't let them sell you the wrong product! To help, print this article. The second page has a detailed analysis of gravel that is perfect for Lighthoof. Give it to your gravel seller to help them help you!



## An Analysis of the Perfect Gravel for Your Lighthoof Installation

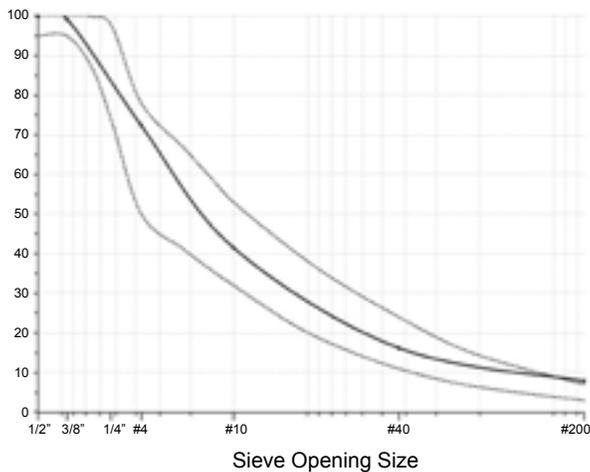
The language of gravel varies across the country. Different sellers use different terminology. The best way to address this challenge is to let the numbers do the talking! We had our favorite gravel analyzed to identify in detail just what it's made of—what size the pieces are and how much of each size there is. Give this information to your gravel sellers so that they can provide the right product.

These are some terms often used to describe gravel that compacts well:

- Aggregate base
- Crushed rock or stone
- Construction gravel
- Highway or railroad base



*Angular Crushed Rock*



Sieve	% Passing
1/2" (12.5mm)	100
3/8" (9.5mm)	99.1
1/4" (6.3mm)	85.8
#4 (4.75 mm)	72.4
#10 (2mm)	41.5
#40 (0.425mm)	16.2
#200	7.93

**Pro Tip:** Sometimes gravel sellers don't have exactly what you're looking for. Don't worry! They can make it for you. Provide this gravel analysis so that they can meet your needs. They don't have to make you gravel that perfectly matches the analysis above, but it should be pretty close.