

## 7 Essential Steps To Straw Bale Success - Day 1

# The 7 Amazing Reasons Why You Should Build With Straw Bale



### An Example of An Owner Built Straw Bale House

Are you interested in building with straw bales? If so, you are among the tens of thousands of people who share the same interest. Straw bale construction is seeing a renaissance of sorts all over the United States and a birth into new areas around the World. No single explanation can be attributed to straw bale construction's new found achievements; however, a number of characteristics can surely be associated with the success. Whichever reason is driving your interest in straw bale construction, we hope to inspire you to take the next step and build your dream home with bales.

#### ENERGY EFFICIENCY

With rising heating and cooling costs, energy efficient homes are becoming more and more desirable. To that end, perhaps the most commonly cited reason for building with bales is the high energy efficiency of the construction material. Consider that a well designed and built straw bale home can lower heating and cooling costs by up to 75% when compared to a conventional home. This is a significant savings. Although straw bales themselves provide excellent insulation, there is more to the equation than simply stuffing straw into the walls of a house. Quality design is needed for the overall house package to work to its full potential. Structure orientation, floor/ceiling and roof insulation choices, window and door quality, heating/cooling and ventilation

systems, and the fine detailing of air penetration all play a role in a home's performance. Paying close attention to the details during the design and construction of the home will pay off in the long run.

#### VISUAL AESTHETICS

The first semblance of enthusiasm is often sparked by the beauty of the straw bale homes themselves. There is something intangible yet palpable about the beauty of straw bale homes. I have had the pleasure of walking

many people through their first straw bale home. In every case, at least one of the people in the party said something like: "Wow! There is just something so amazing about this space." Exactly what it is that excites each person varies. Some may be taken by the thick walls, reminiscent of old English castles or Latin American adobe homes. Others may be drawn to the window seats and nooks created within the bales. Even the texture of the walls inspire people. To be sure, bale buildings are special and offer something conventional homes cannot. After all, who wouldn't want live in a home that instilled calm and joy in the owners each time they walked in?

### NOISE SUPPRESSION



Some people may not be as concerned with what they see as with what they cannot hear. Straw bale homes



are unbelievably quiet. The thick walls eliminate most of the sounds of the world outside, giving the owners the choice as to what they hear. If the owners want to hear the birds singing, they can open a window and revel in the

sounds of nature; however, if they live next to a freeway, they can design the building so they never have to sit in their home cursing the sounds of industry rushing past their door. As with the energy efficiency of the home, the sound efficiency is dependant on more than the bale walls. Most importantly, the design of the home must be thoughtfully planned out to yield the correct balance of sound insulation and natural light and energy design.

### FIRE RATING

Have you ever noticed that a home built with stud wall construction looks like a home with a lot of chimneys in it before it is drywalled? That's what stud bays are: a series of chimneys behind a 20 minute fire break of drywall. In other words, the ability of the home to resist fire is in "the hands" of the ½" thick drywall. Yikes! Once the fire breaks through the drywall, it has access to the entire structure by means of the chimneys created by the studs and sheathing. A fire needs oxygen to burn and in a conventional home, there is a lot of oxygen available. If you have ever watched a home burn, you know how quickly it happens. Many people think that a home built of straw would be at higher risk for fire than a conventional home. In fact, the opposite is true. Homes built with straw bales are extremely fire resistant. A bale home has roughly three times the resistance to fire of a conventional home. If you consider that a stack of loose paper will burn well, but a phone book won't, you can understand the mechanics behind straw bales and their fire resistance. There is nowhere near enough oxygen in a stack of bales, so they just can't burn. Not to mention, of course, the fire would have to get



through roughly 1 ¼" of plaster before even getting to the bales!

### ■ ENVIRONMENTAL CONSIDERATIONS

If you are concerned with the plight of our planet, then straw bale construction holds another gem for you. Imagine the site of millions of tons of straw burning and the smoke that such an event would produce. Sadly, the United States alone produces over 200 million tons of waste straw a year, most of which is burned. Rather than burning this "waste" material, we can use it to build with. Why not take a material that would otherwise be turned into pollution and use it for a healthy building material? This not only decreases the amount of particulate pollution in the air, but also creates a healthier, more efficient home to live in. In fact, natural building materials decrease the chance of "sick house syndrome" and other diseases caused by the off gassing of common home construction materials such as formaldehyde and VOC's.

### ■ EASE OF BUILDING

Although building a home is no easy task, learning to build with straw bales is achievable for most people. The most difficult aspects of building with bales rests on the more conventional elements: framing, electrical, plumbing, etc... The baling itself is something that can easily be learned with the right teacher. To that end, straw bale homes are popular with owner builders because they are fun to build and are a great way to bring friends and family together during the building process. Even if you decide to stay away from the framing, electrical, plumbing and other technical aspects of the construction, you can still play a major role in the construction of your home by raising the bales. For many people, the very idea of building their own home brings them joy. No matter what draws you to straw bale construction, there is something sweet and beautiful about the building process and, of course, the finished product.



**Tomorrow I'll introduce you to some design criteria  
that you must take use before beginning your project.**

Happy Baling,

A handwritten signature in black ink that reads "Andrew Morrison". The signature is written in a cursive style with a long, sweeping underline.

Andrew Morrison  
Professional Straw Bale Contractor

[Learn Straw Bale](http://www.StrawBale.com)