

Andrew Morrison's Advanced Straw Bale Strategies - Day 6

Straw Bale Construction In High Rain Environments



If you live in an area where rain, and lots of it, is the norm, you will need to make some adjustments to the detailing of your building. It is very important the walls be protected from continuous rain. The best way to accomplish this is by designing adequate roof overhangs to stop the rain from hitting the sides of the building. In the case of multiple story homes, you may need to add an additional roofline at the floor level of the top stories. Without this, the structure's main roof will not be able to protect the lower story's walls well enough.

Roof overhangs will only help as much as they themselves are protected. In other words, a roof overhang will help prevent water landing directly on the walls as it rains down from the sky; however, if there are no gutters on the overhang, the rain will have an opportunity to splash up onto the walls as it falls off of the roof and hits the ground. Even with gutters in place, you may choose to add housewrap to the bottom two or three courses of bales to protect the bales from rain splash. Another option is to build a small pony wall and place the bales on top of that. This idea has two major benefits. First of all, it keeps the bales away from rain splash. Secondly, it provides an area for the plumbers and electricians to run their materials without having to get into the bales. One downside to building a pony wall is the extra lumber used for the construction which could otherwise have been avoided.

A detail often overlooked when building a straw bale house is the placement of waterproofing material on top of the bales before the walls are plastered. The idea behind this is that if the roof ever leaks, the water will run down the rafters and into the bales. With the waterproof membrane in place, the water cannot enter the bales. Instead, it will be directed towards the plaster. When it hits the plaster, a wet mark will eventually show up and alert you of the leak. Then the investigation begins and the search for the leak source is on!



The most common leak in any home is around the wall openings: windows and doors. Proper flashing details are a must in any home and perhaps even more so in a straw bale home. If the proper counter flashing and flashing are not installed, leaks may find their way into the building and saturate the bales. The presence of the leak may not be detected until it is too late. With proper flashing of the openings, water that manages to make it past your first line of defense will have to navigate its way through a series of waterproof membranes before it can reach the bales. With extra defense against water infiltration, you should never have trouble with water damaged bales.

Happy Baling,



Andrew Morrison
Professional Straw Bale Contractor