

U.S. Department of Energy - Energy Efficiency and Renewable Energy Energy Savers

Straw Bale Home Design

Straw bales were a fairly common building material in the United States between 1895 and 1940. Interest in straw-bale home construction began to re-emerge in the mid-1970s. But it wasn't until the mid- to late-1990s that building codes began to acknowledge it as a viable approach. The rising cost of conventional construction materials, techniques, and concern for our environment has fueled the growing popular enthusiasm for straw bale home construction.

There remains much we do not understand about appropriate ways to build with straw bales in different individual building assemblies, climate zones, and weather conditions. Two of the current straw bale construction methods include non-load-bearing or post-and-beam, which uses a structural framework with straw bale in-fill, and load-bearing or "Nebraska style," which uses the bearing capacity of the stacked bales to support roof loads.

Proposed straw bale structures still face considerable barriers, including the following:

- Local building code approvals
- Building loans
- Mortgages
- Homeowner's insurance
- Community acceptance.

The non-load-bearing construction method is the approach most regulatory authorities accept today.

To find out the building code standards for your state, contact your city or county building code officials. Your state energy office may be able to provide information on energy codes recommended or enforced in your state.

Learn More

State & Local Resources

- [Status of State Energy Codes](#)
DOE Building Energy Codes Program
- [State and Territory Energy Offices](#)
National Association of State Energy Offices

Related Links

- [The Last Straw](#)
Green Prairie Foundation for Sustainability
- [Straw Bale Construction](#)
Sourcebook for Green and Sustainable Building
- [Ausbale](#)
Australasian Straw Bale Building Association
- [Straw: The Next Great Building Material?](#)
BuildingGreen.com

Reading List

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