

# Straw Bale

Straw is a grain stalk (such as wheat, rice, rye, or oats) without the head. Straw-bale can be used as infill for post and beam/timber framing walls. Straw can also be compressed into agriboard or blocks.

## Hazard Resilience

Wildfire



Fire-resistant when paired with plaster (2 hour fire rating).

Rain and Floods



Risk of moisture retention & mold, especially if exposed to water during construction

Windy



Panels filled with straw bale, if constructed well, are resilient against wind

Extreme temperatures



Low thermal mass but a great insulator

Seismic



Seismic-resilient due to energy absorption and wide footprint



### Costs

For a straw bale wall, costs are estimated at \$180-208 per square foot (number based on an [American website](#) accessed in 2025). This does not include components other than the straw bale, such as the foundation, roof, doors, windows, and plumbing.

Straw bale is generally more affordable and easier to work with compared to other materials. However, as with all other building projects, actual costs will vary based on many regional and site-specific factors.