



Built Green® Case Study

Mattawa Public Library

Project Overview

The Mattawa library is the first strawbale public library constructed in the United States. It was a joint project by the IronStraw Group and the Washington State Housing Trust Fund. The project was funded by a federal Community Development Block Grant as part of a demonstration project showing alternative construction techniques.

This building is a post and beam style strawbale building. The roof was completed prior to the bales being stacked into the walls. This technique keeps the straw dry, which is essential to ensuring building durability. Straw is a natural, non-toxic building material, and building with straw bales is well suited for our climate because of their high insulation properties.

Green Building Features

Although the library was built before the Built Green® program was established, the building is a great example of various green building features that are covered in the Tri-Cities Built Green program, including;

- A compact floor area of 1534 sq. ft.,
- 24" thick strawbale walls insulate to R-40 without thermal bridges,
- R-49 ceiling insulation goes over top of wall to avoid loss at edges,
- Radiant in-floor electric heat,
- Ledalite fluorescent lights feature both direct and indirect light,
- Double glazed, low-e, argon filled, vinyl windows, and
- Locally grown straw reduces energy used for material transportation.

"To us it makes so much sense. Use a locally grown, abundant waste product that no one has known quite what to do with, and use it to make superior insulated (R40+) homes. "

The IronStraw Group

The Builder

The IronStraw Group got started as a non-profit in 1999, after five years of building strawbale homes in the private market. IronStraw relocated to "Straw Country" in central Washington State, and partnered with the Washington Association of Wheat Growers and 85 other organizations and businesses in the IronStraw Partnership Program.



Strawbale walls provide excellent insulation

Project Stats

Location:	Mattawa, WA
Type:	Public Building
Size:	1534 sq. ft.
Builder:	IronStraw Group
Features:	R-40 wall insulation
	R-49 roof insulation
	Low-e windows



Double glazed, low-e, argon filled windows



For more information about this project or the Built Green® Program:
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