

Building GREEN in Greensburg

The Peoples Bank



Courtesy of Joah Bussert, Greensburg GreenTown

The Peoples Bank building opened its doors to the public on December 21, 2009. With its vault and an adjoining room designed to serve as a storm shelter, the 2,100-square-foot building is about 300 square feet larger than the pre-tornado facility. Its innovative design incorporates a variety of sustainable features that will save energy and money. The building is situated on the lot to take full advantage of the sun and features large, tinted-glass doors on its south side that provide passive solar heating in winter months; south-facing overhangs reduce the need for air-conditioning when the summer sun is at its hottest.

ENERGY EFFICIENCY FEATURES

- **Building orientation** takes advantage of southern exposure to reduce heating loads, while overhangs on south windows reduce solar cooling loads
- **Operable windows** reduce nonsolar cooling loads in warmer months
- A **high-efficiency ground source heat pump system** heats and cools the building by pulling warm underground air up in the winter and pushing hot air into the ground in the summer, dramatically reducing the amount of energy needed for temperature control
- A **well-insulated building envelope**, featuring insulated concrete form exterior walls with an R-value of R-25 and a roof system designed for consistent thermal integrity, maximizes energy efficiency
- **Glazing on windows and doors** helps optimize building energy performance
- **South-facing windows** and the lack of trees on the south side of the building help maximize daylighting in high-use areas.

WATER EFFICIENCY

- **Drought-tolerant landscaping plants** promote water conservation in summer months
- A **water-efficient irrigation system** reduces the amount of water needed for landscape maintenance
- **Low-flow toilets** minimize indoor water use.

SUSTAINABLE MATERIALS

- **Native vegetation** used for landscaping conserves water and reduces the need to use fertilizer and pesticides
- **Locally sourced and manufactured building materials** reduce building footprint by minimizing transport
- A physical **in-house recycling system** reduces on-site waste generation
- **Low-impact siting** minimizes access-road length
- **Radiant heat coils** built into the concrete outdoors automatically melt ice and snow, avoiding the need for power-driven snow removal in winter.

AIR QUALITY AND INDOOR ENVIRONMENT

- An **open floor plan, high ceilings, skylights, and large exterior and interior windows** allow natural daylight to penetrate the building's interior
- **Minimized plumbing, electrical, and other penetrations** throughout the building envelope reduce air infiltration.



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