

# Building GREEN in Greensburg

# Greensburg State Bank



Courtesy of Dea Corns

When a tornado leveled 95% of Greensburg, the only thing left of Greensburg State Bank was the original vault. So the bank was rebuilt on its original site and re-opened for business just one year later. It was the second commercial building in Greensburg to do so. The new bank boasts a variety of green building features including an east-west building orientation that maximizes natural daylight inside, insulated concrete form (ICF) construction for an energy-efficient building envelope, and a high efficiency heating and cooling system.

## ENERGY EFFICIENCY FEATURES

- An **east-west building orientation** maximizes natural daylighting in the interior and reduces the wall area on the east and west that the sun can heat up, decreasing the need for cooling
- A **well-insulated building envelope** with an R-value greater than R-22 on the walls and R-35 on the roof maximizes energy efficiency
- **Energy-efficient windows and doors** reduce heat loss in winter and the need for cooling in summer
- **Sealing penetrations through the building envelope** reduce seasonal heat gains and losses
- **Daylighting** reduces artificial lighting loads
- **Reflected light** is maximized by the use of white and neutral surface finishes
- An **open floor plan** allows natural light to flood the space
- **Lighting controls** reduce electricity consumption
- **Reflective shades and blinds** reduce the need for cooling
- **ENERGY STAR® laptop computers** save energy.

## WATER EFFICIENCY

- **Low water-usage toilets and other appliances** help conserve water
- **Drought-tolerant plants** are used wherever possible to reduce the need for irrigation
- **Point-of-use water heaters, insulated pipes, and a floor plan that reduces the length of piping needed** conserve water by reducing the wait for hot water when and where it's needed.

## SUSTAINABLE MATERIALS

- **Existing building elements** were reused wherever possible
- The **construction process incorporated minimal transportation of materials**
- To reduce toxic waste, only **low-mercury fluorescent lamps** are used
- **Pre-and post-consumer recycled materials** were used wherever possible (e.g., roofing, benches, picnic tables)
- **Minimized ozone depletion** by choosing foam insulation made with hydro-chlorofluorocarbons (HCFCs) and by carefully choosing cooling system refrigerants.

## AIR QUALITY AND INDOOR ENVIRONMENT

- **Outdoor air intakes** are located away from potential pollution sources to keep interior air cleaner
- **Moisture control** in the mechanical systems keeps relative humidity below 60%
- **Acoustic materials** used in the interior minimize sound transmission between rooms.