



## First Western Bank – Hill City

This new 5,600 SF branch office facility provides branch banking, staff offices, branch insurance services and drive-through banking services for First Western Bank and Insurance. The facility spaces include a lobby, teller and drive-up area, vault, break room, reception, conference room, offices, and support facilities. The architecture featured an open-air lobby with translucent lighting panels and excellent glasswork. The facility won several construction industry awards.

### Project Data

#### Owner

First Western Bank  
Norbert Sebade  
605-685-4009

#### Location

Hill City, South Dakota

#### Building Type

Bank

#### Building Area

5,600 square feet

#### Mechanical Systems / Features

High Efficiency Air to Air Split System  
Heat Pumps  
Total Energy Recovery Ventilation  
Simple HVAC Controls Systems

#### Electrical Systems / Features

New Underground Service  
Translucent Lighting Techniques  
Fire Alarm  
Communications  
ATM/Teller Services

#### Construction Cost

\$1,500,000

#### Completion Date

2007



#### Mechanical Engineering

To maintain low operating costs, high-efficiency split system air to air heat pumps were used in this facility. This approach had the supplemental effect of keeping installed costs lower while providing an energy efficient system that was conducive for zoning. The air handlers were specified with electric auxiliary heat w/SCR controllers sized for full load. The application also permitted the use of simple HVAC controls (individual "smart" thermostats networked to be able to use the same time-of-day scheduling), and this allows the average building occupant to effectively operate the system.

To further augment the energy efficiency of the facility and fulfill the outside air requirements of ASHRAE, a total energy recovery ventilator was incorporated in the design. In the wintertime, this device extracts beneficial heat from the exhaust air stream and transfers it to the ventilation (outside air) air stream. The process is the same for summer time, except cooling is transferred instead.

#### Electrical Engineering

Lighting for this banking pace mixed traditional efficient office space lighting techniques with translucent panels and bowl fluorescent lighting. The exterior lighting design utilized a combination of exterior wall and pole lighting. The facility used unitary emergency lighting.

Site power required major changes. Overhead lines were buried and several services to adjacent facilities were augmented to accommodate the facility placement, aesthetics, and electrical needs. The new underground service is a 600 amp, 208 V, 3-phase service.

Special systems for the facility included fire alarm, communications connectivity, access security, and infrastructure to support the ATM and banking security systems.

#### Notable

Although relatively small, this facility won many Construction Industry Center craftsmanship awards.