



## Citizens Bank Minnesota

Location: Lakeville, Minnesota

Architect: HTG Architects

### The Situation:

The Citizens Bank in Lakeville, MN was a 19,150 sq. foot building that posed many site constraints for the team at Emanuelson-Podas. The building's unique layout created an interesting design canvas for EP to work within. This design featured a curving, two-story glass wall and a sweeping clerestory, which embraced the interior of the bank. The client desired a thermal comfort level to compliment the architecture while keeping energy efficiency as a top priority.

### The [engineous\*]:

To deliver the thermal comfort necessary, EP selected a variable air volume HVAC system. This system provides the proper number of thermal zones throughout the building – including areas where each office has its own thermostat. A building automation system was designed into the project to control the variable volume system. The system conserves energy by maintaining a tight temperature control and accurate occupancy scheduling. Among other noteworthy energy items were high efficiency condensing units and boilers, as well as a variable-frequency drive (VFD) on the main supply fan. The VFD controls the rotational speed of the motor and in turn electrical energy output, helping to meet the proper temperature conditions. Through withdrawing concern for thermal regulation and the need to save on energy costs, EP worked on another project that exceeded the client's expectations.

For more information on the Citizens Bank project please contact:

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