

Turtle Mountain 24-Unit Apartment Complex



Belcourt, North Dakota

Electrical Construction: \$382,000

Year Completed: 2011

Project Manager: Darin Hall

Project Foreman: Steve Cuiffini

Architect: EAPC

General Contractor: Comstock
Construction

This 19,800 square foot two-story apartment complex located in Belcourt, North Dakota offers typical one-bedroom residential units with a unique twist - geothermal heat with in-floor heating in all the units and heat pumps throughout the building. Simply stated, geothermal heating involves pumping water below the earth's surface (where temperatures are usually about 50 degrees F) and then back up to heat the building. While it has been used around the United States for many years, it is still relatively new to this area. Bergstrom Electric served as the electrical contractor for this project and began work in June of 2010.

Bergstrom crews installed a 1600 amp main distribution along with a 55 KW backup generator. The building's common areas were



handled by three 225 amp subpanels, there was an additional 150 amp emergency power panel, and then each apartment had its own 100 amp panel. Every apartment had a heat pump in it that incorporated the geothermal field. Bergstrom also installed several VFDs (Variable Frequency Drives) on the well-field pumps that circulated the water through the building.

The project was complete in March of 2011. It took Bergstrom approx. 3300 man-hours to complete the job.



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