

Cold-Climate ASHP in Pelican Rapids, MN



Steve Haiby likes to get the best performance out of his home systems. A few years ago, he was on the hunt for a high-efficiency solution for heating and cooling his home built in 1998. After researching his options and gathering information from other homeowners, Haiby landed on a cold-climate air source heat pump (ASHP).

“It’s been wonderful,” Haiby reports. **“This high-efficiency ASHP worked out so well.”**

Haiby was aware that some homeowners worry ASHPs won’t perform as well as advertised on cold winter days. However, he was confident in the technology and decided to take full advantage of his unit’s capacity by setting the changeover temperature to -5°F .

Haiby carefully tracked his ASHP’s performance during the 2020–2021 winter and was pleased with the results. His unit met the entire heating load of his home throughout November and 85% of his heating needs in January. Even during a polar vortex in February that brought 11 below-zero days and eight nights below -20°F , Haiby only had to run his backup propane furnace one-third of the time.

“It’s a win-win for everyone.”

As time has passed, Haiby has been increasingly pleased with his heat pump. “Operating costs for both heating and cooling are low with super-efficient tech like this, and it brings carbon emissions down, too,” Haiby says. “It’s a win-win for everyone.”

House Details

- Built in 1998
- 2,480 square feet (1,240 main, 1,240 walkout basement)
- Located in Pelican Rapids, Minnesota
- Utility: Lake Region Cooperative Electric Association
- Utility rebate: \$480–\$630

Equipment Details:

- Centrally ducted
- SEER 18.75 and HSPF 9.5
- 3-ton system
- -5°F switchover temperature
- Propane backup



Learn more

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