

## MINERALS KEEP US WARM IN THE WINTER



Northern Minnesota is known for its wilderness, natural environment and recreational resources, as well as some of the most extreme winter temperatures in the United States. In fact, the coldest temperature ever recorded east of the Mississippi River – and sixth coldest in U.S. history – was in Tower, Minnesota in February 1996 when it dropped to a bone-chilling minus 60 degrees Fahrenheit.

Though northern Minnesota is among the coldest regions in the country, minerals keep us warm no matter the wind chill outside:

- Radiators, furnaces and heating ducts need nickel to operate and warm our homes when the winds outside are howling.
- Thanks to platinum and the wire produced from this mineral, hand warmers thaw our fingers when they're numb with cold.
- Energy efficient ground source heat pumps use copper tubing buried in the ground to transfer heat into our rooms, keeping our homes cozy.
- Stainless steel and copper are commonly found in kitchen appliances such as stoves and tea kettles, used to heat water for hot chocolate and other warm beverages.
- Furnaces and HVAC (heating, ventilation and air conditioning) systems powered by copper fill our homes with warmth. Copper wire systems are the most widely used of all electrical systems because copper provides more capacity to carry electrical current for a given diameter of wire than any other engineering metal.

Sources:

[http://www.dnr.state.mn.us/climate/summaries\\_and\\_publications/extremes.html](http://www.dnr.state.mn.us/climate/summaries_and_publications/extremes.html)  
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