



# Geothermal Heat Pumps

**Cooling Mode**



**Illustration  
developed by  
NREL**

Geothermal heat pumps use the stable temperatures of the ground (often vertical boreholes typically are 100 to 400 feet deep) as a heat source to warm buildings in winter and as a heat sink to cool them in summer. Also called ground-source heat pumps or Geoexchange units.