

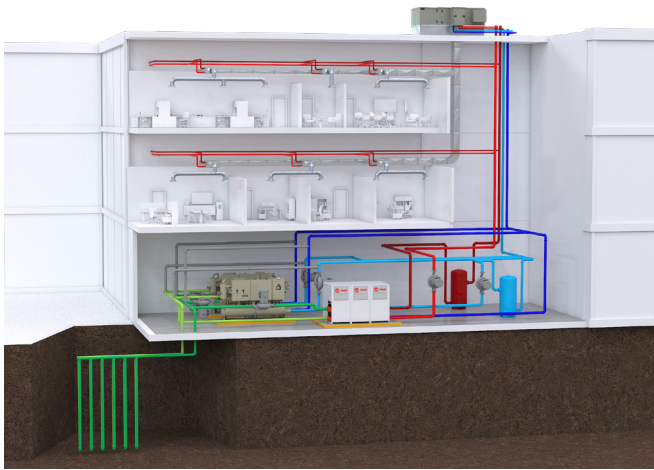
Geothermal Heat Pump Systems

Ground your building with better performance.



Tap into the power beneath your feet. Geothermal heat pump systems use the earth's stable temperatures to deliver highly efficient, reliable, low-carbon operation year-round. With flexible configurations from centralized to distributed systems, geothermal solutions adapt to your building's needs and help unlock a practical path to electrification without sacrificing performance.

- Central and distributed configurations
- Integrated system controls with Tracer® SC+
- Ideal for mixed-use, education, commercial, and institutional buildings



Central Geothermal System



Distributed Geothermal System



Deep-source efficiency for lasting savings.

Long recognized as one of the most efficient ways to design HVAC and achieve a fully electric heating and cooling system, geothermal technology operates **up to 50% more efficiently than air-source heat pump systems and as much as 75% more efficiently than standard HVAC systems***, reducing energy consumption and utility costs. Incentives, such as the 48E ITC, further improve lifecycle economics and accelerate payback, making geothermal an even more cost-effective long-term investment.



Regulation-ready performance.

By harnessing the earth's renewable thermal energy, these solutions provide heating and cooling without onsite combustion, resulting in dramatically lower greenhouse-gas emissions. Their naturally low carbon footprint, paired with reduced peak electrical demand that supports a more resilient grid, helps organizations advance sustainability initiatives, meet evolving regulations, and achieve long-term carbon-reduction targets.



Site flexible system design.

With multiple system configurations and a broad portfolio of proven Trane heat pump platforms, geothermal solutions easily adapt to diverse site constraints, including dense urban environments and limited-footprint projects. This versatility makes them a strong fit for nearly any building type, from high-rise residential to higher education and K-12 facilities.

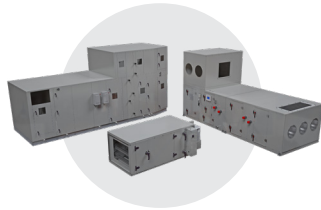
*Guidehouse Inc. Residential HVAC and Heat Pump Market Reports.

System Components

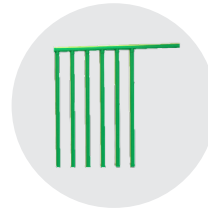
Central Geothermal Systems



**Water-to-Water
Heat Pumps**
(MWS, WXM,
RTWD, CTV)



**Central Air
Handlers and
Hydronic
Accessories**



**Geothermal
Loop**



Tracer® SC+
with proven
control
sequences

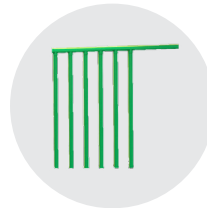
Distributed Geothermal Systems



**Axiom™
Water Source
Heat Pumps**



**Dedicated Outdoor
Air Units
(DOAS)**



**Geothermal
Loop**



Tracer® SC+
with proven
control
sequences

➔ **Discover What's Possible with Trane.**
Contact your local Trane office or visit trane.com/geothermal.



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