

GEO BASIC

GEOTHERMAL PREVENTATIVE MAINTENANCE AGREEMENT

Specialized Care for Ground Source Heat Pump Systems — All Brands Serviced

ANNUAL PRICE	VISITS / YEAR	DURATION	REPAIR DISCOUNT	ADD-ON SYSTEM
\$360	1	6 Months	10% Off	\$125/system

Membership Benefits

- One geothermal-specific maintenance visit per year
- Ground loop pressure check and fluid level inspection
- Full indoor heat pump inspection, cleaning, and calibration
- COP (Coefficient of Performance) calculation — know your actual system efficiency
- Desuperheater inspection if equipped — most companies skip this entirely
- Written system health report with all readings documented
- **10% discount** on all geothermal service and repair jobs
- Same or next-day service scheduling when you call for repairs
- Additional geothermal system add-on: **\$125/system**
- Standard dispatch fee applies on service calls

Your Membership Includes

- **Auto-Scheduling** — We contact you when your tune-up is due. No reminders needed.
- **Service History Online** — Access your geothermal inspection reports anytime from your phone.
- **Same / Next-Day Service** — Members get priority scheduling when something goes wrong.
- **6-Month Labor Guarantee** — If a covered issue returns within 6 months, the labor is on us.

Why Geothermal Systems Need Specialized Maintenance

Most HVAC companies don't have experience with ground source heat pumps. They'll check the thermostat and call it a day. A proper geothermal tune-up requires checking loop pressures, refrigerant charge, compressor performance, and the unique components that make these systems so efficient — including the desuperheater, reversing valve, and auxiliary heat staging.

Geothermal systems are built to last 20–25 years for the indoor unit and 50+ years for the ground loop — but only with proper maintenance. A neglected system loses efficiency gradually, costing you more each month without obvious symptoms until something fails.

Our technicians are trained specifically on geothermal systems. We measure your actual COP so you know exactly how efficiently your system is running — and whether it's declining.

Scheduling & Agreement

Prepaid visits must be scheduled Monday–Friday, 9:00 AM – 3:00 PM. Call 405-375-4822 to schedule. By enrolling, you authorize Hartzell's Heat & Air to perform the services described above at \$360/year. Plan duration is 6 months from enrollment.

Customer Signature: _____ Date: _____

Print Name: _____ Address: _____

Phone: _____ Email: _____

GEOTHERMAL MAINTENANCE CHECKLIST

Comprehensive inspection tailored to your ground source heat pump system. All brands serviced.

Ground Loop System

- Check loop pressure — verify within manufacturer specifications
- Inspect loop fluid level and condition (color, clarity, antifreeze concentration)
- Check loop pump operation, amp draw, and flow rate
- Inspect loop piping connections for leaks at header and unit
- Verify loop entering/leaving water temperatures (EWT/LWT)
- Calculate loop temperature differential under load
- Check flow center valves and hose connections
- Inspect pressure/temperature ports and gauges

Indoor Heat Pump Unit

- Inspect compressor operation — amp draw, sound, and vibration
- Check refrigerant charge — superheat and subcooling readings
- Verify reversing valve operation (heating ↔ cooling switchover)
- Inspect contactors, relays, and electrical connections
- Check capacitor(s) with meter — weak capacitors cause compressor stress
- Inspect and clean indoor coil (evaporator/condenser)
- Check blower motor operation, amp draw, and airflow
- Inspect blower wheel for buildup and clean if needed
- Check air filter condition and replace if needed
- Verify thermostat operation and calibration
- Check auxiliary/emergency heat staging and lockout settings
- Inspect condensate drain and pan — clear if obstructed
- Verify supply/return air temperature differential

Desuperheater / Hot Water Assist (If Equipped)

- Verify desuperheater pump operation, flow rate, and amp draw
- Check hot water output temperature at desuperheater connection
- Inspect all fittings and connections for leaks
- Flush desuperheater heat exchanger if mineral buildup suspected
- Verify proper integration with backup water heater
- Confirm desuperheater is not short-cycling or overheating water

Ductwork & Airflow

- Inspect accessible ductwork for leaks, damage, or disconnections
- Check register and return airflow at key locations
- Verify static pressure is within equipment specifications
- Inspect duct insulation condition in unconditioned spaces

System Performance & Condition Report

- Calculate actual COP (Coefficient of Performance) from measured data
- Document all temperatures, pressures, and electrical readings
- Rate overall system condition: Good / Fair / Monitor / Needs Attention
- Compare current performance to manufacturer specifications
- Estimate remaining useful life of indoor unit and loop system
- Provide recommendations for repairs, improvements, or monitoring

What You Can Do Between Visits

- Change your air filter every 1–3 months — restricted airflow is the #1 cause of geo system stress
- Keep supply and return vents open and unobstructed in every room
- Don't set large thermostat swings — geothermal works best with steady temperatures
- Listen for unusual compressor sounds — humming, clicking, or short-cycling
- Check your condensate drain periodically — a clogged drain can trigger a system shutdown

- Keep the area around your indoor unit clear for service access
- If your energy bills spike unexpectedly, schedule a tune-up — efficiency may be declining

Hartzell's Heat & Air • 405-375-4822 • hartzellsheatair.com