



Ground Source Heat Pump (GSHP) Maintenance Checklist

10 planned preventive maintenance tasks · Free PDF from PM Assist

A practical starting point for planned preventive maintenance. Always refer to the manufacturer's O&M manual and site-specific requirements.

Visual Checks

- ☐ Inspect strainers and any heat exchangers for fouling

Functional Checks

- ☐ Check ground loop pressure and top up the water/glycol mix as needed
- ☐ Verify glycol concentration and inhibitor condition for freeze/corrosion protection
- ☐ Inspect ground loop and source-side circulators for operation and leaks
- ☐ Verify refrigerant circuit performance — pressures, superheat, subcooling
- ☐ Check source-side flow and return temperatures are within expected range
- ☐ Confirm flow temperatures on the heating side are optimised (lower is better)
- ☐ Verify controls, weather compensation, and setpoints

Safety Checks

- ☐ Carry out F-Gas leak checks as required by the refrigerant charge

Record Keeping

- ☐ Record performance, ground-loop pressure, glycol, and F-Gas data in the log

Maintenance Frequency

Annually

- Full service and F-Gas leak check
- Ground loop pressure and glycol test
- Circulator and strainer check
- Refrigerant performance and controls optimisation