



Air Source Heat Pump (ASHP) Maintenance Checklist

11 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 the plate heat exchanger / condenser and system water quality
- ☐ Check condensate drainage from the outdoor unit is clear and frost-protected

Functional Checks

- ☐ Check the fan and motor for operation, balance, and bearing noise
- ☐ Verify refrigerant circuit performance — pressures, superheat, and subcooling
- ☐ Confirm the defrost cycle initiates and clears ice correctly
- ☐ Check flow and return water temperatures against the design (lower is more efficient)
- ☐ Verify controls, weather compensation, and setpoints are optimised
- ☐ Confirm the electrical supply, isolation, and any soft-start operate correctly

Cleaning & Housekeeping

- ☐ Inspect and clean the evaporator coil and outdoor unit of debris, leaves, and dust

Safety Checks

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

Record Keeping

- ☐ Record COP/performance, refrigerant data, and F-Gas checks in the log

Maintenance Frequency

Quarterly

- Clean outdoor coil and check fan
- Verify flow temperatures
- Check defrost and condensate

Annually

- Full service and F-Gas leak check
- Refrigerant performance check
- Water quality and heat exchanger inspection
- Controls optimisation