



Air Handling Unit (AHU) Maintenance Checklist

18 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 pre-filters and bag filters for loading — replace if differential pressure exceeds manufacturer limit
- ☐ Check fan belts for tension, wear, and cracking — adjust or replace as needed
- ☐ Inspect heating and cooling coils for fouling, fin damage, or corrosion
- ☐ Inspect heat recovery wheel or plate exchanger for fouling and bypass damper operation

Functional Checks

- ☐ Verify mixing, fresh air, and exhaust dampers operate fully open and closed
- ☐ Confirm supply and return air temperatures match BMS setpoints within tolerance
- ☐ Check fan bearings for noise, vibration, and temperature
- ☐ Test frost protection stat and low-limit controls
- ☐ Measure supply and return air pressure to confirm fan operating point
- ☐ Verify variable speed drive (VSD) frequency and current at duty point
- ☐ Check humidifier operation, demineralised water supply and steam delivery (if fitted)

Cleaning & Housekeeping

- ☐ Clean condensate drain pan and confirm drain line and trap are clear
- ☐ Clean coil surfaces with appropriate coil cleaner where accessible
- ☐ Vacuum or wipe internal AHU casing — including filter housings and mixing box floor

Safety Checks

- ☐ Verify fire and smoke damper interlocks function correctly on test signal from fire panel
- ☐ Check access panels, interlocks and guards are secure with no exposed rotating parts

Record Keeping

- ☐ Record filter differential pressures, fan currents, supply/return air temperatures and VSD speed
- ☐ Log belt replacements, filter changes, coil cleans and any component repairs in the asset record

Maintenance Frequency

Monthly

- Check filter differential pressures
- Inspect condensate drain pan
- Visual inspection of fan belts
- Log fan currents and VSD speed

Quarterly

- Replace pre-filters if required
- Check belt tension and alignment
- Inspect coils for fouling

- Test damper operation

Every 6 Months

- Replace bag filters
- Lubricate fan bearings
- Full damper stroke test
- Check frost stat operation
- Inspect heat recovery components

Annually

- Full AHU internal inspection
- Coil deep clean
- Fan vibration analysis
- Electrical connection checks
- Review BMS trending data
- Statutory fire/smoke damper drop test