

Air handling unit quarterly maintenance checklist

A quarterly air handling unit round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. Work is commonly verified against ASHRAE guidance, SMACNA duct construction. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The HVAC service tech on the contracted quarterly visit. When: Every quarter, timed ahead of the season change so a failing component is found before the unit is needed hardest.

Running walk-down

- ☐ **Controller readings and alarms noted before shutdown**
Discharge air temperature, fan status and any active alarm read at the unit controller or BAS screen while the unit runs. 1 photo required
- ☐ **Every energy source feeding the unit locked and tagged**
Each fan, heater, drive and control circuit locked, tagged and proven dead; damper and drain-safety checks run under the procedure's temporary release, people clear, then re-locked. 1 photo required

Air path

- ☐ **Filters pulled and inspected, not peeked at**
One filter removed per bank, loading and bypass gaps checked, replacement date or pressure drop recorded. 2 photos required
- ☐ **Coils clean and fins undamaged**
Face of the coil inspected for matting and biological growth, fins not flattened across the air path. 1 photo required
- ☐ **Dampers cycle and seal**
Outside, return and mixing dampers driven full stroke, blades closing tight, linkage pinned. 1 photo required
- ☐ **Intake and mixing section checked for debris and water entry**
Intake screen or return plenum free of debris and leaves, no rain or snow staining on the mixing section floor. 1 photo required

Drive and fan

- ☐ **Belt tension and condition verified**
Deflection measured against the drive spec, no glazing, cracking or misalignment dust. No photo required
- ☐ **Fan and motor bearings checked**
No play, noise or heat at the bearings, grease lines intact where fitted. 1 photo required
- ☐ **Fan wheel turns free and sits secure on the shaft**
Wheel turned by hand with the unit re-locked, no rub at the inlet cone, hub and set screws tight on the shaft. 1 photo required

Drainage

- ☐ **Condensate pan clean and draining**
Pan free of slime and standing water, trap primed, drain line flowing. 2 photos required
- ☐ **Drain safety devices tested where fitted**
Float switch or pan sensor actually trips the unit or alarms, not just present. No photo required

- ☐ **Section downstream of the coils checked for water carryover**
Floor and liner downstream of the coils and pan dry, no wet insulation or rust streaks from moisture blown off a coil. 1 photo required

Return to service

- ☐ **Guards refitted and every access door latched**
Belt and fan guards back on, doors closed and latched, no tools or filter packaging left inside the sections. 1 photo required
- ☐ **Lock removed by its owner and the unit restarted and run**
Lock and tag removed by the person who hung them, fan restarted and run to steady airflow with no new controller alarm. No photo required
- ☐ **Quarterly readings and deficiencies logged to the unit history**
Filter, belt, bearing and drain findings entered against the unit tag, open deficiencies reported to the owner. No photo required