

Free checklist from Deepseal · usedeepseal.com/commercial-hvac-maintenance-checklist · Version: September 2026 · Task list follows ANSI/ASHRAE/ACCA Standard 180 as a minimum. It does not replace the manufacturer's service instructions, the site's written sequence of operation, or your company's safety program.

Commercial HVAC Maintenance Checklist

Customer / site	[Customer] · [Site name] · [Street, City, State ZIP]	Date · technician	[Date] · [Name]
Visit	☐ Q1 winter check ☐ Q2 spring startup ☐ Q3 summer check ☐ Q4 fall startup	Outdoor conditions	[OAT °F] / [RH %] · ☐ Dry ☐ Wet roof ☐ Wind
Site contact · access	[Name · Phone] · ☐ Hatch ☐ Fixed ladder ☐ Extension ladder ☐ Lift · Key / code []	Contract · time	☐ PM only ☐ PM + labor ☐ Full · Arrived [] Left []

Roof safety, before the first panel comes off

☐ Ladder at 4:1, tied off or footed; hatch and landing clear	☐ Edge rule (29 CFR 1910.28(b)(13)): under 6 ft from an edge needs guardrail, restraint or fall arrest; 6 to 15 ft the same or a designated area for infrequent, temporary work
☐ Skylights, drains, ponding and soft spots located; walk paths only; weather acceptable; tools and chemicals staged so nothing rolls off	☐ Disconnect opened and tested dead before opening compartments; gas shutoff located; CO meter on the tech; site contact told which units go off and for how long

Roof sheet: one row per unit

Fill every cell, even when the answer is OK: a blank cell reads as "not checked". Amps as read / nameplate. Split = return minus supply °F.

Unit tag / location	Make · model · serial · tons	Filters size × qty · MERV · changed?	Belt size · OK / new	Split °F R/S	Comp amps C1/C2	Blower amps	Econ OK / fault	Drain OK / fix	Findings
RTU-1									
RTU-2									
RTU-3									
RTU-4									
RTU-5									
RTU-6									
EF / MAU									

Site summary and sign-off

Repairs recommended (quote to follow)	[] units serviced · not running on arrival: [tags]
Parts · roof conditions · next visit	Filters [] Belts [] Other [] · Roof: ☐ Ponding ☐ Membrane damage ☐ Curb/flashing open ☐ Debris on intakes ☐ None · Next visit [Month] · belts due for annual replacement [tags]
Technician	Signature _____ Date _____
Customer acknowledgement	Name _____ Signature _____ Date _____ Confirms the visit took place and the findings were explained; not approval of quoted repairs.

Appendix A: Per-unit detail sheet

Print one per unit. Spring startup: A to G, I to K. Fall startup: A to D, G to K. Target ranges are general trade values; the manufacturer's chart, nameplate and manual override them.

Unit tag · location	[RTU-#] · [roof area]	Make / model / serial	[]	Tons · date	[] · []
Refrigerant · charge	[R-410A / R-454B / R-22] · [lb per circuit] · circuits ☐ 1 ☐ 2 ☐ 3+	Voltage / phase	[208/230/460] · [1 / 3] ph · Heat ☐ Gas ☐ Electric ☐ Heat pump ☐ None	Serves	[Area / tenant]
Filters · belts	[size × qty] MERV [] · belt [size] qty []	Economizer	☐ Yes ☐ No · control [dry bulb / enthalpy / BAS]	Technician	[]

A. Filters and airflow (every visit)

Task	Reading / target	Result
☐ Replace filters; record size, qty, MERV (MERV 8 minimum ahead of a wetted cooling coil per ASHRAE 62.1; MERV 13 where the site specifies it); check fit, rack and door seal for bypass	Installed: [] × [] · MERV []	☐ Done ☐ Cust. supplies ☐ Rack fixed
☐ Blower wheel and housing; clean when the blades are loaded		☐ OK ☐ Cleaned ☐ Quote
☐ Total external static pressure with clean filters	TESP [] in wc · nameplate max [] in wc	☐ In range ☐ High
☐ Return and supply air temperature in cooling after 10 to 15 minutes of run time	Return [] °F · Supply [] °F · Split [] °F Typical 16 to 22 °F	☐ In range ☐ Investigate

B. Belts, sheaves, motors and bearings (check every visit; replace belts annually)

Task	Reading / target	Result
☐ Belt condition: cracks, glazing, fraying, belt dust	Belt size [] · installed [date]	☐ OK ☐ New ☐ Next visit
☐ Tension by deflection, about 1/64 in per inch of span between sheave centers, gauge where possible; the lowest tension that does not slip under load	Span [] in · deflection [] in · force [] lb	☐ OK ☐ Adjusted
☐ Sheave alignment by the belt groove, not the face; groove wear; set screws tight		☐ OK ☐ Aligned ☐ Sheave worn
☐ Blower motor amps per leg vs FLA; re-check after any tension change	L1 [] L2 [] L3 [] · FLA []	☐ OK ☐ High
☐ Condenser fan amps; blades tight, no wobble, guard secure	[] A · FLA []	☐ OK ☐ Investigate
☐ Bearings: noise, heat, play; lube field-serviceable bearings per manufacturer		☐ OK ☐ Lubed ☐ Replace

C. Coils and condensate (every visit; clean condenser coils at spring startup and as the site needs)

Task	Reading / target	Result
☐ Condenser coil: cottonwood, grease, debris, bent fins; rinse inside out, cleaner where loaded		☐ Clean ☐ Cleaned ☐ Quote

Task	Reading / target	Result
☐ Evaporator coil where accessible: dirt, growth, ice history; clean when loaded		☐ Clean ☐ Cleaned ☐ Quote
☐ Drain pan clear and sloped, no standing water or rust-through; pan tablet where used		☐ OK ☐ Cleaned ☐ Pan damaged
☐ Trap present and primed; depth at least double the negative static at the pan on draw-through units; line clear to outlet; float switch tested where fitted	Pan static [] in wc · trap depth [] in	☐ OK ☐ Corrected

D. Electrical and drives (every visit; capacitors and contactors measured at least annually)

Task	Reading / target	Result
☐ Voltage at the disconnect, unit running; phase imbalance on three-phase	L1-L2 [] L2-L3 [] L1-L3 [] V Imbalance under 2 percent	☐ OK ☐ Report
☐ Contactors: pitted or burned contacts, chattering coil, debris; terminations tight; insulation, crimps and rodent damage checked; control box clean and dry		☐ OK ☐ Fixed ☐ Replaced
☐ Run capacitors under load; replace when more than 10 percent below nameplate μ F, bulged or leaking	Comp [] / [] μ F · Fan [] / [] μ F · Blower [] / [] μ F	☐ OK ☐ Replaced
☐ Compressor amps per leg vs RLA; crankcase heater working where fitted	C1 [] / RLA [] · C2 [] / RLA []	☐ OK ☐ High ☐ Low
☐ VFD where fitted: heatsink and fan clean and running, enclosure filter clean, fault log read, parameters match the site sheet	Faults logged: []	☐ OK ☐ Cleaned ☐ Report
☐ Safeties exercised: high and low pressure, freeze stat, phase monitor where fitted		☐ OK ☐ Fault

E. Refrigerant circuit (spring startup, and whenever the split or amps look wrong)

Task	Reading / target	Result
☐ Leak check: oil at joints, service valves, Schrader cores, U-bends; electronic check where oil is found		☐ No sign ☐ Leak found at []
☐ Pressures and saturation temperatures per circuit, after coils and airflow are verified	C1: suction [] psig / [] °F · liquid [] psig / [] °F C2: suction [] psig / [] °F · liquid [] psig / [] °F	
☐ Superheat and subcooling per circuit; charge by subcooling on TXV/EEV, by superheat on fixed orifice, to the chart	C1 SH [] °F · SC [] °F · C2 SH [] °F · SC [] °F TXV SH 5 to 15 · SC 8 to 14 · CTOA 15 to 20 °F	☐ OK ☐ Adjusted ☐ Diagnose
☐ Refrigerant added or recovered per circuit, with the reason, logged against full charge; EPA leak-repair rule noted where it applies (note at the end)	Added [] lb · Recovered [] lb · Reason [] · Full charge [] lb	☐ None ☐ Logged ☐ Rule applies

F. Economizer (spring and fall startups; screen and filter every visit)

Task	Reading / target	Result
☐ Hood, screen and economizer filter clean; no birds, leaves or debris in the intake		☐ OK ☐ Cleaned

Task	Reading / target	Result
☐ Dampers stroked fully open and closed on command (test mode or BAS override); OA and RA move opposite; relief follows		☐ Full ☐ Sticks ☐ Failed
☐ Blade and jamb seals close with no daylight; linkage or gears tight, no slop		☐ OK ☐ Seals worn ☐ Linkage loose
☐ Minimum OA position verified, unit running and not economizing; set by measurement (airflow or mixed-air method), never by eye	Design min OA [] cfm or [] % · found []	☐ Verified ☐ Reset ☐ No design value
☐ OA, RA and mixed or discharge sensors vs a calibrated thermometer; enthalpy sensors checked or replaced by age	OA [] / [] °F · RA [] / [] °F · MA [] / [] °F	☐ OK ☐ Replaced
☐ Changeover setpoint and control type match the site sheet; low-limit stat tested; fault diagnostics read where fitted	Setpoint [] °F · type [] · faults []	☐ OK ☐ Corrected ☐ Reported

G. Cabinet, curb and roof (every visit)

Task	Reading / target	Result
☐ Panels fit, gaskets intact, every fastener back in; no leaks at blower doors	Screws missing on arrival: []	☐ OK ☐ Corrected
☐ Curb, flashing, supports: no gaps, rust-through or daylight into the return; duct and flex sealed; exposed piping and duct insulation intact		☐ OK ☐ Report ☐ Quote
☐ Roof around the unit: ponding, membrane damage, debris, condensate on the membrane		☐ OK ☐ Noted on roof sheet

H. Gas heat section (fall startup)

Task	Reading / target	Result
☐ Heat exchanger where accessible: cracks, rust holes, distortion, staining; flue and vent clear		☐ OK ☐ Suspect ☐ Condemned
☐ Burners clean and seated, crossovers clear; igniter and flame rod cleaned with a fine pad		☐ OK ☐ Cleaned ☐ Replaced
☐ Flame sensor current, burners lit	[] µA 0.5 to 10 µA by unit; 2 to 6 common	☐ OK ☐ Low
☐ Inlet and manifold gas pressure, high and low fire, vs rating plate	Inlet [] in wc · manifold [] in wc · plate [] NG 3.2 to 3.8 in wc · LP 10.5 to 11.5	☐ OK ☐ Adjusted
☐ Temperature rise at steady state against the nameplate range	Return [] °F · supply [] °F · rise [] °F · plate [] to []	☐ In range ☐ High ☐ Low
☐ Combustion analysis in the flue; stable CO under 100 ppm air-free is the target	CO af [] ppm · O2 [] % · stack [] °F	☐ OK ☐ Adjusted ☐ Shut down
☐ Safeties: high limit, rollouts, pressure switch, inducer proving; gas valve closes on flame loss		☐ OK ☐ Fault
☐ Heat pumps: defrost forced and observed; aux or electric heat amps	Aux heat [] A / [] kW	☐ OK ☐ n/a

I. Controls and thermostat (every visit)

Task	Reading / target	Result
☐ Setpoints, deadband and schedule vs the site's written settings (checking, not reprogramming, unless the contract says so)	Occ cool [] heat [] · unocc cool [] heat [] · schedule OK? ☐	☐ Match ☐ Drifted, reported
☐ Stat or zone sensor reads true; batteries, clock and daylight saving correct; BAS points, alarms and comms reviewed, trend shows the unit meeting setpoint	Stat [] °F vs meter [] °F	☐ OK ☐ Corrected ☐ Report
☐ Cool, heat and fan-only cycled from the controller; each stage confirmed at the unit		☐ All stages ☐ Fault: []

J. Exhaust fans and make-up air units (every visit, where listed in the contract)

Task	Reading / target	Result
☐ Belts, sheaves, bearings and amps as in B; wheel clean, no grease loading on kitchen exhaust	[] A / FLA []	☐ OK ☐ Corrected
☐ Backdraft or motorized dampers open freely, close fully; curb and cap secure		☐ OK ☐ Corrected
☐ Hood exhaust and make-up air interlocked so MUA runs whenever the hood runs (IMC 508.1); hood filters in place; MUA filters, burner or coil, dampers and freeze protection as for an RTU		☐ OK ☐ Interlock fault ☐ n/a

K. Findings, recommendations and time

Condition on arrival	☐ Running, no complaints ☐ Running, complaint: [] ☐ Not running: []
Repairs recommended	
Repairs completed today (authorized by)	
Parts used	Filters [] · Belts [] · Capacitors [] · Refrigerant [] lb · Other []
Unit condition	☐ Good ☐ Fair ☐ Poor ☐ Plan replacement · Estimated age [] yrs
Time on unit	[] min · Photos taken: ☐ Nameplate ☐ Filters ☐ Coils ☐ Findings
Technician	Name: _____ Signature: _____ Date: _____

EPA leak-repair rule: applies to ozone-depleting refrigerants at 50 lb or more per appliance and, from January 1, 2026, to HFC appliances at 15 lb or more outside the residential and light commercial air conditioning subsector; the comfort-cooling threshold is a 10 percent annual leak rate with repair within 30 days. Keep this sheet with the unit's history: Standard 180 asks that execution of each task be documented and archived, and the maintenance contract's visit ledger needs it. The matching commercial maintenance contract and a free visit-tracking sheet are at usedeepsel.com.