



FACILITIES MANAGER'S AUDIT CHECKLIST

COMMERCIAL HVAC PREVENTIVE MAINTENANCE CHECKLIST

What Every Quarterly Inspection Should Cover

30

INSPECTION CHECKPOINTS

5

CHECKLIST SECTIONS

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SYSTEM TYPES WITH INTERVALS

SITE / LOCATION

UNITS COVERED

INSPECTION DATE

CONTRACTOR

For: Facilities managers, operations directors, procurement officers at multi-location commercial properties

Why this checklist: Most facilities teams don't realize what "PM covered" actually means. When a vendor says they do "quarterly maintenance," the checks most often missing are the ones that actually prevent failures — refrigerant-system health, electrical wear, and documentation. This checklist shows exactly what a comprehensive quarterly inspection looks like—so you can audit what your current vendor actually covers and know what you're paying for.

The practical use case: Hold this checklist against your vendor's scope of work. Identify gaps. Bring this into your next contract discussion. If your vendor isn't hitting these checkpoints, you're leaving your equipment at unnecessary risk of failure.

WHY THIS MATTERS

Emergency HVAC failures don't just cost money—they cost uptime. For retail chains, that means customer experience hits, lost revenue, and operational chaos. For industrial facilities, that means production halts. For data centers, that means catastrophic risk.

Most commercial HVAC failures give early warning signs — a worn contactor, a weak capacitor, a drifting refrigerant charge — that a comprehensive quarterly inspection is designed to catch before they become emergencies. Industry data attributes roughly three-quarters of catastrophic failures to conditions that routine maintenance would have flagged.

The scale is what makes running this checklist worth the hour. The parts on this list are low-tens-of-dollars items when they are caught on a scheduled visit. A mid-size rooftop unit that fails on an emergency basis routinely runs \$12,000 or more to replace — and larger units or difficult roof access push that materially higher. Those are two different events, not two ends of one chain: replacement is a decision about the age and condition of a unit, never about the part that happened to fail.

This checklist reflects 30 years of Bay Area commercial HVAC work—real equipment, real failure patterns, real solutions.

01 AIR HANDLING & FILTRATION

These items directly affect indoor air quality, system efficiency, and equipment longevity. They should be addressed at every quarterly visit.

☐ Filter inspection and replacement

Inspect MERV rating against spec. Replace on schedule regardless of appearance — visual inspection alone is not a reliable filter performance indicator.

DATE / INITIALS

☐ Evaporator coil inspection and cleaning

Dirty evaporator coils reduce heat transfer efficiency and force the compressor to work harder. A visibly fouled coil is a missed service interval.

DATE / INITIALS

☐ Condenser coil inspection and cleaning

Condenser coils exposed to exterior conditions accumulate debris faster than evaporator coils. Blocked condenser coils are a primary driver of premature compressor failure.

DATE / INITIALS

☐ Drain pan inspection and flush

Standing water in a drain pan produces microbial growth and indicates a blocked condensate drain — a leading cause of water damage and indoor air quality complaints.

DATE / INITIALS

☐ Condensate drain line clear and flowing

Confirm clear drainage path. In multi-location retail, clogged drain lines are among the most common service call causes — and among the most preventable.

DATE / INITIALS

☐ Blower motor and wheel inspection

Inspect for debris accumulation on blower wheels. Imbalanced or fouled blower wheels reduce airflow and increase motor load.

DATE / INITIALS

☐ Belt tension and condition (belt-drive units)

Worn or improperly tensioned belts reduce airflow efficiency. Belts should be inspected and replaced on a preventive basis, not after failure.

DATE / INITIALS

02 REFRIGERANT SYSTEM

Refrigerant system health is the core determinant of cooling capacity and compressor lifespan.

☐ Refrigerant charge verification

Operating with low refrigerant reduces cooling capacity and places sustained thermal stress on the compressor. Low charge is a reliable indicator of a leak that must be located and repaired — not just recharged.

DATE / INITIALS

☐ Leak check — visual inspection and electronic detection

Systems above the CARB Refrigerant Management Program threshold — more than 50 lb of high-GWP refrigerant, common in healthcare, labs, industrial and large central plant — carry documented leak-inspection and recordkeeping requirements, and that documentation should be filed by the contractor at each visit. Most packaged rooftop units sit below the threshold. The leak check still belongs in the scope either way: an electronic check finds what a visual one cannot.

DATE / INITIALS

☐ **Suction and discharge pressure readings**

Document actual readings against manufacturer specifications. Sustained deviation from spec is an early indicator of component wear or refrigerant system issues.

DATE / INITIALS

☐ **Superheat and subcooling measurements**

Establishes whether the refrigerant charge and metering device are operating within design parameters. Required for accurate system evaluation — not optional.

DATE / INITIALS

☐ **Compressor amp draw check**

Compare measured amp draw against nameplate. Elevated amp draw is the leading early indicator of compressor stress or impending failure — a five-minute reading, and one of the items most often missing from a quarterly scope.

DATE / INITIALS

03 ELECTRICAL & CONTROLS

Electrical components are among the highest-wear items on a commercial system, and electrical faults are a leading preventable cause of unplanned downtime. Regular inspection catches most of them while they are still inexpensive.

☐ **Electrical disconnect and panel inspection**

Inspect for corrosion, loose connections, and code-compliant wiring at disconnect boxes and unit-level electrical panels.

DATE / INITIALS

☐ **Contactors inspection — pitting and burn marks**

Contactors are high-wear components. Pitted or burned contact points should be replaced preventively — a contactor is a low-tens-of-dollars part on a scheduled visit, and its failure typically shuts the unit down and brings out an emergency service call instead.

DATE / INITIALS

☐ **Capacitor test — run and start capacitors**

Capacitor failure is one of the most common causes of summer RTU shutdowns. Test with a capacitor meter at each visit. A reading more than 10% below rating warrants replacement.

DATE / INITIALS

☐ **Thermostat calibration and setpoint verification**

Confirm thermostat accuracy against a calibrated reference thermometer. A 2°F offset can measurably affect both occupant conditions and system runtime hours.

DATE / INITIALS

☐ **Control wiring inspection — connections and insulation**

Inspect low-voltage control wiring for loose terminals, chafing, or corrosion. Control wiring failures produce intermittent symptoms that are difficult and expensive to diagnose after the fact.

DATE / INITIALS

☐ **High and low pressure switch testing**

Safety controls should be tested for proper cutout and reset. Non-functional safety controls allow equipment to operate outside safe parameters and accelerate component wear.

DATE / INITIALS

☐ **Time clock and scheduling verification (where applicable)**

Confirm occupied/unoccupied schedules match current building use. Misaligned schedules are among the most common sources of unnecessary HVAC runtime in commercial buildings.

DATE / INITIALS

☐ Compressor operating temperature and sound check

Abnormal operating temperatures or acoustic irregularities (knocking, rattling) should be documented and investigated. These are early-stage indicators of compressor wear.

DATE / INITIALS

☐ Fan motor amperage and bearing inspection

Measure amperage against nameplate on condenser and evaporator fans. Inspect for bearing wear — failed fan bearings lead to motor failure and are inexpensive to catch early.

DATE / INITIALS

☐ Economizer inspection and calibration (where installed)

Sensors and the quality of the original installation — not hardware wear — are the largest contributors to improper economizer operation, and a competent maintenance program catches them before anyone in the building feels it. Check sensor calibration and setup, not just damper travel; configuration errors show up as erratic opening and closing, not only as a damper stuck open. Economizers are also the source of fresh ventilation air for occupants, so improper setup contributes to indoor air quality problems as well as to year-round efficiency loss.

DATE / INITIALS

☐ Heat exchanger inspection (gas heat units)

Cracked heat exchangers allow combustion gases to enter the supply air stream. This is a life-safety issue. Heat exchanger inspection is not optional on any gas-fired system.

DATE / INITIALS

☐ Flue and venting inspection (gas heat units)

Inspect vent pipes and connections for proper pitch, clearances, and condition. Blocked or deteriorated venting is a carbon monoxide risk.

DATE / INITIALS

☐ Gas valve and burner inspection and cleaning

Inspect burner assembly for proper ignition, flame pattern, and combustion. Dirty or misaligned burners reduce heating efficiency and increase operating costs.

DATE / INITIALS

A PM inspection without documentation is not a PM inspection — it is a site visit. Documentation is the mechanism by which preventive maintenance generates value for the building owner and facilities manager over time.

☐ Equipment condition log updated at each visit

The contractor should maintain a running service log per unit, noting observations, measurements, parts replaced, and recommendations. This log is the paper trail that makes equipment lifecycle decisions possible.

DATE / INITIALS

☐ Refrigerant usage and charge records (regulatory compliance)

Required under California regulations for applicable systems. The contractor is responsible for maintaining compliant records.

DATE / INITIALS

☐ Deferred maintenance items documented with cost estimates

Items that are noted but deferred should be written up with estimated costs. This allows the facilities team to plan and budget — and prevents deferred items from becoming emergency events.

DATE / INITIALS

☐ Equipment performance trend data (recommended)

Where systems are inspected quarterly, tracking key measurements (discharge pressure, amp draw, temperature differential) over time provides early-warning indicators of developing problems.

DATE / INITIALS

☐ Annual equipment condition summary provided

At minimum annually, the contractor should provide a summary of the overall condition of the covered equipment, with replacement recommendations where applicable. This input belongs in the capital expenditure planning process.

DATE / INITIALS

06 INSPECTION INTERVALS BY SYSTEM TYPE

Not all commercial HVAC equipment requires identical inspection frequency. Use this as a baseline reference.

SYSTEM TYPE	RECOMMENDED INTERVAL	NOTES
Rooftop Units (RTUs) — commercial retail	Quarterly	Higher-wear environment; filter intervals may be shorter in high-traffic retail
Split Systems — commercial	Semi-annual minimum / quarterly preferred	Quarterly justified where systems run extended hours
Air Handling Units (AHUs) — large commercial	Quarterly	Complexity and consequence of failure warrants quarterly minimum
Chillers — commercial/industrial	Quarterly + annual full service	Chiller scope is distinct; confirm specific intervals with contractor
Gas-fired heating units	Seasonal (pre-heating season) minimum	Heat exchanger inspection non-negotiable before each heating season
Building Automation Systems (BAS)	Annual calibration minimum	More frequent for complex controls environments

HOW TO USE THIS CHECKLIST

To evaluate your current vendor: Review this checklist against the scope documented in your current service agreement. If your vendor's scope document does not address the items in Sections 2, 3, and 5 specifically — refrigerant system health, electrical components, and documentation — you have a gap worth addressing before it becomes a failure event.

To scope a new PM contract: Use this checklist as a baseline for what to request when issuing a PM contract RFP or requesting a proposal from a commercial HVAC contractor. Any credentialed commercial contractor should be able to map their standard scope to these items.

To brief your facilities team: Multi-location operators often have facilities staff who interact with HVAC contractors but are not HVAC technicians. This checklist gives them a structured reference for what a completed quarterly inspection should include and what documentation they should expect to receive.

ABOUT MONZO HVAC

Monzo HVAC Consulting, Inc. has provided commercial and industrial HVAC service across the SF Bay Area and Northern California for over 30 years. We know Bay Area commercial HVAC because we have lived here and done this

work for three decades. Family-owned and operated by Ron Monzo. Licensed (CA Lic. #1140108), insured, OSHA-compliant and BBB-accredited.

Service lines: Preventive maintenance contracts · Equipment replacement and changeouts · New system installation · Emergency repair · Sheet metal and ductwork · Building automation and controls · Government and public works

For multi-location operators: One master service agreement covering your entire portfolio, standardized scope across every location, and consolidated reporting.

Current PM contract holders receive: Annual equipment condition reports · Documented service history per unit · A single point of contact for all HVAC needs across all covered locations

READY TO AUDIT YOUR HVAC PROGRAM?

Then take these next steps:

1. **Audit your current program.** Review this checklist against the scope in your existing service agreement. Which items are covered? Which are missing?
2. **Ask your vendor.** Request specific documentation of what's included in your quarterly visits. A strong vendor should provide detailed scope definitions and a track record of what they've documented at each location.
3. **Calculate the gap.** The cost of filling PM gaps is measured in hundreds of dollars per location per quarter. The cost of an emergency RTU replacement is measured in thousands — during peak season when your business is most vulnerable.
4. **Make the call.** A Free Site Review will show whether your current maintenance is genuinely preventive or just reactive service disguised as maintenance.

ASK FOR A FREE SITE REVIEW

If you held this checklist against your current program and found gaps, call (925) 644-8192 and ask for a Free Site Review.

One visit, no charge. We map the roof, check belt and filter condition and sizes, assess the static condition of every component, and where we can, bump-test each unit to confirm it starts and runs. You walk away with a written report of the pain points and the glaring gaps in your current program.

That is the same question this checklist asks, answered on your roof: which of these checkpoints your current program is actually covering. The instrumented items above (pressures, superheat and subcooling, amp draws) are not part of the free visit.

If you already know what you have and want numbers rather than a survey — refrigerant pressures and temperatures, amp draws, cleanings — that is a comprehensive maintenance visit, and we scope it to a budget you set.

Call: (925) 644-8192

Online: getmonzohvac.com/pm

Location: Concord, CA — Serving the SF Bay Area and Northern California