

Supermarket Refrigeration & HVAC Leak Inspection Checklist

Site / Project	_____	Address	_____
Inspector name	_____	Company	_____
Date	_____	Time	_____

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

Refrigerant Leak Detection & Alarm Systems

☐ Verify refrigerant alarm system is functional and calibrated per manufacturer's specifications. Test alarm response time.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Confirm refrigerant sensors are correctly positioned in walk-in coolers and machine rooms, as per ASHRAE 15 guidelines.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Ensure refrigerant alarms are audible throughout the store and connected to a central monitoring system.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Inspect battery backup for refrigerant alarm system; verify it provides at least 24 hours of power in case of outage.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Verify refrigerant type used matches the sensor calibration and system design specifications. Document refrigerant type.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Review maintenance records for refrigerant alarm system; confirm annual calibration and functional testing are up-to-date.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Inspect the calibration date on each refrigerant sensor. Recalibrate if overdue according to manufacturer's recommendations.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐ Confirm a written procedure exists for responding to refrigerant alarms, including evacuation protocols and emergency contact information. Post procedure clearly.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Verify that a refrigerant usage log is maintained, documenting additions, removals, and leak repairs, as required by EPA regulations.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect refrigerant recovery equipment for proper functionality and certification. Ensure technicians are trained in its use.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Walk-in Cooler & Freezer Inspection

☐	Measure oxygen levels inside walk-in coolers using a calibrated oxygen meter. Ensure levels are above 19.5%.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect walk-in cooler door seals for damage or deterioration. Replace if compromised to prevent refrigerant leaks and maintain temperature.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Examine evaporator coils for ice buildup, corrosion, and cleanliness. Clean coils as needed to maintain efficiency and prevent mold growth.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify interior lighting in walk-in coolers is functional and provides adequate illumination for safe operation.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure emergency exit mechanisms inside walk-in coolers are functional and unobstructed. Test the release mechanism.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect floors inside walk-in coolers for ice buildup, spills, and damage. Address hazards to prevent slips and falls.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify temperature monitoring systems are functional and accurate. Calibrate thermometers regularly.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect condensate drain lines for clogs or leaks. Ensure proper drainage to prevent water accumulation and mold growth.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm proper signage is in place, including warnings about low oxygen levels and emergency exit instructions.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify proper air circulation within the walk-in cooler to prevent temperature stratification and ensure even cooling.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Condenser & HVAC Unit Inspection

☐	Inspect condenser units for refrigerant leaks using an electronic leak detector. Pay close attention to connections and welds.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify condenser fan operation; ensure fans are free from obstructions and operating at the correct speed.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Inspect condenser coils for dirt, debris, and corrosion. Clean coils as needed to maintain efficiency.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Examine electrical connections for tightness and corrosion. Ensure wiring is properly insulated and protected.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify condenser units are securely mounted and properly supported to prevent vibration and damage.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect condensate drainage from HVAC units; ensure proper drainage to prevent water accumulation and mold growth.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure adequate access is maintained around condenser and HVAC units for maintenance and repairs. Clear obstructions.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect pressure relief valves on refrigeration systems to ensure they are not corroded or obstructed. Verify proper operation.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Check compressor oil levels (if applicable) and ensure they are within the manufacturer's recommended range.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect vibration dampening pads or mounts on compressors and other equipment to ensure they are in good condition.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Personal Protective Equipment (PPE)

☐	Verify technicians wear appropriate safety glasses or face shields when working on refrigeration systems.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure technicians wear chemical-resistant gloves when handling refrigerants or cleaning coils.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm technicians have access to and are trained in the use of appropriate respiratory protection (e.g., SCBA) when working in areas with potential refrigerant leaks or oxygen displacement.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify technicians wear hearing protection when working near noisy equipment (e.g., compressors).	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure technicians wear appropriate protective clothing (e.g., long sleeves, pants) to protect against skin contact with refrigerants or chemicals.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify technicians wear safety shoes with slip-resistant soles when working in areas with potential slip hazards.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐ Inspect PPE for damage or defects before each use.
Replace damaged PPE immediately. ☐ Pass ☐ Fail ☐ N/A Notes: _____

☐ Confirm technicians have received adequate training on
the proper use, maintenance, and storage of PPE. ☐ Pass ☐ Fail ☐ N/A Notes: _____

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____

Name _____

Date _____