

Preventive Maintenance

For Walk-In Refrigeration Systems



Most refrigeration failures are not sudden. They result from small, preventable issues that go unchecked. A consistent maintenance program reduces compressor strain, improves system stability, and extends equipment life. Perform the following at least every six months:



***V*Airflow and Heat Transfer**

- Confirm all evaporator and condenser fan motors and blades are operating properly
- Inspect evaporator and condenser coils for cleanliness, damage, and airflow restrictions
- Ensure no obstructions are limiting airflow around equipment



***R*efrigerant Circuit Integrity**

- Confirm all refrigerant line connections (roto-lock and flare fittings) are torqued to manufacturer specifications
- Inspect suction lines for insulation damage, oil residue, or signs of refrigerant leaks
- Verify proper refrigerant charge and system performance under operating conditions (qualified personnel)



***M*echanical System Health**

- Evaluate compressor operation (amperage, sound, vibration, oil condition, cycling behavior)
- Inspect system components for wear or improper operation (fans, heaters, etc.)



***E*lectrical Integrity**

- Inspect and tighten electrical connections per safety and lockout procedures
- Verify voltage supply is within acceptable range and stable



***C*ontrols and System Protection**

- Validate dual pressure control settings for proper cut-in and cut-out operation
- Check thermistor and transducer accuracy (if applicable)
- Confirm defrost strategy is properly set (demand-based or scheduled as required)



***D*rainage and Freeze Protection**

- Clear and flush condensate drain lines
- Verify drain line heaters are operational in freezer applications



***W*alk-In Integrity and System Interaction**

- Inspect door hardware, gaskets, and heaters for proper sealing and operation
- Ensure walk-in lights are off when not in use to reduce heat load
- Verify box condition meets manufacturer specifications (panels, seals, overall integrity)

Consistent execution of this checklist improves efficiency, reduces service calls, and ensures the system performs as designed.

Questions about your RDT Equipment?
techsupport@rdtonline.com | 972-937-3215 option 2