

10-POINT COLD ROOM REFRIGERANT LEAK PREVENTION CHECKLIST

Identify potential leak risks before they become expensive repairs.

Cold Room Ref / ID:

Inspection Date:

Audited By (Name):

1. MECHANICAL VIBRATIONS & PIPEWORK INTERFACE

1. Copper Line Roughening & Friction Points

Verify that refrigerant lines do not make direct contact with structural panels or wall frames to eliminate harmonic wear.

2. Pipework Support Clamp Inserts

Examine rubber cushioning inside all pipe clamps to confirm they are intact and absorbing system circuit movements.

3. Compressor Anti-Vibration Pads

Audit rubber isolation feet beneath the compressor housing to prevent structural stress from fracturing connections.

2. VISUAL JOINT DIAGNOSTICS & PHYSICAL INSPECTION

4. Oil Resurrections & Staining Audit

Inspect all brazed copper connections and mechanical flare joints for oily residues, which indicate a refrigerant breach.

5. Valve Cap Seals & Schrader Clearances

Ensure all service port valves are fitted with secure brass caps and internal rubber seals to eliminate micro-leaks.

6. Sight Glass Bubbling Configurations

Monitor the liquid line sight glass during active load periods; continuous bubbling signals a potential drop in charge volume.

3. ENVIRONMENTAL & THERMAL LOAD FACTORS

7. Coil Frost Buildup Defrost Cycles

Audit evaporator fins for excessive ice buildup boundaries. Unmanaged weight blocks strain internal line joints.

8. Condenser Fin Thermal Cleansing

Keep condenser coils free of baked-on debris to prevent head pressures and operating temperatures from spiking.

4. TELEMETRIC SAFETY & QUOTA COMPLIANCE

9. Dual-Stage Alarm Leak Sensors

Verify local electronic leak detection alarms are powered, unblocked, and properly calibrated to catch gas drift.

10. Low-GWP F-Gas Log Documentation

Record suction and liquid pressure readings to ensure the installation matches F-Gas compliance guidelines.

TECHNICAL VERIFICATION MATRIX

Engineer Sign:		Manager Sign:	
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Protect your cold-chain infrastructure with optimized acoustic, leak-safe, and thermodynamic systems.

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