

FREE RESOURCE



Restaurant Walk-In Freezer Specification Checklist

Avoid costly structural & mechanical mistakes before ordering

Value Proposition: A printable 10-step checklist to help restaurant owners, operational managers, and facility planners successfully avoid expensive sizing, electrical, and efficiency errors during procurement.

1. Location & Space Configuration Analytics

Measure accurate physical dimensions (length, width, height) including a minimum 2-inch clearance from existing walls for proper airflow, ceiling clearance for top-mount compressors, and structural floor weight capacity.

2. Insulation Performance & Panel Thickness (R-Value)

Confirm code-mandated R-values (typically R-32 or higher for freezers). Insist on 4-inch thick foamed-in-place polyurethane insulation to drastically reduce ambient heat penetration and optimize daily energy consumption.

3. Floor Specification & Thermal Breaks

Specify an insulated floor if installing on concrete at grade or above subterranean spaces. Ensure proper thermal structural breaks are designed to stop foundational shifting, underfloor frost heave, and sub-floor structural damage.

4. Refrigeration System Sizing & Condenser Location

Calculate Total Heat Load (BTU/h) based on product volume, daily throughput, and target holding temperatures (-10°F). Determine if air-cooled or water-cooled units are optimal, and choose between indoor remote, outdoor remote, or self-contained layouts.

5. Door Seals, Gaskets, & Heavy-Duty Hardware

Validate magnetic gasket seating along the entire perimeter. Select institutional-grade, self-closing, cam-lift hinges with a secure latching system, interior safety release mechanism, and high-strength plastic/metal kick-plates.

6. Electrical Profiles & Dedicated Power Supply

Document exact voltage requirements (115V, 208V, or 230V; single or three-phase setups). Verify that your commercial kitchen grid features dedicated circuit breakers that align perfectly with the compressor's Minimum Circuit Ampacity (MCA).

7. Vapor Proof Lighting & Energy Management Sensors

Specify shatterproof, high-efficiency LED fixtures certified for low-temperature operation. Ensure operational occupancy sensors, automated high-temperature threshold alarms, and external digital temperature indicators are specified.

8. Internal Airflow & Storage Rack Layouts

Incorporate NSF-approved, corrosion-resistant wire shelving systems. Design the interior footprint to leave a strict 6-inch wall clearance and 12-inch ceiling clearance, maintaining consistent convective airflow and preventing localized hot spots.

9. Condensate Drain Lines & Heated Runout Pipes

Map out the gravity-fed drain line routing to an open floor sink. Mandate a copper drain line wrapped with a continuous, functioning heater cable (heat tape) to eliminate standing water freeze-ups and interior icing hazards.

10. Regulatory Compliance & Local Permits

Ensure the system displays official NSF/ANSI Standard 7 approvals, UL listings for electrical safety, and adheres to the Energy Independence and Security Act (EISA) guidelines. Verify structural code constraints before professional installation.

Keep this checklist on hand during vendor consultations to safeguard your kitchen layout against premature compressor burnout, operational line down-time, and costly structural renovations.