

R-290 Service Provider Vetting & Readiness Guide for FMs

R-290 refrigerant is efficient and environmentally friendly -but it's highly flammable and requires a fundamentally different approach to maintenance and service. The wrong service provider can put your staff, customers, and equipment at risk. With this toolkit, facility managers can confidently select service providers who are **fully equipped, trained, and compliant**, protecting people, equipment, and operations while maximizing the benefits of R-290 refrigerant.

1. Technician Qualifications

-] Must have **formal R-290/hydrocarbon refrigerant training** (RSES, manufacturer-specific, or equivalent).
-] Certification should be **current and documented**—don't rely on generic HVAC experience.
-] Technicians should be familiar with **sealed systems**, small-charge handling, and diagnostic procedures unique to R-290 equipment.
-] Bonus: vendors who maintain **internal safety audits or ongoing R-290 training** demonstrate commitment to best practices.

2. Tools & Safety Gear

-] Must use **hydrocarbon-rated leak detectors, vacuum pumps, and recovery cylinders**.
-] Electrical tools and connectors must be **spark-proof and UL/IEC approved**.
-] Technicians should follow **formal ventilation protocols** and have emergency plans in place.
-] Proper labeling and placarding should be applied at the worksite to warn staff of flammable refrigerant service.

3. Vendor Experience & Track Record

-] Ask vendors for **recent R-290 projects**, ideally in commercial beverage or ice machine environments.
-] Verify familiarity with **store-specific environments**: QSRs, cafés, grocery stores, convenience stores.
-] Seek references or case studies showing the vendor **handled emergencies, component replacements, and preventive maintenance** for R-290 systems safely.

4. Service Protocols & Maintenance Planning

-] Confirm vendors provide **written R-290 safety procedures**.
-] Evaluate their **preventive maintenance plans**: coil cleaning, electrical inspection, refrigerant leak monitoring.
-] Ask how they handle **sealed component failures** (compressor or evaporator replacement vs. repair).
-] Ensure your contract covers **emergency response, safety compliance, and accountability**.

5. Budget Considerations

-] Specialized training, tools, and protocols may affect hourly rates—plan accordingly.
-] OEM replacement parts are required for sealed systems; generic parts can be unsafe and void warranties.
-] Factor in **preventive maintenance vs. reactive service**; proactive care reduces costly downtime and safety risks.

6. Red Flags to Watch For

-] Technicians unwilling to show R-290 training or certification.
-] Use of standard HVAC tools or non-hydrocarbon leak detectors.
-] Lack of formal safety procedures, ventilation plans, or emergency response protocols.
-] No experience with sealed-system R-290 units in commercial beverage or ice equipment.

7. Action Steps for Facility Managers

1. Use this guide to **screen potential vendors** before signing contracts.
2. Ask detailed **questions during interviews or site visits**.
3. **Document all certifications, protocols, and safety compliance**.
4. Establish **internal awareness**: staff should recognize R-290 systems, warning labels, and emergency protocols.