



COOLCHANGE

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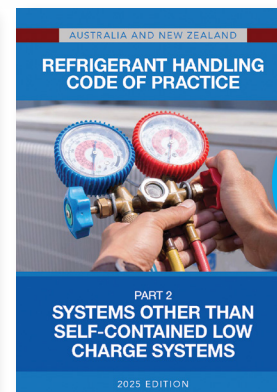
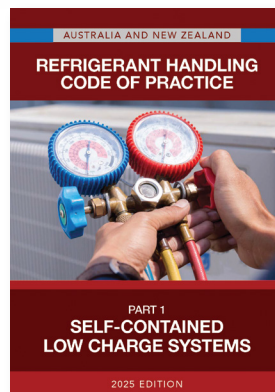
Be part of the energy workforce
transformation in Australia

What's On



New Code of Practice 2025: A must read for all technicians

The Australian and New Zealand Refrigerant Handling Codes of Practice 2025 for stationary refrigeration (including transport refrigeration) are now available.



These codes provide essential guidance for air conditioning and refrigeration technicians and are mandatory for those holding a refrigerant handling licence or refrigerant trading authorisation through the Australian Refrigeration Council.

The new codes cover the entire system life-cycle: design, manufacture, shipping, installation, commissioning, servicing, decommissioning, and refrigerant recovery. Part 1 addresses self-contained low charge systems, while Part 2 covers all other stationary and transport refrigeration and air conditioning systems.

“The codes are freely available on the ARCTick website,” says ARC CEO Glenn Evans, “and they are essential reading for all technicians. Apprentices receive copies of the codes through their TAFE or RTO, but for those who have been in the field for a while, it’s important to check you are referring to the latest codes and standards, and that you have considered all aspects of working with today’s technologies.

“These codes are best-practice guides for avoiding emissions of refrigerants. They will help you do your job and protect the environment.”

You can find the electronic copies for the new Code of Practice here:
<https://arctick.org/refrigerant-handling-licence/codes-of-practice/>

To place an order of a print copy, please contact ARC via the contact form at <https://arctick.org/contact-us> or call us at 1300 88 44 83



New automotive qualifications recognised for Refrigerant Handling Licence (RHL)

The Department of Climate Change, Energy, the Environment and Water has amended its regulations to reflect required automotive qualifications for automotive industry professionals who require a licence to handle refrigerants safely.

The following automotive qualifications are now recognised for granting a RHL under the *Ozone Protection and Synthetic Greenhouse Gas Management (Refrigerant Handling Licences – Qualifications and Standards) Amendment Determination 2025*:

- *AUR32721 Certificate III in Automotive Electric Vehicle Technology*, if the unit *AURETU104 Diagnose and Repair Air Conditioning and HVAC Components* is completed (either as part of or in addition to the qualification).
- *AUR32120 Certificate III in Automotive Body Repair Technology*, if the units *AURETU103 Service air conditioning and HVAC systems* and *AURETU104 Diagnose and repair air conditioning and HVAC components* are completed (either as part of or in addition to the qualification).

The issues relating to these qualifications were raised with the department by the sector's Industry Advisory group. The changes reflect the evolving needs of the automotive and air conditioning industries, especially with the growing presence of electric vehicles. The changes ensure that industry professionals are equipped with the proper qualifications to safely handle refrigerants in a variety of systems.



For a complete list of recognised qualifications, visit <https://arctick.org/refrigerant-handling-licence/licence-types/>

Improved guidance on pair coils

The updated Stationary Australia and New Zealand Refrigeration Handling Code of Practice 2025 – Parts 1 and 2 include more detail on best practice pipework installation and maintenance, such as bending pre-insulated pipe. Following this guidance will reduce the likelihood of issues with pair coil.

In 2023, the Department of Climate Change, Energy, the Environment and Water (DCCEEW) convened two advisory group workshops with industry peak bodies including suppliers, installers, and other experts on the concerns of leaking pair coil. The ACCC attended the advisory group to highlight the rights of technicians as consumers.

DCCEEW also conducted an industry survey on pair coil issues, including questions on pair coil brand and specific issues observed. The survey results showed technicians had concerns with a range of different types of pair coil on the market, with no one brand or style of pair coil identified as more at fault.

Following the workshops, the advisory group recommended that pair coil issues were deemed to be a contractual issue best raised with the manufacturer of the pair coil.



Watch out: Contamination of R-1234yf with R-134a

The contamination of R-1234yf refrigerant with R-134a in the automotive industry is becoming a key issue for technicians and consumers to watch.



Not only does using the wrong refrigerant impact system performance and efficiency, but it also violates regulations. Charging a low-GWP (Global Warming Potential) system with an HFC refrigerant like R-134a is an offence, and technicians must remain compliant to avoid penalties and ensure the integrity of the systems they service.

Technicians are reminded to always check that the refrigerant used matches the system's requirements. This simple step plays a huge role in protecting both the environment and the performance of the vehicle's air conditioning system.

By staying vigilant and adhering to the correct procedures, you're doing your part to prevent contamination, stay compliant with regulations, and contribute to a sustainable future for the automotive industry.

From recovery to safe disposal: The journey of recovered refrigerant gas

The recovery of refrigerant gas is essential to the operation of the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC&R) sector, and their environmental impact requires responsible management.

Understanding the critical importance of handling refrigerants, including hydrofluorocarbons (HFCs) and ozone-depleting substances (ODS), powerful greenhouse gases, and their journey is crucial to ensuring the proper return of used refrigerants for reclamation and destruction.

This process is not only a regulatory requirement but also a cornerstone of industry best practices and environmental responsibility.

Australia's Lifecycle Refrigerant Management system exemplifies how industry collaboration can minimise the environmental impact of refrigerants throughout their life cycle. This process ensures every stage from import, use, recovery, reclamation, and destruction is tightly regulated and supported by an efficient reverse supply chain.

As of December 2024, the recovery of refrigerant has prevented 19.3 million tonnes of CO₂-e from being emitted. RRA proudly marked this milestone together with industry, highlighting this achievement has also safeguarded more than 10 million tonnes of stratospheric ozone from destruction.

Refrigerants are imported under a quota issued by Department of Climate Change, Energy, the Environment and Water (DCCEEW) and distributed by wholesalers and refrigerant suppliers who hold Australian Refrigeration Council (ARC) Refrigerant Trading Authorisations (RTAs). During routine maintenance or system decommissioning, licensed technicians are required to recover used refrigerant using approved methods and equipment.

It is a condition of a RTA that the holder accepts any surrendered refrigerant, including recovered refrigerant that is presented to them.

Wholesalers and refrigerant suppliers can either retain the product for reclamation, which is the process of using specialised equipment to return the refrigerant to brand-new specifications for resale or send it back to RRA for safe disposal.

When refrigerant is returned for destruction, it undergoes pyrolysis, a high-temperature process that breaks down individual molecules. The atoms then recombine into salts, water, and carbon dioxide, which are safely disposed of. This destruction process ensures the breakdown of harmful substances, achieving destruction and removal efficiencies of at least 99.99%.

Technicians are central to this process and to Life Cycle Refrigerant Management. Their expertise and commitment to recovering refrigerant responsibly ensures minimal leakage and safe handling. The cooperation between licensing bodies, technicians, wholesalers, and RRA reinforces the system's effectiveness.

Returning refrigerant gas is not just about compliance, it's about protecting the environment for future generations and showcasing the industry's dedication to sustainable practices. Together, we can make sure that every kilogram of refrigerant is managed responsibly, contributing to a cleaner, safer planet.

If you encounter issues returning recovered refrigerant, contact RRA at info@refrigerantreclaim.com.au

A yellow refrigerant cylinder is the central focus, surrounded by vibrant green foliage and a butterfly. The words 'RECOVERED REFRIGERANT' are printed on the cylinder. Below the cylinder, the text 'EVERY KG COUNTS' is written in a large, white, curved font. The background is dark green with white clouds.

REFRIGERANT RECLAIM AUSTRALIA

RRA, TOGETHER WITH THE HVAC INDUSTRY, HAS RECOVERED OVER 10,000,000KG OF REFRIGERANT, MAKING A MEANINGFUL IMPACT IN PROTECTING OUR PLANET AND THE OZONE LAYER.

LET'S KEEP IT UP.

+61 2 6230 5244
REFRIGERANTRECLAIM.COM.AU

BY THE NUMBERS

ARC Licence Scheme 2024-25: A year in review

Permit Numbers

▲ 614 RTA
▲ 2,762 RHL

increase in permit numbers



■ Up until December 2024
■ January-March 2025

28,644 29,258

Refrigerant Trading Authorisation (RTA)

123,080 125,842

Refrigerant Handling Licence (RHL)

Field engagement

A total of
2,257

Audits Conducted



36%



64%

■ Audits: Compliant at Audit
■ Audits: Non-compliant at Audit



Have you watched the video?

Watch the summer campaign video highlighting the importance of licenced technicians for consumers



Summer Campaign



'Look for the tick' website visits are up

▲ 62%
from last year

127K
website visits

11K
RHL licence checks

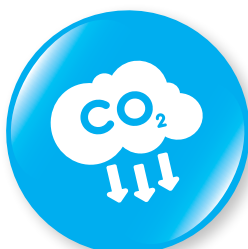
17K
authorised business searches

'Look for the tick' search function use



Scan the QR code to find out more

19.3 million tonnes



Total CO₂ tonnes of emissions prevented as of December 2024 through refrigerant recovery

Low GWP and flammable refrigerants training opportunities

To help RAC technicians stay compliant with evolving refrigerant standards, two key training roadshows are being offered in 2025.

Actrol is hosting a series of 1.5-hour seminars and toolbox talks nationwide, covering the Kigali Amendment, low GWP refrigerants, and safety classifications such as A2L. These sessions also help clarify misconceptions about refrigerant charge limits under AS 5149.

Upcoming seminars will be held in Lismore, Sunshine Coast, Gladstone, and Rockhampton. For details, contact your local **Actrol** branch.

Beijer Ref Academy, in partnership with Superior Training Centre, is also running a nationwide roadshow from May to November. These sessions will help technicians become accredited in handling A2, A2L, and A3 refrigerants. The course, which covers best practices for servicing and installing flammable refrigerant systems, is nationally recognised.

Key training dates include:

- **Geebung:** 8-9 May 2025
- **Townsville:** 14-15 May 2025

Additional locations will be available across Australia throughout the year.

To register, email academy@beijerref.au or visit: <http://unbouncepages.com/beijerrefacademy/>

Both training programs are great opportunities to upskill and stay compliant with the latest refrigerant standards.



Supporting new apprentices and trainees: How ASA can help

If your business has recently hired a new apprentice or trainee, Apprenticeship Support Australia (ASA) can assist with the sign-up process and provide ongoing support throughout their program.

ASA offers comprehensive services to ensure that the recruitment and training of your apprentices and trainees is as smooth as possible. Their team can guide you through the paperwork, provide expert advice, and help keep your new apprentice engaged, supporting their successful completion of the program.

Key Benefits of ASA Support

- **Personalised Guidance:** ASA provides tailored advice to ensure that you and your apprentices are supported from recruitment through to the completion of their training.
- **Streamlined Process:** ASA will come directly to your workplace to manage the sign-up process, handling all the necessary paperwork on your behalf.
- **Government Incentives:** ASA can help you access government-funded incentives that may be available to support your apprentice or trainee.
- **Ongoing Support:** ASA offers mentoring and troubleshooting assistance to both employers and apprentices, helping to overcome challenges during the training period.

Best of all, ASA's services are funded by the Australian Government and provided at no cost to your business.

For businesses looking to support the next generation of skilled workers, partnering with Apprenticeship Support Australia can be a valuable step in building a skilled workforce for the future. For details, visit <https://www.apprenticeshipsupport.com.au/Employers/Register-to-access-funding>.

High GWP small AC ban extends to multi-head systems

From 1 July 2025, the domestic manufacture and importation of small multi-head split air conditioning systems that use a hydrofluorocarbon (HFC) refrigerant with a global warming potential (GWP) over 750 will be banned in Australia.

The ban on high GWP small multi-head systems follows similar restrictions on small single-head split system, portable and window/wall air conditioners that started on 1 July 2024.

These bans mean that new equipment of these types using R-410A (GWP 2,088) or R-134A (GWP 1,430) cannot be imported, except under a licence exemption or in certain limited cases when a licence may be issued. Most equipment in these categories is now using R32 (GWP 675), or for small portable air conditioners, R-290 (propane).

The bans support the HFC phase-down by reducing future demand for higher GWP HFCs to service equipment, and remove outdated, climate damaging air conditioning models from the Australian market.

The ban starting in July 2025 applies to outdoor units for multi-head split systems, including variable refrigerant flow systems, if the equipment:

- is designed to be used to cool or heat, or both, a stationary space primarily for human comfort
- has a standard refrigerant charge of 2.6 kg or less (based on the compliance/rating plate)
- is designed to operate with an HFC refrigerant with a GWP of more than 750 (whether or not the unit is charged with refrigerant when imported).

Technicians working with air conditioning equipment don't need to do anything differently. Existing installed equipment won't be affected, and equipment imported or manufactured before 1 July 2025 may be sold and installed after that date.



If you have any information that banned equipment is being imported, report it via the **Online perceived breach reporting form**.



Evacuation of stationary RAC systems

Ensuring proper evacuation of refrigeration and air conditioning systems is crucial to remove non-condensables and moisture before adding refrigerant. Using a high vacuum pump to evacuate the system lowers the system's pressure, causing moisture to boil off and be removed, along with any non-condensables.

Boiling temperature of water at different pressures:

- At atmospheric pressure (0 kPa gauge), water boils at 100°C
- At 17,300 microns (-99 kPa gauge), water boils at 20°C
- At 500 microns, water boils at -29°C

So, what pressure should the system be evacuated to?

According to the *Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995*, evacuation requirements are outlined in key industry standards:

1. **AS/NZS 5149.4:2016 Refrigerating Systems and Heat Pumps – Safety and Environmental Requirements** specifies that the system should be evacuated to less than 132 Pa (990 microns) absolute pressure during the refrigerant type change.
2. **Australia and New Zealand Refrigerant Handling Code of Practice 2025 (Part 2)** outlines procedures for evacuation before charging a system, including during commissioning, repairs, or refrigerant removal. Key points:
 - Evacuation should be done using dedicated hoses and vacuum gauges, not service manifolds/gauges.
 - Evacuation methods: Deep evacuation method or triple evacuation method using oxygen-free nitrogen (OFN).
 - Required Vacuum: Both methods require the system to be evacuated to at least 500 microns/67Pa absolute. Then allow the system to stand for 60 minutes during which the vacuum must not rise above 600 microns/80Pa absolute to ensure the system's tightness and moisture removal.

By adhering to these procedures, technicians can maintain system efficiency, prevent contamination and ensure compliance with industry standards.



Samples of Electronic Vacuum Gauges

Be part of the energy workforce transformation in Australia



The 2025 Energy Workforce and Skills Survey by Powering Skills Organisation (PSO) aims to identify the challenges and opportunities in building the skilled workforce needed to meet Australia's Net Zero goals.

Your input will directly inform the 2025 Energy Sector Workforce Plan and guide key initiatives like the VET Workforce Blueprint Project. The survey, open to anyone in the energy sector, including RAC workforce, takes just 10 to 30 minutes to complete. PSO encourages candid feedback to help shape the future of the workforce, ensuring it's ready for the transition to a low-carbon economy. Responses will remain confidential, and PSO may follow up with participants to discuss further. Your insights will help create a workforce that drives Australia's energy future.



Scan the QR code or click the link to take the survey: **Powering Skills Organisation – 2025 Energy Workforce and Skills Survey.**



What's on

02 June 2025 RWTA - QLD Golf Day 2025

Brisbane Golf Club, 70 Tennyson Memorial Ave, Yeerongpilly QLD. Forge valuable connections, mingle with cold chain industry leaders and pioneers from across Australia, and expand your industry and professional knowledge in the relaxed atmosphere of a golf day. Details at <https://rwta-membership.com.au/event-5958424>.

24 July 2025 AIRAH Sydney 2025 Industry Night

Royal Randwick Racecourse, Sydney. Join AIRAH's Sydney Industry Night to learn, network, and discover recent trends and technology in the Australian HVAC&R industry. Details at <https://industry nights.airah.org.au/2025-events/sydney/>.

30 July 2025 FMA WA Conference 2025

Pan Pacific Perth – Grand River Ballroom, Perth WA. Join the WA Branch Committee at their annual conference hearing from guest speakers presenting on this years theme 'Smart Buildings: The Next Generation of FM'. Details at https://fma.com.au/Web/Web/Events/Event_Display.aspx?EventKey=BW1460.

10-12 August 2025 RWTA Conference and Exhibition, Gold Coast QLD

The Langham, Gold Coast, QLD. With the theme of 'Advancing Cold Chain Resilience: Strategic Innovations and Sustainable Growth' this transformative event explores latest advancements and strategies shaping the future of the cold chain industry. Details at <https://www.rwta.com.au/events-source/rwta-conference-and-exhibition-the-langham-gold-coast-qld>.