



TYPE3

- Low-pressure appliances must be evacuated to 25 mm Hg absolute, a deep vacuum roughly equal to 29 inches of mercury vacuum. [40 CFR §82.156](#)
- HCFC-123 is a classic low-pressure chiller refrigerant, along with CFC-11 and the newer HFO R-1233zd. [40 CFR §82.152](#)
- Since the low side runs below atmospheric pressure, a leak pulls air and moisture inward rather than pushing refrigerant out.
- A rising purge rate means air is leaking into the vacuum side of the chiller, so the purge unit runs more often to remove it.
- Circulating warm water through the chiller tubes gently raises refrigerant temperature and speeds recovery without risk.
- A float valve meters refrigerant flow to maintain the proper level in a low-pressure chiller.
- R-1233zd is a low-global-warming-potential HFO refrigerant used as a replacement for HCFC-123 in new low-pressure chillers.

TYPE1

- Bolt-on saddle piercing valves rely on a rubber gasket that can dry out or degrade over time, creating a slow leak.
- Type I certification covers the service and disposal of small appliances. [40 CFR §82.161](#)
- Refrigerant recovered on site may generally be recycled and returned to equipment owned by the same owner.

TYPE2

- DOT refrigerant recovery cylinders must be hydrostatically retested every **5 years** to confirm they can safely hold pressure.
- The standard color scheme for a refrigerant recovery cylinder is a gray body with a yellow top (shoulder).
- A standing pressure test that holds steady over time (after correcting for temperature changes) indicates no detectable leak.

RECOVERY RECYCLING

- Recovery is removing refrigerant from an appliance and putting it into a container in any condition, with no processing. [40 CFR §82.152](#)
- Only an EPA-certified reclaimer may reprocess refrigerant to AHRI 700 purity and resell it.
- The fill level must be determined by weighing the cylinder on a scale, since the 80 percent limit is by weight.

