Attention Property Managers: Important information to help you take control of your HVAC needs.

Trane is Your Reliable Source for Information and Options for Transitioning from R-22

Use of R-22 in HVAC Systems is Coming to an End

- R-22 refrigerant will be 99.5% phased out in use in commercial and residential HVAC products by 2020. In 2015, consumption was reduced by 90%.
- Phase out dates were set for all ozone-depleting substances as part of the Montreal Protocol of 1987. The Environmental Protection Agency (EPA) declared R-22 refrigerant an ozone-depleting substance.
- Manufacturers were ordered to stop producing R-22 condensing units as of 2010.
- The current refrigerant replacement for R-22 is R410A.



Consider Your Options

If you have existing HVAC systems that use R-22 or are close to the end of their operational lifecycle, you have three options:

Leave in Place: Your aging system will require more maintenance. The increasing cost of R22 refrigerant, as well as the parts for maintenance repair, will cause longer downtime and higher maintenance expenses.

Convert: Try and convert to an alternative refrigerant. (Some examples of alternative refrigerants are R-407c, R-421a, R-438A or R422B) These refrigerants are not designed for a system with R-22, and operating efficiency and reliability will be greatly affected.

Replace: For peak performance and immediate and long-term return on your investment, transitioning to new equipment with today's refrigerant sooner rather than later **makes the most sense**.

Benefits of Installing A New Condensing Unit

Energy Efficiency. New systems are designed to be more energy efficient. Installing one will reduce energy consumption and increase your residents' comfort and satisfaction.

Warranty. New systems fall under the manufacturer's registered warranty typically covering your parts cost for 10 years from the date of installation.

Maintenance. Newer systems require much less maintenance, therefore decreasing the budget implications of unplanned maintenance expenses, freeing you from service and

repair headaches, and creating more resident satisfaction.

The Risks of Retrofitting with Alternative Refrigerants Not Designed for R-22 Systems

- Alternative refrigerants result in reduced efficiency that can negatively impact unit performance and the quality of your residents' comfort. Alternative refrigerants will also increase your residents' energy consumption which can have an impact on their utility costs.
- Some refrigerants can create serious problems in older equipment including compressor oil loss, increased flammability and system instability.
- Ongoing regulation threatens the long-term viability of replacement or drop-in solutions.
- Counterfeit refrigerants are a growing issue and compromise efficiency, reliability, safety and the environment.



A/C Replacement: Be Proactive And Protect Your Property Value

Alternative refrigerants may seem like a more affordable way to manage your HVAC needs, but it's a short-term approach that delays the inevitable. Consider the cost-saving realities of taking a proactive replace vs. repair approach:

- Each time you replace a compressor and refill a unit with new refrigerant will likely cost approximately \$400-600 and eat up half a day of work for your maintenance staff.
- The higher repair/maintenance costs of an older system can quickly exceed your monthly budget, reducing your net operating income (NOI) and lowering the value of your property.
- In most cases running an alternative refrigerant in an aging system will cost you more money in repairs in the next two years than buying a new condensing unit now.
- After just two leaks or compressor failures, the money spent for service could have been used to install a new energy-efficient Ameristar condensing unit with future repairs covered by warranty.
- Reduced HVAC maintenance and improved efficiency both increase the resident experience and can decrease resident turn-over.

Trane and Ameristar air conditioners are efficient and reliable. Count on them to keep your operating costs low ... and your property value and resident satisfaction high.