



## **410a Refrigerant Update**

### ***New Regulation – 410a refrigerant replacing R-22 in HVAC Equipment***

Beginning in early 2010, the Environmental Protection Agency will no longer allow newly built HVAC equipment to use the refrigerant R-22. In its place, HVAC equipment manufacturers will build equipment that uses the refrigerant 410a, which is a more efficient system. In preparation for this regulatory deadline, manufacturers have begun phasing out equipment that uses R-22 refrigerant.

Additionally, in 2020, the EPA will ban the production and import of R-22 refrigerant, which will greatly increase the cost of obtaining R-22 for technicians.

The federal, state and city code requirements, laws and regulations that coincide with this new regulation will significantly effect how technicians perform air-conditioning system replacements.

Here is an EPA website link for further detail:

<http://www.epa.gov/ozone/title6/phaseout/hcfcfaqs.html>

### ***How will this affect home warranty clients?***

Generally, home warranty plans replace major HVAC components using builder's grade equipment with similar features, capacity, and efficiency. These plans often do not cover upgrades (such as to brand, efficiency or size), modifications to the existing equipment required by the new equipment, and upgrades required by government regulations or code requirements. These exclusions from coverage, in addition to other limitations, allow home warranty companies to maintain plans priced in the \$300 to \$500 level.

In the event that your home warranty company approves the replacement of a major component of your Air Conditioning System, such as a Condenser (outside unit), Evaporator Coil (inside unit), or Air Handler (inside unit), the typical standard home warranty plan will not cover the upgrades and modifications that are required by the new 410a equipment. Member companies within the Texas Warranty Association are researching these changes and how to best provide additional coverage for the consumer. And, each residential service contract has different coverage and limitations. So, for specific inquiries, please contact your residential service provider.

### ***Can you provide an example of how the regulations may affect coverage?***

For example, if a client's R-22 Condenser needs replacement, since only 410a Condensers will be available for purchase, the home warranty plan will generally cover the cost of a R-22 Condenser and installation, but the client should expect to pay the



vendor up to several thousand dollars to complete the job, including the non-covered costs to:

- 1) Upgrade existing R-22 Condenser to a 410a Condenser
  - a. Estimated non-covered cost \$150 and up
- 2) Upgrade existing R-22 Evaporator Coil with a 410a Evaporator Coil (the new 410a Condenser uses higher pressure, so the existing R-22 Evaporator Coil will not work under these pressures)
  - a. Estimated non-covered cost \$1,400 to \$2,500 and up
- 3) Modify existing Line Set (copper lines between outside and inside units) by either cleaning it with Acid Wash or replacing it with a new set (typically a larger diameter line)
  - a. Acid Wash option estimated non-covered cost \$200 and up
  - b. Replace Line Set estimated non-covered cost \$700 and up

The above estimates are in addition to the normal non-covered costs of a Condenser replacement under a typical home warranty, which are estimated at \$400 and up.

Of course, the benefits of the new 410a HVAC system are important to note. First and foremost, a 410a HVAC system is more efficient compared to an older R-22 system, which means lower utility usage. Secondly, these new systems will benefit the environment because R-22 has negative environmental effects. Finally, the re-sale value of your home will benefit with a new 410a system versus an older R-22 system.

It is important to note that every home is different, which means the condition, age, brand, and accessibility of the equipment is different, and because of this, these estimated costs will vary. Therefore, do not rely on this general information; instead, please contact a licensed HVAC contractor for specific information on your home's HVAC System.

***Where can I find more information on these changes?***

Please contact your specific residential service contract provider to determine your plan's coverage.

For more information on 410a refrigerant regulations, please see:

<http://www.epa.gov/ozone/title6/phaseout/hcfcfaqs.html>

<http://www.rheemac.com/R410A/index.php>

<http://emersonclimate.com/refrigerant/ac.htm>