

# Contractor Service Tips



## Refrigerants

Many air conditioning systems incorporate an HFC refrigerant as the standard. It is extremely important for the HVAC technician to understand the properties of these refrigerants. If proper service practices are not followed severe system damage will result.

The Air Conditioning market is converting to the new, environmentally friendly refrigerant, R-410A, with the phase-out of R-22 in 2010. R-410A will represent one third of the market in 2006, in conjunction with the new higher efficiency regulation of 13 SEER.

Since R-410A is classified as an HFC, the only recommended oil is polyol ester (POE) oil. POE oil is extremely hygroscopic and will absorb moisture at a rapid rate. Testing has shown that POE oil can be moisture saturated in less than 15 minutes if exposed to a 90% relative humidity environment.

The "Refrigerants/Lubricants Approved For Use In Copeland® Compressors" chart, available online at [www.EmersonClimate.com/refrigerantschart](http://www.EmersonClimate.com/refrigerantschart), lists approved combinations of common refrigerants and lubricants. To maintain compressor warranty, please ensure these combinations are respected when installing or retrofitting a system.

