

msac MANUFACTURERS' SERVICE ADVISORY Council HOTLINE

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R-410A Phase Out

I just spoke to a fellow contractor who told me he just saw a mini-split with R-32 in it. Do you have any information on this? Is R-410A being replaced? Any information would be appreciated.

R-410A will be phased out because of its high Global Warming Potential (GWP) of 2,088. Here is the current list of applications the EPA has delisted for the use of R410A: new vending machines as of Jan. 1, 2019; new stand-alone medium-temperature units with a compressor capacity below 2,200 Btuh and not containing a flooded evaporator as of Jan. 1, 2019; new stand-alone medium-temperature units with a compressor capacity equal to or greater than 2,200 Btuh and stand-alone medium-temperature units containing a flooded evaporator as of Jan. 1, 2020; new stand-alone low-temperature units as of Jan. 1, 2020; and new chiller applications as of Jan. 1, 2024. By the way, R-410A contains 50% R-32.

The industry has been moving in the direction to find and implement refrigerants with lower GWPs. R-32 is one of those refrigerants that is being used to replace R-410A because R-32 has a GWP of 675. R-32 is currently being used in millions of air conditioning and heat pump units worldwide. Japan, Thailand, Australia, India, and other Asian and European countries all use R-32 in their air conditioning and heat pump systems.

Currently, the EPA has approved R-32 for the following applications: new residential and light commercial equipment for self-contained room air conditioners; PTACs; PTHPs; window units, and portable units. Several manufacturers are currently using R-32 in the U.S. for some of the applications just listed. R-32 is not the only refrigerant that may be used to replace R-410A. Carrier is researching and testing R-454B for air conditioning.

Additional information on these refrigerants and applications would be available through the manufacturers who are testing these refrigerants as well as the chemical companies who are producing these refrigerants.

One last comment: I have a concern that you said a fellow contractor saw a mini-split with R-32 in it. If he saw it in the U.S., that application has not been approved for R-32 use.

*Question from Mike Pursell of Tampa, FL.
Answer from Arthur Miller, CMS, RCT.*

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