

Henry Snelson  
PO Box 7645  
Charlotte, NC  
28241



Technical Services  
Manager  
704-887-4875  
Fax 704-587-4591

Date: 9/19/06

To: Craig Chadwick

I wanted to share with you our findings with the R-421A refrigerant you sent me. We tested the R-421A against an R-22 system at the class I teach at Blue Ridge Comm. College. The original system was a Comfortmaker C9MPD075F12B furnace with a CAC030AKA A/C unit matched to an EPM30B15 evaporator coil.

With R-22 on a 80 degree day we were operating at a total capacity of 25,231btu's with a rated capacity of 27,200btu's. We had a dry bulb split of 20 degrees, an enthalpy split of 5.34 and operating at 1050cfm. Our compressor amp draw was 9.8 on common and 7.9 on run. The system was operating at an 11 degree subcooling and a 28 degree superheat.

With R-421A on a 75 degree day, we were operating at a total capacity of 29,484btu's with a rated capacity of 30,100btu's. We had a dry bulb split of 19 degrees, an enthalpy split of 6.24 and operating at 1050cfm. Our compressor amp draw stayed consistent with 9.7 on common and 7.6 on run. The system was operating at a 12 degree subcooling and a 19 degree superheat.

We experienced no problems with the R-421A refrigerant with either the capacity or operating characteristics. Is any manufacturer looking into using this in the future as opposed to R-410A?

I would love to discuss this further anytime you get a free moment.

Thanks

Henry T. Snelson