



# The Duct Man

HVAC Industry News You Can Use



## NO-WAIT DUCTWORK

Waiting days, or even weeks, for custom ductwork can result in costly job delays and dissatisfied customers.

E.P. Homiek's expert team of sheet metal technicians can provide 1-2 day turnaround on all residential and light commercial fabrications year round, as well as 1-2 hour emergency fabrication service. We offer free delivery, competitive pricing, and all work is guaranteed.

## WIN a \$100 Gift Card

What is the HVAC technician doing in this photo?



BE THE FIRST TO SUBMIT THE CORRECT ANSWER TO [NEWS@EPHOMIEK.COM](mailto:NEWS@EPHOMIEK.COM) TO WIN A \$100 LONGHORN STEAKHOUSE GIFT CARD!\*

\*Previous photo contest winners and E.P. Homiek employees and their families are not eligible

## Refrigerant Line Sets Choose Wisely or Risk Compressor Failure

As a New Jersey HVAC supplier for over 30 years, E.P. Homiek has sold countless line sets to our contractors, and we've heard plenty of stories of compressor burnouts, poor system performance, and arguments with manufacturers over warranties.



Recently, we spoke with a manufacturer that ran into a dispute over compressor warranties in a large building in Hoboken, NJ. Sixty-four new split systems had been installed, with all compressors and condensers installed on the roof and evaporators installed on floors 2-7.

Within a relatively short time, the units on the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> floors were performing poorly, mostly due to undersized line sets or system overcharging, and there were a large number of compressor failures. It turned out that the HVAC contractor had installed identically-sized line sets for each unit in the building, ignoring that the distances on the lower floors were much greater than those on floors 5, 6 and 7.

Understanding refrigerant piping and how refrigerant and oil migrate through a system are crucial when sizing and connecting split systems and can often help technicians spot issues in existing systems. Each manufacturer has piping design guidelines, charts, and installation instructions that are readily available online, and many manufacturers can help HVAC contractors design line sets or can provide factory piping design literature. Liquid lines and suction lines have specific criteria for size and



distance, and capacity loss should be kept at 3% or less. This information can be found on charts showing approximate percentages of cooling capacity loss for different size systems and different equivalent line lengths.





## HVAC Techs Should Understand Your Service Charge

In every business, there are things that owners should keep confidential. HVAC service technicians, for example, don't need to know every little detail about how their employer chooses to run their business. There are some things, however, that owners should consider sharing with their service techs to give them a better understanding of their jobs and improve their communications with customers.

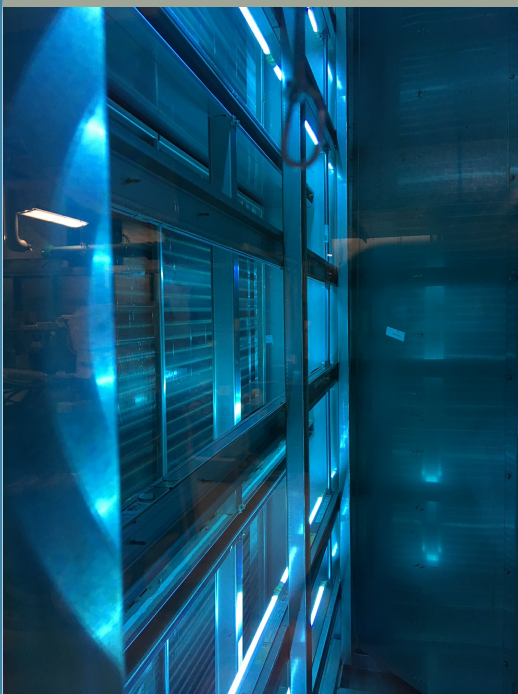
One of these things is a clear explanation of your company's hourly service charge.

Providing service techs with a clear understanding of how you arrived at your specific service charge can give them more confidence when selling a job, and it better enables them to support your pricing. It also helps curb confusion or resentment among those who think the difference between their hourly pay and the service charge is easy money in the bank for the owner.

The best way to dispel myths and help employees understand the service charge is to sit them down in a meeting and show them the math. List all of your overhead items and their costs, total them all up, and break them down to the billable hour. This exercise will be a real eye-opener for most of your service technicians, resulting in solid benefits for your business.



## ASHRAE: UV-C Light Proven for Cleaner Indoor Air



UV-C, or ultraviolet light as a method of eliminating microbial growth in HVAC systems and improving indoor air quality has long been underutilized in residential and light commercial sectors, despite the fact that it has been widely touted by industry experts. Fortunately for home and business owners, HVAC contractors are finally catching on to one of most effective ways to improve IAQ, airflow, and heat transfer.

UV-C has been used as a germicide for many years in such applications as equipment sterilization and water purification. By targeting DNA, it causes microbe death or renders them unable to reproduce. In HVAC systems, damp, humid conditions encourage growth of mold, biofilm and other organic compounds on coils, filters, duct surfaces, and drain pans. Eventually, this accumulation chokes airflow, decreases system efficiency, and releases odors and contaminants into the air. ASHRAE has found that application of UV-C light kills or inactivates 90% or more microorganisms living on HVAC system surfaces. Thus far, no microorganism has been found to be completely immune to UV-C.

Properly-maintained UV-C lamps installed in new systems will prevent microbial growth from the get-go, but existing systems can be effectively retrofit, as well.

Studies have shown that UV-C can restore an air handler with microbial growth

to as-built operating conditions in as little as 90 days, restoring system capacity by up to 40% and drastically reducing energy consumption. E.P. Homiek Sheet Metal & HVAC Supply carries UV-C air disinfection and surface irradiation systems by Diversitech and Honeywell. Please call Brian Terranova at (732) 610-8152 for more information.