

# **HIGH-PERFORMANCE HVAC TODAY™**

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## **The Four Faces of Performance**

**A Spotlight on  
Tetra Mechanical**

### **ALSO IN THIS ISSUE:**

**Evaluating and Correcting Evaporator Performance**

**How to Attract, Hire, and Retain Good People**

**Use Newsletters to Generate Leads from Existing Customers**





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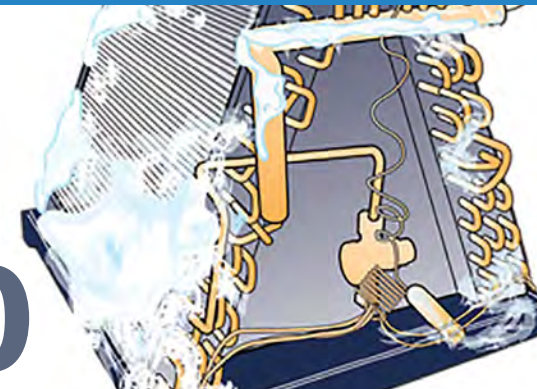
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# HIGH-PERFORMANCE HVAC TODAY™

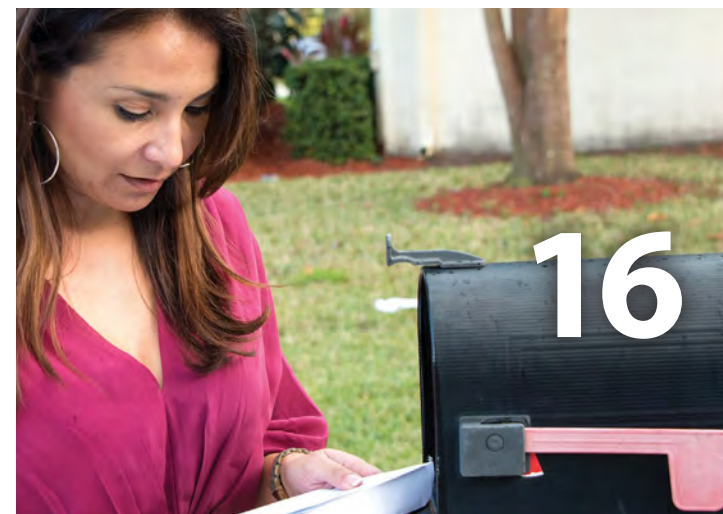
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## Evaluate and Correct Compressor Performance

Why is this so important? NCI Field Coach Justin Bright explains how to do a proper evaluation and why it benefits the customer so much.



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# Company Policies Versus Customer Experience: A Parable



Mike Weil is editor-in-chief and director of communications and publications at National Comfort Institute, Inc. Reach out to him at [ncilink.com/ContactMe](mailto:ncilink.com/ContactMe)

Once upon a time, there was a certain trade press editor who lived in Suburbia, U.S.A. He lived in a decent house with a nice little yard that hosted a fair number of very old, very tall, very awesome trees. These trees provided the Editor's house with fabulous shade and made his back yard feel like a forest. The Editor loved those trees.

One recent day, a storm flogged the area with powerful winds causing many trees to shudder throughout the land. In some areas, trees were toppled causing all kinds of problems.

One tree in the Editor's back yard suffered a thunderous crack as one of its largest limbs (the size of a small tree itself) split, causing it to partially fall. It came to rest on a live power line attached to the Editor's house.

This was not good.

So the Editor called seven (yes seven) tree service companies looking for help. Not one company called him back over a two-day period.

Not one!

Then the Editor called the local electric utility to report the situation, only to be greeted by an automated system that gave no options for his situation. So he opted for reporting a power line down.

Someone answered the phone immediately and listened to his tale of woe.

"I am sorry sir," the person said. "Our policy is that we cannot come out and correct the situation unless the wire is on the ground."

The Editor was flabbergasted. "So you'd rather be reactive and wait until there is a deadly, dangerous situation than be proactive and nip the issue in the bud?" he asked.

"I am sorry sir. That is our policy. If the wire comes down, call back and we will send a team out immediately. In the meantime, we can sched-

ule you for a trimming service from our forestry department. Someone will call you in one to 10 business days to set up an appointment."

Seeing that he had no choice, that is what our intrepid hero did and hoped the branch wouldn't rip out that power line for a week.


Then he had a thought. He called the utility back and reported the wire was actually down. Within two hours a crew was out and, while it continued to rain and the wind swirled, they tackled the irksome branch with real professionalism.

The workers methodically planned their moves. They climbed into the tree, secured the broken limbs, then chainsawed, cut, and hacked until the danger was no more. They left with a tip of their hats after explaining that because it was raining, their policy was not to remove the material strewn all over the yard.

And away they went. One of the workers accidentally left behind his safety vest. The Editor tried to call the utility to let them know, but once again the automated system simply didn't let him leave a message about the vest or the quality of service.

Was the Editor pleased? On one hand, yes, for the danger had been alleviated. On the other hand, he felt both the tree service and utility industries left a bad taste in his mouth. So the overall experience was negative.

**The moral of this story:** Don't let your policies get in the way of a customer's experience. Tree service companies and High-Performance HVAC Contracting companies are both in business to make and keep customers. I am sure summer is equally as busy for the tree services as it is for HVAC contractors. But that shouldn't be the excuse to not always put your best foot forward.

And for goodness sake, don't rely only on automated systems to help customers. They don't help. They frustrate. And that is an epic fail. 

## Star-Kap® by Field Controls

A Star Kap is something that gives spellcheck a problem, but trust me, it is spelled correctly.

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and found to prevent downdrafts from the wind. This attribute allows HVAC equipment to operate safely.

Although their wind test simulates a constant 10-minute downdraft, that isn't a normal weather condition, except in hurricanes and tornadoes.

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To learn more, visit the Field Controls website at [ncilink.com/StarKap](http://ncilink.com/StarKap).

— By Jim Davis, National Comfort Institute Senior Instructor



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# Tetra Mechanical – The Four Faces of Performance

**T**etra Mechanical is an interesting name for an HVAC company. When you look up the definition of the word, ‘tetra’, you’ll find that it is a type of South American fish. So, when I spoke with Kent Donnelly about how the company got that name, I learned an interesting story about the company and its owner.

You see, Donnelly took over the management of the company at a young age after his father suffered a severe heart attack. At the time, the family-owned business was called

Sentinel Refrigeration – a name that was, according to Donnelly, hard for people to spell and remember. It also didn’t seem to have any cache within their marketing area.

He says he sat down and really analyzed the business, its performance-based service delivery methods, and its mission. He boiled everything down to four attributes, which he calls the **Four Faces of Performance**.

“Everything we do is about fairness,” Donnelly explains. “I’m talking about fairness in our approach to technology, in our treatment of the team, as well as in our pricing and delivery to customers.”

He adds that in geometry, a tetrahedron is a triangular pyramid with four equal faces or planes.

“For me, I felt the tetrahedron truly represented our four faces of performance. One face represents the Earth because we are *stewards of the planet*. Another represents *HVAC equipment* which requires us to do everything we can to give it a fair shake to produce comfort.

“The third face represents the *customer*. We must provide them a fair price for the job we do. And the last face is for our *company*. We must be as responsible and fair to our employees as we are to our customers.”

Donnelly shortened *tetrahedron* and the company’s new name became Tetra Mechanical.

## DESTINED FOR HVAC

The company was founded by Kent’s father, Mike Donnelly. Donnelly, a World War II veteran, made a good living as a salesperson working for the Coca-Cola company. One of his customers was a refrigeration contractor who also did work for Coca-Cola. Kent says his father was very intrigued by refrigeration and made good friends with this contractor.

In 1962 or 1963, Mike Donnelly had a dispute with Coke regarding a commission they refused to pay him. So he left, and with his friend the refrigeration contractor, started Sentinel. Unfortunately, his partner died very shortly af-

ter starting the business (not even three months later) leaving Mike with a company that he had very little knowledge about from a technical or business standpoint. He had to figure it out on his own.

Which he did. According to Kent, his dad rented a commercial refrigerator and ice machine and disassembled them to figure out how they worked. He then reassembled them.

“Then he went out and did what he did best – selling business,” Kent says.

At a very young age, Kent watched as his father brought non-working compressors home to work on.

“I just gravitated toward mechanical things,” he says. “My dad would bring home motors and let me tear them apart. By the age of seven, I could pretty much rebuild semi-hermetic compressors on my own. Dad would order the parts and I could rebuild them. Then Dad would reinstall them at the job site.”

Kent Donnelly, who by his nature prefers to work on his own in the background, says that people thought of him as the Michelangelo of refrigeration and air conditioning, destined for greatness.

“Where Michelangelo was born with a hammer and chisel in his hands,” Donnelly explains, “people say I was

born with a set of magnehelic gauges and wrenches in my hands.”

He humbly wanted to be the best at fixing everything in refrigeration and air conditioning without any fame.

## TETRA MECHANICAL TODAY

From the beginning, the company has been in the commercial refrigeration business. As time went by and air conditioning became affordable by homeowners, the company focus evolved to include this relatively ‘new’ part of the industry into its offerings. Today Tetra continues serving both the commercial and residential marketplace, though Kent says most of it is now in air conditioning.

“The refrigeration business is very demanding and very hard,” he explains. “It requires dedicating long hours and lots of supervision. Frankly, it was too grueling, and I just couldn’t teach people how to do refrigeration fast enough. Plus, there are other companies dedicated to the refrigeration business that can do a much better job than us.

“So, we focus on commercial and residential air conditioning.”

Tetra’s revenues are split 50-50 between them. Almost all of that is service/replacement work with maybe

1% from new construction. The company has 10 vehicles (though they are down to nine right now because one of their heavy-duty trucks was recently stolen). Of the nine, five vehicles are currently active.

Three of the active trucks are dedicated to commercial and the others are a blend. “That,” says Donnelly, “is fluid. We change it around as we need.”

## STRUGGLING TO BREAK BARRIERS

Kent Donnelly describes himself as always having a great love of figuring things out and was keen to measure and test out whatever he was working on. Even as a 17-year-old, who took over the business after his father suffered a heart attack, his love was on the tech side of things and he says he had no idea how to run a business.

“This is my biggest weakness and I struggle with it to this day,” he says. “I looked at what I did as a craft and absolutely loved it. I often worked for free, doing favors for clients and friends. It was fun! It never dawned on me during the early years that I had skills that very few others did, and those skills had a value.”

But taking on the business side of things was, in his words, a baptism by fire forged in the crucible of hard knocks. The day he took over, he was thrown into the middle of a very large commercial refrigeration project and had to learn on the fly how to price, project-man-

age, and keep control of the job site.

“One of my biggest struggles today is how to sustain growth. We vacillate between \$5 and \$8 million in gross revenues annually. Then I stumble. I get knocked down to around \$1.5 million and have to start over. This has caused me to focus, in the last five years, on learning how to be a better business person.”

This resulted in the business being on track at the beginning of 2020 to hit \$5 million in revenues. Donnelly says he runs a staff of 12 people.

Then, like every other business in America today, the COVID Pandemic combined with the shelter-in-place directives changed everything. Now he says he hopes to hit \$3 million in 2020.

“Every year it’s like I get to a point and then hit a barrier or a wall.”

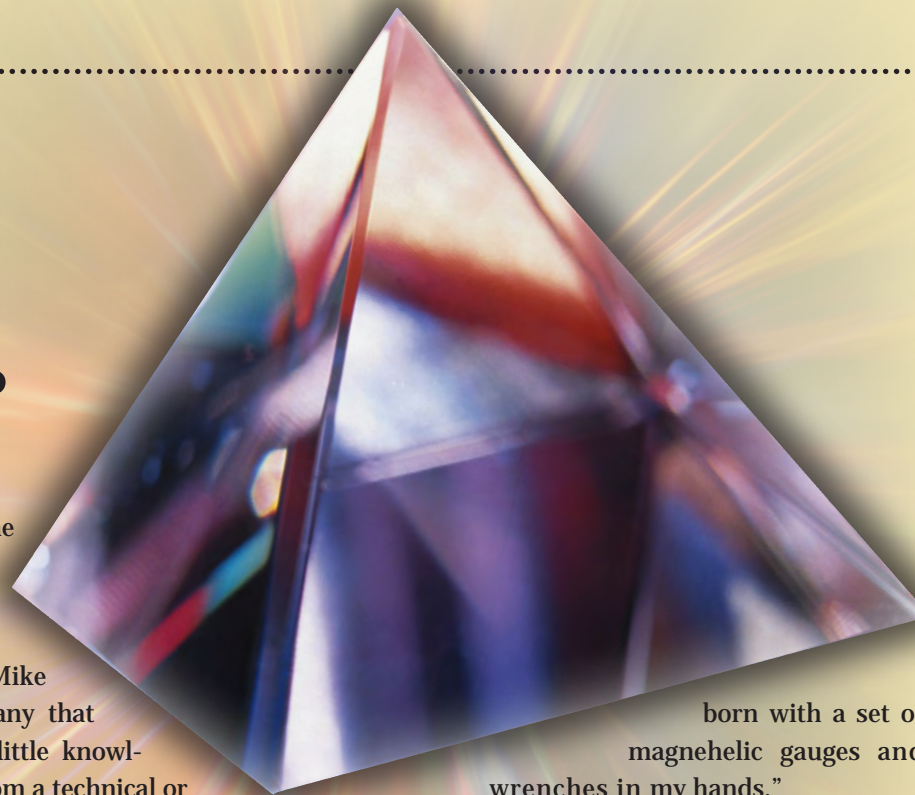
To overcome that barrier, he says he knows that both business and technical training are a must and he is committed to making that happen for himself and his co-workers.

## EDUCATION AND TRAINING

While still working for his father, Kent says his Dad encouraged him to



Kent Donnelly



A typical commercial rooftop unit installation from Team Tetra.



attend college and study computer/electrical engineering. Reluctantly he did, but says it didn't grab him the way mechanical work did. Even though he earned an associate degree and later attended UCLA for mechanical engineering, he says that his best education was from professionals in the field, from on-the-job experiences.

"Back then, field technicians were craftsmen and from them I learned that everything had to be measured, baselines established, and I had to

done the NBC training, but all have taken NCI classes and are certified in several of the disciplines.

### PERFORMANCE-BASED CONTRACTING™

Even though Donnelly and his team have been testing and measuring ventilation systems almost from the start of the business, it wasn't until they began formal training with the NCI organization that they packaged this approach under the concepts of air

upgrades and duct system renovations.

"This is our focus," he explains. "But it is not easy. We face a lot of resistance from our res-

idential customers. That resistance is based on the cost of this work.

"We test and measure every system," he continues, "and then share the data that pinpoints where the system is lacking. The hardest thing is to talk about the dollars because it will cost more than what they are used to. For the consumers, that is a tough pill to swallow.

"I believe that in our industry a lot of contractors low-ball their prices to close more sales. To make things worse, consumers just don't understand what they are looking at because contractors have not educated them.

"We must educate them. And we do it mathematically. We show them how much they will spend as well as how much it will **cost** them over time if they don't invest the money in duct renovations and/or air upgrades."

Donnelly adds, "Then we take all our findings and break them down into bite-sized chunks, with the most important and necessary repair at the top of the list. We then list the other repairs based on the cost of **NOT** doing them over time. Sometimes that means just doing insulation work. Sometimes that means changing out the equipment."

He says the long and short of it is that sometimes renovation work can take a year or two because the consumer just doesn't want to pay for everything all at once.

"You have to figure out where you can make the most difference and how to help the customer understand the benefits. And you must price it right," says Donnelly.

From Kent Donnelly's perspective, he struggled with pricing for years. "One of my biggest problems was not recognizing my value to the customer equation.

"It took years of training and talking with people like Rob Falke, John Garofalo, David Holt, and others to help me understand that the skills I bring to the marketplace have a great value and I need to charge people what that is worth," he says.

### BRINGING HOME THE VALUE

One of the key values Tetra Mechanical brings to the table is how they take the data from their testing and measuring, then put it into a format that helps consumers understand what is happening with their HVAC system and the solutions Tetra is proposing. They do this using the cloud-based software known as **ComfortMaxx™** and **AirMaxx™**.

"We use ComfortMaxx every sin-

gle day. It is fantastic at taking all the data and creating easy-to-understand reports that help us show customers what is going on and why the renovation work we propose is necessary.

"I love it," Donnelly says.

"It allows me to single-handedly take something that can be quite complicated and present it visually and mathematically so they can make the best decisions based on their needs and their budgets."

Another value that Donnelly believes Tetra brings to the table is more confidence based on their membership to NCI. He says he used to find it worrisome that his competitors had no clue what static pressure is and why a system operates the way it does. NCI membership confirmed to him that

what he was doing was correct and in the customer's best interest.

Besides, he says being an NCI member enables him to forge bonds with other like-minded contractors, even local competitors, so they can have a healthy competition and still do things right.

"NCI has taught me that there are so many opportunities for me to learn and grow. Without that, I doubt very much that I would still be in business today. The performance-based approach has allowed me to grow as a person as well as a contractor.

"In the end, the most important lesson for me is finally understanding that the business side of contracting is equally important to the technical side.

"I feel many contractors today need to come to grips with that. Understanding the people side of things, business management, leadership, and forecasting is the only way to win. These are the things I must get better at. This is the core of what I call the four faces of performance.

"In the end, owners are responsible not only for the company's successes but also for every single failure as well. You are the steward of a tradition that's been around for more than 100 years and that is a big responsibility," Donnelly concludes.

It is for these, and many more reasons, that **High-Performance HVAC Today** magazine has selected Tetra Mechanical of Simi Valley, CA as the July Contractor Spotlight. **NCI**



understand the meaning behind those measurements.

"This is what Rob Falke and the team at National Comfort Institute (NCI) also teaches," he says. "To me, this is just the basics, but it is amazing how many HVAC and refrigeration contractors don't get the importance of this. In fact, when I began seeing some of the promotions for NCI training, I was all on board for that. Rob was talking my language and I hoped to learn new things," he adds.

After that class Kent joined NCI and has been a member since 1994.

The NCI training and the subsequent certifications helped Donnelly hone his skills and enabled him to jump into the commercial air conditioning side of the business. He became National Balancing Council (NBC) certified in 2011. None of his other technicians have

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# Evaluating and Correcting Evaporator Performance

**WHY DO YOU NEED TO MEASURE STATIC PRESSURE? NONE OF THE OTHER CONTRACTORS WHO QUOTED ME A NEW SYSTEM HAVE TAKEN MEASUREMENTS. CAN'T YOU JUST ADD MORE REFRIGERANT?**

**D**oes this sound familiar to you? Have you ever felt lost as to where to start when a customer's system does not provide comfort? Static pressure testing can quickly give you insight into how poorly the system is performing.

It also provides some talking points to discuss with your customer. Evaporator coils and filters tend to be the biggest contributor to excessive total external static pressure (TESP).

## EFFECTS OF HIGH COIL PRESSURE DROP

As pressure drop across the coil increases, the amount of energy required to move a volume of air across the evaporator also increases.

For modern furnaces with electronically commutated motors (ECM), this means the watt draw will increase as the motor attempts to overcome the pressure due to their variable operation. As the motor consumes more energy, it decreases the equipment's Energy Efficiency Ratio (EER).

In older systems (which make up the bulk of motors still in use today), the Permanent Split Capacitor Motor (PSC) operates at a fixed speed. As static pressure increases, airflow decreases. Reducing airflow across an evaporator can lead to a variety of issues.

For example, on the refrigerant side of the system, technicians often misdiagnose low airflow as an undercharged refrigerant circuit.

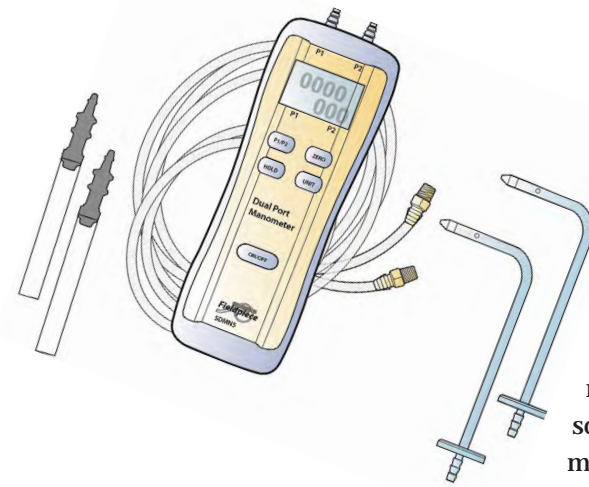
They are only looking at pressure-temperature relationships. Insufficient airflow can also cause register airflow to fall below the required heating or cooling capacity to the point that customers notice temperature differences between rooms.

High coil pressure-drop also impacts the longevity of major system components, such as the compressor or heat exchanger. Under low airflow conditions, inadequate heat is available to convert all the liquid refrigerant to vapor, allowing liquid refrigerant to enter the compressor. In heating mode, low airflow will increase the temperature rise of the heat exchanger.



If a system is allowed to cycle on and off because of excessive temperature, the result is often a crack in the heat exchanger. Whether in heating or cooling mode, airflow depends on a coil with a pressure drop that matches the original design.

When you have the pressure entering and exiting the coil, subtract exiting pressure from entering pressure to calculate the evaporator coil pressure drop expressed by the symbol  $\Delta p$ .



## HOW TO MEASURE COIL STATIC PRESSURE DROP

When evaluating the performance of evaporator airflow, you need to use a manometer with a static pressure tip and hose to connect them. When installing a new coil, it is a best practice to install your test port in a location that avoids the refrigerant tubing before the coil installation.

Going one step further, for a low additional cost, you can install a permanently mounted static pressure tip to avoid any mechanical damage caused by repeatedly inserting static pressure tips during maintenance visits.

First, determine a location to install a static pressure port. Depending on what type of equipment you are testing, you should verify your probe will not come in contact with belts, capacitors, or other electrical components.

In an existing system, you may not be confident as to what is behind the panel and may not want to drill through it.

In these cases, you can install a test port in the side of the furnace, test through the limit switch hole, or use a section of capillary tubing to measure the pressure entering the coil through the gap in the corner of the furnace's exiting opening flange.

When you have the pressure entering and exiting the coil, subtract exiting pressure from entering pressure to calculate the evaporator coil pressure drop expressed by the symbol  $\Delta p$ .

## SOLUTIONS FOR COIL PRESSURE DROP PROBLEMS

To solve pressure-drop problems with evaporator coils, you need to identify and control the source of the problem. Some common problems begin with a poor coil choice, filter bypass, as well as return duct leakage.

Another problem source is incorrect airflow. This leads to insufficient condensation on the coil to remove particulate buildup.

Occasionally you may come across excessively low coil pressure drop. Typically, you need to look for a bypass around the coil. Other things to look for include missing panels inside and along the sides of the coil, or gaps between the drain pan and outer casing.

There are several solutions to correct an evaporator coil that has an excessive pressure drop.

The most effective way is to in-

drop, we can select the coil rated at .2" and ensure we meet the pressure budget for a system with a PSC motor rated at .5".

If we choose a coil rated at .4", that will use 80% of the fan's available pressure. There is still one more option; by increasing to a 3 1/2-ton coil, we could reduce the pressure drop to .17," allowing for degradation due to buildup on the coil.

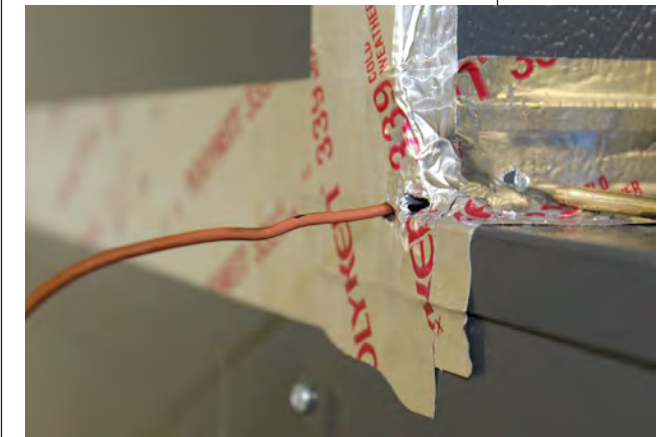
If a previously installed coil is showing signs of excessive pressure drop, cleaning the coil will lower the pressure drop in most cases. Before spending time cleaning the coil, make sure to verify that the coil is installed correctly and is appropriately sized for the system airflow.

Use fan tables from the manufacturer's installation instructions or the National Comfort Institute **Airmaxx** app (<https://airmaxxlite.com/>) to verify blower airflow. Compare the measured static pressure at the operating airflow to the manufacturer's rated static pressure drop.

You may need to use **Fan Law Two** ([ncilink.com/FanLaws](http://ncilink.com/FanLaws)) for when you encounter airflow tables that do not list your design airflow.

If you see that the coil has a lower listed pressure drop than the pressure measured, cleaning the coil is warranted. Along with cleaning the coil, you should minimize the source creating buildup on the coil.

Look for leaks in the duct system which bypasses the filter. Consider adding weather stripping at the filter to provide a better seal.



stall coils that can move the correct airflow at a low pressure drop. One evaporator coil manufacturer, for example, offers three-ton coils at an airflow of 1200 cfm that have a range of static pressure drops from .2" to .4". By knowing the operating pressure

the coil is warranted. Along with cleaning the coil, you should minimize the source creating buildup on the coil.

Look for leaks in the duct system which bypasses the filter. Consider adding weather stripping at the filter to provide a better seal.



## COIL CLEANING

Coil cleaning techniques vary from company to company. Some companies have policies that require using water for cleaning. Water will rinse the coil clean while minimizing damage to the coils that can happen if you use a corrosive chemical.

In reality, when cleaning a coil in place or when the coil has been exposed to cooking oils on its surface, chemicals may be necessary.

After cleaning the evaporator, restore airflow to as close to design airflow as possible. Install a static pressure port sticker and list the date, coil pressure drop, and airflow on it. This provides a reference for future visits.

On each service or planned maintenance

visit, you can track the increase in static pressure. Then you can create a custom coil cleaning schedule that reflects the individual coil's installation quality, the customer's level of operation, as well as the environmental impact of buildup on the coil.

Be sure you're not limiting your troubleshooting to the evaporator alone. Remember that the coil pressure drop is only one component of a system's pressure budget.

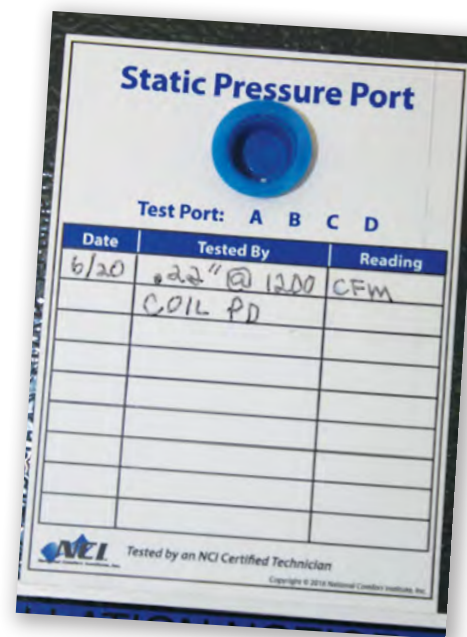
Excessive pressure drop in other components may reduce overall system airflow, making the coil appear to be within budget. Restoring airflow by correcting other components may increase airflow through the coil, which would increase the pressure drop across the coil.

## A BRIEF CASE STUDY

Recently I was on a job site with a contractor. He had replaced an evaporator and was having issues with the refrigerant cycle. The system evaporator had a 40-degree temperature drop and a pressure drop of .8". The coil was exceeding the pressure budget of .2".

We used a boroscope to perform a visual inspection through our static pressure port and found several issues. The TXV sensing bulb had been mounted upside down with its tubing facing down. The insulation had fallen off the inside of the casing and had frozen to the coil. Plus there was excessive coil bypass at the drain pan through a three-inch gap.

After making corrections to the evaporator, the pressure drop decreased



Install a static pressure port sticker like the one pictured here to record your measurement results.

to .41". This was a perfect example of what happens if you pick up a coil without looking at its engineering data. The excessive coil pressure drop, along with the overly restrictive electronic air cleaner, left this system only able to deliver 80% of its airflow.

If the customer had been willing to

wait for a better coil option to be ordered, the pressure drop would have been lower. Originally the contractor had offered a broader scope of work, which would have addressed other performance issues, but the customer had a limited budget.

## PROVIDE CUSTOMERS CHOICES BASED ON DATA

In many cases, we are not able to make all the corrections we want. But through testing and collecting data, we can provide customers with the information they need to make an informed decision and have reasonable expectations of the results within their budget.

When a customer asks me why I need to perform a static pressure test when other contractors don't, my an-

swer is to provide them with enough information to understand the problem, how severe it is, and what results to expect from the options available.

So, tool up, take the time to test systems, and discuss your solutions with customers. It only takes a few minutes of practice on each job to master static pressure testing and turn tests into sales. **NCI**



**Justin Bright** is a field coach and instructor for National Comfort Institute, Inc. His background is in designing, installing, and servicing HVAC and plumbing systems for residential and commercial systems. Today he trains students in all NCI disciplines and is an instructor for NCI's Southern California Workforce Education & Training program. Go to [ncilink.com/ContactMe](http://ncilink.com/ContactMe) for more info.

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# How to Attract, Hire, and Retain Good People

**A**fter more than 25 years of working with HVAC contractors, I have learned quite a bit about the daily need-to-hire challenges. I want to share a few thoughts on what it takes to attract good people into your business. Here are two key points to remember:

- There is no shortage of good people. If you think there is then read no further.
- You convince people to stay by simply meeting their needs. If you're not sure how to do this, I have a few ideas that will help.

## ATTRACTING GOOD PEOPLE

If you want to acquire good talent, then why is your hiring process all about you and not about the candidate? National Comfort Institute has a saying: "If you don't measure, you're just guessing." This statement is just so true.

We measure all the time. Based on the information our company gathers from thousands of job applicants each week (data that we analyze regu-



larly), we know that on average 90% of job seekers who read your job ad leave without applying, and more than 40% of job seekers who start reading the ad for your job end up not completing it.

So here's the question: Do you know how many people see your job ad each week? Do you know how many people start the process of filling out the application for the position you need to fill? Or how many complete it?

Why is this important? It is data you can use to improve the success rate of your job advertisements. Let's face it: You can't change what you don't acknowledge. If you want to attract the best people from within your market area, you must believe in a very simple idea: Simply changing the job ad messaging can have a huge impact on the answers to all of the above questions.

After years of writing job ads that work, here are five points I strongly suggest you consider if you wish to attract quality applicants from your market through an ad.

**1. Think about what sets you and your company apart from competitors?** What is it about your business that will convince someone to quit their current job and come work for you? Hint – it's not money.

**2. Formal job titles are nice but be sure you keep it simple.** Search engines are the name of the game. Having a job title like customer assurance officer means *nothing* to nearly every job seeker. But *customer service* is attractive to a large number of job seekers and gives you the largest talent pool opportunity possible.

**3. I have seen so many contractors copy a job description they think sounds nice but, it is incredibly boring and says nothing about them or their company. Job descriptions should reflect your company values** – both for the potential employee and the people they will serve.

**4. Be positive about the position.** You want to catch their interest, not scare them away. Did you know that 75% of candidates say "the ap-



pearance of a job posting" affects their choice to apply?

**5. Watch the job ad tone.** This highlights your culture, which I'll talk about next. The job ad should match whether your company has a laid-back approach or is more formal. It can focus on whether you are all about good employee relationships or maybe casual working conditions. My best advice is to be authentic and not something you aren't.

## RETAINING GOOD PEOPLE

What separates top-performing HVAC companies from the rest is the service delivery medium. That medium is your people! So, it makes sense that if you want to attract and retain the best people, you need a culture that supports this.

According to a 2013 *Harvard Business Review* article by Michael D. Watkins ([ncilink.com/CompanyCulture](http://ncilink.com/CompanyCulture)), "Company culture refers to the personality of a company. It defines the environment in which employees work. Company culture includes a variety of elements, including work environment, company mission, values, ethics, expectations, and goals."

A big part of company culture is the relationship between management and the employees. One of my closest mentors used to tell me, "The quality

of a relationship is a function of the extent in which it meets the needs of the people involved."

How well your people rate that relationship is a function of how well their needs are met. Owners/managers should not have the objective of leading, guiding, or directing people. Instead, they should aim towards allowing, challenging, and inspiring people to blossom and grow.

## FIVE CORNERSTONES

There are three things all people need: Acceptance, Security, Validation.

Furthermore, here are five cornerstones that, if put in place, can create a culture of growth and lay the foundation for success:

■ Strive to manage people in a way that protects and enhances their self-esteem. If people feel unappreciated, jerked around, underpaid, overworked, and insecure, then you're perpetuating mediocrity in your culture.

■ Be objective and consistent in all actions and decisions. Don't run on personal agendas, don't play politics.

■ Delegate all tasks that do not uniquely require your attention. Managers can become territorial: they hold information back, don't let people go. When that happens, people feel oppressed, bottlenecked.

■ Focus on productivity, not activity.

■ Lead by inspiration, but most assuredly lead. Someone needs to make decisions, step up, and take the heat.

In the world today, because of advances in technology, training, communications, and so on, there is parity between most contracting firms. The only differentiator is the people who deliver your products and services. Doesn't it make sense then that you must have the best people possible? This starts with how you go about finding and hiring them through your advertising and marketing, followed up by providing them a strong culture where they can thrive and grow.

I believe these are profound cornerstones. Remember, success comes from the inside out. By understanding the numbers behind your marketing and advertising and adapting your message accordingly, you can truly become an impact player in your market.



**Paul Vishnesky** is president of Hire Dimensions, Inc., Dallas, TX. The company offers state-of-the-art hiring solutions for the HVAC Industry. Key among them is teaching contractors how to create hiring strategies and then using their Inbound Hiring Optimization to help contractors significantly increase the number of good job applicants. Go to [ncilink.com/ContactMe](http://ncilink.com/ContactMe) for more information.



## A woman with long brown hair, wearing a bright pink V-neck top and large hoop earrings, is looking down at a white envelope she is holding. She is standing next to a black mailbox with a red handle. The mailbox has the number '140' visible on its side. The background shows a grassy area, a tree, and a white building.

lieve in them so much that we continue to do them with a marketing company twice a year. Yes, they are expensive, but there is a lot of value to putting a newsletter together for your customer base.

## NEWSLETTERS AS EDUCATIONAL TOOLS

Here is how a newsletter provides value to your customer and pays you back:

## NEWSLETTERS AS EDUCATIONAL TOOLS

Here is how a newsletter provides value to your customer and pays you back:

**Education.** This is a great opportunity to provide tips or ideas on things to do at the home. Newsletters can tie to the services you provide or not at all. The key here is to give, not get. You may share facts about IAQ while at the same time letting customers know a bit about the products you use and why.

newsletter allows you to have a more intimate connection with those who might actually care about what you have to say.

**Personal Touch.** Every newsletter goes out with a first-person letter from our owner, Bill Kennihan. He always shares some personal anecdotes or excitement about the contents within the pages of the newsletter. You should do this in your own newsletter. It allows readers to get to know you better and learn what you care about.

**Constant Reminder.** Newsletters are definite constant reminders so customers can remember what company took care of their home. You can also use it as a reminder for them to maintain equipment, replace their filters, and more.

When doing a company newsletter for your customers, be intentional about the content. Plan for who, what, and when. In our experience sending

out. This way they will have an idea about why the customer is calling and they can answer with confidence. This can help them book more calls.

While the newsletter's marketing strategy may be mostly about branding, historically they have focused in one call for every hundred and a Return on Investment of 300% at a cost per lead of \$120.

However, I strongly recommend personalization in a newsletter. As you look at third-party firms to help, you may see they provide premade newsletters filled with generic content that are ready to mail short of your logo. While these might be cheap, in



Personalization is key. Even though I recommend personalization, this doesn't mean you are writing everything in it or figuring out all the de-





tails. For example, our vendor, EB & L Marketing (<https://ebandlmarketing.com/>) provides us with a menu from which we pick different articles for different sections.

This way we fill up the newsletter with the content that we want for the frame they have provided us.

The articles are populated into the newsletter, then we get to see and edit it accordingly. We take personalization a step further by always writing the opening article ourselves. For us, that is usually done by our owner, Bill Kennihan.

If you are not the writing type, your vendor can create these for you based on what you want it to say.

FYI: I have found **HudsonInk** ([hudsonink.com](http://hudsonink.com)) is also a good source for newsletters. With them, you decide how much content to include in the newsletter and they will work with you.

When discussing newsletters with

your provider, make sure you know what they include and what they don't include. For example, if you decide you want them to write about a topic for which they don't already have an article done in house, there might be extra charges.

Newsletters separate you from the crowd, just like your NCI certification does. It is one more way to show why you are not like everyone else. **NCI**



**Jose Montes** is the office manager at Kennihan Plumbing, Heating and Air Conditioning, in Valencia, PA. His industrial engineering background propels him to always look for improvement. As a contractor he enjoys sharing what he has learned with others. Go to [ncilink.com/ContactMe](http://ncilink.com/ContactMe) for more info.



## “No Cooling: Really?”

— **Kent Donnelly, Tetra Mechanical, Simi Valley, CA**

“We came out on a “no air conditioning” call and found this bit of artwork. I was so stunned, my jaw hit my chest. I literally had no words.”

Kent Donnelly from Tetra Mechanical is the July 2020 winner of our Photo-of-the-Month contest. He won in the *What The Heck* category, as voted on by the subscribers to **High-Performance HVAC Today** ([ncilink.com/HToday](http://ncilink.com/HToday)) and visitors to the website. He will receive a \$25 gift card.

You can too – submissions are always welcome. If you'd like to submit a photo for consideration in our Photo-of-the-Month contest, go to [ncilink.com/POMSubmit](http://ncilink.com/POMSubmit) and fill out the information as requested.

## THE AUGUST CONTEST OPENS ON JULY 10, 2020.

That gives you plenty of time to submit something in any of our three categories: **The Good, The Bad, and the WTH (What the heck).**

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New Online Live Course: Grow Profitably with Airflow Upgrades

National Comfort Institute (NCI) recently added a new online live course to its growing repertoire of Distance Learning training. It is called **Grow Profitably with Airflow Upgrades Online Live** ([ncilink.com/GrowAU](http://ncilink.com/GrowAU)).

This course addresses the fact that typical air distribution systems lose an average of 43% of their efficiency because of poor design and installation. Why should your customers have to live with these substandard systems?

The answer is: they shouldn't. Taking this training can help ensure they don't.

**Grow Profitably with Airflow Upgrades Online Live** is a two-hour online course that will help you discover the many business opportunities available just by adding minor air duct renovations to your residential HVAC service and replacement business offerings.

HVAC contractors, managers, and sales personnel should attend this class to learn why Airflow Upgrades are so critical, and how they can improve profitability. Each student who successfully completes the class will receive a digital Implementation Quick Reference Guide and more.

Go to [ncilink.com/OL-AirUpgrades](http://ncilink.com/OL-AirUpgrades) to see how this may be just the option for your team.

For more information on other Distance Learning Courses available to you, just go to [ncilink.com/DistLearn](http://ncilink.com/DistLearn).

We've Restructured NCI Online University!

You may notice some great changes to the look and feel of our **Online University**. All the training has been reorganized into logical learning steps.

Let's take a look at the Advanced Technical Training category:

**NCI Fundamentals 101** consists of 10 courses that will help your team understand the basics of airflow, what the fan laws are and how they work, and addresses the impact of returns and grilles, filters, and more. It also includes an introduction to carbon monoxide.

**NCI Fundamentals 201** has nine courses that take your field people to the next level once they've mastered the 101 series. From how to take duct traverses to basic building pressure, this level sets you up to understand Btu measurement, how to calculate HSPS™ and CSPS™, and so much more.

**System Performance Testing** features eight courses covering the fundamentals of HVAC system performance and measured Btus. Techs will learn system temperature measurement basics, fundamentals of equipment Btu measurement, and system Btu measurement.

**Another beneficial change:** Members receive a **10% discount on all classes** while those who have the Learning Excellence Premium and Learning Excellence Online subscriptions get the entire Online University **included**.

The NCI Online University Business Man-

agement Training follows a similar organization. There are 101, 201, and 301 levels plus a four-module **Path to Performance with NCI's 4-D Business Model** course.

The Online University also offers Business Performance 101 and 201 Training.

Plus, the Online University's reorganized **Customer Service Training** includes the following courses:

- Customer Service Excellence
- Proactive Customer Service 101
- Proactive Customer Service 201
- HVACR for Rookies.

Don't forget about the library of **NCI Series Webinars** — over 70 hour-long recorded webinars on a variety of HVAC subjects, led by NCI trainers and staff.

Get Your July 2020 PowerPack Today!

Your July 2020 PowerPack is ready. This month it focuses on content to help you integrate testing and diagnostics into your company's culture:

- **Top 10 HVAC Performance Based Sales Obstacles** (Download)
- **An Air Side Diagnostics Lesson** (Download)
- **CO Levels and Risk Chart** (Download)
- **HVAC for Rookies** (Online Training Modules)
- **Master HVAC Pressure Diagnostics with NCI Static Pressure Budgets** (Webinar).

To access your PowerPack today click here: [ncilink.com/PwrPak](http://ncilink.com/PwrPak).

If you have any questions, or if you are unable to access any of the tools in this program, please contact your Customer Care team at 800-633-7058.

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## Summit 2020 Is Going Virtual!



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*High-Performance  
HVAC Today* magazine  
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**A**s you know, there are still many challenges with travelling during this pandemic. In addition, we are faced with the strong possibility of additional waves. For this reason, we've decided to make this year's High-Performance HVAC Summit a virtual live event.

Virtual Summit Week 2020 is scheduled for October 5-9. The best part is you won't have to leave the comfort of your home or office to participate. In fact, we are making it easier and more affordable than ever to "bring" more of your team to Summit this year.

With NCI's improved communications technology and our ability to create very interactive virtual events, this year's Summit is poised to be an event like no other in our industry.

When the lockdowns first hit, NCI immediately began investing in technology and curriculum development to take as much of our training online as possible. We built a robust video studio within our headquarters training center, and continue to improve and learn from our experiences.

In early April we began broadcasting live training and recertification events. In just a few months more than 600 students participated in NCI's live, online training events with more than 300 achieving recertification in six different areas.

We also have several brand-new recertification classes being rolled out over the next few months.

### WHAT WILL OUR FIRST VIRTUAL SUMMIT LOOK LIKE?

Our team is currently putting all the pieces in place to create the most interactive online event we have ever held. Nearly every feature of Summit that our members and students have grown to enjoy over the years will be virtualized to allow for intensive interaction with our presenters, fellow contractors, and our industry partners.

As advertised, this year's theme will center around coaching your team to high performance. Our general sessions and breakouts are all focused on how to communicate with and coach your entire team.

Our opening session will once again kick off with

our fun and informative game show, "Reach For The Summit." This year's contest will also focus on coaching. Attendees will actively participate by assisting our contestants with "audience voting" on correct answers. In "Reach For The Summit" tradition, NCI coaches will provide commentary throughout the session.

Each of this year's breakout sessions will focus on communicating with and coaching different groups on your team. The session content will help you provide a cohesive and consistent experience for your customers as your company delivers high-performance service, system replacement, and renovations. For details on this year's breakout session be sure to visit [ncilink.com/2020breakouts](https://ncilink.com/2020breakouts).


**Virtual High-Performance HVAC Summit 2020** will include all the same events normally held during our in-person Summits, including our Idea Meeting, where contractors bring sales and marketing ideas and can win cash prizes, to our Virtual Tradeshow where you can learn about the latest products and services from our industry partners.

Summit 2020 will also feature several general session speakers, a special contractor panel discussion, and our coveted NCI contractor and individual awards.

### BONUS PRE- AND POST CONFERENCE SESSIONS!

We will again offer several pre-conference sessions on October 5th, and three post-conference recertification classes on October 8-9th.

Registration will be open within the next few weeks, and will include reduced conference fees and special group pricing. In addition, you'll save big by eliminating travel and hotel costs this year!

Be sure to mark your calendar for Summit 2020 the week of October 5th, and visit [GoToSummit.com](https://GoToSummit.com) for more details. We will soon be sending notices when registration is open for what promises to be the best and biggest High-Performance Contractor virtual event of 2020! 

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- Grow Profitably with Airflow Upgrades
- Airflow Testing and Diagnostics
- Performance-Based Selling

### Online, live recertification available:

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- Combustion and Carbon Monoxide Recertification\*

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