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WORKPLACE SAFETY

ALSO IN THIS ISSUE:
CO Draft Testing: The Heart of
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Why You Need A Safety Culture

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**MANAGEMENT:
 CO Draft Testing: The Heart
 of Performance Safety**

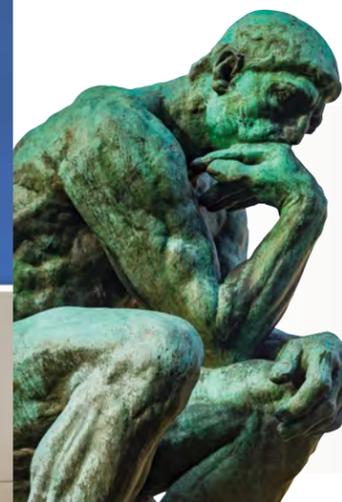
Contractor Tom Spall explains his company's approach to performance testing and carbon monoxide safety.



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**TRAINING:
 A Culture of Safety**

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So How Are We Doing? "SURVEY SAYS ..."



Mike Weil is editor-in-chief and director of communications and publications at National Comfort Institute, Inc. Contact him at ncilink.com/ContactMe.

As a journalist and trade press editor, I am always interested in what readers say about our publication, the articles we provide, and their usefulness. Over the years, many of you anecdotally shared what you like, don't like, and wish we'd do more of and that is certainly very helpful.

Sometimes it's worth the effort of doing formal surveys to get specific answers to specific questions and use that information to help guide the future content development for the magazine.

So in July 2021, we did that survey. We even offered a reward for those who took the time to participate. More on that later.

Here is what you told us:

Readers of *High-Performance HVAC Today* are mostly HVAC contractors (nearly 90%) who are extremely interested in the technical issues that surround the High-Performance approach to delivering HVAC services. In fact, 82% of you look to this publication to get a laser focus on the High-Performance HVAC contracting industry and 90% of you fully trust the content within our pages.

Furthermore, reading in-depth content with useful technical information is among the most important features that you like about the magazine. More than 85% of you shared this detail with us.

It is important to the team here at the magazine to understand how you use the information we provide. Here is what you told us:

- 80.3% of our survey respondents say they use the magazine to find out more about the high-performance approach to contracting.
- 77.6% say *High-Performance HVAC Today* content helps them to do their jobs more efficiently
- 71.1% find the publication useful for locating additional training for their teams.

- 61.8% use the magazine to reinforce high-performance within their companies.

"The information your magazine provides sets the foundation of the High-Performance approach we have in our company," writes William Laurin of No Hack HVAC in Corona, CA.

Mark Thompson of Ward Mechanical Contractors, Denham Springs, LA says, "I am the field operations manager at my company. I read the magazine every month and find it to be a great asset in helping me learn how to better perform my job."

Your comments provide a guidepost to where we need to go in the future. For that, I personally am very grateful.

FIVE SURVEY DRAWING WINNERS

Contractors who took this survey were placed into a drawing for a new NSI 6000 Carbon Monoxide Monitor (See Dominick Guarino's 'One More Thing' column on page 22 about the importance of these new devices). We drew five winners. They are:

- Steve Houser of Houser's Air Conditioning and Heating Service, Glenwood, IA
- Ernest Craig of A & K Service Heating and Cooling, Alpharetta, GA
- Gerald Kurtz, Sandstone Service, Monticello, IN
- Michael Quigley, Michael Quigley Plumbing and Heating, Manasquan, NJ
- Perry Sheppard, JPS HVAC of Omaha, NE.

Congratulations to our winners who will receive their NSI 6000 monitors in the mail shortly. And thank you to all the participants who shared their feedback and comments with us.

We know how busy you are, especially during the summer season. Your answers will help me and the entire magazine team do our best to serve you the content you need and want. And that is our ongoing mission. 

Written by HVAC Professionals for HVAC Professionals

A Great American Pastime

Before you get too excited, I'm not talking about baseball. I'm talking about the great American clipboard. And not just any clipboard like the one invented in 1908 by George Henry Hohnsbeen.

I'm talking about the two clipboards every National Comfort Institute (NCI)-trained contractor and technician has come to love.

NCI clipboards are printed with all the tables and charts necessary to help you complete your High-Performance HVAC diagnostic process.

Designed for two different users — one is for the system performance guru, the other is for the duct design master.

The NCI clipboard has saved thousands of man-hours across the country

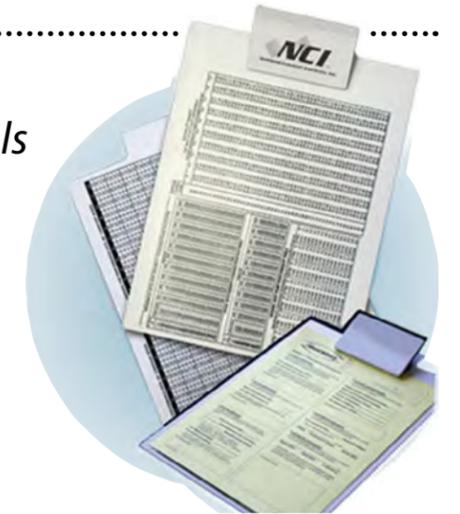
by making manufacturer equipment ratings a thing of the past. Check out what each chart has to offer.

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- ▲ Air Density Correction
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- ▲ Heat Pump Performance
- ▲ .50" Fan Performance
- ▲ .80" Fan Performance
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- ▲ Cooling Capacity.

Duct Design Master

- Duct Design Tables
- Static Pressure / Blood Pressure Table
- Airflow requirements
- Static Pressure Budgets
- .50" Fan Performance
- .80" Fan Performance
- .80" Var. Fan Performance



- Nomenclature lookup. Only an NCI-certified professional can buy these clipboards. Your untrained competition won't stand a chance.

For more information, or to buy these clipboards, go to ncilink.com/ClipBd or call your NCI Customer Care Representative at 800-633-7058.

— by Casey Contreras, NCI field coach and instructor




Certification Can Provide ROI for Residential Stakeholders

Why are certifications so important in the HVAC (and most other) industries? The answer can be complicated, but in general, it's because they provide a third-party document attesting to a status or level of achievement. Certifications are designated credentials earned by an individual to verify their legitimacy and competence to perform a job. Your certification is typically displayed as a document stating that you've been trained, educated, and prepared to meet a specific set of criteria for your role as a professional.

Earning certifications through National Comfort Institute (NCI) shows your commitment to being the best technical expert the High-Performance HVAC Industry has to offer. But other certifications can help you and your company stand so far out from others that you virtually have no competition.

PEARL CERTIFICATION

This month we shine our spotlight on one such company. Pearl Certifications is a Charlottesville, VA-based NCI partner that brings your skills to bear on what is called the high-performance home marketplace. Pearl's focus is on being the standard for the most comfortable, healthy, and energy-saving homes on the market. Their certification can increase a home's value and introduce the High-Perfor-

mance HVAC contractor to a marketplace segment where value is more important than price.

Click here to learn more about the [Pearl Certification Process \(ncilink.com/PearlCP\)](http://ncilink.com/PearlCP).

A HIGH-PERFORMANCE APPROACH

Pearl started in 2015 when co-founders Cynthia Adams and Robin LeBaron opened the doors to a firm that, at a high level, creates and provides a suite of sales and marketing tools for contractors.



Cynthia Adams is co-founder and CEO of Pearl

LeBaron, who is Pearl's president, says, "In essence, Pearl is a platform for which we've created a suite of tools that help homeowners understand what they need to do in their home to improve their comfort, health, and safety, then find the resources to make those improvements. We put them in contact with contractors, real estate agents, appraisers, and eventually lenders to achieve high standards of excellence and ultimate value."

LeBaron says their approach goes beyond certifying what already exists to giving homeowners the resources

they need to keep making improvements. That includes educating them as well.

EDUCATING HOMEOWNERS

"There is quite a knowledge gap within the market with regard to understanding what the high-performing home and high-performing opportunities are," he adds. "The knowledge gap extends from homeowners to agents, appraisers, and all the rest."

From a Pearl perspective, the standards a home could be built to, with reasonably affordable technology compared to what typically exists today, demonstrates that gap in terms of HVAC performance and building shell performance.

In terms of what may narrow that gap, LeBaron points out things like smart devices, plus the ability to generate and store energy. Opportunities, he says, also lie in air filtration, indoor air quality improvements, safety issues, and accessibility issues.

"The key is to make these investments cost-effective. And even when they're not, they still offer so much improvement in the health and livability of a home that educated consumers



Robin LeBaron is co-founder and president of Pearl

want to invest anyway.

"We are interested in addressing that education challenge," LeBaron says. "That is one reason I think this relationship with NCI is a really good one. The nerve center in every home is the HVAC and associated distribution system. Clearly, high-performance HVAC is central to that. We want the home to perform as well as it possibly can, and for that to happen, the HVAC and distribution systems need to perform as well as possible."

Cynthia Adams, the Pearl CEO, adds that their high-performance contractor focus is at the heart of providing consumers superior installation quality in homes. She cites a NIST (National Institute of Standards and Technology) study that shows how incorrectly installed high-efficiency equipment leaves the homeowner with low efficiency and dissatisfaction when it comes to saving energy dollars and achieving superior levels of comfort.

PARTNERSHIP ROLES

Adams adds that the installation quality issue is a direct link to HVAC manufacturers. She explains, "manufacturers would like to see no callbacks and a happy customer when it comes to the mechanical equipment installed in their homes. The contractor has a lot to do with that. Unfortunately, many contractors don't do a good job installing equipment, and fewer still do performance testing on their installations."

She says that's why Pearl wants to educate homeowners on why proper installation and performance testing is so important.

"We want to lift and elevate those contractors who are doing that work



Energy savings, quality installation, indoor air quality, and more are all important to a High-Performance Home. High-Performance HVAC is the nexus for this.

right in the first place," Adams continues. "Our certification system includes a significant number of points for quality installation and the ability to document that the contractor did do a quality job. By the way, the documentation process NCI-trained and certified contractors use when performance testing is proof a house is performing to a level that warrants our certification. You can't achieve our highest level of certification without having that documentation."

"This is why we believe our certification platform is a good fit with NCI and the goals of that organization."

CREATING A WHOLE HOUSE CERTIFICATION DEMAND

Both LeBaron and Adams say that their approach is a push-pull to the market. They want to bring homeowners up to speed, so they look for and demand high-performance services. And that may lead to more contractors looking to get involved.

Because Pearl's approach is a whole-house certification, Adams says they engage with HVAC contractors, insulation contractors, plumbers (because of water heating), LED lighting specialists,

appliance installers, and others.

She says that is why they created something called **Green Door** (ncilink.com/GreenDoor). This consumer-facing portal enables homeowners to engage themselves in "updating their home's record, learning about additional improvements they might make using that contractor again, or a complementary trade. This holistic approach is unique in our industry."

PEARL AND HOME APPRAISERS

Another major partner for Pearl, according to LeBaron, is the appraiser community. He says, "Pearl is about ensuring the homeowner recaptures the value of their higher-performing homes. Appraisers are vital in that transaction. So, just engaging with them and helping to train them is a big part of what we do."

"We also train real estate agents so that they can communicate the value of high-performing homes to potential buyers during the sale. We've found that a trained agent makes a huge difference in ensuring that such a home sells for a higher price."

What about HVAC distributors? LeBaron and Adams say they too have

a role to play, though that is down the road.

Adams says, "Initially, we felt like it might be more compelling in engaging distributors if we had some recognizable names within the portfolio. I'm talking about contractors who work directly with us and some recognizable manufacturers.

"We are finding that manufacturers are making the introductions to their distributors, which is a much stronger approach.

"From a marketing and brand loyalty perspective, there is a benefit that we can bring to distributors through our program.

"It's possible that by the end of the year, Pearl will announce our first distribution partner — we are in conver-

sations with a distributor now."

THE NCI CONNECTION

LeBaron says that one of the most exciting partnerships to date is with National Comfort Institute. "We feel, without exaggeration, that NCI has some of the best contractors in the U.S."

"Pearl Certification can provide two things that could be very valuable to an NCI contractor," continues Adams. "One is the power of increasing closing rates. Contractors in our network see a five to 10% increase when leveraging Pearl in their sales conversation."

She adds that they have appraisal studies -- including a new one to be published in the future -- that show a Pearl whole home certification can increase home value on average by 5%.

"So, we're not relying only on one-off testimonials when we say that Pearl certification helps contractors' customers see an ROI on their installations. We have appraisal studies that back that up," she says.

Both executives say that contractors who already hold NCI certifications have a leg up and can truly benefit from working with Pearl.

Between high-performance testing reports to Pearl certification, contractors can finally prove a return on investment to homeowners. And if that doesn't close sales, what will?

For these and many other reasons, the editors of *High-Performance HVAC Today* magazine are pleased to shine the September Spotlight on Pearl Certification. 

CO Draft Testing: The Heart of Performance Safety

Back in 1993, I set my company onto the High-Performance HVAC Contracting path. To me, testing, measuring, and diagnosing issues filled a gap I'd been experiencing in my company almost from the beginning when my father and I started it back in 1985.

One of the critical features of the performance approach, at least for me, is the combustion analysis portion and carbon monoxide (CO) safety.

We embrace that as heavily as we test and measure on the airflow side of the equation. These two things are invisible, yet they impact customer comfort, safety, and efficiency more than anything else.

The key is you cannot quantify that impact without instruments and testing. And you cannot correctly use those instruments and test accurately without training.

IT'S A CULTURAL THING

Training is simply part of our culture here at T.E. Spall and Son. As a result of our performance

training, we now have the tools and knowledge to quantify the improvement in CO safety, comfort, and efficiency.

We joined National Comfort Institute (NCI) in 2003, and in that first year, we brought in NCI trainers to conduct in-house training and certify everyone in the company. We have been students of High-Performance HVAC ever since.

Here is what we train for on every call:

- Causes and effects of CO poisoning
- Proper diagnostic procedures
- Proper repair procedures
- How to prevent problems from occurring.

One part of our training that is vital to success is using a combustion analyzer, knowing where to place it, and interpreting what its readings mean.

When taking combustion training with NCI, you learn what to look for when equipping your team for doing combustion testing. An important feature is a fast response to CO and oxygen level changes. In an article written by NCI CEO Dominick Guarino (ncilink.com/ABCs-7), he explains that you

should check out the pump volume when you look at any analyzer specifications.

"The more volume it can pull," he writes, "the faster the analyzer will respond to changes. At a minimum, it should pull at 400 cc/min. A better volume is 700 cc/min."

Guarino also points out two other features to look for in a good analyzer:

- A high-range CO sensor. The higher the range, the more likely it will quickly bounce back from a very high reading in a flue. Look for a high minimum of 4,000 ppm. 8,000 ppm is better

HVAC technician conducts a carbon monoxide draft test on a domestic hot water heater.



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● Calibrated replacement sensors. These make it possible to avoid sending the instrument back to the manufacturer to replace a sensor – a definite cost savings.

Having the right tools is just one step. Again, training is vital. We try to have as many of our technicians trained and certified in CO and combustion as possible. I'd say that 70% of our company right now is trained and certified.

DRAFT TESTING HAS LEFT A POSITIVE MARK

With training under our belts and equipped with proper tools and instruments, we implemented combustion testing on every service call, every installation, and startup.

We embraced it 100%, implemented it, and talked about it every week in our meetings. We invite our technicians to tell us what's going on, what's confusing, what's not.

Though I can't quantify the impact of CO draft testing in direct dollar terms, I can confidently say that delivered revenue is one benefit that's come from it. At T.E. Spall and Son, we now install draft modifications regularly on atmospheric draft hot water heaters.

We do this maybe 30% of the time. We include draft modifications when we change out a gas water heater. The cost is built into our water heater changeout fee.

CO draft testing has also given us a leg up in our marketplace. We are one of few organizations that test, measure, and diagnose issues and then offer customers choices. These choices are on how to keep their systems safe and improve their comfort.



NOT ALL A BED OF ROSES

In the beginning, trying to get all our field service and installation techs to do CO draft testing was difficult. Change is hard, and we did have some resistance, especially on new installations.

My installers would say things like, "Tom, it's a brand-new system. Why do we have to combustion test it?"

I tell them the reason is that equipment is not perfect straight out of the box. We have to attach it to an existing ventilation system that may not be

functioning properly. So we test and we train. We train in our small training facility and out in the field.

Another issue we faced was making sure they were doing performance tests in the field. Part of resolving that was talking about testing every week in our service meetings. We also ask our field techs questions. Reviewing their tickets is important too.

Our technicians know that if they need to call me with questions, they better have certain information. I need to know from their analysis if the issue is combustion-related. I need to know if the appliance is power vented or not.

I'll ask for information such as oxygen readings, CO readings and its action, and the draft measurements results, if applicable.

With high-efficiency inducers, there's certain information necessary to coach a tech in the right direction.

But it's by living and breathing the high-performance culture that shows people it's here to stay. It's important. They need to do it.

For us, we've been doing this long enough that it is part of our culture.

Today our long-term technicians stress the importance of testing and measuring to new guys. The senior technicians are

You've got to talk about PERFORMANCE TESTING every single week. IF YOU DON'T, your team will drift away from it.

now who teach the 'why' behind why we do these things.

THE HEART OF PERFORMANCE SAFETY

The High-Performance HVAC method is, in my opinion, the future of this industry. It is essential for customer satisfaction and safety. It isn't easy. It requires focus and patience. And it can only succeed if it is driven from the top down throughout the entire company.

As the adage says, "the fish stinks from the head down." By this, as the owner, you better be 100% bought into the High-Performance approach and believe in it if you expect your people to do it. Then, you must deliver that message to your people and teach

them the 'why' behind it. That means helping them to understand why performance is so crucial for their safety and the safety of your customers.

We want everybody going back to their families at the end of the day, and we've got to be doing the right thing in identifying these problems.

Next, performance testing and measuring must be part of your culture. You've got to talk about this every single week. If you don't, your team will drift away from it. And that will happen. When it does, you need to refocus on helping your team to get back on point.

As we slow down from our summer busy season, we'll start training our field technicians on combustion again. This brings testing and mea-

suring on the heating side back to the forefront leading into our heating season. All of our field people can then brush the rust off, blow the dust off, and make sure they do the right thing. Isn't that the heart of high-performance contracting? **NCI**



Tom Spall is president of T.E. Spall and Son, Inc. (ncilink.com/TESpall) of Carbondale, PA. Known as the Comfort Doctor, this 36-year-old HVAC service, add-on/replacement, and construction company enjoyed gross sales of just under \$4 million in 2020

and is well on the way to breaking their \$5 million budget in 2021. He is a strong proponent of High-Performance HVAC contracting, and training. You can reach him at ncilink.com/ContactMe.

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Why It's So Important To Have A Culture of Safety

Haller Enterprises, Inc. is a 40-year-old residential and commercial HVAC, plumbing, and electrical contracting company serving residential and commercial new construction and service markets. Based in Lititz, PA, the company employs around 350 people in five branch locations around the state.

With that many employees and customers, our mission is to keep them all safe and healthy. That is a big mission.

From its start by Rick Haller back in 1981, the company developed seven core values, and safety was among them. We're anchored by our values and driven by our vision for a better service experience.

WHY IS SAFETY SO IMPORTANT?

Customer safety is always at the forefront of our minds on every job, and with the pandemic, we leaned in to be sure we were as safe as possible when working at customer's homes. Safety included wearing full personal protective equipment (PPE), sanitizing all tools and equipment, and using daily covid protocols for technicians. We view our jobs as keeping our customers safe, whether by providing them clean air by replacing an air filter or fixing an electrical issue in a panel.

Our #1 priority is to make sure our teams go home safely every night. To that end, we regularly

hold training to help improve job site safety.

Safety becomes paramount during the busy seasons. We've noticed over the years that when things get busy, there tends to be more injuries. Many such injuries are caused by technicians working too quickly to finish jobs and move on to the next one.

Your company and your techs must keep everyone in the game during the busy season. This is the time to communicate the importance of safety more often; remind the techs to slow down and ask for help if they don't think they can do something safely.

CREATING A SAFETY CULTURE

Haller's approach to safety begins by creating policies through what we call our Safety Committee. The committee consists of people who work in the field, do the work, and face safety considerations every day.

Once the committee develops safety policies, we take it from there and start driving those home,

focusing on the areas where we see the most difficulty.

Here are some bullet points on how we develop and maintain a safety culture at Haller:

- Safety is all about good **communication**, keeping it up front, and part of your daily safety routine. We talk about it in our daily huddles. We talk about it in our one-on-one conversations.
- **Evaluations.** Everyone is evaluated on safety

at their quarterly one-on-one meetings including management. We talk about difficulties and wins at monthly department meetings.

● **No-Blame.** We have what we call a no-blame autopsy process where everyone in the room is equal. There are no ranks recognized here. Everybody discusses what happened during the incident. Sometimes, depending on the type of event, we might go to the site to see where it happened. We **examine the event triggers** and talk about the consequences of decisions that could have caused it.

● **Training.** Like anything else, safety requires training and practice to make it work in any company. Most companies partner with third-party organizations to help with safety training. In Haller's case, we partner with several – including National Comfort Institute (NCI).

This process is a focus on continuous improvement. Between our approach of no-blame and engaging the right stakeholders, we create a community that focuses on the big safety issues and on daily suggestions to help avoid minor issues. Such suggestions include getting better work gloves, PPE, or safety glasses.

Then it is up to the leadership to go to their resources and have samples brought in for the team to examine. The team then decides what works best for them. They own the decision. And I think when you create that type of engagement, it creates people who are champions. That is our culture.

So safety is not just a leader's responsibility. It is also the team's responsibility.

The Safety Committee is a peer-to-

peer program developed and fostered by Dwayne Stauffer. Furthermore, this process also works to help improve minor injuries such as sprains and strains. We also regularly talk about these injuries and encourage team members to stretch before beginning work to help prevent them.

COMPANY SIZE DOES NOT MATTER

Even though Haller is such a large company, this kind of safety culture is transferrable to companies of any size. Smaller companies may not have dedicated safety leadership on staff, but they should have someone with safety as one of their responsibilities. The key is to create a peer-to-peer culture of inclusion and a no-blame approach to safety events.

There are two key things a smaller company should think about: First, as an owner or general manager, you must break the habit of having all the answers. Your role is to facilitate. Let everyone speak freely.

Secondly, when you include others, safety becomes part of *their* responsibilities. In a small company, that would be incredibly powerful.

TRAINING IS AS IMPORTANT TO SAFETY AS IT IS TO SKILLS

For you to create and foster a culture of safety, you need regular and continuous training. There are many sources for this training from national sources through the Occupational Health and Safety Administration (OSHA) and third-party outfits like NCI.

When it comes to HVAC services and construction, we

focus on **Combustion Performance & CO Safety** (ncilink.com/COTest) training provided by NCI. We usually bring their trainers in to train all our field guys over several days.

We also focus on OSHA training. Specifically, we do **OSHA 10-hour training** (ncilink.com/OSHA10) for all our employees. This online training program covers fall protection, personal protective equipment (PPE), electrocution protection, ISHA inspection procedures, and more.

For our foremen, we recently began using the **OSHA 30-hour training** (ncilink.com/OSHA30). Furthermore, we do what is known as confined space training (forklift training) and more.

Internal Training: For a company of our size, we use an outside training consultant to organize programs customized for our needs. This consultant also provides advice and guidance. When he puts on a training program, it's all hands-on, and in many cases, training is on-site.

By the way, we design our training approach to be engaging and interactive. We've found if you don't use this approach, it usually doesn't work. No matter what size your company is, you need to find a way to engage your technicians so they can relate to it. Engagement makes training real for techs.

Part of that is making sure the techs understand the "why" behind safety. Remember, techs are diagnosticians. They are good at tracing problems to the root cause, doing root cause analysis, and finding solutions. The same should be valid for your approach to



safety and your training.

KEEP TRACK OF SAFETY

Finally, as NCI likes to say, “If you Don’t Measure, You’re Just Guessing.” This statement is true for creating a safety culture; regardless of how minor the incident. Each safety incident is an opportunity for your team to learn and get better, no matter the size.

We keep track using specialized software, but there are plenty of ways to build Excel spreadsheets to keep track of incidents. You can track the number of days between incidents, keep tabs on technicians to see the impact of their training on the number of incidents they have, and more.

Then during our regular one-on-one meetings with the techs, we can ad-

dress any safety issues we see. It’s important to share what we learn from our incident meetings with everyone. It’s a learning opportunity.

Creating a culture of safety includes catching people doing something right. Our team can nominate people for recognition regarding a specific one of Haller’s Seven Values. It’s an opportunity. These recognitions give us a chance to celebrate. Then we have an end-of-year recognition breakfast.

In the end, safety for both your techs and customers should be a high priority. The new generation coming into the trades care about work-life balance and about going home in one piece. Do yourself and them a favor and begin working on or improving your culture of safety today. 



Eddie McFarlane is Vice President of Learning and Development for Haller Enterprises, Inc., Lititz, PA. He has been in the HVAC trades for 19 years. He joined Haller Enterprises in 2006, with a focus on residential service and replacement.

McFarlane served in various positions within the company, including sales, management, and marketing on both the commercial and residential sides of the company. You can reach him at ncilink.com/ContactMe



Dwayne Stauffer is the Safety and Risk Control Manager at Haller Enterprises. He has been with Haller for 32 years. Stauffer began his career in the electrical trades, earned his journeyman license, moved into management, and eventually into a safety role. According to McFarlane Stauffer led the development of Haller’s safety culture. You can reach him at ncilink.com/ContactMe.



The Power of Changing Your Mindset

Have you ever felt like there is more to life than what you are experiencing today? That you are somehow missing out on the life that you were meant to live?

What is really holding you back?

Is it laziness? Lack of motivation? Lack of time or resources? Lack of experience or education? Lack of extreme weather? Lack of skilled workers? Lack of available equipment? Lack of luck?

Most likely, there is a deeper issue underlying this “lack” in your life. “Mental blocks” commonly hold you back from achieving your true potential. In other words, the problem is in your mind!

SELF-LIMITING BELIEFS DESTROY FUTURE RESULTS

Henry Ford said, “*Whether you think you can, or you think you can’t, you are right.*” The key word in his statement is “think.”

Mental blocks (or “self-limiting beliefs”) affect everything you think, feel, do, or avoid doing. According to American Psychologist Carol Dweck (ncilink.com/CDweck), “Changing people’s beliefs – even the simplest beliefs – can have a profound effect.”

How much we achieve doesn’t depend on innate ability, character, environment, or opportunities. Achievement depends on what we be-

lieve about ourselves, and what that means to us. That is called our “mindset.” Learning to control and change mindset impacts our success.

If you want to achieve greater success in your life, you must do so with clarity, confidence, focus, and a strong belief it can be done. You must learn to destroy self-limiting beliefs and embrace a high-performance mindset.

EMBRACING A HIGH-PERFORMANCE MINDSET

According to an **INC.** magazine story (ncilink.com/IncProductivity), researchers find that 92% of people say they never achieve the goals and resolutions they set for themselves each year. Most people do not really believe they will ever achieve them.

They fail “in their mind” before they even get started. In studying the 8% who do achieve great success, a common ingredient was discovered – they all operated with a **positive, success-oriented, high-performance mindset.**

These positive thinkers come from all walks of life. They can be married, single, or divorced; highly educated or high school dropouts; wealthy, middle class, or even poor by most standards. They are a variety of ages and ethnicities. The fact is, no matter where you are in life or where you came from, you can set big goals and achieve them with the right mindset.



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Here are seven steps to help guide you into a winning mindset:

UNDERSTAND YOUR “WHY”

Your WHY defines your purpose, belief, cause, or existence. In his amazing book, *Start with Why: How Great Leaders Inspire Everyone to Take Action* (ncilink.com/Sinek), Simon Sinek says “knowing your WHY is the only way to maintain lasting success.”

Changing your mindset takes work

think about.” If you want to achieve better results, you must think better thoughts.

We live in a skillset-driven industry. When you believe more education leads to goal achievement, your primary focus becomes learning new skills and improving existing skills.

People in general are usually on the lookout for that “silver bullet” skillset that makes everything fall into place.

iting beliefs, self-doubt, and a whole host of negative thoughts that get in the way of your future success. Zig Ziglar (ncilink.com/Ziglar) labeled limiting beliefs as “stinking thinking.”

Furthermore, in an article published by the TLEX Institute (ncilink.com/PosThoughts), author Nerin-ga Antanaityte says that up to 60,000 thoughts go through our minds each day. Left unchecked, 80% of them stink. These negative thoughts occur so often that most people are unaware of them. Aware or not, they seriously impact our outcomes.

We all know that little voice in our head that makes you hesitate before changing the way you do things.

What if you try something new and it fails? *What if you do nothing new and your business fails?*

You must identify your limiting thoughts and find ways to eliminate their impact on your future performance. When you allow limiting beliefs to control your actions, you remain stuck where you are.

FLIP THE SWITCH WITH THE “IF/THEN APPROACH”

Once you identify your top negative thoughts, you must stop them from holding you hostage. You need a way to “flip the switch.” When you find yourself looking at a situation through a set of negative lenses, flip the switch and discover ways to turn the negatives into positives. It will take time to embrace this way of thinking, but it is well worth it.

From my computer background, I learned an effective method to attack this mindset challenge - the “*if/then approach.*” When you recognize a negative thought, simply stop to con-

shut those negative thoughts up. Flip the switch!

REALIZE THAT MOTIVATION AND WILLPOWER ARE NOT ENOUGH

Most people incorrectly believe that motivation and willpower are all they need to achieve goals. That is because it is common advice given by friends, family, motivation gurus, and life coaches.

Motivation is hard to maintain no matter how important your goal may be, and that’s when willpower is supposed to kick in.

Willpower is like a gas tank. You start with a full tank, but deplete your supply each time you use it.

High achievers understand this reality: achievement is not about grinding your way to success. By accepting this

fact, you will stop punishing yourself for stumbling or failing to stick to your plan. This emotionally frees you to optimistically try again tomorrow.

START SMALL SO YOU CAN FINISH BIG

This may sound counter-intuitive, but one of the best ways to change your mindset and realize your dreams is through setting ridiculously tiny, utterly achievable goals.

Decide that your tiny goal is the minimum, and that you can do more if you feel up to it. Some days, you will do more and feel great because you are overachieving. Other days, you may do the minimum and feel great because you have met your goal. Either way, you feel great!

Nine Points to Changing Your Mindset

- Self-Limiting Beliefs Destroy Future Results
- Embracing a High-Performance Mindset
- Understand Your “Why”
- Accept the Fact That You Must Adjust Your Thinking
- Identify Your Most Common Limiting Beliefs
- Flip the Switch with the “If/Then Approach”
- Realize That Motivation and Willpower Are Not Enough
- Start Small So You Can Finish Big
- Get Comfortable with the “F” Word

because established habits are not easy to break. This is especially true since many of our most harmful habits and negative mindsets were formed when we were kids. You must understand your WHY to keep you inspired, motivated, and on the proper path to higher performance.

ACCEPT THE FACT THAT YOU MUST ADJUST YOUR THINKING

Your current results are based on your current thinking. According to Earl Nightingale (ncilink.com/EarlNightingale), the strangest secret to success is “we become what we

Unfortunately, skill development efforts fall way short when the student has a negative mindset.

Improved skillsets - *together with the proper toolsets* - are critically important to success. But our mindsets need adjustment long before we invest in additional tools and training. Fail to adjust your thinking and you will fail to achieve better results.

IDENTIFY YOUR MOST COMMON LIMITING BELIEFS

Mindsets are formed through prior experiences and emotional milestones. Bad experiences lead to lim-

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Massive change requires small steps, repeated daily, which create momentum and yield positive high-performance results over time.

According to an article published in 2018 by the *Chicago Tribune* (ncilink.com/MeetGoals), the top 8% of achievers apply this approach. Sadly, most people never try this strategy because they think it is pointless to start so small.

Wrong! Over time, consistently hitting your small goals will form new mindset habits. The result is real progress toward revamping your thinking so you can live your biggest dreams.

GET COMFORTABLE WITH THE "F" WORD

The previous steps will help you move

forward with confidence toward achieving your goals and dreams. However, it is critical to understand that it is hard work.

That's why high-performance achievers are comfortable with the "F" word: FAILURE.

When most people hit a wall, they make excuses and give up. High-performance achievers realize that the only thing that keeps them from winning is not trying.

What separates them from under-achievers is they mentally prepare for failure. They know it is coming, and it does not scare them or make them give up. When failure happens, they seek feedback and adjust to get back in the game.

Give yourself permission to fail. It takes the pressure off getting a perfect result. Learn from missteps and make

adjustments that will keep you moving forward. That is progress!

Changing your mindset does not happen by accident, it happens by choice. These seven steps will help get you on the right track and stay there. Enjoy a better future by employing the power of your positive, success-oriented, high-performance mindset! **NCI**



David Holt is an NCI business coach who shares his expertise and knowledge with HVAC contractors who are looking for guidance on how to implement High-Performance into their business. He is responsible for developing content for both classes as well as in-person training events. You can reach him at ncilink.com/ContactMe.

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SAVE THE DATE! SUMMIT 2022 RETURNS TO SCOTTSDALE, AZ

Good news! National Comfort Institute is bringing its **Annual High-Performance HVAC Summit** event back to Scottsdale, AZ, and the fabulous We-Ko-Pa Resort and Conference Center, **April 4-7, 2022.**

Members tell us that We-Ko-Pa is one of their favorite locations for Summit. It is just 20 minutes from the Phoenix International Airport in Arizona's captivating Sonoran Desert.

The resort and casino have both undergone major renovations and updates, which will make your stay better and safer than ever. From award-winning golf to incredible gaming, horseback riding, off-road tours, kayaking, spa, fine dining, deluxe rooms, and more, it's a four-diamond desert oasis beyond anything you've experienced before.

Summit 2022 will feature the program developed for the postponed 2021 Summit with the addition of a golf outing on one of We-Ko-Pa's two world-class courses. Stay tuned for more information.

You can learn more about the We-Ko-Pa Casino and Resort here: ncilink.com/WeKoPa2022.

You can get all the details about NCI's 2022 High-Performance HVAC Summit here: gotosummit.com.

You can also register for Summit here: ncilink.com/summitreg. Early bird dis-

counts are available!

So mark your calendars, register today, and join us in Scottsdale in April. We look forward to seeing you there. If you have any questions, be sure to call our Customer Care Line at 800/633-7058.

WELCOME TO THE SEPTEMBER 2021 POWERPACK

Guess what? The member-only **September 2021 PowerPack** is now online and ready for you to access. We hope you were able to take advantage of all the great tools from August.



This month we provide you with more content to help you with your carbon monoxide approach and strategy.

Some of the tools included each month may not be normally accessible with your current membership subscription package.

However, you can access these tools through this PowerPack portal during the current month.

So, without further ado, let's drill down and see what we have for you:

- **Introduction to Carbon Monoxide** (Online Training Module)
- **Create the Ultimate Fall Marketing Strategy** (Recorded Webinar)
- **NSI 6000 CO Monitor Sales Ideas** (Download)
- **Why Should I Demand a CO Test? brochure** (Download)
- **Important Test Results** (Download).

We think you'll find these tools and training materials very helpful as you continue to grow your High-Performance HVAC business.

Be sure to share your September PowerPack with your entire team! Get started today: ncilink.com/PwrPak.

NCI INTRODUCES IT'S LATEST CARBON MONOXIDE MONITOR

High-Performance HVAC contractors: there is a new low-level CO monitor in town. It is the NSI 6000 which boasts better sensitivity and accuracy than any store-bought detector on the market.

After years of research and development, now you can offer your customers a level of safety above and beyond anything your competitors can!

To offer this product to your customers, you must become a reseller. Learn more about that here: ncilink.com/NSI6000.

If you are trained and certified through NCI's **Combustion Performance and Carbon Monoxide Safety** training (ncilink.com/COTest), you can simply apply to be a reseller.

The NSI 6000 lets you know there is a problem before CO reaches dangerous, even deadly levels. This is especially important for infants, children, the elderly, and highly sensitive or ill people.

Questions? Call our Customer Care Line at 800/633-7058. **NCI**



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Learn more and Register Today at ncilink.com/CO or call 800-633-7058

Keep Your Employees and Customers Safe From Carbon Monoxide



Dominick Guarino is publisher of *High-Performance HVAC Today* and CEO of National Comfort Institute, Inc. He can be reached at ncilink.com/ContactMe

Since this month's issue is dedicated to workplace safety, it's important to recognize that the workplace for service technicians and installers is in the homes and buildings where they perform their work each day.

Besides all of the needed safety precautions, tools, and training to safeguard them from things like falls, electrocution, exposure to toxic chemicals, and so on, we also need to protect employees - and customers - from Carbon Monoxide (CO), also known as the silent killer.

We must be wary of not just lethal levels, but also that CO can cause immediate illness or worse. Low levels of CO are even more insidious as we usually don't experience immediate symptoms. Instead, we're negatively impacted by long-term exposure.

Think about this: your field people are in dozens, maybe hundreds of different homes and commercial buildings every month. If they don't know whether they are being exposed to CO, they can be unwittingly poisoned a little bit every day.

When it comes to customers, unless their indoor environments are continuously monitored for CO, they really have no idea if they are being poisoned - often until it's too late to reverse the effects of this long-term exposure.

Because of this, 17 years ago NCI designed a low-level CO monitor that can be used as a personal safety device for your field techs and can be installed in your customers' homes and buildings. An estimated 100,000 NSI 3000 CO monitors have been installed since 2004. And every one of those monitors was sold by qualified contractors with NCI-Certified technicians on staff.

Since day one we only sell these monitors through trained and certified contractors. Why has this been so important to us for nearly two decades? Because we want to make sure that if an NSI low-level CO monitor alarms, the homeowner

or building occupant can call a qualified individual to diagnose the root cause.

Unfortunately, most first responders who are called when an alarm goes off are not trained to deal with low-level CO situations. Even fewer have any clue how to diagnose root causes. In fact, many just dismiss these calls as caused by defective detectors.

After many years of faithful service, we have finally retired the NSI 3000. Unfortunately, like all electronics, many of its components have become obsolete and impossible to source.

Now here's the good news: After several painstaking years of R&D, including new hardware and software design, we are excited to introduce the brand new NSI 6000. This new compact monitor has all the same features and benefits as the 3000 plus many new innovations.

For example, the new monitor ensures accurate readings through its entire lifespan, which is estimated to be eight to 10 years. We decided to keep the same exact sensor used in the proven NSI 3000, many of which are still going after more than a decade!

The NSI 6000 also features Bluetooth communications with a consumer app to sync the monitor with smartphones. Plus, there is a "Pro" App your techs use to activate the monitors you sell so you can access key history data through a cloud portal.

While these features alone add a new level of value for your customers, there's no additional cost for the apps or 24/7 cloud service.

To learn more about the NSI 6000 go to nationalsafetyinstruments.com.

If you're a contractor interested in selling these low-level monitors, go to NCILink.com/NSI6000. Whatever device you choose, make sure you are helping to keep your employees and customers safe from carbon monoxide.



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Upcoming 2021 NCI Training Schedule

Duct System Optimization & Residential Air Balancing Certification Program
 Sept 14-16: Mesa/Phoenix, AZ
 Oct 12-14: Dayton, OH
 Oct 26-28: Minneapolis/Bloomington, MN

Residential HVAC System Performance & Air Balancing Certification Bundle
 Sept 14-16: New Hudson, MI
 Sept 21-23: San Antonio, TX
 Sept 28-30: Las Vegas, NV
 Sept 28-30: Baltimore/Glen Burnie, MD
 Oct 5-7: Dallas/Carrollton, TX
 Oct 5-7: Chicago/Wood Dale, IL
 Oct 19-21: Valley View, OH
 Oct 26-28: Seattle, WA

National Balancing Council Commercial Balancing with Certification
 Sept 20-24: Cleveland/Sheffield Lake, OH

Combustion Performance & Carbon Monoxide Safety Certification Program
 Sep 21-23: Louisville, KY
 Sept 21-23: St. Louis/Earth City, MO
 Sept 28-30: Union City/Atlanta, GA
 Sept 28-30: Mason City, IA
 Oct 12-14: Philadelphia, PA
 Oct 19-21: Phoenix, AZ

Commercial Air Balancing Certification Program
 Oct 5-7: Tampa, FL

Performance-Based Selling Bootcamp
 Oct 26-28: Sheffield Lake/Cleveland, OH

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