



# Combustion Performance and Carbon Monoxide Safety

## Deliver Optimum Combustion Performance and Keep Your Customers Safe

Combustion performance is key to providing customers comfortable, safe, healthy, and energy efficient homes. Get the technical knowledge you need to improve customers' system performance, prevent carbon monoxide (CO) hazards, and increase profitability. Without full combustion and CO diagnostics, there is no way of knowing whether a system is safe or efficient.

### Top 10 Issues You Will Learn to Diagnose and Solve By Taking This Class

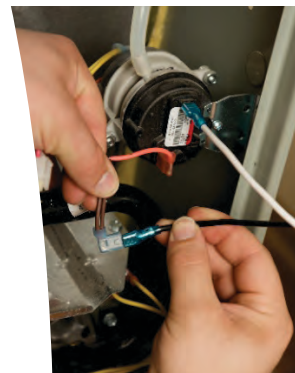
1. Poor combustion efficiency and mechanical defects
2. Unsafe equipment operation
3. Complaints of fumes and/or odors
4. Reports of illness or headaches
5. Improper light-off or delayed ignition
6. Carbon Monoxide caused by incomplete combustion
7. Inadequate combustion air
8. Improper venting of flue gases
9. Gas valve leakage or flame impingement
10. Improper furnace or boiler shutdown

NCI's exclusive Combustion Performance and CO Safety course will give you the technical knowledge you need to maximize system performance, prevent CO hazards, and increase profitability.

*CO certification helps you save lives and opens the door to new sales opportunities and greater income.*



Courses Qualify for  
NATE, BPI & Most  
State CEUs



# Combustion Performance and Carbon Monoxide

## Benefits:



- Get the knowledge you need to provide cutting-edge combustion and safety services to your customers on every installation and maintenance call
- Receive the NCI CO/Combustion Analyst Certification, the most recognized certification of its kind in the industry, when you successfully pass the certification exam on Day Three
- Increase sales opportunities for add-on services and equipment replacement by using NCI's exclusive SafeMaxx™ diagnostic CO report
- Learn the steps necessary to implement cutting-edge methods into your everyday business for greater efficiency and profitability
- Benefit from over 40 years of combustion experience from the country's leading combustion experts
- Leave with a full understanding of the combustion process and how to address CO hazards in homes and businesses.

## Agenda:

### Day 1 - CO Safety Testing & Diagnostics

- Combustion basics: the combustion process
- Concentration levels and symptoms of CO poisoning
- Identify and diagnose CO problems
- Discussion of the right tools & equipment test locations
- Learn vital testing procedures to effectively measure flue draft and combustion air functions
- Provide customers a complete safety analysis of their homes

### Day 2 - Combustion Performance & Diagnostics

- Learn the benefits of NCI's Performance-Based approach versus standard service protocols for combustion testing
- Learn combustion field testing and proper efficiency tuning procedures
- Learn proper fuel/air adjustments & mechanical repairs
- Troubleshoot and solve CO/Combustion problems
- Use modern testing instruments including combustion analyzers and draft gauges
- Interpret temperature and flue gas measurements to quickly diagnose a system
- Add-on performance and safety products

In the CO training, Jim Davis stated we would save somebody's life and three days afterwards, I was certain I did.

*Vic Updike  
Service Manager,  
Masterworks Mechanical, Inc.  
Craig, CO*



"The NCI classes I took were very informative to me. CO is no joke!"

*Ron Warren  
Technician,  
Davis Services, Inc.*

I loved the class on carbon monoxide and combustion analysis. I truly enjoyed it and it was an honor to have been in your class.

*Dave Fonda  
Senior Mechanic  
County Fair Air Conditioning*

**Register now and discover the Performance-Based Contracting™ Difference!**

# Safety Training



## Who Should Attend?

- Service & Maintenance Technicians
- Owners and Managers
- Installers
- Service & Installation Managers
- Sales Managers

## Day 3 - CO/Combustion Review & Certification

- Review of Days 1 and 2
- Troubleshoot situations encountered in the field
- Learn about the use, maintenance, and care of combustion analyzers
- Use a combustion analyzer on actual operating equipment and make the necessary adjustments
- Learn draft hood test procedure
- Complete written and hands-on certification exams to confirm your knowledge of CO safety and combustion procedures

“Carbon Monoxide and combustion safety testing are strong pillars in our company. Consistent testing keeps us serving our customers far better than other local contractors. Uncovering potential CO hazards and increasing system efficiency keeps our service base strong with well over 2000 active maintenance plans.”

Dale Nine  
Owner, Homer Nine & Sons Inc.  
Beaver, PA

## Frequently Asked Questions

### Q: What kind of certification do I earn?

NCI's CO/Combustion Analyst Certification is among the most recognized certifications in our industry. NCI has certified more than 18,000 industry professionals across North America and beyond. These certifications are valid for two years. Recertification is achieved with 8 hours of NCI continuing education.

### Q: Do I need to bring any special tools to the class?

While all the tools needed for the training are provided in the class, you are welcome to bring your instruments and verify if they are still within calibration.

### Q: What are the start and end times of the class and is lunch included?

The typical NCI training day is 8:00 am to 5:00 pm. Light refreshments and lunch are included.

## Who is NCI?

National Comfort Institute (NCI), the HVAC industry's leader in Performance-Based Contracting™, is an international membership and training organization that provides heating, air conditioning, plumbing and electrical contractors with services and tools to help them improve their businesses.

NCI coined the phrase “Performance-Based Contracting™”, a unique approach to managing a contracting business through accountability and measurable results. During the past two decades, NCI has trained and certified more than 18,000 HVAC industry professionals. For more information about NCI, please call 800-633-7058 or visit [www.nationalcomfortinstitute.com](http://www.nationalcomfortinstitute.com).



## Additional Educational Opportunities from NCI:

- Residential HVAC System Performance & Air Balancing
- Commercial Air Balancing
- Residential HVAC System Renovation & Retrofit
- Commercial System Performance
- Home Performance for HVAC Professionals
- and much more...



**Call 800-633-7058**