

*Deliver Optimum
Combustion Performance*



Combustion Performance and CO Safety Certification Program

Without conducting full combustion and carbon monoxide (CO) diagnostics, there is no way of knowing whether an HVAC system is safe or efficient. Get the technical knowledge you need to improve customers' system performance, prevent carbon monoxide (CO) hazards, and increase profitability. Then use that knowledge to perform combustion performance and safety tests.

Top 10 Skills You Will Learn By Taking This Class

1. Measure ambient carbon monoxide levels
2. Learn the corrective actions to take based on ambient carbon monoxide levels
3. Identify common sources of carbon monoxide
4. Determine proper combustion and draft test locations
5. Measure carbon monoxide, oxygen, and temperature in flue gas
6. Measure draft pressure
7. Determine field-measured performance and efficiency of installed equipment
8. Accurately measure equipment and system temperatures
9. Uncover and identify specific mechanical defects
10. Discuss potential repairs and adjustments to improve safety and efficiency

In addition, you will then learn how to use combustion and draft readings to:

- Verify equipment safety
- Increase equipment efficiency and improve equipment performance
- Identify fuel and mechanical problems
- Uncover combustion air and venting defects
- Determine if a flue is functional or restricted
- Measure draft interference
- Measure live duct system temperature losses
- Pinpoint needed repairs and adjustments

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




National Comfort Institute, Inc.

Leading the Industry in
Performance-Based Contracting™

Combustion Performance and Carbon Monoxide

Learn how to improve customer's system performance, prevent carbon monoxide (CO) hazards, and increase profitability

In this three-day certification class, HVAC professionals will learn how to:

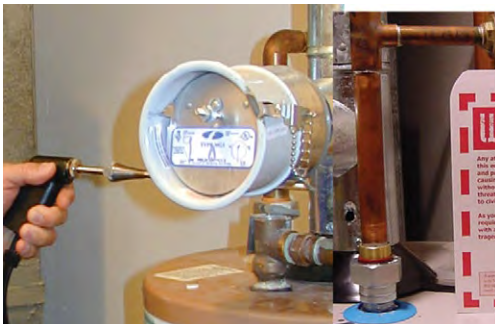
- Identify common sources of carbon monoxide and measure the ambient carbon monoxide levels
- Uncover combustion air and venting defects
- Verify equipment safety
- Repair and make adjustments to improve safety and efficiency.



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.



"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.

NCI's Training and Certification Package Include:

- Course workbooks, combustion troubleshooting chart, along with many useful NCI report forms and procedures
- Certificates and Wallet cards upon passing certification exams and field testing
- 30 days of unlimited toll-free support

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

Safety Training



Who Should Attend?

Field Technicians and Installers
Owners and Managers
Service & Installation Managers
Sales Professionals
Energy Raters and Comfort Advisors

Agenda:

DAY 1: CO Safety Testing & Diagnostics

- Introduction to combustion performance
- Proper combustion testing locations
- Using safety and combustion test instruments
- CO sources, levels, and protocols
- NCI Combustion Performance Standards
- Effects of combustion issues effect efficiency
- Field-measured efficiency
- How to diagnose fuel and mechanical problems

DAY 2: Combustion Performance & Diagnostics

- Troubleshooting combustion air problems
- Draft testing
- Diagnosing venting problems
- Seven common diagnostic issues
- How to use the combustion troubleshooting chart
- Combustion diagnostic procedures and reports
- Combustion repairs, adjustments, and upgrades
- Makeup air sizing and systems
- Barometric and spill switch upgrades

DAY 3: CO/Combustion Review & Certification

- Natural draft water heat repairs & adjustments
- Induced draft furnace repairs & adjustments
- Condensing furnace repairs & adjustments
- Natural draft boiler repairs & adjustments
- Hands-on exercises and practice
- Certification exam

Call 800-633-7058

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. By passing the exam on Day 3 you will earn a **Carbon Monoxide & Combustion Analyst** certification. 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, Inc. (NCI) is the world leader in HVAC System Performance and Air Balancing training. We created the industry's best practices, processes, and forms and have been teaching them for decades.

What makes NCI's approach different? We show you how to thoroughly test and diagnose the system using practical, easy-to-follow methods so you'll know exactly what to do to provide your customers with optimum comfort and energy efficiency.

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 25,000 HVAC industry professionals. For more information about NCI, please call **800-633-7058** or visit www.nationalcomfortinstitute.com.



Additional Educational Opportunities from NCI:

- Residential HVAC System Performance & Air Balancing
- Introduction to Hydronic Testing, Adjusting, & Balancing
- Large Commercial Balancing (National Balancing Council)
- Airflow Testing & Diagnostics Implementation
- Commercial HVAC System Performance
- Duct System Optimization
- Commercial Air Balancing
- NCI Online University



**Learn to:
Improve System
Performance,
Prevent CO hazards,
and Increase
Profits**

Offer Homeowners Safety and Energy Efficiency Solutions That Really Work



Combustion Performance and Carbon Monoxide Safety Training



Courses Qualify for:
NATE, BPI &
Most State CEUs

