

RETROFIT INSTALLER— MECHANICAL

WHAT IS A RETROFIT INSTALLER MECHANICAL TECHNICIAN ?

A Retrofit Installer Technician is a residential heating professional who installs energy-efficiency and safety upgrades in single-family homes and small (2-4 units) multi-family housing facilities. The technician uses a variety of building-science best practices to improve safety, comfort, durability, indoor air quality and energy efficiency.

COURSE DESCRIPTION

This course is appropriate for all professionals who in Indiana are referred to as Heating Technicians — specifically, those who are responsible for installation of mechanical equipment such as gas furnaces and appliances in residential buildings.

COURSE OBJECTIVES

This course will cover:

- gas furnace fundamentals
- gas appliance inspection procedure
- carbon monoxide mitigation
- worst-case draft testing

WHAT YOU WILL LEARN

- basic principles of combustion
- principles of venting atmospheric and induced-draft furnaces
- how condensing furnaces operate
- furnace blower and airflow properties
- leak-testing and inspecting gas piping systems
- checking a gas furnace for electrical safety
- weatherization and code requirements for gas systems
- furnace cleaning and tuning
- testing carbon monoxide (CO) levels in combustion gas
- action levels for CO in ambient air and all gas appliances
- indicators and causes of CO production
- CO locations, standards and dangers
- chimney effect and vent pressure
- definition and identification of Combustion Appliance Zones
- how air ducts and exhaust fans affect pressure balances
- the process of determining worst case
- and more



ABOUT THE TRAINER

Fred Clade is a BPI-certified Quality Control Inspector. See his trainer biography page to learn more about Fred.



CERTIFIED
PROFESSIONAL

COURSE DETAILS

- Three days of course instruction and demonstrations
- Written test at end of day three
- Customized to meet your network's needs

COURSE PREREQUISITES

Participants must be heating system installers or service technicians, or have attended Basic Heating Systems training course or equivalent.

RETROFIT INSTALLER— MECHANICAL

WHAT IS A RETROFIT INSTALLER MECHANICAL TECHNICIAN ?

A Retrofit Installer Technician is a residential heating professional who installs energy-efficiency and safety upgrades in single-family homes and small (2-4 units) multi-family housing facilities. The technician uses a variety of building-science best practices to improve safety, comfort, durability, indoor air quality and energy efficiency.

COURSE DESCRIPTION

This course is appropriate for all professionals who in Indiana are referred to as Heating Technicians — specifically, those who are responsible for installation of mechanical equipment such as gas furnaces and appliances in residential buildings.

COURSE OBJECTIVES

This course will cover:

- gas furnace fundamentals
- gas appliance inspection procedure
- carbon monoxide mitigation
- worst-case draft testing

WHAT YOU WILL LEARN

- basic principles of combustion
- principles of venting atmospheric and induced-draft furnaces
- how condensing furnaces operate
- furnace blower and airflow properties
- leak-testing and inspecting gas piping systems
- checking a gas furnace for electrical safety
- weatherization and code requirements for gas systems
- furnace cleaning and tuning
- testing carbon monoxide (CO) levels in combustion gas
- action levels for CO in ambient air and all gas appliances
- indicators and causes of CO production
- CO locations, standards and dangers
- chimney effect and vent pressure
- definition and identification of Combustion Appliance Zones
- how air ducts and exhaust fans affect pressure balances
- the process of determining worst case
- and more



ABOUT THE TRAINER

Fred Clade is a BPI-certified Quality Control Inspector. See his trainer biography page to learn more about Fred.



CERTIFIED
PROFESSIONAL

COURSE DETAILS

- Three days of course instruction and demonstrations
- Written test at end of day three
- Customized to meet your network's needs

COURSE PREREQUISITES

Participants must be heating system installers or service technicians, or have attended Basic Heating Systems training course or equivalent.