# 3-DAY VIRTUAL SCHOOL OF BETTER HEATING



# **CONDENSING BOILER TECHNOLOGY**

## for Residential & Commercial Heating Contractors

#### **Course Objectives:**

- Review design, construction and operation of condensing boilers.
- Study proper installation, venting, piping and wiring as well as set up and programming of controls.
- Learn about start up, maintenance and troubleshooting.

#### **For More Information Contact**

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#### **Day 1 Residential**

## September 15

9:00AM-4:00PM FST

#### **Topics include:**

Hydronic System Fundamentals

**Domestic Hot Water** 

Hydronic Wiring & Controls: ECO\* Tec

#### **Day 2 Residential**

## **September 16**

9:00AM-4:00PM EST

#### **Topics include:**

Residential High-Efficiency Boiler Installation

Hydronic Wiring & Controls: Ultra™ & Evergreen\*

Evergreen, Ultra, & GV90+\* Service Workshop

#### **Day 3 Commercial**

## September 17

9:00AM-2:35PM FST

**Topics include:** SVF™

SlimFit\*

Commercial Cast Iron
Steam & Hot Water Boiler:
Features & Benefits

Earn up to **\$300** in coupons for attending. Redeem for Weil-McLain residential high-efficiency products.

## **SPACE IS LIMITED REGISTER ONLINE TODAY!**

To register visit Weil-McLain.com/Residential-Training and find the registration links Registration is required for each event you plan to attend.

# **3-DAY VIRTUAL SCHOOL OF BETTER HEATING**



## **COURSE DETAILS**

#### **Day 1 Residential**

#### **Hydronic System Fundamentals (9:00-11:00 am EDT)**

This course is designed to deliver relevant, fundamental concepts for successful residential hydronic heating systems. This course has been developed primarily for contractor and distributor personnel involved with Sales, Installation and Service of residential hydronic heating systems. Why Hydronic Heat—Easy 3-step Boiler Sizing—Key Component selection including circulators, expansion tanks, air elimination and more—Learn to calculate flow rate and velocity in piping systems

#### Domestic Hot Water (11:15 am -1:15 pm EDT)

DHW usage and water heaters may be one of the most important appliances in our lives. This class will give you a clear understanding of the options you have and provide you with the following: An Understanding of the Terminology used in the discussion of hot water production, the ability to calculate BTU required, flow rate and recovery time needed to meet your customer's needs, troubleshooting tips.

#### **LUNCH BREAK (1:15- 2:00 pm EDT)**

#### Hydronic Wiring & Controls: ECO\* Tec (2:00-4:00 pm EDT)

Weil-McLain Proudly introduces our newest high efficiency boiler to our line, The ECO Tec a 95% AFUE, high efficiency boiler. Detailed look at the design, construction and operation of the boiler including; how to navigate our newest Unity 2.0, color, touchscreen control with advanced capabilities using the onboard wizard with built in help screen tutorials and learning about the easy field wiring of the control and initial setup and review application examples and diagnostic menus.

#### **Day 2 Residential**

# Residential High-Efficiency Boiler Installation(9:00-11:00 am EDT)

This class will focus on the proper installation of high efficiency boilers for trouble free operation as well as an overview of the science behind them and the components that make them work. Topics Include: Theory of operation, including outdoor reset, condensation and modulation for maximizing partial

load efficiency, learn about the components common to most modulating/condensing boilers and how they interact, including the heat exchanger, combustion engine and temperature sensors, Learn the necessary steps for a successful installation, including locating the boiler, venting materials and options, water and gas piping and field wiring and review startup and combustion adjustments for reliable operation.

# Hydronic Wiring & Controls: Ultra™ & Evergreen\* (11:15 am -1:15 pm EDT)

This course is designed to do a deep drive into the Boiler Design and control operation for each boiler. Hydronic Wiring and Control strategy for Evergreen and Ultra High Efficiency Boiler. We will take a typical boiler application for each model and take you through the wiring and control strategy and set up. This class is for any level of experience and is designed to provide you with the right stuff to install these boilers correctly.

#### LUNCH BREAK (1:15- 2:00 pm EDT)

# Evergreen, Ultra, & GV90+\* Service Workshop (2:00-4:00 pm EDT)

This course is a "how to" service and maintenance workshop. Reviewing the three simple steps we use when conducting annual maintenance: retrieve DATA stored in the control, disassemble and clean the boiler components, reassemble and test the boiler.

#### **Day 3 Commercial**

#### **SVF**<sup>™</sup> (9:00-10:45 am EDT)

Exploring the Stainless Steel Heat Exchanger design, The Unity Controller and multiple boiler operation, technical aspects on installation and operation.

#### **SlimFit**\* (10:55 am-12:40 pm EDT)

Examine the cast Aluminum Heat Exchangers design and construction, learn how to set up the Unity controller and adjust combustions, technical aspects on installation and operation.

# Commercial Cast Iron Steam & Hot Water Boiler: Features & Benefits (12:50-2:35 pm EDT)

Technical aspects on installation and operation. Controls, Lead/Lag and power-burner options.

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