



#### **HIGH-EFFICIENCY CONDENSING BOILER**

4 Heat-Only Sizes, 3 Combi Sizes | Water | Natural or Propane Gas | 80-199 MBH Direct Vent or Direct Exhaust | 95% AFUE

# The next generation of Weil-McLain comfort







## Efficiency advantage

ECO Tec is Weil-McLain's newest, premium residential gas boiler. It's designed to be easy to install and service, with a long-lasting stainless steel firetube heat exchanger and our next-generation color touchscreen control with multi-zone and other advanced capabilities. It features a space-saving wall-mount design, optional pedestal for floor standing installations and common-parts approach across all models.

ECO Tec is available in four heat-only sizes, from 80 to 199 MBH, and three combi sizes, from 110 to 199 MBH. The 199 size can generate up to 5.4 GPM and is able to satisfy two showers, a faucet and a dishwasher at the same time – making it the premium residential combi from North America's leading boiler manufacturer.

With an impressive 95% AFUE rating, ECO Tec has earned the ENERGY STAR® Most Efficient recognition, helping homeowners save on energy costs every heating season. Even greater savings can be realized, all year long, if choosing the combi unit for both space and domestic hot water heating.

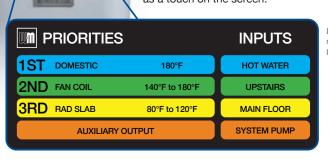


## Comfort where you want it

Weil-McLain is devoted to simplified and targeted comfort. Our next-generation Unity 2.0 control is equipped with 10 preloaded system-type options to choose from, and even has a guided setup wizard – making start-up as easy as a touch on the screen.

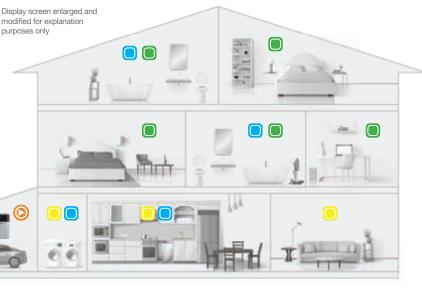


Household lifestyles vary. Shouldn't controls match the family's needs? While some other products may only offer one setting, we know that's not enough. The ECO Tec control has several different domestic hot water modes to choose from to maximize energy savings and/or comfort – ranging from the most efficient mode to preheat, high performance or our own ECO BOOST<sup>TM</sup> technology.



We understand heating systems. We should. We've been leading the industry for close to 150 years. Different types of systems operate at different temperatures, and a home may have a combination of systems in it.

We've simplified that too. Our boiler control can send out different temperatures to match the home's systems, assign a priority of what need is met first, and identify what part of the



## Control advantage

home is set up on each system by color code.

Want to know at a glance what your boiler is doing? No problem on the ECO Tec. Whether you're in front of the boiler or across the room, our display screen has operation status icons and colors.



















Forget when to have a checkup? We've got you covered.

A maintenance reminder can be set to automatically appear on the display screen when it's time. And no need to find and check your paperwork ... the contractor's name and phone number appear on the screen as well.



# Design advantage

- Spacious cabinet allows full access to all critical parts that are strategically positioned
- Durable, high-grade stainless steel firetube primary heat exchanger maximizes heat transfer, and its vertical design promotes self-rinsing during operation
- Combustion system achieves up to a 10:1 turndown ratio to minimize fuel usage and is low NOx emission certified
- Corrosion-resistant polypropylene heat exchanger base protects against acidic condensate
- · Sound-dampening air silencer for whisper-quiet operation
- Insulated heat exchanger and DHW pipes further reduce heat loss and noise
- Sealed cabinet preheats incoming air for smooth starting, and does not pull any potential outside debris directly into blower and burner

- NSF/ANSI 372-certified stainless steel domestic hot water brazed plate exchanger design provides up to an industry-leading 5.4 gallons per minute at a 70-degree temperature rise (199 combi)
- Removable, unique control terminal blocks eliminate potential field wiring errors
- Control board features multiple fuses to help protect from surges, and has a "built-in" zone control able to accept up to 4 thermostat inputs and operate up to 4 external circulators (plus internal) without the need of an external control (2 on combi)
- · Built-in ECM circulator saves electrical energy and installation time
- 3-in-1 universal air and vent adapters readily accept different types of pipe materials, and have built-in test ports to aid combustion testing

## Standard equipment

- Stainless Steel Firetube Heat Exchanger
- Non-Metallic Heat Exchanger Base
- 10:1 Turndown Ratio (110-199 Sizes)
- 8:1 Turndown Ratio (80 Size)
- Built-In ECM Circulator (Taco 0015e)
- 3-in-1 Air/Vent Adapters w/Test Port
- · Built-In LWCO Port
- · Wall-Mount Bracket and Template
- Condensate Trap
- Low NOx SCAQMD Compliant
- High Altitude Approved

#### **Control Features**

- · Color Touchscreen Display
- Easy Setup with Control Wizard
- Zone and/or Priority-Based Control
- · 4 Thermostat Inputs (2 on Combi)
- 0-10V Input (Modulation or Setpoint)
- · Outdoor Reset for Each Priority
- Rate Adjustable per Priority
- 4 Outputs (2 on Combi) can be used with external circulators, dampers or system aux
- Aux Inputs Flow Switch or End Switch
- Aux Outputs System Pump or Damper
- Individually Fused 120V Outputs
- Modbus Connectivity
- Additional Heat Demand Contact

### Blend in, nice appearance · 2" and 3" concentric vent termination

· Easy-up manifold

Optional accessories

Avoid flow issues, save time with

Paintable sidewall vent termination

quick fit near boiler piping

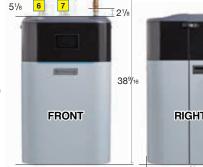
For easy DHW maintenance

Isolation flush valves

For one penetration through sidewall or roof

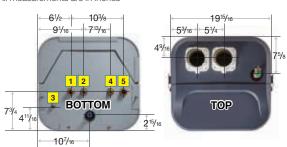
#### · Low water cutoff Simple plug and play kit to meet local codes

- Condensate neutralizer To protect home drain line
- Water treatment and test kit To help ensure entire system protection
- · Parts kit Critical components to optimize customer service
- Maintenance kit Key components to perform annual boiler maintenance
- Propane kit Simple conversion to match home LP supply
- System sensors Extra monitoring points on supply and return pipes for further modulation
- · Boiler pedestal kit For floor standing



## **Dimensions**

All measurements are in inches







## Specifications

Domestic Hot Water Flow Rate Gallons Per Minute @ Temp Rise							
Model <sup>1</sup>	70°F	75°F	77°F				
110-C	3.0	2.9	2.8				
150-C	4.1	3.9	3.8				
199-C	5.4	5.0	4.9				

Connections (NPT/Inches)		80	110	150	199
1	Heating system supply tapping	1"	1"	1"	1"
2	Domestic hot water outlet	-	3/4"	3/4"	3/4"
3	Gas connection	1/2"	1/2"	1/2"	1/2"
4	Domestic cold water supply	-	3/4"	3/4"	3/4"
5	Heating system return tapping	1"	1"	1"	1"
6	Combustion air connection	3"	3"	3"	3"
7	Flue outlet connection	3"	3"	3"	3"

#### **AHRI Certified Ratings** DOE **Net AHRI** Boiler DOE Heating Seasonal Water Vent/Air **Boiler** Water Ratings Efficiency Content Pipe Size Weight Input Capacity Model<sup>1</sup> (MBH) (MBH)<sup>2</sup> (MBH)<sup>3</sup> (AFUE) (Inches) **Vent Material Boiler Dimensions** (Lbs.) (Gallons) 80-H 80 2.2 PVC, CPVC, PP, SS 19"L x 20"W x 33"H 104 74 64 95% 2 or 3 HEAT-ONLY PVC, CPVC, PP, SS 110-H 100 87 19"L x 20"W x 33"H 104 110 95% 2.2 2 or 3 150-H 150 139 121 95% 3.1 2 or 3 PVC, CPVC, PP, SS 19"L x 20"W x 33"H 117 199-H 199 184 160 95% 3.8 2 or 3 PVC (3" only), CPVC, PP, SS 19"L x 20"W x 33"H 127 PVC, CPVC, PP, SS 110-C 110 100 87 95% 2.2 2 or 3 19"L x 20"W x 33"H 114 COMBI 150-C 150 139 121 95% 3.1 2 or 3 PVC, CPVC, PP, SS 19"L x 20"W x 33"H 126 199-C 199 184 160 95% 3.8 2 or 3 PVC (3" only), CPVC, PP, SS 19"L x 20"W x 33"H 135

## Venting







Through-the-roof direct vent





Direct exhaust

## Product Warranty

Transferable, Non-Prorated

#### Residential:

- 12 years on primary heat exchanger
- 2 years on parts without registration or 5 years on parts with registration

#### Commercial:

- 10 years on primary heat exchanger
- 1 year on parts

1Shipped as natural gas, field-convertible to LP with optional kit. 2Based on standard test procedures prescribed by the United States Department of Energy, MBH refers to thousands of Btu per hour. <sup>3</sup>Net AHRI ratings are based on net installed radiation of sufficient quantity for the requirement of the building and nothing needs to be added for normal piping and pick-up. Ratings are based on piping and pick-up allowance of 1.15. An additional allowance should be made

Dual pressure zones

for unusual piping and pick-up loads. In the interest of continual improvement in product and performance, Weil-McLain reserves the right to change specifications without notice. WM2005\_BRO\_058\_ECOTec











