

# The next generation of Weil-McLain comfort



ENGINEERED,  
DESIGNED  
& ASSEMBLED  
in the USA



Most Efficient  
**2020**  
ENERGY STAR [www.energystar.gov](http://www.energystar.gov)

## 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.

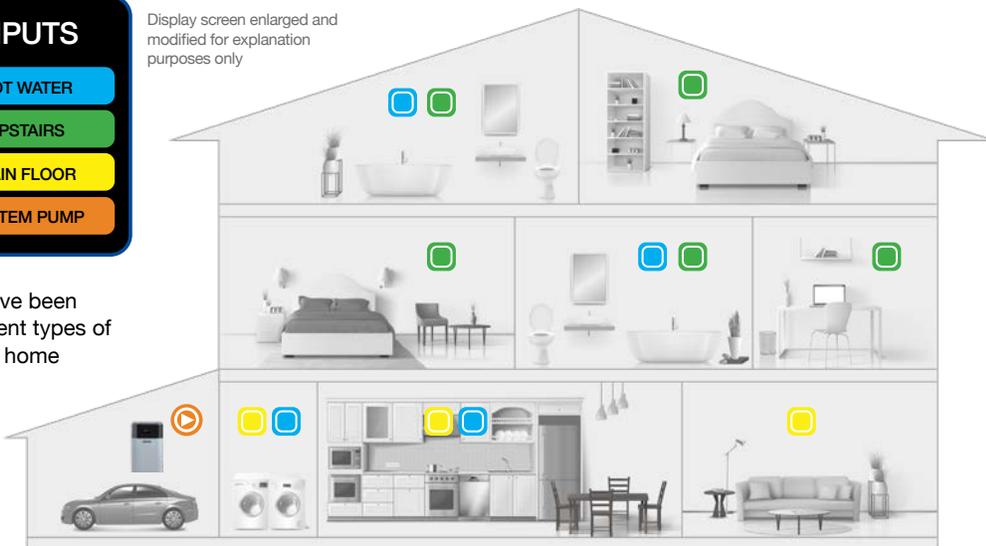
Weil-McLain is devoted to simplified and targeted comfort. Our next generation Unity 2.0 control is equipped with 10 preloaded system type options to choose from, and even has a guided set up wizard – making start up as easy as a touch on the screen.



PRIORITIES		INPUTS	
1ST	DOMESTIC 180°F	HOT WATER	
2ND	FAN COIL 140°F to 180°F	UPSTAIRS	
3RD	RAD SLAB 80°F to 120°F	MAIN FLOOR	
AUXILIARY OUTPUT		SYSTEM PUMP	

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 home is set up on each system by color code.

Display screen enlarged and modified for explanation purposes only



## Hot water when you need it.

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™ technology.

## Control advantage

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.

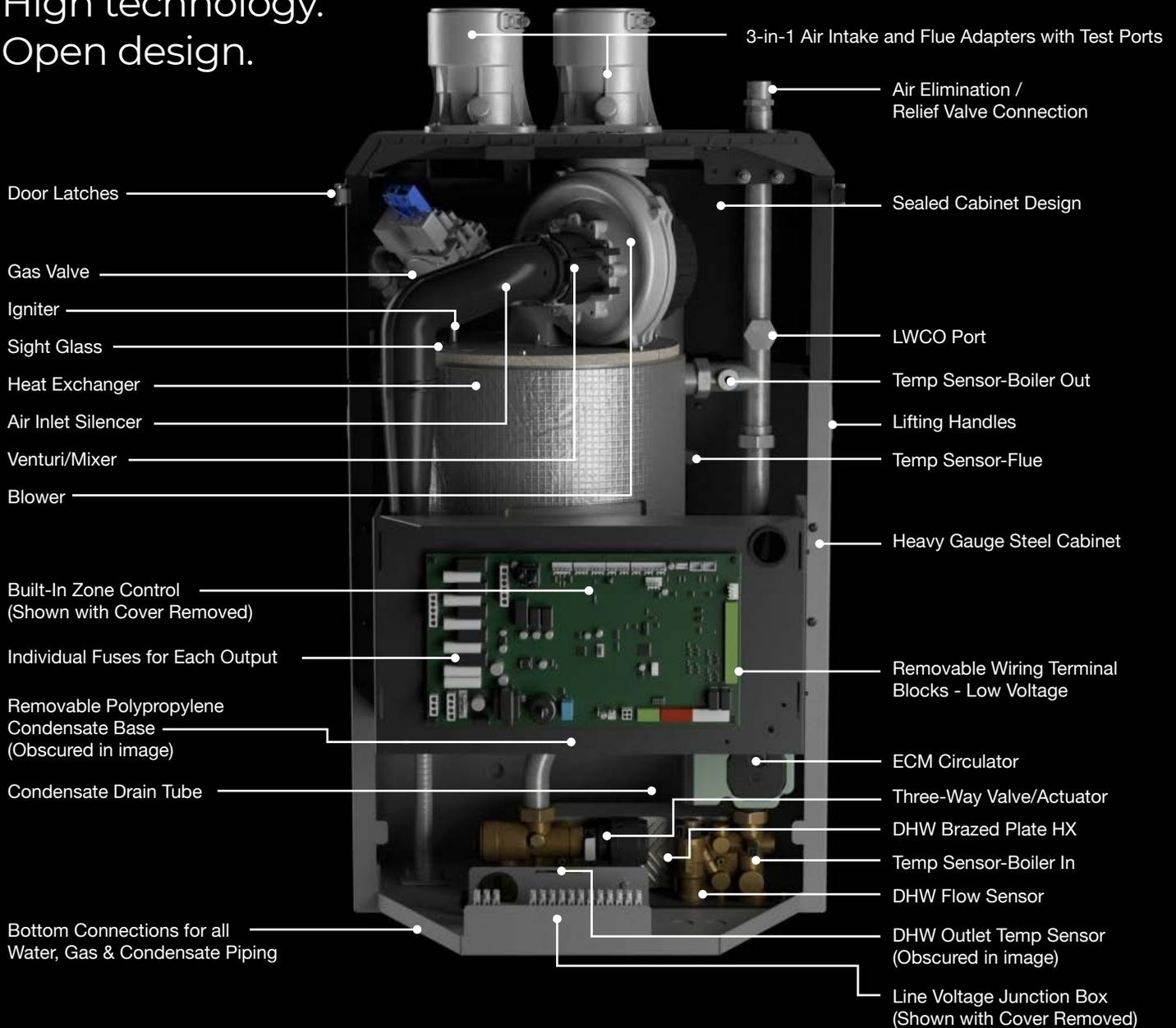


### Forget when to have a checkup? We've got you covered.

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 appears on the screen as well.



# High technology. Open design.



## Design advantage

- Spacious cabinet allows full access to all critical parts that are strategically positioned
- Durable, high grade stainless steel fire tube 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 emission certified
- Corrosion resistant polypropylene heat exchanger base to protect 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

## Boiler

- Stainless Steel Fire-Tube Heat Exchanger
- Non-Metallic Heat Exchanger Base
- 10 to 1 Turndown Ratio (110-199 Sizes)
- 8 to 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 & Template

- Condensate Trap
- Low NOx SCAQMD Compliant
- High Altitude Approved

## Control Features

- Color Touch Screen Display
- Easy Set-up with Control Wizard
- Zone and/or Priority Based Control
- Four Thermostat Inputs (2 on combi)
- 0-10V Input (modulation or setpoint)
- Outdoor Reset for Each Priority
- Rate Adjustable per Priority
- Four 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

# 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"

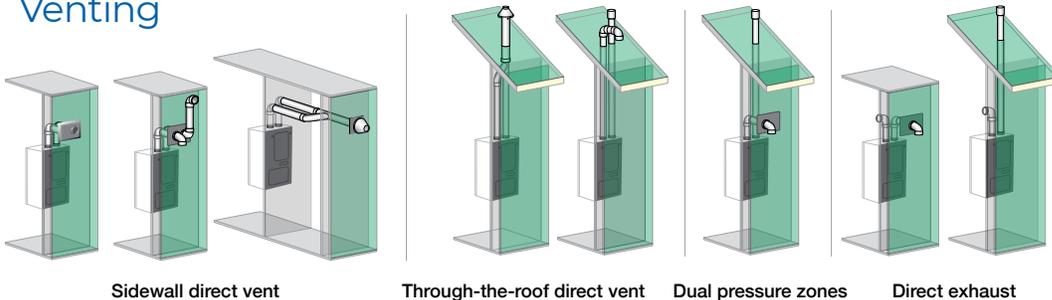
		AHRI Certified Ratings								
	Model <sup>1</sup>	Input (MBH)	DOE Heating Capacity (MBH) <sup>2</sup>	Net AHRI Water Ratings (MBH) <sup>3</sup>	DOE Seasonal Efficiency (AFUE)	Boiler Water Content (Gallons)	Vent/Air Pipe Size (Inches)	Vent Material	Boiler Dimensions	Boiler Weight (Lbs.)
HEAT ONLY	80-H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

# Optional accessories

- **Easy Up manifold**  
Avoid flow issues, save time with quick fit near boiler piping
- **Isolation flush valves**  
For easy DHW maintenance
- **Paintable sidewall vent termination**  
Blend in, nice appearance
- **2" & 3" concentric vent termination**  
For one penetration through sidewall or roof
- **Low water cut off**  
Simple plug & 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 & return pipes for further modulation
- **Boiler pedestal kit**  
For floor standing installations



# Venting



# Product Warranty

Transferable, Non-Prorated

- Residential:
- 12 years on primary heat exchanger
  - 2 years on parts without registration
  - 5 years on parts with registration
- Commercial:
- 10 years on primary heat exchanger
  - 1 year on parts

<sup>1</sup>Shipped as Natural gas, field convertible to LP with optional kit. <sup>2</sup>Based 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 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.

