

Eco™ Hybrid

Dual Fuel Hydronic System

Integrating an air-to-water
heat pump within a boiler
hydronic heating system



CLIMATE
CONSCIOUS

Easier. Better. Smarter.

Weil-McLain understands the importance of simplicity and energy-efficiency for both homeowners and contractors. The ECO™ HP is designed to streamline installation, operation and serviceability, making it an ideal choice for heating needs. **The Most Efficient Solution for High-Temp Hydronic Heating Systems.**



Climate Conscious Energy Efficiency

Our hybrid solution is up to five times more efficient than traditional boilers, providing significant energy savings and reducing environmental impact. Our heat pump uses state of the art, eco-friendly R-32 refrigerant.



Consistent Comfort with Dual Fuel

Our ECO HP heat pump with boiler backup ensures homes remain warm even in the coldest climates. The heat pump operates during milder temperatures to maximize efficiency and carbon reduction, while seamlessly switching to the boiler as the always-ready backup heating source on the coldest days.



Dependable Heating Solution

Enjoy peace of mind with our reliable heating system that does not require freeze protection with our innovative split design, ensuring hassle-free maintenance and long-lasting performance. Operating with redundancy and positioning the boiler as a backup, extends both appliance life expectancy.



Budget-Friendly Rebate Options

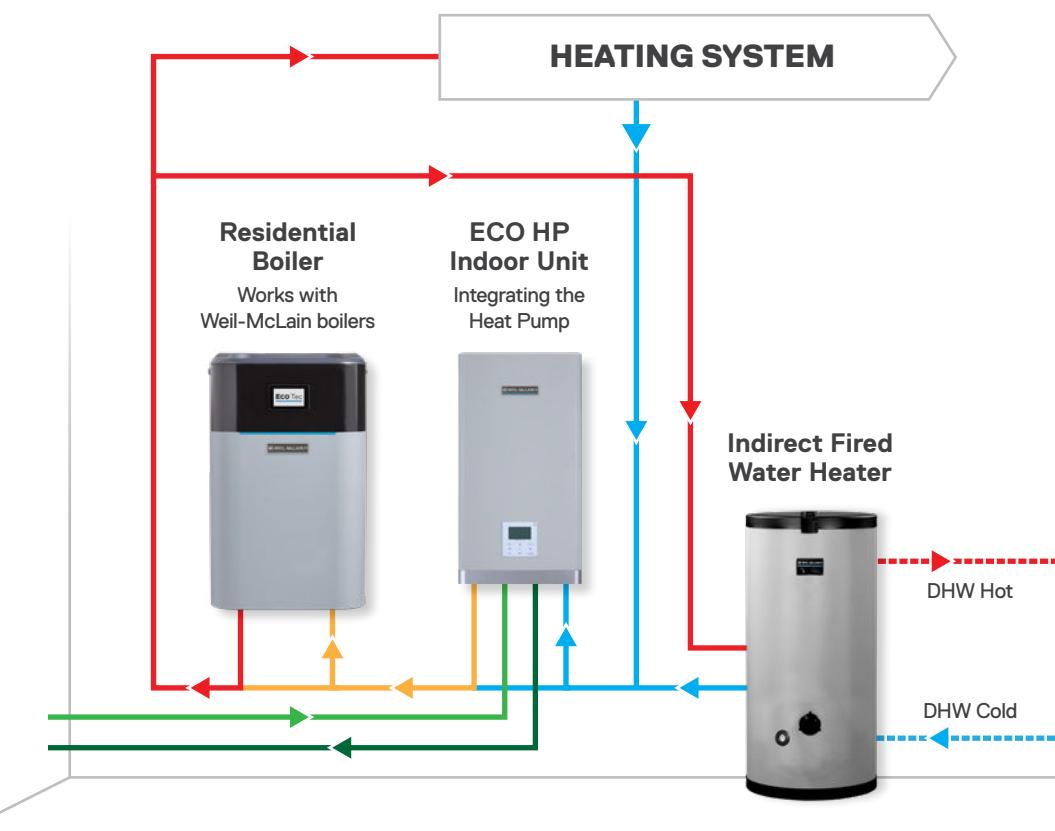
Offset equipment costs by taking advantage of federal, state and local rebate incentive programs.*

*Varies by location

Quiet Operation & Compact Design

ECO HP Outdoor Unit

- Air-to-Water Heat Pump
- 55,000 BTU/hr (16kW)
- Split-Design—No Freeze Protection Required
- Operates in Cold Climates
- Max Water Output – 149°F
- Standard Power Supply (220-240V/1Ph/60Hz)
- Small Footprint—Single Fan Design



Flexible Installation Options



All-at-Once Installation

If you're replacing your boiler outside of heating season, live in a location with mild winters, or installing a heating system in new construction, the ECO Hybrid system can be installed together.

While an all-at-once installation will be a greater up-front cost, you will save on total labor costs for the complete installation.



Phased Installation

If you need to replace your boiler in mid-winter when installing the outdoor unit is not practical, the ECO Hybrid system can be installed in phases.

A heat pump-ready boiler and heat pump piping connections are installed now. The heat pump indoor and outdoor units are added when weather permits.



Retrofit Upgrade

If you already have a heat-pump-ready boiler, you may be able to upgrade to a Hybrid System.

Contact a Weil-McLain authorized contractor to assess your current system and outline a plan for installing the indoor and outdoor heat pump units.

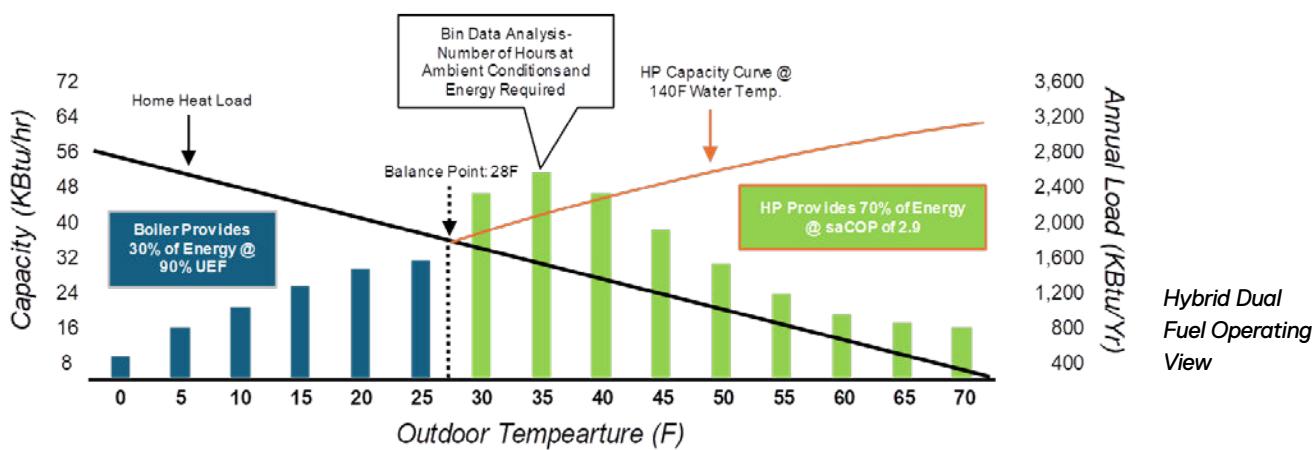
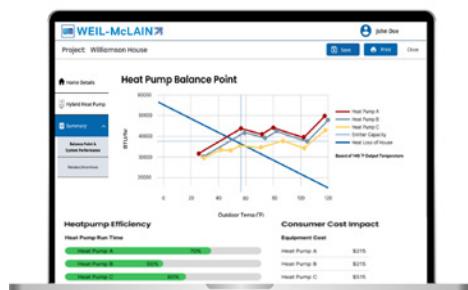
Key Advantages of the ECO™ HP Indoor Unit

The ECO Indoor Unit features a refrigerant-to-water heat exchanger, circulator, and controls. Through an Easy-Up manifold, the unit seamlessly integrates the heat pump into the existing heating system significantly reducing installation time, labor, and the need for additional parts. For routine maintenance, the manifold features shut-off valves that allow for quick isolation of the boiler and circulator for the system.

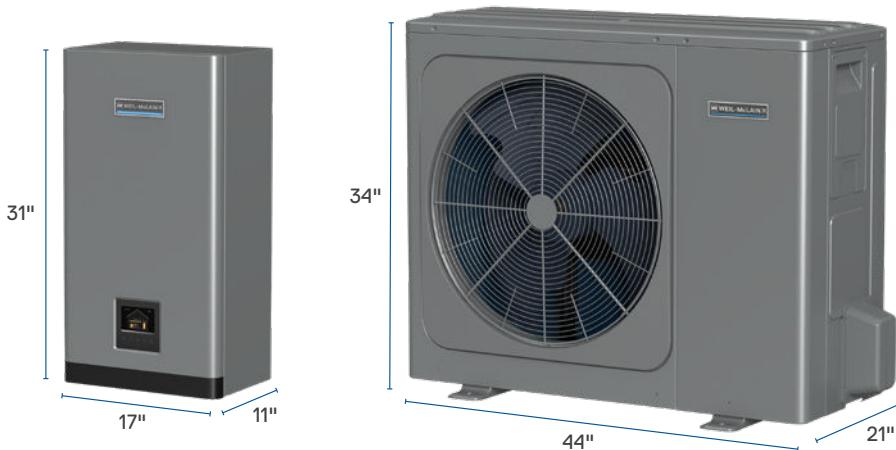
ECO Calc Application Sizing Tool

To ensure the comfort, efficiency, and durability benefits of the Hybrid System—the application must be properly sized. Weil-McLain has created the ECO Calc Application Sizing Tool, an industry-first tool to guarantee the correct sizing incorporating:

- Manual J (Heat Load)
- Heat Pump Capacity
- Heat Emitter Capacity
- DHW Consideration
- Localized Weather “Bin” Data
- Localized Utility Rates
- Rebates & Tax Credits



DIMENSIONS



SPECIFICATIONS

SPEC	DESCRIPTION	MEASURE	MODEL		
			41	48	55
Heating Performance	Nominal Capacity*	MBH	41.2	49.5	54.6
	COP @ Nominal	—	4.95	4.70	4.5
	Input @ Nominal	kW	2.44	3.09	3.56
	Max Capacity	MBH	51.1	56.0	59.3
	Max Input	kW	3.19	3.66	3.93
	Min Capacity	MBH	21.1	21.1	21.1
	Min Input	kW	1.21	1.21	1.21

*44.6° F Outdoor temperature, 95° F water outlet temperature

SPEC	DESCRIPTION	MEASURE	VALUE
Heating Performance	Outdoor Temperature	Deg °F	-13-109
	Heating Supply Temperature	Deg °F	77-149
Hydronic	Flow	GPM	3.1-13.2
	Pressure Drop @ 12.1 GPM	ft.	9
	Piping Connections	in.	1
Refrigerant	Type	R-32	
	Factory Charge	lb.	4.04
	Max Pre-Charged Pipe Length	ft.	49.2
	Additional Charge	oz./ft.	0.41
	Liquid Line Connection	in.	3/8
	Gas Line Connection	in.	5/8
	Compressor Type	Twin Rotary	
Electrical	ODU Power	V/Ph/Hz	208-230/1/60
	Compressor RLA	A	26
	ODU Fan FLA	A	1.3
	ODU MCA	A	34
	ODU MOP	A	50
	IDU Power	V/Ph/Hz	110-120/1/60
	IDU MCA	A	1.5
	IDU MOP	A	15
Weight	IDU Net	lb.	69
	IDU Shipping	lb.	78
	ODU Net	lb.	212
	ODU Shipping	lb.	255

Our Brand Promise

For over 140 years, Weil-McLain has been a trusted leader in innovative heating solutions. Our commitment to reliability and a consultative approach is unwavering. With Weil-McLain, customers receive more than just a product; they receive a premium, experienced, and trusted brand dedicated to meeting their heating needs.

Experience the future of heating with Weil-McLain's Hybrid Dual Fuel Solution. Contact us today to learn more about how we can elevate home comfort systems while reducing environmental impact.

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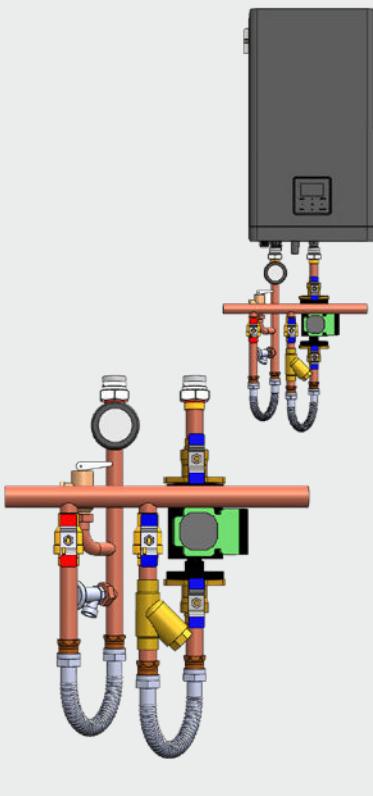
ECO HP—Split Easy Up Manifold

Items included on Easy Up Manifold:

- Dielectric unions
- Isolation valves
- Y-strainer
- Stainless steel flex lines
- Plugged port for drain valve

Items included in installation Accessory kit:

- Taco 0018e circulator
- Pressure relief valve
- Pressure & temperature gauge



Product Warranty

Outdoor Unit (ODU) & Indoor Unit (IDU)

- 5 years on ODU Compressor
- 2 years on Parts without registration
- **Or 5 years on Parts with registration**

Non-Transferable, Non-Prorated

