

Eco[™] Hybrid Dual Fuel Hydronic System

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



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 R32 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 as dual fuel and positioning the boiler as a backup, extends both appliance life expectancy.



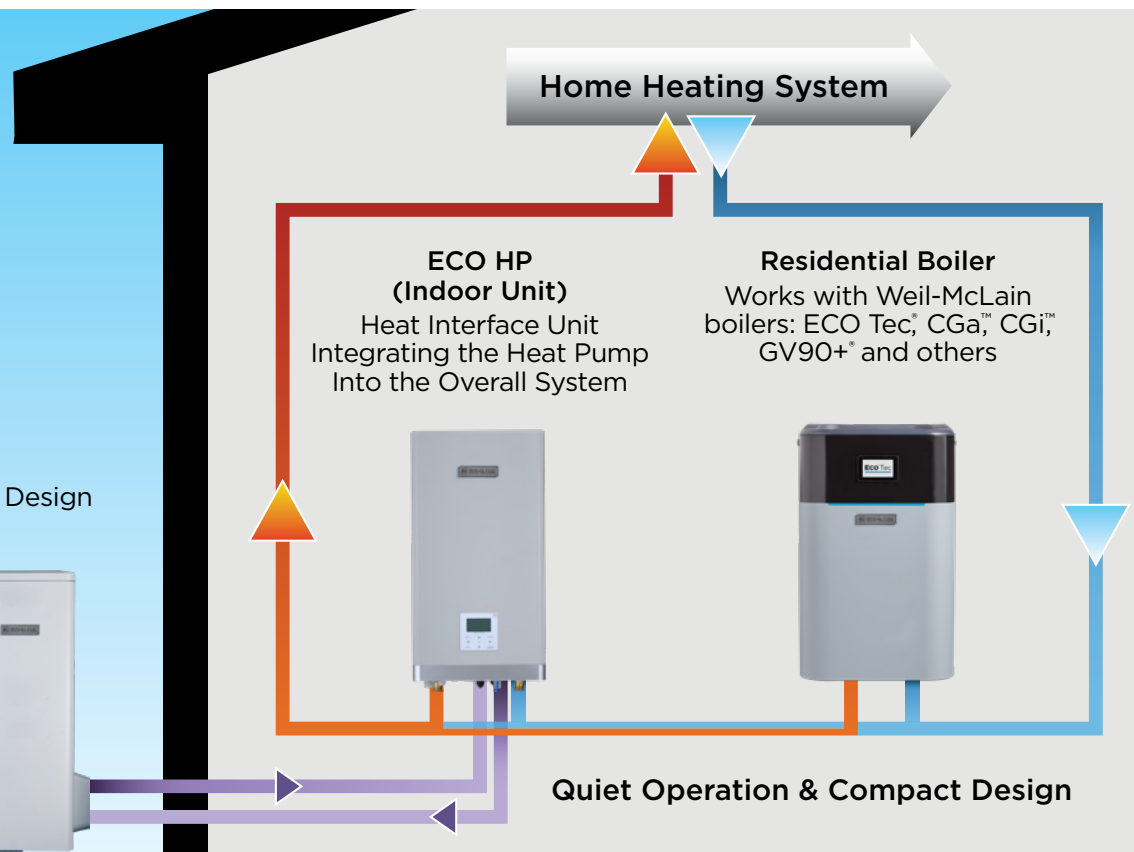
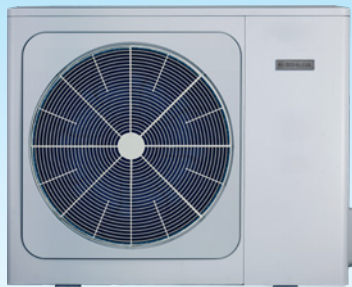
Budget-Friendly Rebate Options

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

*Varies by location

ECO HP (Outdoor Unit)

- Air-to-Water Heat Pump
- 16kW (55,000 BTU)
- Split-Design—No Freeze Protection Required
- Operates in Cold Climates
- Max Water Output - 149°F
- Standard Power Supply (220-240V/1Ph/50Hz)
- Small Footprint—Single Fan Design



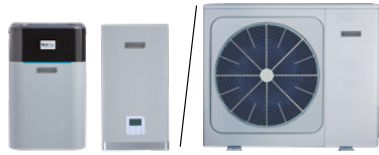
Flexible Installation Options



All-at-Once Installation

If your current boiler fails at the end of cold season, you're in a location with mild winters, or setting up a new construction, the full 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

Most boilers are replaced when they stop working, often in the cold of winter. It is not always practical to install the outdoor heat pump during the winter.

The Hybrid System is designed to be installed in two phases. A heat-pump-ready boiler and the indoor heat pump unit installed now—restoring the heat, and followed by adding the outdoor heat pump later during the warmer months.



Retrofit Upgrade

If you already have a heat-pump-ready boiler, your system may be able to be retrofitted into the 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.

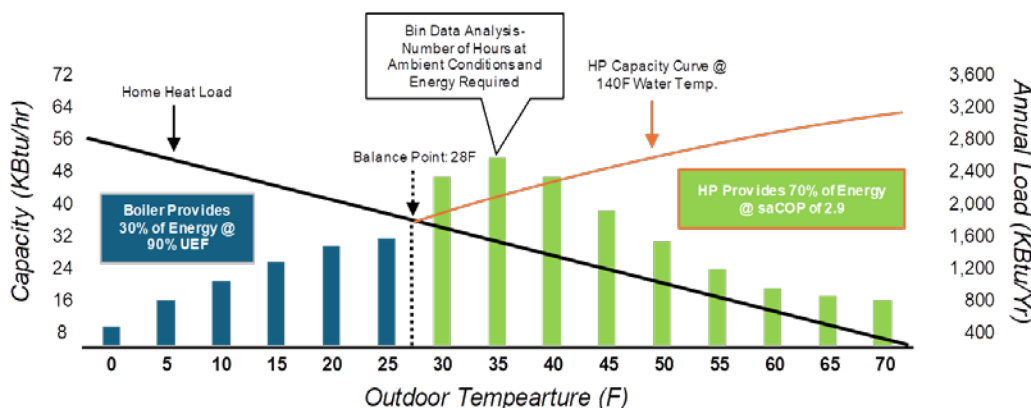
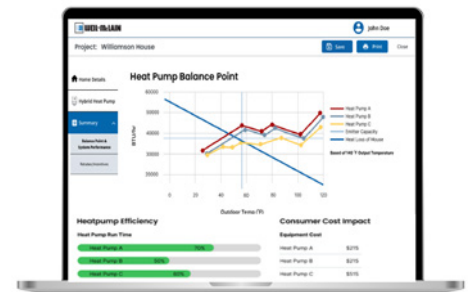
Key Advantages of the ECO™ HP Indoor Unit

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

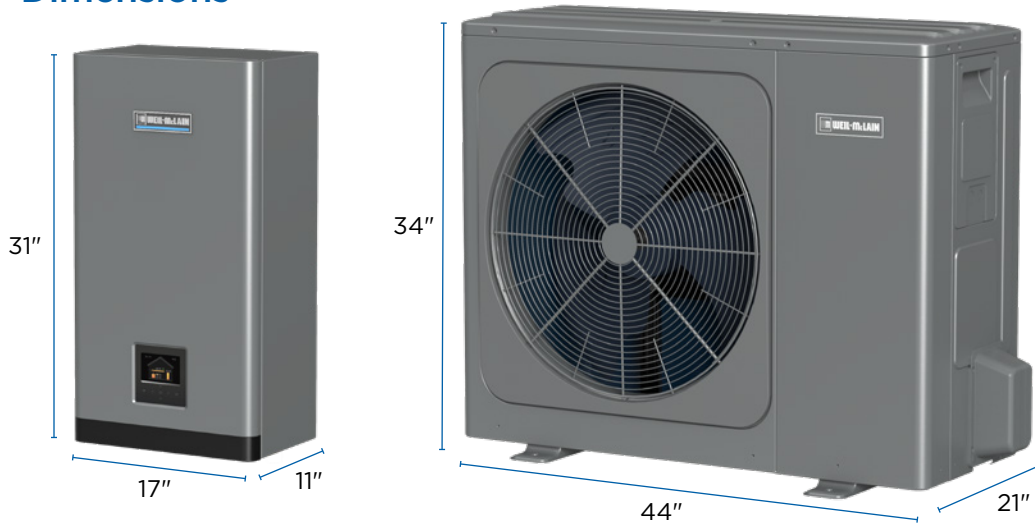
To ensure the comfort, efficiency, and durability benefits of the Hybrid System—the application must be properly sized. Weil-McLain has created the ECO Calc Application Sizing Tool, an industry-first tool to guarantee the correct sizing incorporating:

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



Hybrid
Dual Fuel
Operating
View

Dimensions



ECO HP—Split Easy Up Manifold

Items included on Easy Up Manifold:

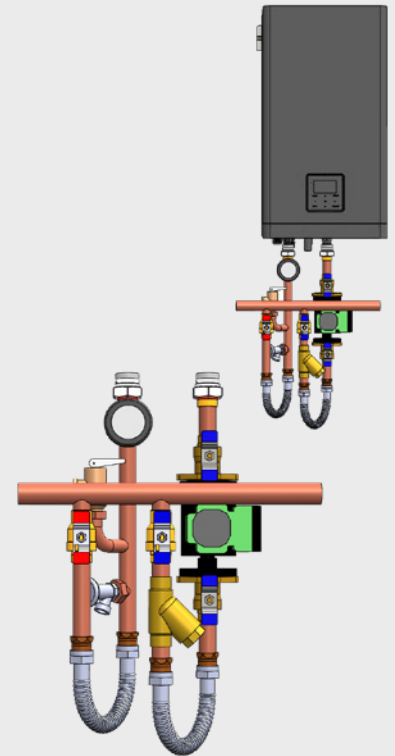
- Dielectric unions
- Isolation valves
- Y-strainer
- Stainless steel flex lines
- Plugged port for drain valve

Items included in installation Accessory kit:

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

Specifications

Spec	Model	Description	Measure	Value (range)	Spec	Description	Measure	Value (range)	
Heating*	41	Capacity	MBH	19.04-41.29	Refrigerant	Type	R-32		
		Efficiency	COP	4.96-5.37		Charge	LBS	4.04	
		Power Input	kW	1.04-2.44		Pressure Low Side	PSIG	377.1	
		Current Input	Amps	4.33-25		Pressure High Side	PSIG	623.6	
		Delivery Temp	Deg °F	77-149		Fan	Type	Brushless DC	
		Outdoor Temp	Deg °F	-13-109.4			Quantity	1	
	48	Capacity	MBH	20.2-49.48	Input		W	170	
		Efficiency	COP	4.60-5.29	Speed	RPM	200-730		
		Power Input	kW	1.12-3.15	Compressor	Type	Rotary		
		Current Input	Amps	4.67-26		Quantity	1		
		Delivery Temp	Deg °F	77-149		Speed	RPS	24 - 92	
		Outdoor Temp	Deg °F	-13-109.4	Hydronic	Flow	GPM	12.1	
	55	Capacity	MBH	21.94-54.25		Max Temp	Deg °F	149	
		Efficiency	COP	4.50-5.06		Piping Conn.	Inch	1	
		Power Input	kW	1.27-3.53		Pressure Drop @ 12.1 gpm	PSI	3.9	
		Current Input	Amps	5.29-27					
		Delivery Temp	Deg °F	77-149					
		Outdoor Temp	Deg °F	-13-109.4					



Spec	Description	Measure	Value (range)	
Electrical	ODU	Power	V/Ph/Hz	208-230/1/60
		Fan Motor	A	1.3
		Compressor	A	26
		MCA 41/48/55	A	25/26/27
		MOPD	A	30
		SCCR	kA	5
	IDU	Power	V/Ph/Hz	110-120/1/60
		MCA	A	1.5
		MOPD	A	15
Weight	IDU	IDU Net	LBS	69
		IDU Shipping	LBS	78
	ODU	ODU Net	LBS	212
		ODU Shipping	LBS	255

*Outdoor temperature at 44.8°F, water outlet temperature 95°F

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

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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