



Ultra Oil

Commercial grade 3-pass heat exchanger design

APPLICATIONS INCLUDE:

- Residential
- Light Commercial
- Multiple Boilers
- Indirect-fired Water Heating
- Radiant Heating



WEIL-McLAIN LEADS THE INDUSTRY WITH ITS PREMIUM, DURABLE OIL BOILER

With an extensive list of features for both contractors and homeowners including:

- Commercial grade three-pass cast iron heat exchanger for long service life
- Sleek, innovatively styled jacket with rear piping and wiring openings, and concealed controls for an appliance-like appearance
- Adaptable door design and interchangeable side panels that can accommodate most installation conditions
- Venting options — chimney or direct vent
- Burner options — Beckett, Carlin and Riello

DISTINCTIVE STYLING

JACKET AND SIDE PANEL DESIGN — STYLISH APPEARANCE & EASY ACCESS

Ultra Oil has a modern appearance that combines appliance-like design features for placement in high traffic living spaces, with easy serviceability for the contractor and homeowner.

- The snap-on front jacket panel allows easy entry to the full access burner door
- The left and right side panels are interchangeable
- All piping, wiring, and venting connections are located in the rear of the boiler for a cleaner look
- The entire housing and top control tray can be easily removed for hand trucking

REVERSIBLE SWING — AWAY DOOR — FLEXIBLE INSTALLATION OPTIONS

Ultra Oil features a full access, reversible swing-away door, which exposes virtually the entire combustion area and all flue-ways for simplified inspection, cleaning, and maintenance. This design also incorporates a mounting bracket that can be installed on either the left or right side of the front section for installation in small, confined spaces and corners.

- Removable door lessens the overall weight when trucking
- The symmetrical design enhances strength and durability
- Bolts on both sides create a uniform consistent seal
- A quick-disconnect plug cuts burner power when the door is open



THREE PASS DESIGN

PROVEN TECHNOLOGY

It's not uncommon for cast iron boilers to last in excess of 40 years. Ultra Oil features a commercial grade heat exchanger with thick cast iron walls for durability and product longevity. It also features a three pass design concept that has been used by Weil-McLain for over 70 years, because it provides better flame control and more efficient fuel utilization-which reduces heating costs.



- Strategically designed flueway fins increase the heat transfer surface area, which extracts more heat and increases efficiency without penalizing boiler back pressure
- The wider flueways decrease the negative impact of fouling
- An added benefit of the three pass design is the horizontal configuration, which makes virtually all of the combustion chamber, turnaround, and flueways visible from the front of the boiler for easy cleaning and maintenance
- Silicone coated fiberglass rope insures a positive seal
- Revolutionary rear section design directs the flue gas flow into the flueways without sacrificing pressure drop through the inner and the outer flueways which eliminates rear refractory



CONCEALED CONTROLS

TOP MOUNTED, HINGED CONTROL POD AND INTEGRATED CONTROL SYSTEM

The top mounted hinged control POD includes a factory installed external service switch and temperature/pressure gauge for easy viewing. The unique, angled POD provides control system protection from dirt, moisture and temperature fluctuations, and includes a combination temperature control and low water cutoff. Factory assembled, pre-wired terminal strips simplify field wiring of incoming power, mounted circulators and additional limit controls that may be required by local codes.

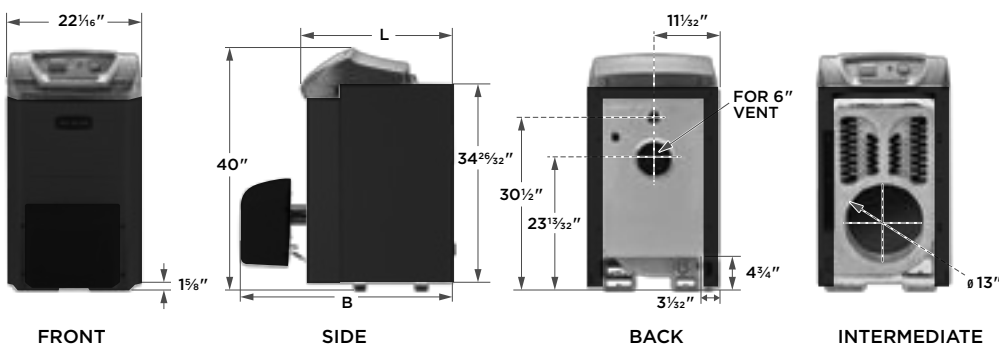
VENTING OPTIONS

CHIMNEY OR DIRECT VENT

The Ultra Oil boiler provides venting installation flexibility. It can be easily vented to an existing chimney, or direct vented using a pre-packaged termination and combustion air kit.

- Barometric damper included when venting to a chimney
- No chimney needed, and direct vent options provides better indoor air quality by protecting against possible contaminated inside air
- No power-assisted fan needed to help exhaust flue products
- Optional direct vent kits available — for the outside termination cap and the flexible insulated vent pipe (15')

DIMENSIONS



DIMENSIONS	UO-3RE ¹	UO-3E	UO-4E	UO-5E
Supply Tapping	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Return Tapping	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Depth - with Burner (B)	37"	37"	41"	45"
Depth - Boiler	25"	25"	29"	33"

DATA	UO-3RE ¹	UO-3E	UO-4E	UO-5E
Chimney Rectangle	8"x 8"	8"x 8"	8"x 8"	8"x 8"
Chimney Round	6"	6"	6"	6"
Chimney Height	15'	15'	15'	15'
Water Volume	15.00 Gal.	15.00 Gal.	18.25 Gal.	21.50 Gal.
Approximate Shipping Weight	636 Lbs.	636 Lbs.	737 Lbs.	852 Lbs.

RATINGS

RATINGS	UO-3RE ¹	UO-3E	UO-4E	UO-5E
Burner Capacity (GPH)	0.80	1.00	1.20	1.40
CSA Input (MBH)	112	140	168	196
DOE Heating Capacity (MBH)	99	123	148	173
Net Ratings (MBH)	86	107	129	150
AFUE	87%	87%	87%	87%
Draft Loss Through Boiler (In. w/c)	.000	.020	.025	.040

¹The .80 GPH firing rate is achieved by changing the burner nozzle, refer to burner instructions or boiler's rating label for correct selection.

STANDARD EQUIPMENT:

BOILER

- Three-pass cast iron heat exchanger with captured elastomer seals
- Reversible swing-away burner door
- Silicone coated fiberglass sealing rope
- Boiler drain valve
- Relief valve (30 PSI)
- Attractive jacket design
- Hinged control pod
- Service switch
- Temperature/pressure gauge
- Factory wired terminal strips with labeled wires (pre-wired to accept external limits such as high limit and low water cut off)
- Combination limit and low water cut off
- Quick disconnect burner plug
- Barometric damper
- Circulator
 - Sizes 3 & 4: Taco 007e
 - Size 5: Taco 007

OPTIONAL EQUIPMENT:

- Beckett AFG Burner (chimney vent only)
- Carlin Burner (chimney vent only)
- Riello Burner (chimney or direct vent)
- Direct vent termination cap (part #386-902-010)
- Direct vent 15' flexible insulated pipe (part #386-902-012)
- Wired outdoor temperature sensor (part #386-500-126)
- Wireless outdoor temperature sensor (part #386-701-047)

LIMITED TRANSFERABLE WARRANTY:

- Residential: 20 Years Heat Exchanger; 2 Years Parts
- Commercial: 10 Years Heat Exchanger; 1 Year Parts

Weil-McLain certifies that the ENERGY STAR Ultra Oil boilers meet the requirements of the Inflation Reduction Act of 2022, when used with Beckett & Carlin approved oil burners.

In the interest of continual improvement in product and performance, Weil-McLain reserves the right to change specifications without notice.

