

# Williamson

# OWB/OWT

Series 3

**Factory-Packaged**  
**0.70 to 1.75 GPH # 2 Fuel Oil**

## Oil-Fired Water Boiler

- ❑ **Efficiencies 86% - 87% AFUE**
- ❑ **Enhanced control**
  - Temperature limit control
  - LWCO Function
  - Thermal pre-purge function
- ❑ **Rear flue outlet**
  - Top flue available with optional kit
- ❑ **Easy service**
  - Swing-away burner door
  - Top access cleanout cover
  - Plug-in wiring harness
- ❑ **High efficiency oil burner**
  - Solenoid valve
  - PSC motor
  - Solid state ignitor
- ❑ **Cast iron sections with built-in air separator**
- ❑ **Insulated heavy-gauge steel jacket**

OWB  
No Tankless



OWT  
With Tankless Heater



**Williamson**<sup>®</sup>

# RATINGS

Boiler Model	Burner Input		AHRI Certified Ratings			Flue Outlet Diameter	Minimum Chimney Size (x 15' High)		Draft Loss Through Boiler	Approx. Shipping Weight (Lbs)		Circulator Flange Size <small>(Recommended Supply &amp; Return Pipe Size, NPT)</small>
	GPH	MBH	Heating Capacity MBH (1)(2)(3)	Net Ratings MBH (3)	Seasonal Efficiency AFUE%		Rectangle	Round		Inches W.C	OWB	
OWB/OWT-3	0.70	98	86	75	86.4	7"	8" x 8"	6"	0.010	540	560	1-1/4"
OWB/OWT-3*	0.95	133	115	100	86.0	7"	8" x 8"	6"	0.020	540	560	
OWB/OWT-4	1.00	140	122	106	86.2	7"	8" x 8"	6"	0.010	645	660	
OWB/OWT-4*	1.20	168	146	127	86.0	7"	8" x 8"	6"	0.010	645	660	
OWB/OWT-5	1.20	168	147	128	86.1	7"	8" x 8"	7"	0.010	760	775	1-1/2"
OWB/OWT-5*	1.45	203	176	153	86.0	7"	8" x 8"	7"	0.015	760	775	
OWB/OWT-6	1.40	196	171	149	86.1	7"	8" x 8"	7"	0.010	860	875	
OWB/OWT-6*	1.75	245	213	185	86.0	7"	8" x 8"	7"	0.015	860	875	

\* The specific higher input rates are compliant when installed with the required High Input Damper kit, Part #381-800-515WT (sold separately)

The boilers listed below are compliant with ENERGY STAR® Program 3.0 when installed with the specific (optional) OVD kit.

Boiler Model	GPH	MBH	Heating Capacity MBH (1)(2)(3)	Net Ratings MBH (3)	Seasonal Efficiency AFUE%	Flue Outlet Diameter	Rectangle	Round	Optional Vent Damper Kit, Part #
OWB/OWT-3 -T-S3-D	0.70	98	86	75	87.0	7"	8" x 8"	6"	381-800-502WT
OWB/OWT-4 -T-S3-D	1.00	140	123	107	87.0	7"	8" x 8"	6"	381-800-503WT
OWB/OWT-5 -T-S3-D	1.20	168	148	129	87.0	7"	8" x 8"	7"	381-800-504WT
OWB/OWT-6 -T-S3-D	1.40	196	173	150	87.0	7"	8" x 8"	7"	381-800-505WT

**Notes:**

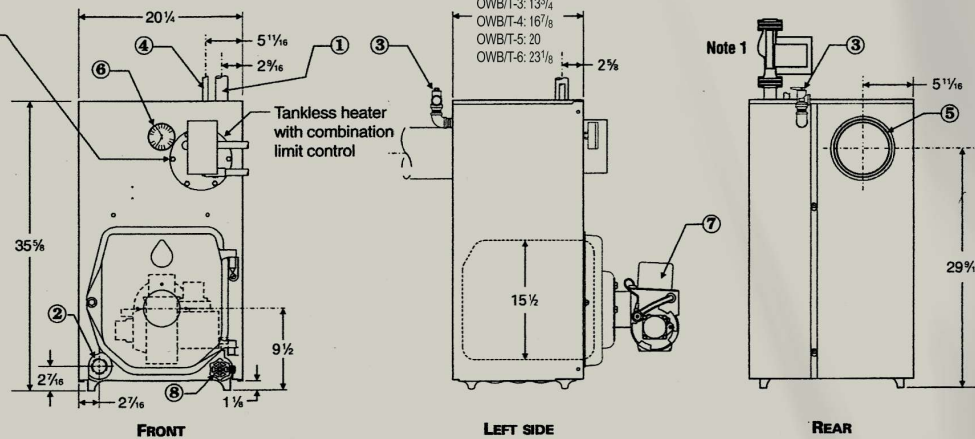
(1) MBH refers to thousands of Btu per hour. Based on 140,000 Btu/gal. (2) Based on standard test procedures prescribed by the United States Department of Energy. (3) Net AHRI ratings are based on net installed radiation of sufficient quantity for the requirement of the building and nothing needs to 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.

## DIMENSIONS / CONNECTIONS

ALL DIMENSIONS IN INCHES

Boiler Model	Tankless Heater	Intermittent draw rating
OWT-3	WT-11	3.00 GPM (50°F to 140°F)
OWT-4	WT-14	3.75 GPM (40°F to 140°F)
OWT-5	WT-14	4.00 GPM (40°F to 140°F)
OWT-6	WT-14	4.25 GPM (40°F to 140°F)

Tankless heater tappings are 1/2" NPT, with 3/4" NPT center tapping for tankless temperature control/limit.



- ① Supply piping (Note 1)
- ② Return piping (Note 1)
- ③ Relief valve, 3/4" NPT
- ④ 1/2" NPT to expansion tank/air vent
- ⑤ Vent connection - 7" diameter
- ⑥ Pressure/temperature gauge
- ⑦ Oil burner (shipped in separate carton)
- ⑧ Drain valve

Note 1: Boiler supply and return tappings are 1-1/2" NPT. Circulator flanges shipped with boiler are sized to recommended pipe size listing in RATINGS table, above.  
Boiler circulator is shipped loose. Circulator may be mounted on either boiler supply or return piping.

## EQUIPMENT

- Factory tested
- Factory-assembled cast iron section assembly, including aluminized steel flue collector, swing-away burner mounting door, with refractory blanket and recessed target wall in combustion chamber.
- Taco 007 circulator
- High Efficiency flame-retention oil burner (Beckett AFG or NX, Carlin or Riello)
- High limit control with circulator relay and LWCO function
- Built-in air separator
- Combination pressure/temperature gauge
- 30 PSIG ASME relief valve
- Drain Valve
- Barometric damper
- Tankless heater (OWT)

**Optional**

- Top flue vent kit



**Williamson®**

N93 W14635 Whittaker Way, Menomonee Falls, WI 53051

[www.williamson-thermoflo.com](http://www.williamson-thermoflo.com)