

**80 Commercial Boiler  
Weil-McLain**

Series 1  
Gas, Oil & Gas/Oil  
Water or Steam  
MBH: 346-1,674  
Combustion Eff.: 85%



- **Weil-McLain captured seal design**
- **For Light Oil, Gas and Dual Fuel Combustion**
- **Packaged, Assembled Block or Knock-down**
- **Available for Water and Steam Heating Systems**
- **Available as Forced or Chimney draft venting**



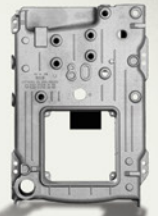
**WEIL-McLAIN®**  
[www.weil-mclain.com](http://www.weil-mclain.com)



# 80 Output 278-1348 MBH (8-40 HP)

- Top or Rear outlet flexibility
- Easy access jacket

<b>Oil</b>	<b>Gas</b>
Combustion 85%	82%
Thermal 83%	80%



## Ratings

Boiler Model	I=B=R			I=B=R Net Rating									
	Oil Input GPH	Gas Input MBH	Gross Output MBH	Boiler H.P.	Steam MBH	Steam Sq. Ft.	Water MBH	Flue Outlet Dia.	Net Firebox Volume Cu/Ft	Stack Gas Volume CFM	Positive Pressure in firebox	Water Boiler Content Gallons	Operating Weight Pounds
380	2.4	346	278	8.3	208	867	242	8	2.61	139	0.28	37.5	1170
480	3.4	491	396	11.8	297	1238	344	8	3.97	198	0.28	49	1411
580	4.45	639	515	15.4	386	1608	448	8	5.33	259	0.28	60.5	1752
680	5.5	787	634	18.9	476	1983	551	8	6.69	320	0.27	72	2093
780	6.5	935	753	22.5	565	2354	655	10	8.05	378	0.27	83.5	2434
880	7.5	1082	872	26	654	2725	758	10	9.41	436	0.27	95	2774
980	8.5	1230	991	29.6	743	3096	862	10	10.77	494	0.27	106.5	3115
1080	9.6	1378	1110	33.2	833	3471	965	10	12.13	558	0.26	118	3456
1180	10.6	1526	1229	36.7	922	3842	1069	10	13.49	616	0.26	129.5	3697
1280	11.6	1674	1348	40.3	1018	4242	1172	12	14.85	675	0.26	141	4038

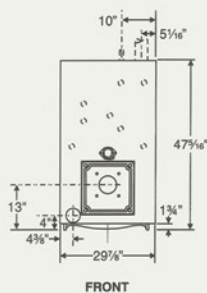
### Notes

- Burner input based on maximum of 2,000 feet altitude. For higher altitudes consult local Weil-McLain representative.
- NO.2 fuel oil Commercial Standard Spec. CS75-56. Heat value of oil-140,000 Btu/Gal.
- Consult Weil-McLain Burner Specifications and Data Sheet for gas pressures required. Gross I=B=R ratings have been determined under the I=B=R provision forced draft boiler-burner units.

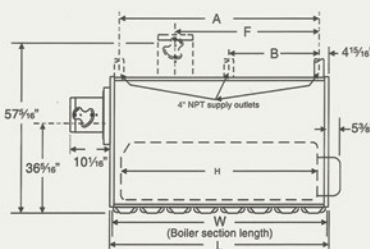
- Net I=B=R ratings are based on net installed radiation of sufficient quantity for the requirements of the building and nothing need be added for normal piping and pickup. Water ratings are based on a piping and pickup allowance of 115. Steam ratings are based on the following allowances: 380 thru 1180 - 1.333; 1280 - 1.321. An additional allowance should be made for gravity hot water systems or for unusual piping and pickup loads. Consult local Weil-McLain representative.
- Stack gas volume at outlet temperature.
- With 0.10" W.C. positive pressure at flue collar.

## Dimensions

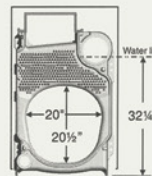
Boiler Model	Supply Tappings Qty - Size		Return Tappings Qty - Size		Dimensions (Inches) - Reference Drawings						
	Water	Steam	Water	Steam	A	B	D	F	H	L	W
380	2 - 4"	2 - 4"	2 - 3"	2 - 3"	13-1/8	-	8	12-7/16	13-1/2	21-5/8	20-3/8
480	2 - 4"	2 - 4"	2 - 3"	2 - 3"	20-1/8	-	8	13-5/8	20-1/2	28-5/8	27-3/8
580	2 - 4"	2 - 4"	2 - 3"	2 - 3"	27-1/8	-	8	13-5/8	27-1/2	35-5/8	34-3/8
680	2 - 4"	2 - 4"	2 - 3"	2 - 3"	34-1/8	-	8	13-5/8	34-1/2	42-5/8	41-3/8
780	2 - 4"	2 - 4"	2 - 3"	2 - 3"	41-1/8	-	10	27-5/8	41-1/2	49-5/8	48-3/8
880	2 - 4"	2 - 4"	2 - 3"	2 - 3"	48-1/8	-	10	27-5/8	48-1/2	56-5/8	55-3/8
980	2 - 4"	2 - 4"	2 - 3"	2 - 3"	55-1/8	-	10	41-5/8	55-1/2	63-5/8	62-3/8
1080	2 - 4"	3 - 4"	2 - 3"	2 - 3"	62-1/8	27-9/16	10	41-5/8	62-1/2	70-5/8	69-3/8
1180	2 - 4"	3 - 4"	2 - 3"	2 - 3"	69-1/8	34-9/16	10	55-5/8	69-1/2	77-5/8	76-3/8
1280	2 - 4"	3 - 4"	2 - 3"	2 - 3"	76-1/8	34-9/16	12	55-5/8	76-1/2	84-5/8	83-3/8



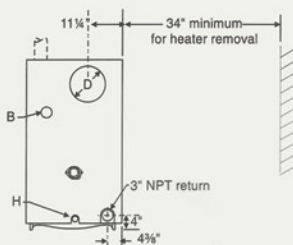
FRONT



SIDE



INTERMEDIATE



BACK

## Standard Equipment

### All Boilers

- Cast iron sections
- Insulated steel jacket
- Flame retention burner (except H-80)
- Burner mounting plate with refractory (except H-80)
- Aluminized steel flue collector assembly
- Steel flue collar and breeching damper
- Observation ports on front and rear sections
- Refractory blanket and target wall in combustion area
- Side cleanout plates
- Flue brush

### Water Boilers

- 30 PSIG ASME safety relief valve (sections tested for 80 PSIG maximum working pressure)
- Combination high limit/low limit control
- Combination pressure/temperature gauge
- Built-in air eliminator

### Steam Boilers

- 15 PSIG ASME safety valve (side outlet)
- Low limit and high limit pressure controls
- Steam pressure gauge
- Gauge glass, gauge cocks and gauge guards

### Optional Equipment

- Low water cut-offs (probe or float type)
- Tankless heaters
- Burner mounting plate (for H-80 boilers)
- Factory-assembled sections
- Fire-tested packaged boiler (with low water cut-off)

