94™ BOILER

Series 3
Gas, Oil & Gas/Oil
Water or Steam
MBH: 2,540-8,660
Combustion Eff.: 84%

- PACKAGED FOR KNOCK DOWN
- EASY TO INSTALL AND SERVICE
- GAS, OIL, GAS/OIL
- WATER OR STEAM
- MADE WITH WEIL-McLAIN QUALITY

WEIL-McLAIN®
weil-mclain.com

WEIL-McLAIN®

Presenting... the Weil-McLain No. 94 heavy-duty cast iron boiler is designed for heating apartments, schools, churches, offices, and other commercial and institutional buildings. The boiler is available for hot water or steam in 18 sizes with net I-B-R ratings from 1,763.5 to 6,060.9 MBH.

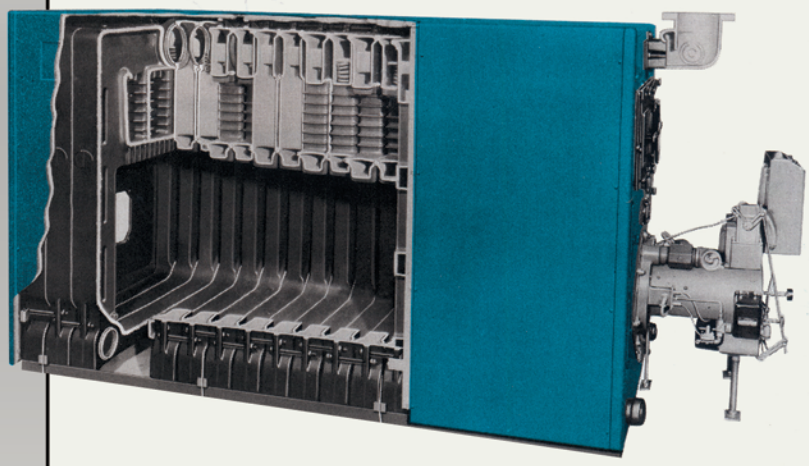
The 94 is available as a complete boiler-burner unit furnished with a light oil burner (BL Unit), power gas burner (BG Unit), or combination gas light oil burner (BGL Unit). It is also available as a boiler only (H Unit) for use with heavy oil burners approved by Weil-McLain.

In addition to total fuel flexibility, the 94 also features total installation flexibility: It is available in individual sections, with factory-assembled sections, or as a completely assembled and factory fire-tested package boiler.

The 94 features forced draft firing at over 80% operating efficiency. Outstanding design and construction features include provision for multiple tankless water heaters, patented section sealing method, Hydro-Wall wet-base design, insulated steel jacket, provision for easy cleaning, built-in air eliminator in water boilers, simplified piping no refractory combustion course, Weil-McLain cast iron construction.

Forced Draft Firing

The No. 94 boiler is pressurized for forced draft firing and therefore does not require a chimney for draft... only a 3-foot vent above the roof is necessary. This feature is particularly valuable in replacement installations, since an existing chimney with insufficient draft because of low height or poor construction is not a problem. Other advantages of a forced draft boiler: No mechanical draft equipment is required, boiler room space requirements are reduced, and a pressurized boiler is more energy efficient.



Design Features

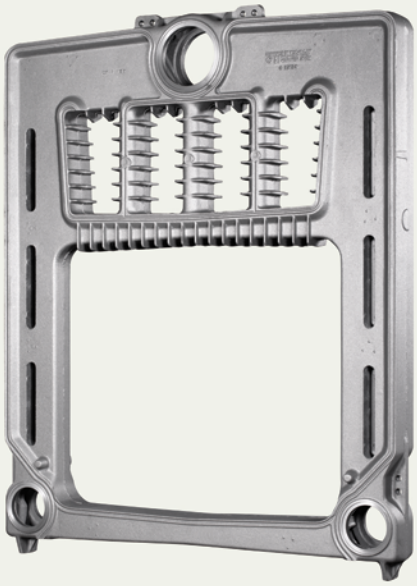
1. Forced draft firing with light oil, gas combination gas-light oil, or heavy oil. Burner mounting plate furnished as standard equipment (additional equipment for heavy oil boilers).
2. Hydro-Wall design with water circulating completely around the combustion area... no refractory combustion chamber, no separate base.
3. Cast iron sections for corrosion resistance and extra long life... special sealing rope assures a gastight seal.
4. Short draw rods permit faster, easier assembly of boiler sections.
5. Patented section sealing method assures a watertight seal and reduces installation time.
6. Simplified piping reduces installation time. No return header necessary.
7. Multiple tankless heaters. Up to eight heaters can be installed in larger boilers.
8. Supply outlets with built-in air eliminator simplify piping.
9. Extra-large top port opening forms internal header for better water circulation... large steam area assures rapid production of dry steam.
10. Steel jacket finished in attractive blue hammerloid, completely insulated, designed for fast installation.
11. Designed for easy cleaning through front cleanout doors and openings.
12. Stronger boiler construction. H and T-shaped cross sections provide maximum design strength, 80 lbs. working pressure available.

Hydro Wall Design

The No. 94 boiler has a water-backed combustion area with water circulating completely around the firebox. The crown sheet and sidewalls maximize heat-transfer surface.

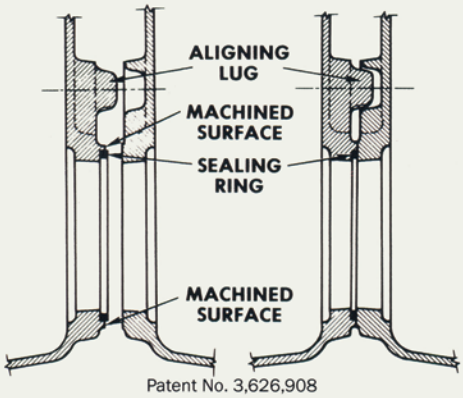
Hydro-Wall section design also permits lower height, reduces heat loss through the bottom of the boiler, and permits installation on any floor.

The cast iron sections are not face-ground; the tough outer skin is retained to protect against rust and corrosion.



No Refractory Combustion Chamber

A refractory combustion chamber is not required for the 94 boiler because the combustion area is entirely surrounded by water, and flame retention burners do not require hot refractory for combustion. This feature of the boiler saves the cost of combustion chamber material, the labor to install it, and there is no future replacement cost.

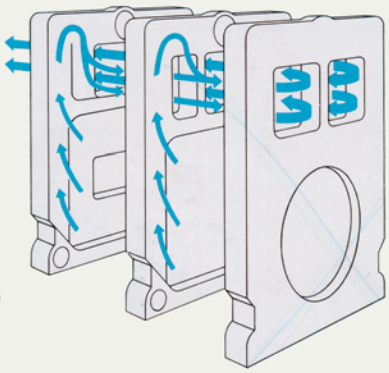


Patent No. 3,626,908

Section Sealing Method

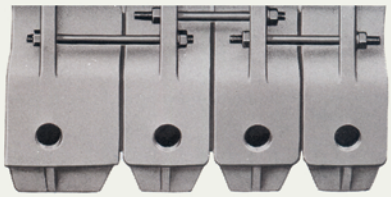
A flexible elastomer sealing ring is used in each port opening of the 94 boiler to assure a permanent, water-tight seal between sections. This sealing method, combined with the use of short draw rods to tie sections together, also permits faster section assembly.

As shown in the illustrations, the machined surface of the port opening controls the compression ratio of the sealing ring for a watertight seal. The aligning lugs assure proper section alignment during assembly and positive locking of the sections.



Flue Gas Traveler

Multiple uptakes, combined with "3-pass" design, force hot gases to wipe the entire flue area, assure balanced flue gas travel, and prevent shortcuts to the chimney. Extra-long flue gas travel and higher velocities increases heat absorption of the secondary heating surfaces.

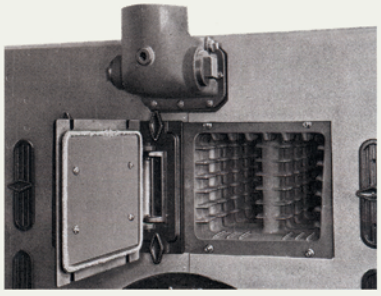


Assembled with short draw rods

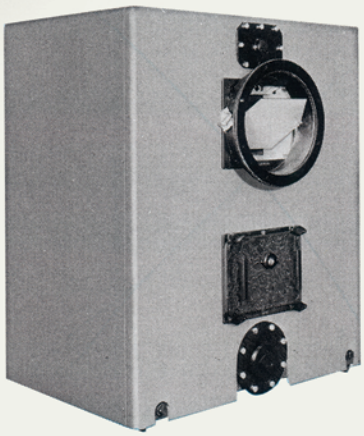
Multiple short draw rods, instead of a single long rod and expansion washers, are used to tie the sections of the 94 boiler together. This is a standard feature of Weil-McLain boilers and is recognized by leading insurance companies. Short draw rods permit faster, easier assembly of boiler sections.

Tappings (1 ½") may be provided in front, back and intermediate sections for access to waterway areas and for inspection above the crown sheet and at the bottom of the boiler.

Front Cleanout Openings



The No. 94 boiler has two large cleanout doors that give complete access to center flueways for easy cleaning. These frameless doors are hinged to a center plate, sealed with rope, and made airtight by tightening the wing nuts. There are also six rope-sealed cleanout plates at the front of the boiler for cleaning the side flues.



No Return Header... Flanged flue collar

No separate return header is necessary for the 94 boiler, saving valuable installation time and material costs. Return water or condensate enters the center opening and is directed to the left and right port openings by internal vanes in the section.

For water boilers 894 through 1294 and all steam boilers, the center opening is covered with a plate with a 6" tapping. For water boilers 1394 through 2094, the opening accepts a standard 8" counter flange; for water boilers 2194 through 2594, the opening accepts a 10" counter flange.

The flanged flue collar has a steel counter flange so the breeching may be welded to the collar of the gastight seal required for forced draft firing. (Note: 2294 through 2594 boilers are furnished with a counter flange with a 12-inch-long male adapter.) Rope seal between the flange and counter flange eliminates air leakage. The flue collar has a built-in breeching damper that can be locked in position to maintain positive pressure over fire.

The large access panel gives easy access tot the firebox for servicing. The panel has a refractory liner; an additional refractory heat shield provides further cooling of the panel. An observation port on the access panel permits close study of the flame.

Supply Outlets

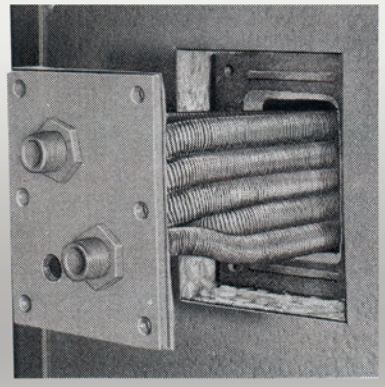
The 94 boiler requires only one or tow supply outlets, which reduces installation time. All water boilers and the 894 steam boiler use one supply outlet; remaining steam boilers use two. Three types of supply outlets are furnished as standard equipment depending on boiler size: (1) supply elbow with 6" tapping, (2) supply elbow with 8" flanged opening, and (3) top outlet with 10" flanged opening (see table). The outlets feature a built-in trap, which separates the air from the water.

	One 6" Tapped Elbow	One 8" Flanged Elbow	Two 8" Flanged Elbow	One 10" Top Outlet	Two 10" Top Outlet
Water Boilers	894 through 1294	1394 through 2094	-	2194 through 2594	-
Steam Boilers	-	894	994 through 2094	-	2194 through 2594

Multiple Tankless Water Heaters

Up to eight tankless water heaters can be installed in the 94 boiler. Storage heaters are also available.

Multiple tankless heaters offer these advantages: (1) increased volume of hot water, (2) hot water at different temperatures, or (3) one heater for snow melting.



Domestic Water Heater Capacities

Tankless Heaters*

Heater Number	**Intermittent Draw GPM 100º Average Temperature Rise	***Continous Draw GPM 100º Temperature Rise	Inlet and Outlet Tappings
92-K-34	9 GPM	11 GPM	3/4"

*Weil-McLain ratings
**Gallons of water per min. heated 40º to 140º with 200ºF. boiler water temp.
***Continuous draw–no recovery period.

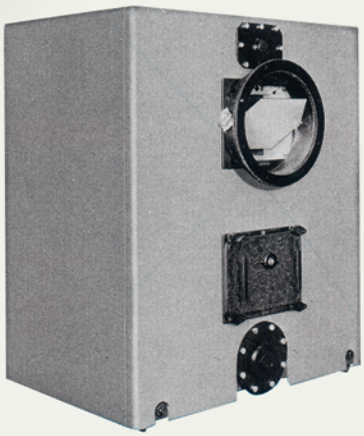
Tankless Heater Section Location

Location of TI sections (intermediate sections with tankless heater opening) counting from front to back to match jacket knockouts.

Boiler	Max No. Of Heaters	All Heaters Must Be on R.H. Side of Boiler
894	3	2, 4, 6
994	4	2, 4, 6, 8
1094	4	2, 4, 7, 9
1194	4	2, 4, 8, 10
1294	5	2, 4, 6, 9, 11
1394	5	2, 4, 6, 9, 11
1494	6	2, 4, 6, 9, 11, 13
1594	6	2, 4, 6, 10, 12, 14
1694	7	2, 4, 6, 8, 11, 13, 15
1794	7	2, 4, 6, 8, 11, 13, 15
1894	8	2, 4, 6, 8, 11, 13, 15, 17
1994	8	2, 4, 6, 9, 11, 14, 16, 18
2094	8	2, 4, 6, 9, 11, 15, 17, 19

	Steam	Water	Steam	Water
2194	5	7	2, 9, 11, 13, 20	6, 9, 11, 13, 16, 18, 20
2294	5	7	2, 9, 11, 13, 21	6, 9, 11, 13, 17, 19, 21
2394	6	8	2, 9, 11, 13, 15, 22	6, 9, 11, 13, 15, 18, 20, 22
2494	6	8	2, 9, 11, 13, 17, 23	6, 9, 11, 13, 17, 19, 21, 23
2594	7	8	2, 9, 11, 13, 15, 18, 24	6, 9, 11, 13, 17, 19, 21, 23

Note: If TI sections are ordered (see boiler rating table footnote), it is important to position them in the boiler section assembly in the exact location shown in the table above so that heater openings will match the jacket knockouts. If one or two TI sections are ordered with boiler, they MUST be located in one jacket panel because only ONE jacket side panel will have knockouts for tankless heaters. If more than two TI sections are ordered, additional jacket side panels with knockouts will be provided according to the table. The location of TI sections in other positions in the section assembly is possible, but jacket openings must then be cut by the installer.



No Return Header... Flanged flue collar

No separate return header is necessary for the 94 boiler, saving valuable installation time and material costs. Return water or condensate enters the center opening and is directed to the left and right port openings by internal vanes in the section.

For water boilers 894 through 1294 and all steam boilers, the center opening is covered with a plate with a 6" tapping. For water boilers 1394 through 2094, the opening accepts a standard 8" counter flange; for water boilers 2194 through 2594, the opening accepts a 10" counter flange.

The flanged flue collar has a steel counter flange so the breeching may be welded to the collar of the gastight seal required for forced draft firing. (Note: 2294 through 2594 boilers are furnished with a counter flange with a 12-inch-long male adapter.) Rope seal between the flange and counter flange eliminates air leakage. The flue collar has a built-in breeching damper that can be locked in position to maintain positive pressure over fire.

The large access panel gives easy access tot the firebox for servicing. The panel has a refractory liner; an additional refractory heat shield provides further cooling of the panel. An observation port on the access panel permits close study of the flame.

Supply Outlets

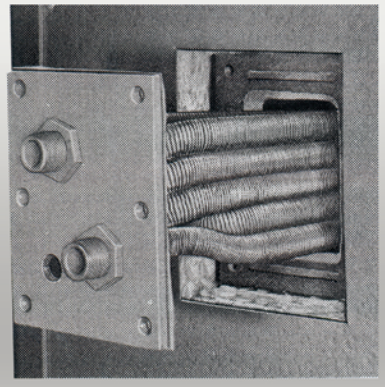
The 94 boiler requires only one or tow supply outlets, which reduces installation time. All water boilers and the 894 steam boiler use one supply outlet; remaining steam boilers use two. Three types of supply outlets are furnished as standard equipment depending on boiler size: (1) supply elbow with 6" tapping, (2) supply elbow with 8" flanged opening, and (3) top outlet with 10" flanged opening (see table). The outlets feature a built-in trap, which separates the air from the water.

	One 6" Tapped Elbow	One 8" Flanged Elbow	Two 8" Flanged Elbow	One 10" Top Outlet	Two 10" Top Outlet
Water Boilers	894 through 1294	1394 through 2094	-	2194 through 2594	-
Steam Boilers	-	894	994 through 2094	-	2194 through 2594

Multiple Tankless Water Heaters

Up to eight tankless water heaters can be installed in the 94 boiler. Storage heaters are also available.

Multiple tankless heaters offer these advantages: (1) increased volume of hot water, (2) hot water at different temperatures, or (3) one heater for snow melting.



Domestic Water Heater Capacities

Tankless Heaters*

Heater Number	**Intermittent Draw GPM 100º Average Temperature Rise	***Continous Draw GPM 100º Temperature Rise	Inlet and Outlet Tappings
92-K-34	9 GPM	11 GPM	3/4"

*Weil-McLain ratings
**Gallons of water per min. heated 40º to 140º with 200ºF. boiler water temp.
***Continuous draw–no recovery period.

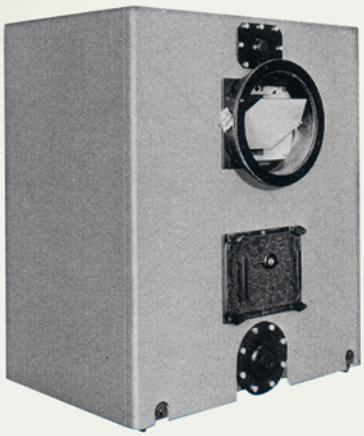
Tankless Heater Section Location

Location of TI sections (intermediate sections with tankless heater opening) counting from front to back to match jacket knockouts.

Boiler	Max No. Of Heaters	All Heaters Must Be on R.H. Side of Boiler
894	3	2, 4, 6
994	4	2, 4, 6, 8
1094	4	2, 4, 7, 9
1194	4	2, 4, 8, 10
1294	5	2, 4, 6, 9, 11
1394	5	2, 4, 6, 9, 11
1494	6	2, 4, 6, 9, 11, 13
1594	6	2, 4, 6, 10, 12, 14
1694	7	2, 4, 6, 8, 11, 13, 15
1794	7	2, 4, 6, 8, 11, 13, 15
1894	8	2, 4, 6, 8, 11, 13, 15, 17
1994	8	2, 4, 6, 9, 11, 14, 16, 18
2094	8	2, 4, 6, 9, 11, 15, 17, 19

	Steam	Water	Steam	Water
2194	5	7	2, 9, 11, 13, 20	6, 9, 11, 13, 16, 18, 20
2294	5	7	2, 9, 11, 13, 21	6, 9, 11, 13, 17, 19, 21
2394	6	8	2, 9, 11, 13, 15, 22	6, 9, 11, 13, 15, 18, 20, 22
2494	6	8	2, 9, 11, 13, 17, 23	6, 9, 11, 13, 17, 19, 21, 23
2594	7	8	2, 9, 11, 13, 15, 18, 24	6, 9, 11, 13, 17, 19, 21, 23

Note: If TI sections are ordered (see boiler rating table footnote), it is important to position them in the boiler section assembly in the exact location shown in the table above so that heater openings will match the jacket knockouts. If one or two TI sections are ordered with boiler, they MUST be located in one jacket panel because only ONE jacket side panel will have knockouts for tankless heaters. If more than two TI sections are ordered, additional jacket side panels with knockouts will be provided according to the table. The location of TI sections in other positions in the section assembly is possible, but jacket openings must then be cut by the installer.



No Return Header... Flanged flue collar

No separate return header is necessary for the 94 boiler, saving valuable installation time and material costs. Return water or condensate enters the center opening and is directed to the left and right port openings by internal vanes in the section.

For water boilers 894 through 1294 and all steam boilers, the center opening is covered with a plate with a 6" tapping. For water boilers 1394 through 2094, the opening accepts a standard 8" counter flange; for water boilers 2194 through 2594, the opening accepts a 10" counter flange.

The flanged flue collar has a steel counter flange so the breeching may be welded to the collar of the gastight seal required for forced draft firing. (Note: 2294 through 2594 boilers are furnished with a counter flange with a 12-inch-long male adapter.) Rope seal between the flange and counter flange eliminates air leakage. The flue collar has a built-in breeching damper that can be locked in position to maintain positive pressure over fire.

The large access panel gives easy access tot the firebox for servicing. The panel has a refractory liner; an additional refractory heat shield provides further cooling of the panel. An observation port on the access panel permits close study of the flame.

Supply Outlets

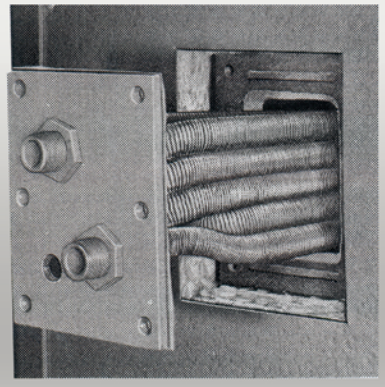
The 94 boiler requires only one or tow supply outlets, which reduces installation time. All water boilers and the 894 steam boiler use one supply outlet; remaining steam boilers use two. Three types of supply outlets are furnished as standard equipment depending on boiler size: (1) supply elbow with 6" tapping, (2) supply elbow with 8" flanged opening, and (3) top outlet with 10" flanged opening (see table). The outlets feature a built-in trap, which separates the air from the water.

	One 6" Tapped Elbow	One 8" Flanged Elbow	Two 8" Flanged Elbow	One 10" Top Outlet	Two 10" Top Outlet
Water Boilers	894 through 1294	1394 through 2094	-	2194 through 2594	-
Steam Boilers	-	894	994 through 2094	-	2194 through 2594

Multiple Tankless Water Heaters

Up to eight tankless water heaters can be installed in the 94 boiler. Storage heaters are also available.

Multiple tankless heaters offer these advantages: (1) increased volume of hot water, (2) hot water at different temperatures, or (3) one heater for snow melting.



Domestic Water Heater Capacities

Tankless Heaters*

Heater Number	**Intermittent Draw GPM 100º Average Temperature Rise	***Continous Draw GPM 100º Temperature Rise	Inlet and Outlet Tappings
92-K-34	9 GPM	11 GPM	3/4"

*Weil-McLain ratings
**Gallons of water per min. heated 40º to 140º with 200ºF. boiler water temp.
***Continuous draw–no recovery period.

Tankless Heater Section Location

Location of TI sections (intermediate sections with tankless heater opening) counting from front to back to match jacket knockouts.

Boiler	Max No. Of Heaters	All Heaters Must Be on R.H. Side of Boiler
894	3	2, 4, 6
994	4	2, 4, 6, 8
1094	4	2, 4, 7, 9
1194	4	2, 4, 8, 10
1294	5	2, 4, 6, 9, 11
1394	5	2, 4, 6, 9, 11
1494	6	2, 4, 6, 9, 11, 13
1594	6	2, 4, 6, 10, 12, 14
1694	7	2, 4, 6, 8, 11, 13, 15
1794	7	2, 4, 6, 8, 11, 13, 15
1894	8	2, 4, 6, 8, 11, 13, 15, 17
1994	8	2, 4, 6, 9, 11, 14, 16, 18
2094	8	2, 4, 6, 9, 11, 15, 17, 19

	Steam	Water	Steam	Water
2194	5	7	2, 9, 11, 13, 20	6, 9, 11, 13, 16, 18, 20
2294	5	7	2, 9, 11, 13, 21	6, 9, 11, 13, 17, 19, 21
2394	6	8	2, 9, 11, 13, 15, 22	6, 9, 11, 13, 15, 18, 20, 22
2494	6	8	2, 9, 11, 13, 17, 23	6, 9, 11, 13, 17, 19, 21, 23
2594	7	8	2, 9, 11, 13, 15, 18, 24	6, 9, 11, 13, 17, 19, 21, 23

Note: If TI sections are ordered (see boiler rating table footnote), it is important to position them in the boiler section assembly in the exact location shown in the table above so that heater openings will match the jacket knockouts. If one or two TI sections are ordered with boiler, they MUST be located in one jacket panel because only ONE jacket side panel will have knockouts for tankless heaters. If more than two TI sections are ordered, additional jacket side panels with knockouts will be provided according to the table. The location of TI sections in other positions in the section assembly is possible, but jacket openings must then be cut by the installer.

WEIL-McLAIN®

Ratings

Boiler Unit No. Steam or Water	I=B=R Burner Capacity: Light Oil GPH	Heavy Oil GPH	Gas MBH	Gross I=B=R Output MBH	I=B=R Burner Capacity: Steam Sq. Ft.	Steam MBH	Water MBH	Net Sq. Ft. Water	Boiler H.P.	Net Firebox Volume Cu. Ft.	Stack Gas Volume CFM Light Oil & Gas	Draft Loss Through Boiler-in. H20	I=B=R Chimney Size Vent Dia. Inches
894	17.50	16.65	2526	2,028	6,560	1,574	1,763	11,755	60.6	45.40	1088	.175	14
994	20.00	19.00	2887	2,320	7,505	1,801	2,017	13,450	69.3	51.48	1242	.215	14
1094	22.50	21.35	3247	2,612	8,450	2,028	2,271	15,140	78.0	57.58	1397	.255	16
1194	25.00	23.75	3608	2,904	9,395	2,254	2,525	16,835	86.7	63.64	1555	.295	16
1294	27.50	26.10	3969	3,190	10,320	2,476	2,773	18,490	95.3	69.72	1710	.335	16
1394	30.00	28.45	4330	3,480	11,260	2,701	3,026	20,175	104.0	75.80	1866	.375	18
1494	32.50	30.80	4691	3,770	12,195	2,927	3,278	21,855	112.6	81.88	2020	.415	18
1594	35.00	33.15	5052	4,070	13,165	3,159	3,539	23,595	121.6	87.96	2175	.455	18
1694	37.50	35.55	5412	4,360	14,105	3,385	3,791	25,275	130.2	94.04	2325	.485	18
1794	40.00	37.90	5773	4,650	15,045	3,610	4,043	26,955	138.9	100.12	2480	.525	20
1894	42.50	40.25	6134	4,940	15,980	3,835	4,295	28,640	147.6	106.20	2640	.565	20
1994	45.00	42.60	6495	5,230	16,920	4,060	4,542	30,285	156.2	112.28	2795	.605	20
2094	47.50	45.00	6856	5,520	17,855	4,285	4,800	32,000	164.9	118.36	2945	.650	20
2194	50.00	47.40	7216	5,810	18,795	4,510	5,052	33,675	173.6	124.44	3120	.750	20
2294	52.50	49.80	7577	6,100	19,735	4,736	5,304	35,360	182.2	130.52	3255	.850	22
2394	55.00	52.20	7938	6,390	20,670	4,961	5,556	37,045	190.9	136.60	3410	.950	22
2494	57.50	54.60	8299	6,680	21,610	5,186	5,808	38,725	199.6	142.68	3565	1.050	22
2594	60.00	57.00	8660	6,970	22,550	5,411	6,060	40,406	208.2	148.76	3730	1.150	22

- Burner input based on maximum of 2,000 ft. altitude-for higher altitudes consult Weil-McLain applications Engineering Department.
- No.2 oil-Commercial standard spec. CS75-56. Heat value 140,000 BTU/G.
- Consult Weil-McLain Applications Engineering Department for gas pressure required.
- Gross I=B=R ratings have been determined under the I=B=R provision governing forced draft boiler-burner units.
- Net I=B=R ratings are based on net installed radiation of sufficient quality for the requirements of the building and nothing need be added for normal piping and pick-up. Water ratings are based on a piping and pick-up allowance of 1.15. Steam ratings on am allowance of 1.288.
- An additional allowance should be made for gravity hot water systems or for unusual piping and pick-up loads. Consult Weil-McLain Applications Engineering Department.
- Based on average water temperature of 170F. in heat distributing units.
- Stack gas volume at outlet tempuature.
- Add .100 to obtain firebox pressure.

Control Tappings

Indentification	Location	Size	Steam: Description	Steam: Location	Water: Description	Water: Location
J1†	Front Section	1/2"	See J1 and J5	–	High Limit Control or Pressure Gauge	AL
J2†	Front Section	1/2"	Plug	NA	Plug	NA
J5†	Front Section	1/2"	See J1 and J5	–	Plug	NA
J1† & J5†	Front Section	1/2"	Gauge Glass	DL	–	–
M1† & M2†	Front Section	1"	Low-Water Cutoff; or Low-Water Cutoff & Pump Control; or Low-Water Cutoff & Feeder Combination	DL	Low-Water Cutoff; or Low-Water Cutoff & Feeder Combination	DL
M3† & M4†	Front Section	1"	Low-Water Cutoff; or Low-Water Cutoff & Pump Control; or Low-Water Cutoff & Feeder Combination	AL	Low-Water Cutoff; or Low-Water Cutoff & Feeder Combination	AL
P1*	Front Supply Elbow	3"	Skim Tapping	AL	High Limit or Dual Operating and Limit Control	DL
P2◉	Back Supply Elbow	3"	•Steam Safety Valve (994 through 2094 boilers only)	DL	–	–
R1*	Front Supply Elbow	4"	Skim Tapping	DL	Plug	NA
R2◉	Back Supply Elbow	4"	•Steam Safety Valve (1294 through 2094 boilers only)	DL	–	–
S1*	Front Supply Elbow	3/4"	Steam Pressure Gauge and/or Pressure Limit & Operating Controls	DL	–	–
S2 •	Back Supply Elbow	3/4"	Pressure Limit and Operating Control (994-2094 only)	AL	–	–
T1†*	Front Supply Elbow	1 1/4"	Pressure Limit and Operating Control	AL	Piping to Compression Tank or Pressure Gauge	DL
T2†*	Front Supply Elbow	1 1/4"	Pressure Limit and Operating Control (and Firing Rate Control, where used)	DL	Piping to Compression Tank or Pressure Gauge	DL
T3†◉	Back Supply Elbow	1 1/4"	•Pressure Limit and Operating Control (Steam Safety Valve 1094 & 1194 steam boilers only)	AL	–	–
T4†◉	Back Supply Elbow	1 1/4"	•Pressure Limit and Operating Control (Steam Safety Valve 1094 & 1194 steam boilers only)	AL	–	–
U1▲	Back Outlet Cover	2"	•Steam Safety Valve (894 steam boilers only)	DL	•Pressure Relief Valve (2094 through 2594	DL
U2▲	Back Outlet Cover Plate	2"	Plug (894 steam boilers only)	NA	•Pressure Relief Valve (2094 through 2594; Plug (894 through 1994)	DL
V1∅	Front Outlet Cover Plate	4"	•Steam Safety Valve and Skim Tapping	DL	Fire Rate Control	DL
W1∅	Front Outlet Cover Plate	3/4"	Pressure Limit Control, Pressure Operating Control and Firing Rate Control	DL	Combination High-Limit and Low-Limit Control; or High-Limit Control	DL
W2∅	Front Outlet Cover Plate	3/4"	Steam Pressure Gauge	DL	Combination Pressure-Temperature-Altitude Gauge; or Temp Gauge	DL
V2◆	Back Outlet Cover Plate	4"	•Steam Safety Valve and Skim Tapping	DL	–	DL
W3◆	Back Outlet Cover Plate	3/4"	Pressure Limit and Operating Control	AL	–	–
W4◆	Back Outlet Cover Plate	3/4"	Pressure Limit and Operating Control	AL	–	–
X1†∅	10" Front Supply Outlet	1 1/4"	Pressure Gauge	AL	Pressure Gauge	AL
X2†∅	10" Front Supply Outlet	1 1/4"	Plug	NA	Piping to Compression Tank	DL
X3 ◆	10" Back Supply Outlet	1 1/4"	Pressure Gauge	AL	–	–
X4 ◆	10" Back Supply Outlet	1 1/4"	Pressure Gauge	NA	–	–
Y1†	Front Section	3/8"	Try Cock	–	Plug	–
Y2†	Front Section	3/8"	Try Cock	–	Plug	–

DL – Most Desired Location AL – Alternate Location NA – Not Allowed

NOTES:
1. Tappings MArked optional will be provided only when specified on the boiler order.
2. Try Cock Tappings are standard for front section and optional for back section.

† Do not use these tappings for operating control location on water boilers.

* Furnished with 894 through 2094 steam and water boilers only.

⊗When internal water heater (s) are installed in boiler, use temperature control tapping in heater plate for additional operating (low-limit) control.

◉ Furnished with 994 through 2094 steam boilers only.

▲ Furnished with 894 steam boiler only, and 894 through 2594 water boilers.

∅ Furnished with 2194 through 2594 steam and water boilers only.

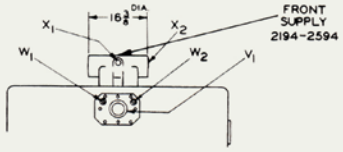
◆ Furnished with 2194 through 2594 steam boilers only.

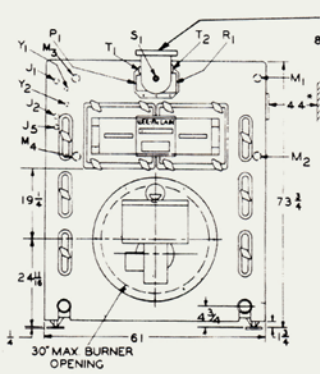
• For 894 and 994 steam boilers, one Steam Safety Valve is furnished; 1094 through 2594 steam boilers are furnished with two Steam Safety Valves. For 894 through 1994 water boilers, one Pressure Relief Valve is furnished; 2094 through 2594 water boilers are furnished with two Pressure Relief Valves.

Dimensions

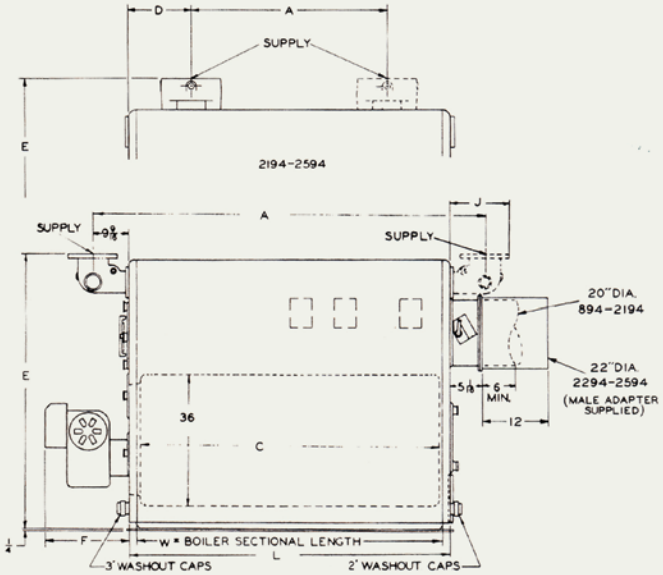
Boiler No.	Water		Steam		A	B		C	D		E	F		J	L	W
	Supply Outlet No. & Size	Return Inlet Size	Supply Outlet Size	Return Inlet Size	Steam Only	Water	Steam		Water	Steam		Light Oil	Gas & Gas-Oil	Steam Only		
894	1-6"	6"	1-8"	6"	-	$7^{11/16}$	$7^{11/16}$	45	-	-	76	$29^{1/2}$	25	-	$52^{1/2}$	51
994	1-6"	6"	2-8"	6"	$77^{5/8}$	$7^{11/16}$	$7^{11/16}$	51	-	-	76	$29^{1/2}$	25	$16^{3/8}$	$58^{1/2}$	57
1094	1-6"	6"	2-8"	6"	$83^{5/8}$	$7^{11/16}$	$7^{11/16}$	57	-	-	76	$21^{1/4}$	25	$16^{3/8}$	$64^{1/2}$	63
1194	1-6"	6"	2-8"	6"	$89^{5/8}$	$7^{11/16}$	$7^{11/16}$	63	-	-	76	$24^{15/16}$	25	$16^{3/8}$	$70^{1/2}$	69
1294	1-6"	6"	2-8"	6"	$95^{5/8}$	$7^{11/16}$	$7^{11/16}$	69	-	-	76	$24^{15/16}$	25	$16^{3/8}$	$76^{1/2}$	75
1394	1-8"	8"	2-8"	6"	$101^{5/8}$	$8^{3/8}$	$7^{11/16}$	75	-	-	76	$24^{15/16}$	25	$16^{3/8}$	$82^{1/2}$	81
1494	1-8"	8"	2-8"	6"	$107^{5/8}$	$8^{3/8}$	$7^{11/16}$	81	-	-	76	$24^{15/16}$	$30^{1/4}$	$16^{3/8}$	$88^{1/2}$	87
1594	1-8"	8"	2-8"	6"	$113^{5/8}$	$8^{3/8}$	$7^{11/16}$	87	-	-	76	$24^{15/16}$	$30^{1/4}$	$16^{3/8}$	$94^{1/2}$	93
1694	1-8"	8"	2-8"	6"	$119^{5/8}$	$8^{3/8}$	$7^{11/16}$	93	-	-	76	$24^{15/16}$	$30^{1/4}$	$16^{3/8}$	$100^{1/2}$	99
1794	1-8"	8"	2-8"	6"	$125^{5/8}$	$8^{3/8}$	$7^{11/16}$	99	-	-	76	$24^{15/16}$	$30^{1/4}$	$16^{3/8}$	$106^{1/2}$	105
1894	1-8"	8"	2-8"	6"	$131^{5/8}$	$8^{3/8}$	$7^{11/16}$	105	-	-	76	$24^{15/16}$	$30^{1/4}$	$16^{3/8}$	$112^{1/2}$	111
1994	1-8"	8"	2-8"	6"	$137^{5/8}$	$8^{3/8}$	$7^{11/16}$	111	-	-	76	$30^{3/4}$	$30^{1/4}$	$16^{3/8}$	$118^{1/2}$	117
2094	1-8"	8"	2-8"	6"	$143^{5/8}$	$8^{3/8}$	$7^{11/16}$	117	-	-	76	$30^{3/4}$	$30^{1/4}$	$16^{3/8}$	$124^{1/2}$	123
2194	1-10"	10"	2-10"	6"	72	$8^{3/8}$	$7^{11/16}$	123	$17^{1/4}$	$29^{1/4}$	$82^{1/2}$	$30^{3/4}$	$30^{1/4}$	-	$130^{1/2}$	129
2294	1-10"	10"	2-10"	6"	78	$8^{3/8}$	$7^{11/16}$	129	$17^{1/4}$	$29^{1/4}$	$82^{1/2}$	$30^{3/4}$	$30^{1/4}$	-	$136^{1/2}$	135
2394	1-10"	10"	2-10"	6"	84	$8^{3/8}$	$7^{11/16}$	135	$17^{1/4}$	$29^{1/4}$	$82^{1/2}$	$37^{3/4}$	$37^{3/4}$	-	$142^{1/2}$	141
2494	1-10"	10"	2-10"	6"	90	$8^{3/8}$	$7^{11/16}$	141	$17^{1/4}$	$29^{1/4}$	$82^{1/2}$	$37^{3/4}$	$37^{3/4}$	-	$148^{1/2}$	147
2594	1-10"	10"	2-10"	6"	96	$8^{3/8}$	$7^{11/16}$	147	$17^{1/4}$	$29^{1/4}$	$82^{1/2}$	$37^{3/4}$	$37^{3/4}$	-	$154^{1/2}$	153

*All 6" supply outlets are tapped–all 8" and 10" supply outlets are flanged. 6" return is tapped.

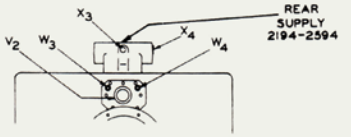


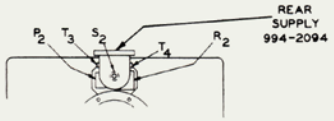


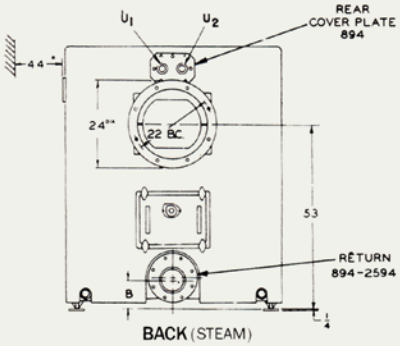
FRONT



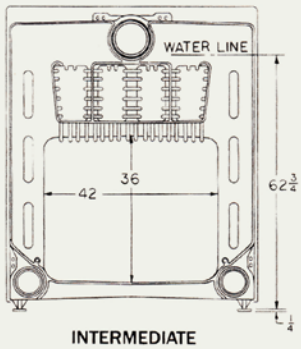
SIDE





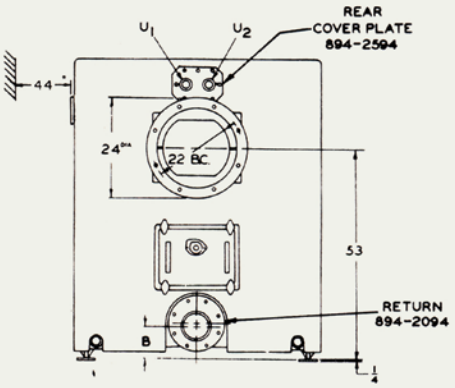


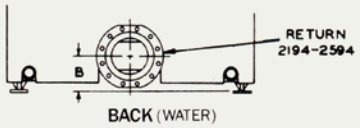
BACK (STEAM)



INTERMEDIATE

*Minimum clearance for tankless heater.





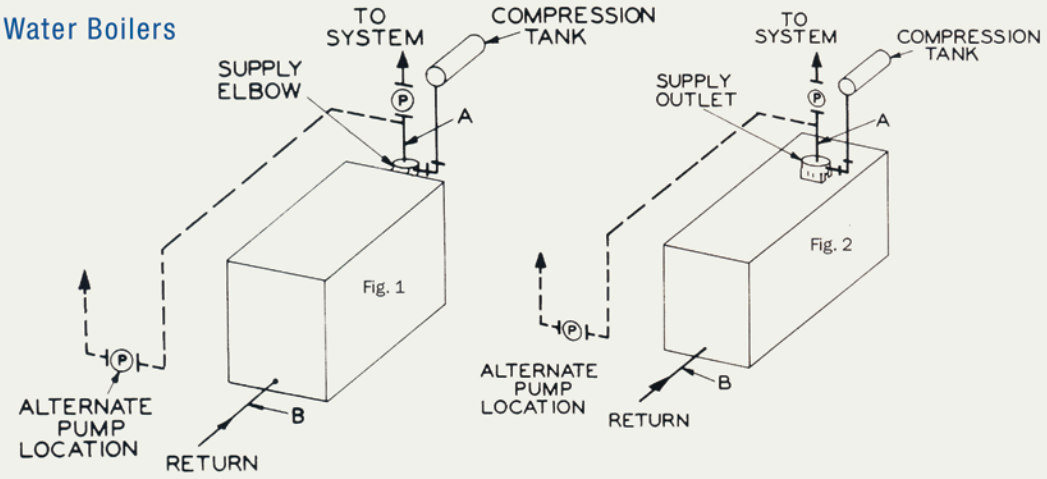
BACK (WATER)

94 Output 2,028-6,970 MBH (60-208 HP)

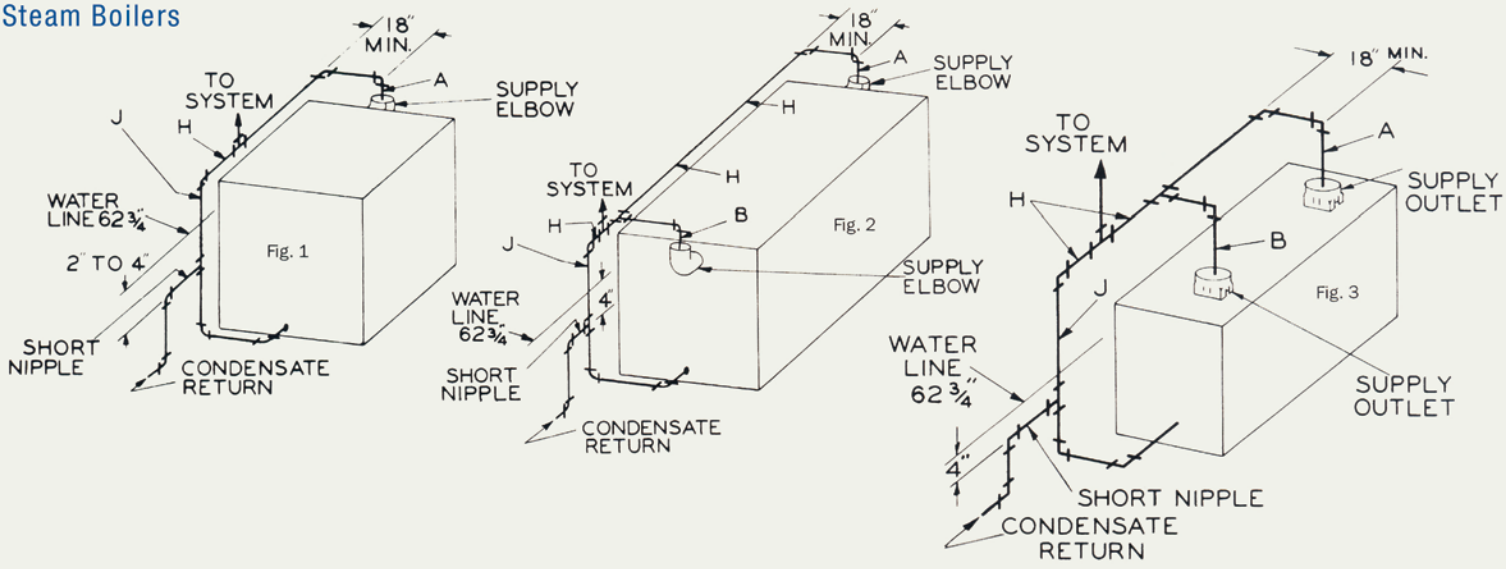
- 3 pass heat exchange design for maximum heat transfer
- Approved for heavy oil

	Oil	Gas
Combustion	84%	81%
Thermal	83%	81%

Water Boilers



Steam Boilers



Standard Equipment

All Boilers

Insulated Flush Jacket
Flue Collar with Built-in Breeching Damper
Front Cleanout Doors and Wing Nuts
Front Cleanout Plates and Wing Nuts
Back Access Door
Flue Brushes and Handles
TwoClose Nipples and Caps for Washout Tappings on Front Section
Supply Elbow(s) or Top Outlet(s)

Water Boilers

ASME Safety Relief Valve
Combination High-Limit and Low-Limit Control
Combination Pressure-Temperatures-

Steam Boilers

ASME Side Outlet Safety Valve
Low-Limit and High-Limit Pressure Controls
4.2" Steam Pressure Gauge
Syphon
Gauge Glass
Gauge Cocks

Additional Equipment

Optional Equipment

Factory-Assembled Sections (894-2194 only)
Fire-Tested Package Units
Burner Controls
Water Level Controls and Low-Water Cutoffs
Barometric Damper
1.2" Side Inspection Openings with Plugs
80 PSI Working Pressure
Manometer
Tankless Heater(s)
Flame Retention Oil, Gas, or Gas/Oil Burner
Burner Mounting Plate with Refractory

WEIL-McLAIN®
weil-mclain.com