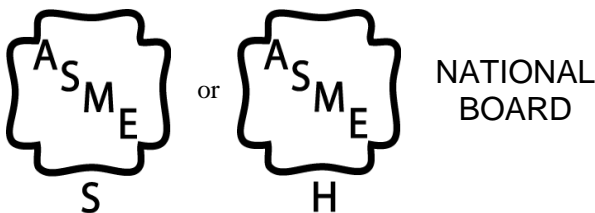


**PARKER ADVANTAGE SHEET**  
**PARKERETTE MODEL WATER TUBE STEAM BOILERS**  
**1-1/2 TO 3 H.P. ATMOSPHERIC GAS FIRED**

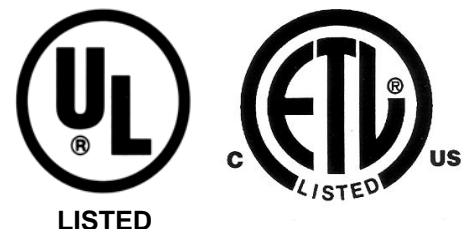
1. **RELIABILITY**: The superior design and quality construction of the Parker Boiler assures the best available in reliable, trouble-free and long life service. Parker has manufactured dependable boiler products for over 75 years.
2. **SAFETY**: The heavy construction and all welded bent tube flexible design of the Parker, provides the ultimate in safety available in a steam boiler.
3. **FAST HEAT-UP**: The boiler requires less than seven minutes to heat up to 100 PSI steam pressure from a cold start. This is a considerable time and fuel saver.
4. **SIMPLICITY**: The control system and entire boiler are furnished so that it is simple to operate by regular personnel and easy to repair without requiring special tools or skills. Simplicity is a decided advantage, as there are no expensive blowers, complicated controls, or burner adjustments, as necessary on many boilers.
5. **LOW COST OPERATION**: The staggered tubing design provides a 4-pass self-baffled heating surface with uniform heat distribution to permit maximum heat transfer resulting in lower stack temperatures and more economical operation.
6. **ALL WELDED TUBE BUNDLE**: Parker tubes are 1" O.D. heavy thickness spiral tubes, welded in headers with no internal fittings exposed to the heat area. Tubes are furnished in complete sets that are easy and inexpensive to replace. All tubes are flexibly arranged to permit free expansion and contraction to eliminate warping or leaking, typical of rigid construction.
7. **EASILY CLEANED**: The flexible design permits complete blow offs from high pressure so that the drum, tubes and mud traps can be thoroughly flushed clean each day. Accessible inspection openings are provided in the drum, mud leg and on the headers at end of each tube for easy inspection. If necessary, internal cleaning can be accomplished effectively and economically with chemicals.
8. **HEAVY INSULATED CABINET - INTERNAL ACCESSIBILITY**: The sectional cabinet consists of two thicknesses of heavy 16-gauge steel, well insulated with 1-1/2" thick, high temperature, thermal fiber insulation. This reduces radiation loss to a minimum and protects against fire hazards. Cabinets are finished with an attractive baked enamel, and heat resistant finish for long life protection.
9. **CONTROLS**: All Parker Boilers are furnished with first line quality automatic controls to assure safe and fully automatic operation. Each boiler has an enclosed boiler control panel, flame safeguard with manual reset, operating pressure control and separate manual reset high limit, gas pressure regulator, dual electric gas valves, variable rate firing control on natural gas, primary low water cutoff and pump control with motor starting relay and separate secondary low water cutoff. All boilers are factory fire tested to meet the highest standards in all phases of mechanical and operating efficiencies before shipment.
10. **COMPACT - EASY TO INSTALL**: Parker Boilers are furnished fully assembled with electrical controls mounted and wired to the boiler control panel. Each unit is factory fire tested to meet the highest standards in all phases of mechanical and operating efficiencies before shipment. Installation costs are held to a minimum since the boiler is furnished completely packaged with all trim and requires a minimum amount of valuable floor space. The "**KOMPACT MODEL**" is available at small additional charge to provide a fully packaged boiler with return system durably mounted to boiler frame. This assures a properly piped and electrically wired system - ready to install at considerable savings.
11. **CODES**:



All Boilers are built in accordance with the A.S.M.E. Power & Heating Boiler Codes, Sections I & IV. Boilers above 15 PSI are furnished with the A.S.M.E. certification mark with an "S" designator and Trim. Boilers for 15 PSI are normally furnished with the A.S.M.E. certification mark with an "H" designator and Trim. All Boilers are inspected and registered with the National Board of Boiler and Pressure Vessel Inspectors.

All individual gas and electrical controls are AGA Certified or UL Listed.

The standard natural gas fired model is furnished as an Underwriters' Laboratories, Inc. Listed Gas Fired Boiler Assembly and displays this symbol on the nameplate. Canadian models are C-ETL Listed Industrial and Commercial Gas Fired Packaged Boilers certified to Can1-3.1 and UL 795.





## TRIM AND DESCRIPTION PARKER INDUSTRIAL STEAM BOILERS ATMOSPHERIC GAS FIRED 1-1/2 TO 150 HP - HIGH OR LOW PRESSURE STEAM

MODEL		102-1.5	102-3	103-7	103-9.5	103-15	103-20	103-25	104-30	104-40	104-50	105-70	105-90	105-115	105-150
<b>BOILER &amp; ACCESSORIES</b>		<b>1.5 HP</b>	<b>3 HP</b>	<b>7 HP</b>	<b>9.5 HP</b>	<b>15 HP</b>	<b>20 HP</b>	<b>25 HP</b>	<b>30 HP</b>	<b>40 HP</b>	<b>50 HP</b>	<b>70 HP</b>	<b>90 HP</b>	<b>115 HP</b>	<b>150 HP</b>
Steam Boiler Group Trim		AB	AB	AB	AB	AB	AD	AD	AE	AE	AE	F	F	F	F
Return System Model		R1--	R1--	R3--	R3--	R3--	R4--	R4--	R5--	R6--	R6--	R7--	R8--	R9--	R9--
Kompact Mounting		Available 1-1/2 to 25 HP							Not Available 30 to 150 HP						
Blowdown Tank Model		BD1248	BD1248	BD1248	BD1248	BD1648	BD2048	BD2048	BD2048	BD2448	BD3048	BD3672	BD3672	BD3672	BD4272
Automatic Compound Feeder		Model ST15-115										Model ST30-115			
<b>SPECIFICATIONS</b>															
STEAM OUTPUT LBS/HR		52	104	242	328	518	690	863	1035	1380	1725	2415	3105	3968	5175
STEAM OUTLET	15 PSI	1-1/4"	1-1/4"	1-1/2"	2"	2"	2"	2-1/2"	2-1/2"	3"	4" FLG	5" FLG	5" FLG	6" FLG	6" FLG
	Above 15 PSI	1/2"	1/2"	3/4"	1"	1"	1"	1-1/4"	1-1/4"	1-1/2"	2"	2-1/2"	2-1/2"	3"	3"
BTU INPUT		65M	129M	301M	398M	645M	860M	1075M	1260M	1680M	2100M	2940M	3780M	4830M	6300M
GAS INLET	STD. NATURAL GAS	3/4"	3/4"	3/4"	3/4"	1"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2-1/2"	3"	3"
	HI PRES. NG & PROPANE	3/4"	3/4"	3/4"	3/4"	3/4"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"
VENT STACK	DRAFT HOOD	5"	6"	8"	10"	12"	14"	14"	14"	16"	18"	NA	NA	NA	NA
	BAROMETRIC DAMPER	5"	5"	6"	8"	10"	10"	12"	12"	14"	16"	18"	20"	22"	26"
STANDARD ELECTRICAL SERVICE	15 PSI	115 Volt, 60 Hz, 1 Phase										Two 115 Volt, 60 Hz, 1 Phase			
	16-125 PSI	115 Volt, 60 Hz, 1 Phase					230 Volt, 60 Hz, 3 Phase					Two 230 Volt, 60 Hz, 3 Phase			
	Above 125 PSI	230 Volt, 60 Hz, 3 Phase										Two 230 Volt, 60 Hz, 3 Phase			
NATURAL GAS TYPE OF FIRING	15 PSI	OFF-ON					TWO STAGE					MODULATION			
	16-200 PSI	OFF-ON					TWO STAGE					MODULATION			
	Above 200 PSI	TWO STAGE										MODULATION			
PROPANE TYPE OF FIRING		OFF-ON					TWO STAGE								
<b>SHIPPING WEIGHTS</b>															
Boiler		440#	515#	950#	1235#	1430#	1860#	2175#	3040#	3970#	4680#	6200#	7600#	9300#	12300#
Boiler & Return System		625#	700#	1240#	1525#	1720#	2215#	2530#	3560#	4510#	5220#	7050#	8540#	10550#	13550#
Boiler, Return System & BD Tank		805#	880#	1420#	1705#	1940#	2510#	2825#	3855#	4945#	5795#	7980#	9470#	11480#	14645#

**DESCRIPTION:**

Parker Industrial Packaged Gas Fired Steam Boiler. Bent water tube design with 1-5/16" O.D. steel tubes welded to headers for pressures up to 250 PSI. Assembled in heavy steel insulated cabinet with controls mounted and wired. Each unit factory fire tested. Recommended for all applications requiring high or low pressure steam. For specifications and dimensions, see Specification Sheets D-102-105-I.

**WORKING PRESSURE:**

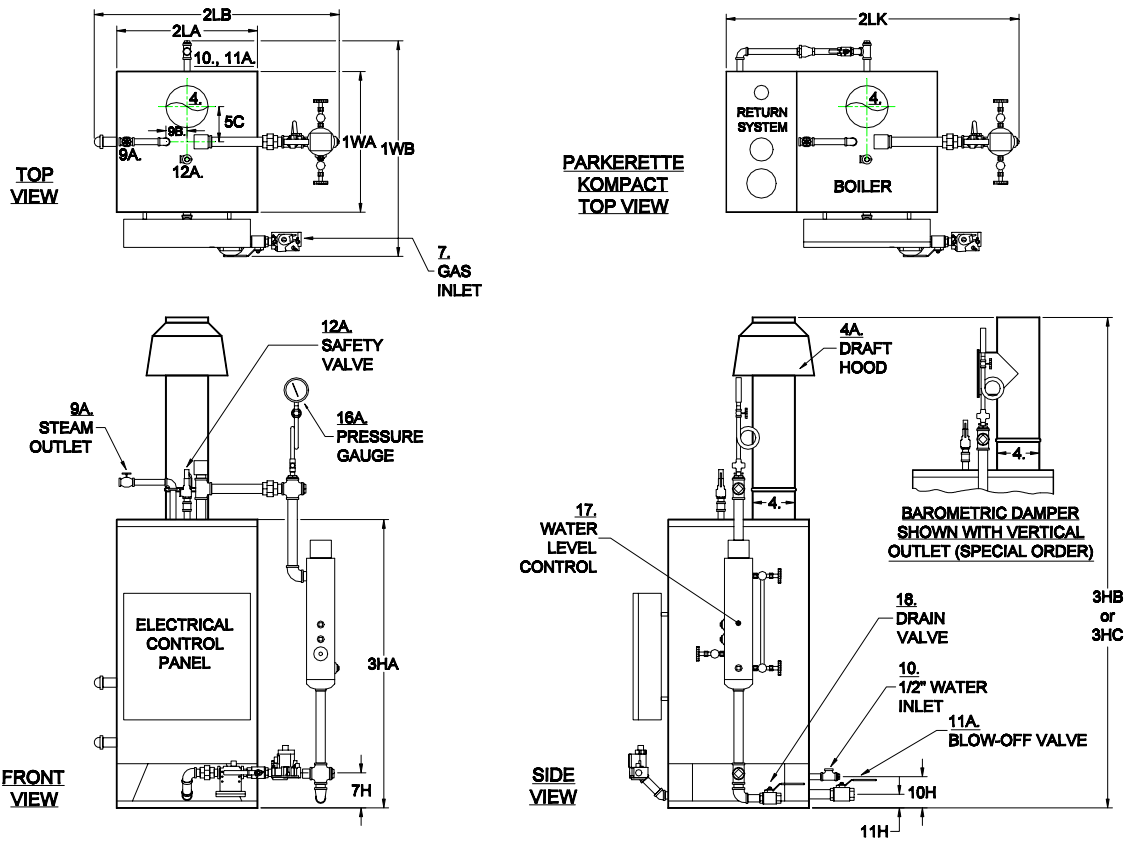
All sizes are standardly furnished with 100 PSI MAWP stamped pressure and the safety valve set 100 PSI (for operation up to 90 PSI maximum). All models are available for higher pressures at additional charge with safety valve settings of 125 PSI (112 PSI operation), 150 PSI (135 PSI operation), 200 PSI (180 PSI operation) and 240 PSI (216 PSI operation). All models are available with safety valve setting of 15 PSI (11 PSI operation) which includes a larger steam outlet (steam valve is not furnished), larger safety valve and "H" Heating Boiler Stamp in place of "S" Stamp.

## TRIM AND DESCRIPTION PARKER INDUSTRIAL STEAM BOILERS ATMOSPHERIC GAS FIRED 1-1/2 TO 150 HP - HIGH OR LOW PRESSURE STEAM

<b>CODES:</b>	All models are build in accordance with the ASME Power Boiler Code and registered with the National Board of Boiler and Pressure Vessel Inspectors. 15 PSI boilers are stamped "H" in accordance with the ASME Heating Boiler Code. The Standard Natural Gas Fired Model is listed by Underwriter's Laboratories, Inc., and displays the Listing Label as a <u>complete Gas Fired Boiler Assembly</u> . All Controls and trim are in compliance with UL Standard 795.
<b>GROUP TRIM:</b>	
<b>Trim STD:</b>	<u>Standard all Sizes:</u> Safety valve, pressure gage, water gage fixtures, column drain valve, steam valve (except 15 PSI), water feed stop and check valve, main line blow-off valve, operating pressure control and separate manual reset high limit, two main gas cocks, gas pressure regulator, primary and secondary electric gas valves, 100% electronic flame safety with electric ignition and manual reset, separate manual reset secondary probe type low water cutoff and boiler control panel. All boilers (except 15 PSI) include the ASME Code boiler external piping (BEP). Boilers with MAWP over 100 PSI include a slow opening blow off valve mounted with forged steel fittings and schedule 80 pipe.
<b>Trim A:</b>	<u>Standard 1-1/2 to 50 HP:</u> Draft Hood, and motor starting relay. Warrick P3 probe type primary low water cutoff and pump control. Off-on or variable rate firing on Natural Gas as shown on front.
<b>Trim B:</b>	<u>Standard 1-1/2 to 15 HP:</u> Honeywell S8610H Intermittent Pilot Module instant response with electric ignition. Combination gas control (main and pilot gas cock; primary and secondary electric gas valves; and gas pressure regulator).
<b>Trim D:</b>	<u>Standard 20 to 25 HP:</u> Control transformer (except 15 PSI). Electronic flame safeguard (Fireye ME Series or Honeywell RM7890) instant response with electric ignition and intermittent pilot.
<b>Trim E:</b>	<u>Standard 30 to 50 HP:</u> Same as Trim D except two blow-off valves, primary positive close motorized electric gas valve, and Parker-Lite 5-Light Sequence Indicator System.
<b>Trim F:</b>	<u>Standard 70 to 150 HP:</u> Barometric damper with flue gas spillage switch, two main blow-off valves and two header blow-off valves. Warrick P4 probe type primary low water cutoff and dual pump control for two pumps, motor starting relays, control transformer (except 15 PSI), safety lockout and low water horn, high and low gas pressure switches, primary positive close motorized electric gas valve (proof-of-closure switch on 150 HP only), butterfly valve and modulating control on Natural Gas, Fireye MEP560 Series or Honeywell RM7895C electronic flame safeguard, instant response with electric ignition and interrupted pilot, and Parker-Lite 5-Light Sequence Indication System.
<b>CALIFORNIA CODE TRIM:</b>	1- 1/2 to 9.5 HP above 100 PSI, require high and low water alarm. 15 HP and larger above 15 PSI, require high and low water alarm.
<b>FUEL:</b>	
<b>Natural Gas:</b>	Burners standard for natural gas 950 to 1150 BTU content. Boiler rated at 4" W.C. gas pressure at burner. Required gas pressure at inlet: Boilers 1-1/2 to 90 HP: Minimum: 7" W.C.; Maximum: 14" W.C. (1/2 PSI). Boilers 115 to 150 HP: Minimum: 10" W.C.; Maximum: 14" W.C. (1/2 PSI). For lower inlet pressures, consult Factory. Higher pressures require additional high gas pressure trim.
<b>Propane Gas:</b>	Propane Gas Fired Boilers are ETL Listed and the controls and trim are in compliance with UL Standard 795. They require higher gas pressure and additional charge. All boilers are rated for 18" W.C. gas pressure at burner. Burners are furnished for Propane Gas 2500 to 3200 BTU Content. Required gas pressure at inlet on all sizes: Minimum 1 PSI; Maximum: 5 PSI. See front for Propane Type of Firing.
<b>NOTE:</b>	Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.

PARKERETTE VERTICAL DRUM STEAM BOILER  
1-1/2 TO 3 H.P. - ATMOSPHERIC GAS FIRED

SPEC. SHEET D-102-I  
7D

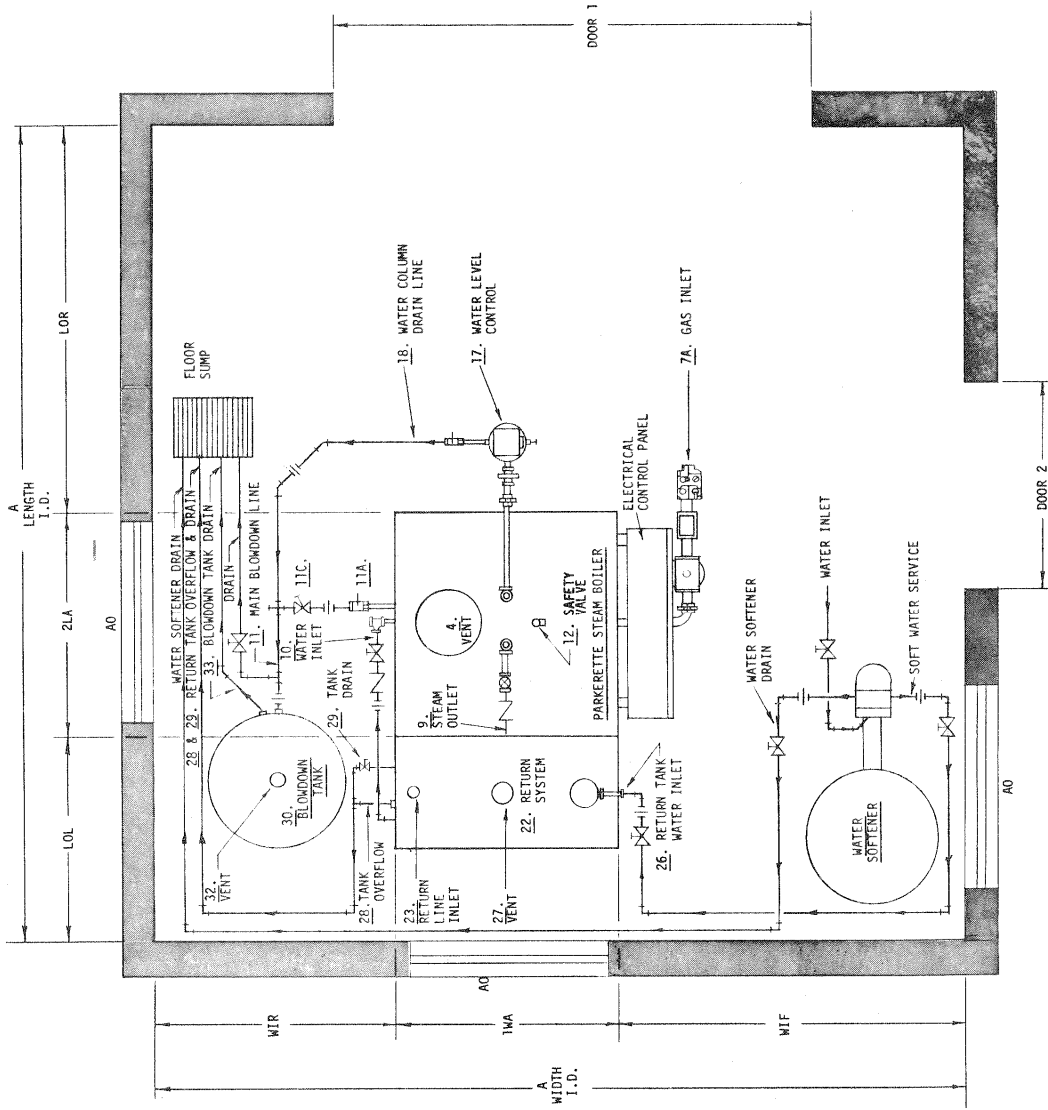


		MODEL NO.	102-1½	102-3	
NO.		HORSEPOWER	1½ HP	3 HP	
A	BTU Input	1000's BTU/HR.	65	129	
B	BTU Output at rating from and at 212°F	1000's BTU/HR.	52	104	
C	Heating Surface	SQ. FT.	16	19.9	
D	Rated Steaming Capacity from and at 212°F	LBS./HR.	52	104	
1WA	Width Cabinet Only	IN.	18	20	
1WB	Width Overall Including Controls	IN.	31	33	
2LA	Length of Cabinet Only	IN.	18	20	
2LB	Length Overall Including Controls	IN.	30	32	
2LK	Length Parker Kompact - Boiler With Return System	IN.	39	41	
3HA	Height of Cabinet Only	IN.	39	41	
3HB	Height Overall Including Draft Hood - (Standard)	IN.	66	69	
3HC	Height Overall Including Barometric Damper (Vert. Outlet/Horizont. Outlet) - (Spec. Order)	IN.	55 / 52	57 / 54	
4A	Vent Stack Diameter with Draft Hood - (Standard)	IN.	5	6	
4B	Vent Stack Diameter with Barometric Damper - (Special Order)	IN.	5	5	
5C	Vent Stack Location From Center	IN.	4-1/2	5	
7A	Gas Inlet Size - Standard Nat. Gas/ Supply Press. Min: 7" WC; Max: 14" WC	IN.	3/4	3/4	
7A1	Natural Gas Manifold Pressure at Burner	IN. WC	4	4	
7B	Gas Inlet Size - High Press. Nat. Gas & Propane Gas / Supply Press. 1-5 PSI	IN.	3/4	3/4	
7B1	Propane Gas Manifold Pressure at Burner	IN. WC	18	18	
7H	Gas Inlet Height From Floor	IN.	5	5	
9A HP	Steam Valve Size - High Pressure 60 to 250 PSI	IN.	1/2	1/2	
9 LP	Steam Outlet Size - Low Pressure 15 PSI or less - (Special Order)	IN.	1-1/4	1-1/4	
9B	Steam Outlet Location - From Center of Boiler	IN.	2	2	
10H	Water Inlet Height From Floor	IN.	5	5	
11A	Blow-off Valve Size	IN.	1	1	
11H	Blowdown Line Height From Floor	IN.	3	3	
12A HP	Safety Valve Drain Size - High Pressure - 100 PSI - Standard	OUTLET IN.	3/4	3/4	
12A LP	Safety Valve Drain Size - Low Pressure - 15 PSI ("H" Code)- (Special Order)	OUTLET IN.	3/4	3/4	
18	Water Column Drain Valve Size	IN.	3/4	3/4	
J	Net Weight Of Boiler	LBS.	370	440	
K	Domestic Crated Shipping Weight of Boiler	LBS.	440	515	
L	Same with Return System or Kompact Mounting	LBS.	625	700	
MINIMUM LISTED CLEARANCES TO COMBUSTIBLE CONSTRUCTION:		12"	48"	6"	12"
		Cabinet Sides & Rear	Cabinet Top	Draft Hood Vent Connector	Baro. Damper Chimney Connector
Recommended Clearances for Access: Inspection Doors 18"; Controls 24"; Electrical Panel 30"; Additional Space may be required by Local Codes					

Notes: All of the above dimensions are for a standard trim model. Due to continuous improvement, specifications are subject to change without notice.



# BOILER ROOM FLOOR PLAN DRAWING 1-1/2 AND 3 H.P. PARKERETTE GAS FIRED STEAM BOILER



NOTE: FOR DIMENSIONS AND LINE SIZES SEE  
BOILER ROOM FLOOR PLAN SPEC. SHEET.

USED ON		1-1/2 AND 3 H.P.		PART NAME		BOILER ROOM FLOOR PLAN DRAWING	
FOR		PARKERETTE GAS FIRED STEAM BOILER		SCALE		NONE	
DR.	DH	8775		PARKER FILLER CO.		5630 RANDINT BLVD.	
CH.				LOS ANGELES, CALIF.		90060	
APPROVED				PH: 213-722-2400		FAX: 213-722-2448	
				REFERENCES NO.		13/79	
				DWG. NO.		102 BRFP 1	





**PARKER BOILER CO.**  
**BOILER ROOM FLOOR PLAN SPECIFICATION SHEET**  
**PARKERETTE VERTICAL DRUM GAS FIRED STEAM BOILER 1-1/2 TO 3 H.P.**

**(IA) RECOMMENDED BOILER ROOM SIZE, SINGLE BOILER, ATMOSPHERIC GAS FIRED:**

NO.	ITEM	1-1/2 H.P.	3 H.P.
A	Boiler Room Size (Recommended I.D., W x L x H)	6-1/2 x 6 x 9'	6-1/2 x 6 x 9'
D1	Door No. 1 (W x H)	3 x 7'	3 x 7'
D2	Door No. 2 (W x H)	2-1/2 x 7'	2-1/2 x 7'
AO *	Air Openings - Total Free Area	100 Sq. " *	129 Sq. " *
WIF	Width in Front	36"	36"
IWA	Width Boiler Cabinet	18"	20"
WIR	Width in Rear	24"	22"
LOL	Length on Left	20"	18"
2LA	Length Boiler Cabinet	18"	20"
LOR	Length on Right	34"	34"
3HA	Cabinet Height	39"	41"
4A	Vent Stack Diameter w/Draft Hood (Standard)	5"	6"
4B	Vent Stack Diameter w/Barometric Damper (Special Order)	5"	5"
7A	Gas Inlet Size - Standard Natural Gas	3/4"	3/4"
7B	Gas Inlet Size - High Pressure Natural Gas & LPG Gas	3/4"	3/4"
7C	B.T.U. Input required at rating (Per Hour)	65,000	129,000
9A HP	Steam Outlet Size High Pressure (Standard)	1/2"	1/2"
9 LP	Steam Outlet Size Low Pressure (Special)	1-1/4"	1-1/4"
10	Water Inlet Pipe Size to Boiler	1/2"	1/2"
11	Main Blowdown Line Size	1"	1"
12A HP	Safety Valve Drain Size (100 PSI)	3/4"	3/4"
12A LP	Safety Valve Drain Size (15 PSI)	3/4"	3/4"
18	Water Column Drain Size	3/4"	3/4"
22	Return Tank Size (W x L x H)	10 x 20 x 35"	10 x 20 x 35"
23 **	Return Line Inlet Size	3/4" **	3/4" **
26	Return Tank Water Inlet Line Size	1/2"	1/2"
27A	Return Tank Vent Size Required	1"	1"
27B	Return Tank Vent w/Dry Cleaning Steam Vacuum	3"	3"
28	Return Tank Overflow	3/4"	3/4"
29	Return Tank Drain Line Size	3/4"	3/4"
30	Blowdown Tank Size (Diameter x Height)	12 x 66"	12 x 66"
32	Blowdown Tank Vent Outlet Size	2-1/2"	2-1/2"
32L ***	Minimum Reduced Vent Line Size for up to 150 PSI	2" ***	2" ***
33	Blowdown Tank Drain Line Size	1"	1"
FS	Recommended Drain Line Size - floor sump to sewer	2"	2"
ES	Electrical Service - Main Line Disconnect Switch	15 Amps	15 Amps

\* Air Openings based on horizontal ducts to outdoors. See GBI 101-5, Paragraph V for complete details.

\*\* Can be decreased on high pressure or close runs. Increase on low pressure or long runs.

\*\*\* Consult Local Inspection Authority for approval before reducing Vent Line to size shown.

**PARKER BOILER CO.**  
**BOILER ROOM FLOOR PLAN SPECIFICATION SHEET**  
**PARKERETTE VERTICAL DRUM GAS FIRED STEAM BOILER 1-1/2 TO 3 H.P.**

**(IB) MINIMUM RECOMMENDED BOILER ROOM SIZE, SINGLE BOILER WITH RETURN TANK AND BLOWDOWN TANK:**

NO.	ITEM	1-1/2 H.P.	3 H.P.
A	Boiler Room Size (Recommended I.D., W x L x H)	6 x 5 x 7'	6 x 5 x 7'
WIF	Width in Front	35"	35"
WIR	Width in Rear	19"	17"
LOL	Length on Left	18"	18"
LOR	Length on Right	24"	22"
<b>(IC) MINIMUM ALLOWABLE BOILER ROOM SIZE FOR SINGLE BOILER AND RETURN SYSTEM:</b>			
<b>Blowdown Tank and All Other Equipment Outside Boiler Room</b>			
A	Boiler Room Size (Recommended I.D., W x L x H)	5-1/2 x 4-1/2 x 7'	5-1/2 x 4-1/2 x 7'

NOTE: All installation dimensions and specifications are adequate for proper operation of standard equipment. Special equipment may require additional space. All installations must comply with Local Code Requirements. Specifications subject to change without notice.