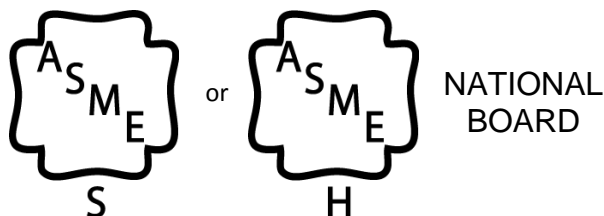


**PARKER ADVANTAGE SHEET**  
**HORIZONTAL DRUM SECTIONAL WATER TUBE STEAM BOILERS**  
**70 TO 150 H.P. ATMOSPHERIC OR PREMIX GAS, POWER GAS, OIL, AND COMBINATION GAS/OIL FIRED**

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 ten 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 on atmospheric models 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 12-pass self-baffled heating surface with uniform heat distribution to permit maximum heat transfer resulting in lower stack temperatures and more economical operation.
6. **SECTIONAL TUBES**: Parker tubes are 1-5/16" O.D. 0.12" (11-gauge) heavy thickness which is almost double that of standard gauge boiler tubing. Each tube is double welded to headers with high tensile weld metal by the inert gas process to assure full penetration and greater strength. Tubes are furnished in individual sections, each attached by two union connections for easy replacement. All sections are interchangeable and reversible. The bent tube design permits free expansion of each tube individually eliminating strain, warping and leaking, typical of rigid design.
7. **EASILY CLEANED**: The flexible design permits complete blowdowns 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 a minimum 1-1/2" thick (2" thick on 150 H.P.) 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. The two inspection doors on each end of the cabinet can easily be removed in minutes for complete accessibility to the internal boiler and burners.
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, Parker-Lite Sequence Indicator System, flame safeguard with manual reset, electric ignition, operating pressure control and separate manual reset high limit, primary low water cutoff and dual pump controls with motor starting relays, separate secondary low water cutoff, dual fuel shutoff valves and variable rate firing. Gas fired models are furnished with a gas pressure regulator. 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. 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.
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. Power Gas, Oil and Combination Gas/Oil Fired Boilers are furnished with a UL Listed Burner.

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

A105.DOC





## 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	
BOILER & ACCESSORIES		1.5 HP	3 HP	7 HP	9.5 HP	15 HP	20 HP	25 HP	30 HP	40 HP	50 HP	70 HP	90 HP	115 HP	150 HP	
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				
SPECIFICATIONS																
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	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"	
INLET	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	DRAFT HOOD	5"	6"	8"	10"	12"	14"	14"	14"	16"	18"	NA	NA	NA	NA	
STACK	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										
SHIPPING WEIGHTS																
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:

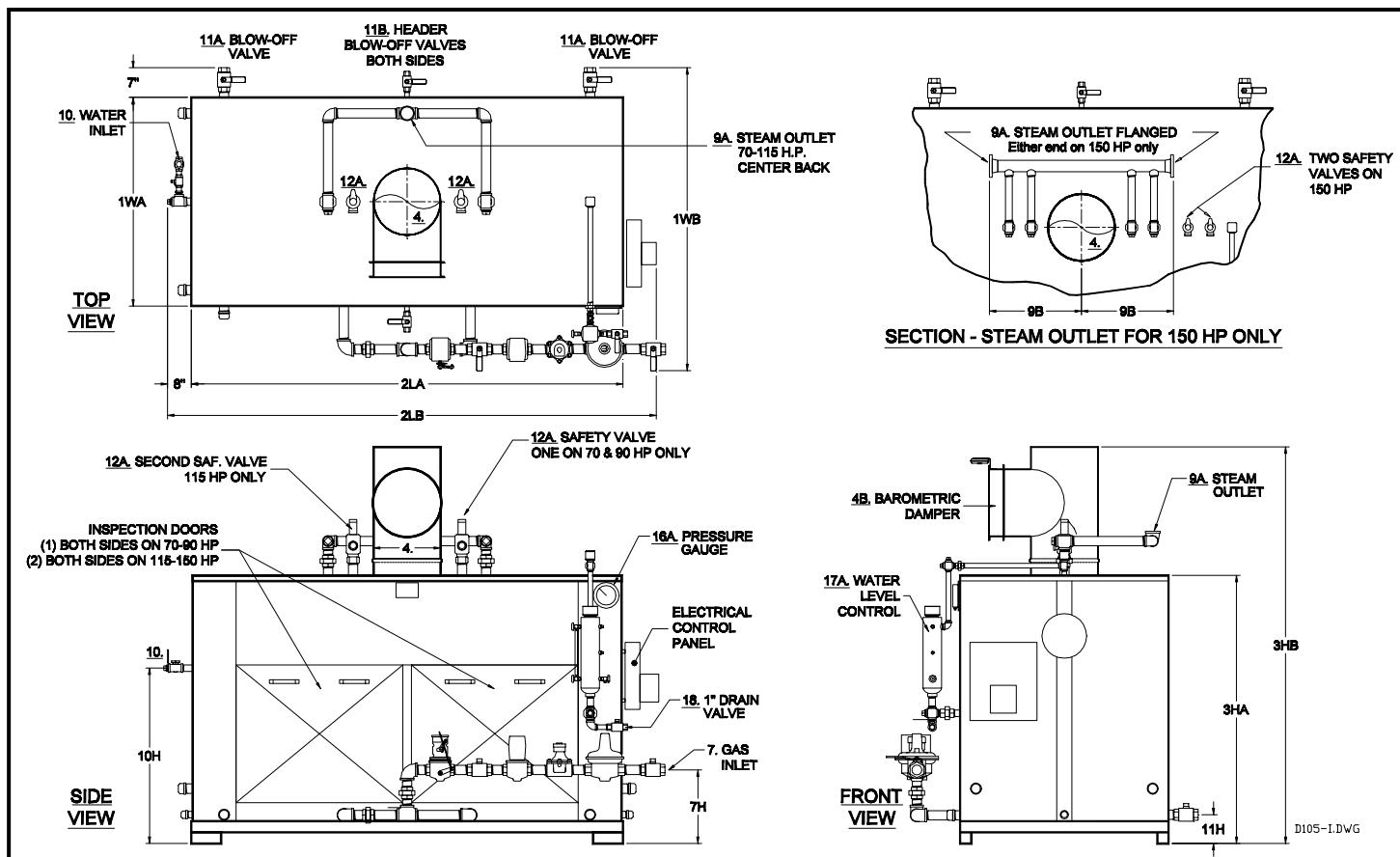
Parker Industrial Packaged Gas Fired Steam Boiler. Bent water tube design with 1-5/16" O.D. steel tubes welded to headers for pressures up to 250 PSI. Assembled in heavy steel insulated cabinet with controls mounted and wired. Each unit factory fire tested. Recommended for all applications requiring 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><u>CODES:</u></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><u>GROUP TRIM:</u></b>	
<b><u>Trim STD:</u></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><u>Trim A:</u></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><u>Trim B:</u></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><u>Trim D:</u></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><u>Trim E:</u></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><u>Trim F:</u></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><u>CALIFORNIA CODE TRIM:</u></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><u>FUEL:</u></b>	
<b><u>Natural Gas:</u></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><u>Propane Gas:</u></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><u>NOTE:</u></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.



		MODEL NO.	105-70	105-90	105-115	105-150
NO.		HORSEPOWER	70 HP	90 HP	115 HP	150 HP
A	BTU Input	1000's BTU/HR	2940	3780	4830	6300
B	BTU Output at rating from and at 212°F	1000's BTU/HR	2352	3024	3864	5040
C	Heating Surface	SQ. FT.	349	456	593	793
D	Rated Steaming Capacity from and at 212°F	LBS. PER HR.	2415	3105	3968	5175
1WA	Width Cabinet Only	IN.	56	56	56	56
1WB	Width Overall Including Controls	IN.	82	82	82	82
2LA	Length of Cabinet Only	IN.	80	98	116	156
2LB	Length Overall Including Controls	IN.	98	116	134	174
3HA	Height of Cabinet Only	IN.	72	72	72	72
3HB	Height Overall Including Barometric Damper (Std) (Vert. Outlet / Horizont.)	IN.	107 / 104	107 / 107	113 / 112	113 / 116
4	Vent Stack Diameter with Barometric Damper (Std)	IN.	18	20	22	26
5	Vent Stack Minimum Height Above Boiler @ Sea Level	FT.	6	6	6	6
7A	Std. Nat. Gas Inlet Size	IN.	2	2-1/2	3	3
7A1	Std. Nat. Gas Inlet Supply Press: Max: 14" WC; Min: ____" WC	MIN. IN. WC	7	7	10	10
7A2	Natural Gas Manifold Pressure at Burner	IN. WC	4	4	4	4
7B	Hi Press. Nat. & Propane Gas Inlet Size/Supply Press. 1-5 PSI	IN.	1-1/2	1-1/2	2	2
7B1	Propane Manifold Pressure at Burner	IN. WC	18	18	18	18
7H	Gas Inlet Height From Floor	IN.	18	20	21	21
9A HP	Steam Outlet Size - High Pressure 60 to 250 PSI - Standard	IN.	2-1/2	2-1/2	3	3 FLG.
9 LP	Steam Outlet Size - Low Pressure 15 PSI or less - Special Order	IN.	5 FLG.	5 FLG.	6 FLG.	6 FLG.
9B	Steam Outlet Location - From Center of Boiler	IN.	Center-Back	Center-Back	Center-Back	33
10	Water Inlet Size	IN.	1-1/2	1-1/2	1-1/2	1-1/2
10H	Water Inlet Height From Floor	IN.	47	47	47	47
11A	Blow-off Valve Size	IN.	(2) 2	(2) 2	(2) 2	(2) 2
11H	Blowdown Line Height From Floor	IN.	7	7	7	7
11B	Header Blow-off Valve Size	IN.	(2) 1	(2) 1	(2) 1	(2) 1
12A HP	Saf. Valve Drain Size - High Press. -100 PSI - Standard	OUTLET IN.	(1) 2	(1) 2	(2) 1-1/2	(2) 1-1/2
12A LP	Saf. Valve Drain Size - Low Press. -15 PSI ("H" Stamp)-Special Order	OUTLET IN.	(1) 2-1/2	(1) 3	(2) 2	(2) 2-1/2
J	Net Weight Of Boiler - Approximate	LBS.	5800	7000	8500	11000
K	Domestic Crated Shipping Weight of Boiler - Approximate	LBS.	6200	7600	9300	12300
L	Same with Return System - Approximate	LBS.	7050	8540	10550	13550

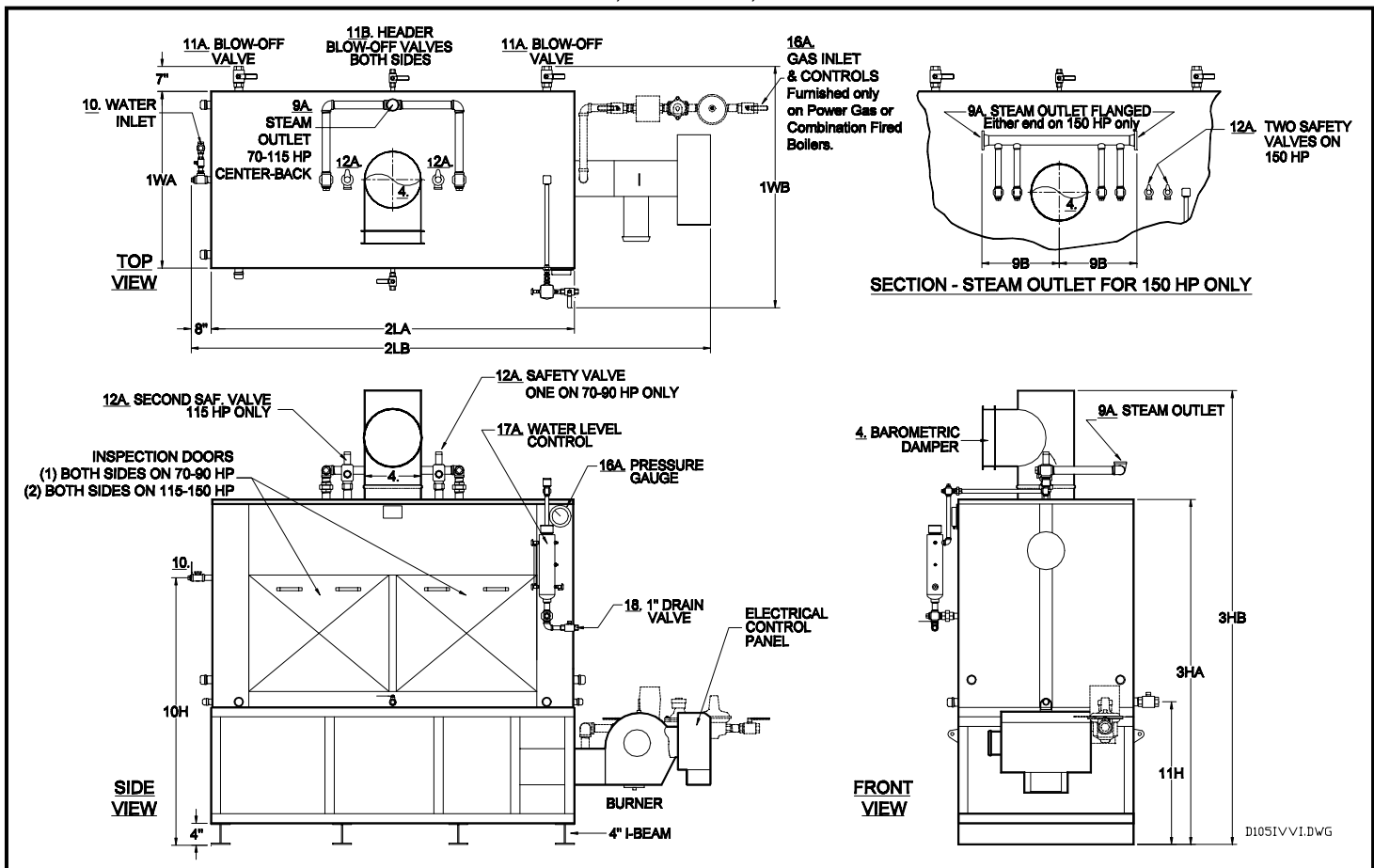
MINIMUM LISTED CLEARANCES TO COMBUSTIBLE CONSTRUCTION:	12" Cabinet Sides & Rear	48" Cabinet Top	12" Baro. Damper Chimney Connector
Recommended Clearances for Access: Inspection Doors 18" (One inspection door must be 38" for tube removal); Controls 24"; Electrical Panel 30"; Additional Space may be required by Local Codes.			

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

**PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILER**  
**70 TO 150 H.P. - POWER GAS, LIGHT OIL, OR COMBINATION FIRED**

SPEC. SHEET D-105-IV-VI

0D2

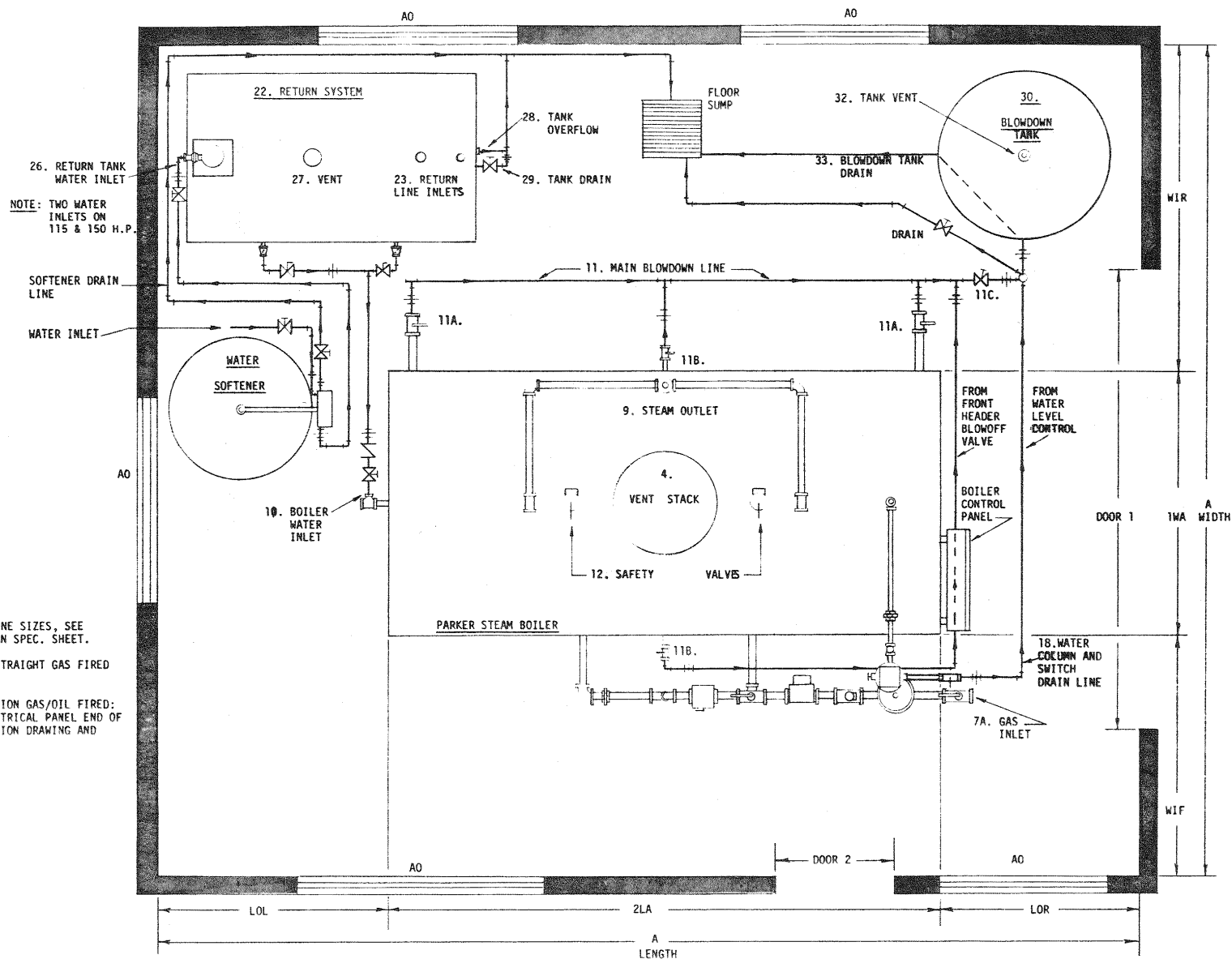


* DENOTES FUEL (G,O,GO)			MODEL NO.	105-*-70	105-*-90	105-*-115	105-*-150
NO.		HORSEPOWER		70 HP	90 HP	115 HP	150 HP
A	BTU Input	1000's BTU/HR.		2940	3780	4830	6300
B	BTU Output at Rating from and at 212°F	1000's BTU/HR.		2352	3024	3864	5040
C	Heating Surface	SQ. FT.		349	456	593	793
D	Rated Steaming Capacity from and at 212°F	LBS./ HR.		2415	3105	3968	5175
1WA	Width Cabinet Only	IN.		56	56	56	56
1WB	Width Overall Including Controls	IN.		82	82	82	82
2LA	Length of Cabinet Only	IN.		80	98	116	156
2LB	Length Overall Including Controls	IN.		119	141	160	204
3HA	Height of Cabinet Only	IN.		100	103	103	104
3HB	Height Overall Including Barometric Damper	IN.		135	138	144	145
4	Vent Stack Diameter with Barometric Damper	IN.		18	20	22	26
5	Chimney Minimum Height Above Boiler @ Sea Level	FT.		12	12	12	12
7A	Gas Inlet Size - Std. Nat. Gas	IN.		2	2	2-1/2	2-1/2
7A1	Std. Nat. Gas Inlet Supply Pressure; Max: 14" WC; Min. " WC	MIN. IN. WC.		7	7-1/2	10	12
8A	Oil Input Required @ Manufacturer's Capacity Rating (No. 2 Light Fuel Oil)	GPH.		21	27	35	45
8B	Oil Supply Line Size - Minimum for up to 30 Ft. Length	IN.		3/4	3/4	1	1
9A HP	Steam Outlet Size - High Pressure 60 to 250 PSI	IN.		2-1/2	2-1/2	3	3 FLG.
9 LP	Steam Outlet Size - Low Pressure 15 PSI or less - Special Order	IN.		5 FLG.	5 FLG.	6 FLG.	6 FLG.
9B	Steam Outlet Location - From Center of Boiler	IN.	Center-Back	Center-Back	Center-Back		33
10	Water Inlet Size	IN.	1-1/2	1-1/2	1-1/2		1-1/2
10H	Water Inlet Height From Floor	IN.	75	78	78		79
11A	Blow-off Valve Size	IN.	(2) 2	(2) 2	(2) 2		(2) 2
11H	Blowdown Line Height From Floor	IN.	36	38	38		39
11B	Header Blow-off Valve Size	IN.	(2) 1	(2) 1	(2) 1		(2) 1
12A HP	Saf. Valve Drain Size - High Press. -100 PSI - Standard	OUTLET IN.	(1) 2	(1) 2	(2) 1-1/2		(2) 1-1/2
12A LP	Saf. Valve Drain Size - Low Press. -15 PSI ("H" Stamp)-Spec'l Order	OUTLET IN.	(1) 2-1/2	(1) 3	(2) 2		(2) 2-1/2
J	Net Weight Of Boiler - Approximate	LBS.	7900	9100	11950		14450
K	Domestic Crated Shipping Weight of Boiler - Approximate	LBS.	8400	9800	12950		15950
L	Same with Return System - Approximate	LBS.	9250	10740	14200		17200
MINIMUM CLEARANCES TO COMBUSTIBLE CONSTRUCTION:		18" Cabinet Sides & Rear	48" Cabinet Top		18" Baro. Damper Chimney Connector		
Recommended Clearances for Access: Inspection Doors 18" (One inspection door must be 38" for tube removal); Controls 24"; Electrical Panel 30"; Additional Space may be required by Local Codes							

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

# BOILER ROOM FLOOR PLAN DRAWING

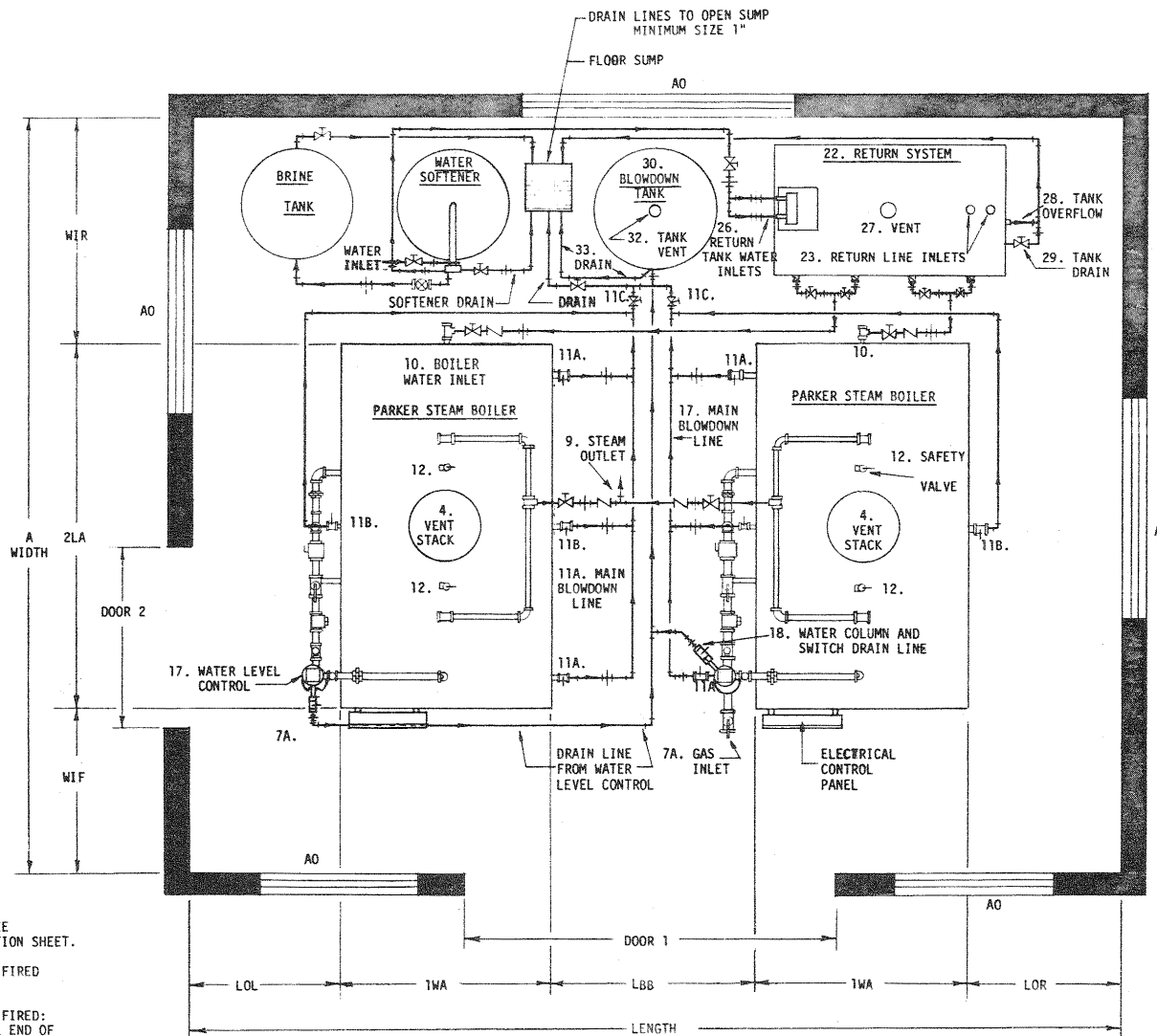
## 70 TO 150 H.P. PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILER



USED ON		70 TO 150 H.P.	PART NAME		BOILER ROOM FLOOR PLAN DRAWING	
FOR		PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILER				
DR.	DW	DATE	PARKER BOILER CO.		SCALE	NONE
CH.		8/79			SUPERCEDES NO.	11/74
APPROVED					DWG. NO.	105 BRFP 1

# BOILER ROOM FLOOR PLAN DRAWING

## DUAL 70 TO 150 H.P. PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILERS



NOTES:  
FOR DIMENSIONS AND LINE SIZES, SEE  
BOILER ROOM FLOOR PLAN SPECIFICATION SHEET.

THIS DRAWING IS FOR STRAIGHT GAS FIRED  
BOILERS.

OIL FIRED OR COMBINATION GAS/OIL FIRED:  
BURNER MOUNTS ON ELECTRICAL PANEL END OF  
BOILER. SEE INSTALLATION DRAWING AND SPEC.  
SHEET 105-IV-V.

USED ON	70 TO 150 H.P.	PART NAME	BOILER ROOM FLOOR PLAN DRAWING
FOR	DUAL PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILERS		
DR. DW.	DATE 8/79	PARKER BOILER CO.	SCALE NONE
CH.			SUPERCEDES NO. 11/73
APPROVED			DWG. NO. 105 BRFP 2



**PARKER BOILER CO.**  
**BOILER ROOM FLOOR PLAN SPECIFICATION SHEET**  
**HORIZONTAL DRUM GAS FIRED STEAM BOILER 70-150 H.P.**

<b>(IA) RECOMMENDED BOILER ROOM SIZE, SINGLE BOILER, ATMOSPHERIC GAS FIRED:</b>					
NO.	ITEM	70 H.P.	90 H.P.	115 H.P.	150 H.P.
A	Boiler Room Size (Recommended I.D. Width x Length x Height)	14' x 14' x 12'	14' x 15-1/2' x 12'	15' x 17' x 12'	15' X 20-1/2' X 12'
D1	Door No. 1 (Width x Height)	8' x 8'	8' x 8'	8' x 8'	8' x 8'
D2	Door No. 2 (Width x Height)	2-1/2' x 7'	2-1/2' x 7'	2-1/2' x 7'	2-1/2' x 7'
AO *	Air Openings- Total Free Area	2940 sq. in. *	3780 sq. in. *	4830 sq. in. *	6300 sq. " *
WIF	Width in Front	44"	44"	50"	50"
1WA	Width Boiler Cabinet	56"	56"	56"	56"
WIR	Width in Rear	68"	68"	74"	74"
LOL	Length on Left	48"	48"	48"	48"
2LA	Length Boiler Cabinet	80"	98"	116"	156"
LOR	Length on Right	40"	40"	40"	42"
3HA	Cabinet Height	72"	72"	72"	72"
4	Vent Stack Diameter with Barometric Damper (Standard)	18"	20"	22"	26"
5A	Vent Stack Height above Boiler - Minimum at Sea Level	6'	6'	6'	6'
7A	Gas Inlet Size - Standard Natural Gas	2"	2-1/2"	3"	3"
7B	Gas Inlet Size - High Pressure Natural Gas and LPG Gas	1-1/2"	1-1/2"	2"	2"
7C	B.T.U. Input Required at Rating B.T.U./HR.	2,940,000	3,780,000	4,830,000	6,300,000
9 HP	Steam Outlet Size - High Pressure	2-1/2"	2-1/2"	3"	3" FLG.
9 LP	Steam Outlet Size - Low Pressure	5" FLG.	5" FLG.	6" FLG.	6" FLG.
10	Water Inlet Pipe Size to Boiler	1-1/2"	1-1/2"	1-1/2"	1-1/2"
11	Main Blowdown Line Size	2"	2"	2"	2"
12A HP	Safety Valve Drain Size (100 PSI) OUTLET IN.	(1) 2"	(1) 2"	(2) 1-1/2"	(2) 1-1/2"
12A LP	Safety Valve Drain Size (15 PSI) OUTLET IN.	(1) 2-1/2"	(1) 3"	(2) 2"	(2) 2-1/2"
18	Water Column Drain Size	1"	1"	1"	1"
22	Return Tank Size (Width x Length x Height)	36" x 48" x 63"	36" x 60" x 63"	42" x 60" x 69"	42" x 60" x 69"
23 **	Return Line Inlet Size	2" **	2" **	(2) 2" **	(2) 2" **
26	Return Tank Water Inlet Line Size	1"	1"	1-1/4"	1-1/4"
27	Return Tank Vent Size Required	2"	2"	2"	2"
28	Return Tank Overflow	1-1/4"	1-1/4"	1-1/4"	1-1/4"
29	Return Tank Drain Line Size	1"	1"	1"	1"
30	Blowdown Tank Size (Diameter x Height)	36" x 103"	36" x 103"	36" x 103"	42" x 106"
32	Blowdown Tank Vent Outlet Size	5"	5"	5"	5"
32L ***	Minimum Reduced Vent Line Size for up to 150 PSI	4" ***	4" ***	4" ***	4" ***
33	Blowdown Tank Drain Line Size	2"	2"	2"	2"
FS	Recommended Drain Line Size from floor sump to sewer (Minimum)	4"	4"	4"	4"
ES	Electrical Service - Main Line Disconnect Switches	(2) 20 AMP	(2) 20 AMP	(2) 20 AMP	(2) 20 AMP

\* Air Opening sizes based on horizontal ducts to outdoors. See GBI 101-5, Page 2, 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.

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

<b>(IB) MINIMUM RECOMMENDED BOILER ROOM SIZE, SINGLE BOILER WITH RETURN TANK AND BLOWDOWN TANK:</b>					
NO.	ITEM	70 H.P.	90 H.P.	115 H.P.	150 H.P.
A	Boiler Room Size (W x L x H) I.D.	13' x 13' x 9'	13-1/2' x 14-1/2' x 9'	14' x 16' x 9'	14' x 19-1/2' x 9'
WIF	Width in Front	40"	43"	43"	43"
WIR	Width in Rear	60"	63"	69"	69"
LOL	Length on Left	36"	36"	36"	36"
LOR	Length on Right	40"	40"	40"	42"
<b>(IC) MINIMUM ALLOWABLE BOILER ROOM SIZE FOR SINGLE BOILER AND RETURN SYSTEM: Blowdown Tank and All Other Equipment Outside Boiler Room</b>					
A	Boiler Room Size (W x L x H) I.D.	10-1/2' x 11-1/2' x 9'	10-1/2' x 13' x 9'	10-1/2' x 14-1/2' x 9'	10-1/2' x 18' x 9'
<b>(ID) RECOMMENDED BOILER ROOM SIZE, DUAL BOILERS:</b>					
A	Boiler Room Size (W x L x H) I.D.	15-1/2' x 23' x 12'	17-1/2' x 23' x 12'	19' x 23' x 12'	22-1/2' x 23' x 12'
AO*	Air Openings- Total Free Area	5880 Sq. In. *	7560 Sq. In. *	9660 Sq. In. *	12600 Sq. In. *
WIF	Width in Front	40"	40"	40"	41"
WIR	Width in Rear	66"	72"	72"	73"
LOL	Length on Left	56"	56"	56"	56"
LBB	Length Between Boilers	62"	62"	62"	62"
LOR	Length on Right	46"	46"	46"	46"
22	Return Tank Size (D x L x H)	42" x 60" x 69"	48" x 96" x 72"	48" x 96" x 72"	48" x 96" x 72"
23 **	Return Line Inlet Size	(2) 2" **	(2) 2" **	(2) 2" **	(2) 2" **
26	Return Tank Water Inlet Line Size	(2) 1"	(2) 1"	(2) 1-1/4"	(2) 1-1/4"
27A	Return Tank Vent Size Required	3"	3"	3"	3"
29	Return Tank Drain Line Size	2"	2"	2"	2"
30	Blowdown Tank Size (D x H)	36" x 103"	36" x 103"	36" x 103"	42" x 106"
<b>(IV) RECOMMENDED BOILER ROOM SIZE, SINGLE BOILER, OIL FIRED:</b>					
A	Boiler Room Size (W x L x H)	14' x 15-1/2' x 12'	14' x 16-1/2' x 12'	15' x 18' x 12'	15' x 21' x 12'

\* Air Opening sizes based on horizontal ducts to outdoors. See GBI 101-5, Page 2, Paragraph V for complete details.

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

- NOTES:**
1. All other dimensions same as those shown under IA on preceding page.
  2. In dual boiler rooms, gas main must accommodate twice B.T.U. shown Item 7C on preceding page.
  3. Boiler room size may be smaller than shown but will not provide desired accessibility.
  4. 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.