

Series 4F Forced Draft Firebox Boiler



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The Versatile Boiler

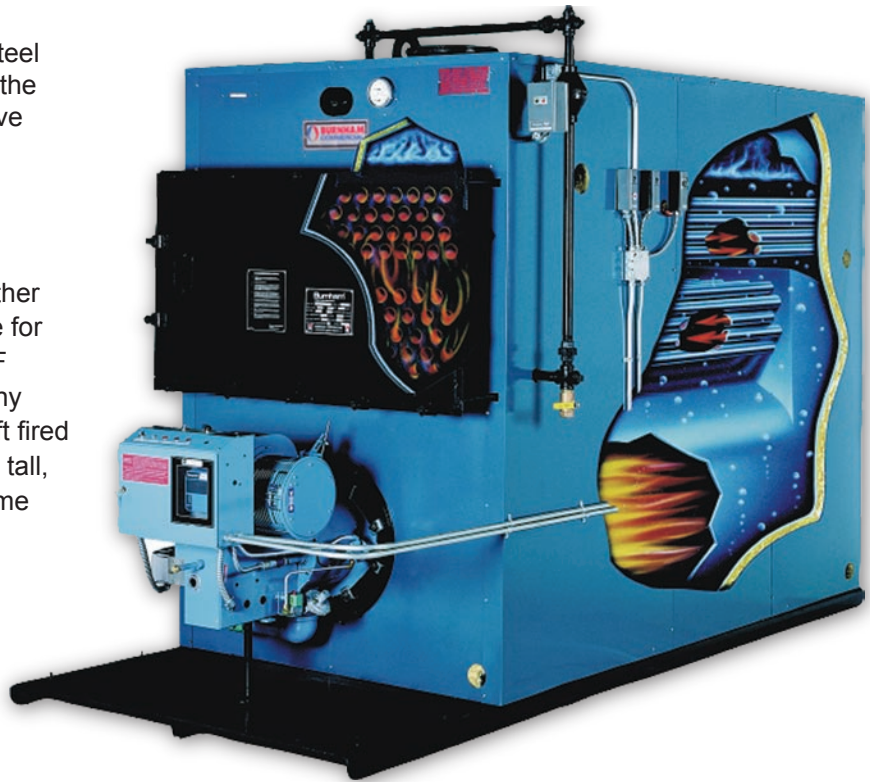
The Burnham Commercial 4F forced draft steel firebox boiler is a consistent sales leader in the heating industry. Its compact and constructive design saves on installation, operation, and maintenance.

4F Saves on Installation

The 4F is a compact boiler that fits where other designs of similar capacity cannot. Available for 15 psi steam and 30 or 60 psi water*, the 4F can serve perfectly as the heart of almost any system. As a factory assembled, forced-draft fired boiler, this packaged unit does not require a tall, expensive vent stack or excessive jobsite time and labor.

4F Saves in Operation

- The furnace surrounds the flame with highly efficient waterbacked primary heat absorbing surfaces. This large combustion chamber is easy to fire and accommodates many forced-draft burners without flame impingement or other critical firing problems.
- Forced draft firing makes the 4F inherently more efficient than boilers using outmoded atmospheric burners and gives you a feature that atmospheric units cannot offer: the option of burning gas or oil.
- A dual fired burner allows you to burn the more economical fuel or the most readily available fuel at the flip of a switch and affords you leverage in negotiating fuel prices.
- The 4F is an economical heat source, whether used singly or in multiples. In fact, 4F's with modulating burners may be sequenced to operate in a step-fired system more cost effectively than a large number of space saver boilers when ongoing maintenance costs are considered.

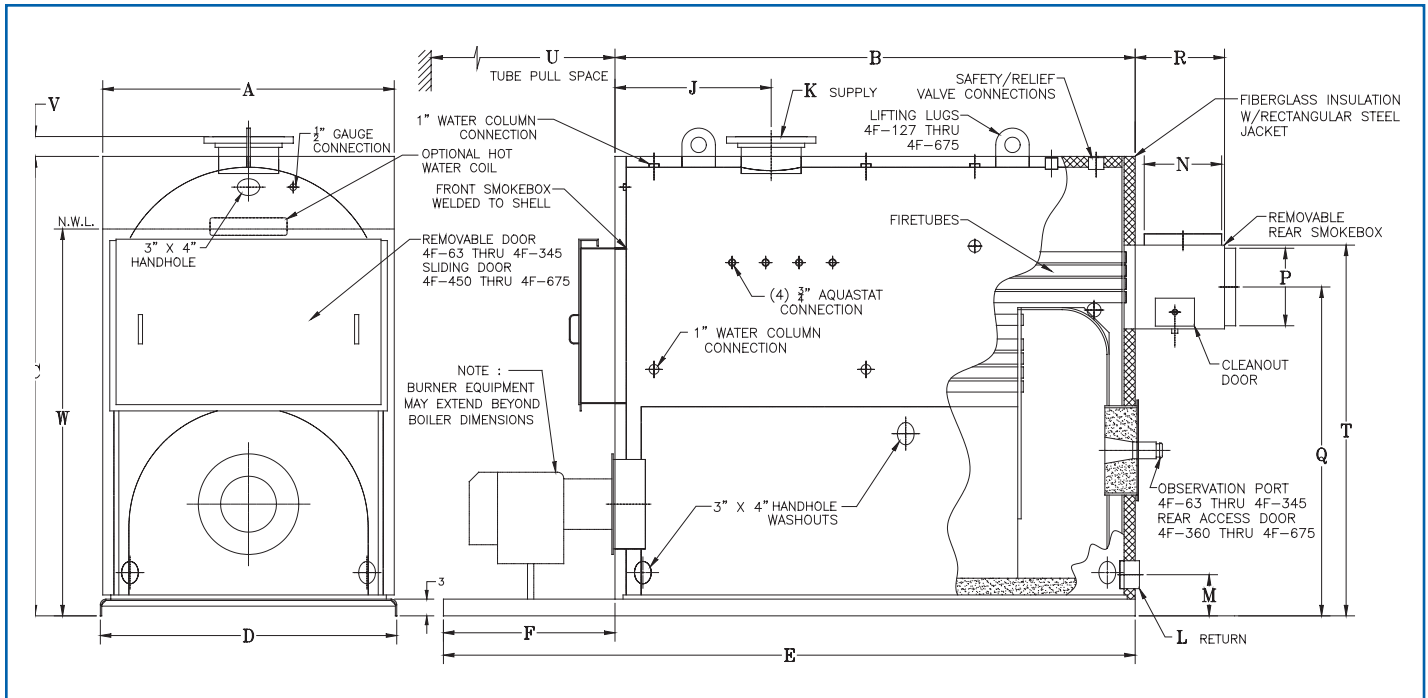


4F Saves on Maintenance

- Superior design makes the 4F easy to clean and maintain — requiring no special tools, materials, or skills.
- Opening the front flue door allows firetubes to be brushed out quickly, unlike the watertubes used in some boilers which can be virtually impossible to clean.
- Elaborate or expensive proprietary seals are not required to re-close the doors as with some boilers.
- As a wetback boiler, there is no delicate or expensive rear refractory to maintain.

*60-psi water boiler - consult factory for available sizes.

Series 4F — Models 63 - 675

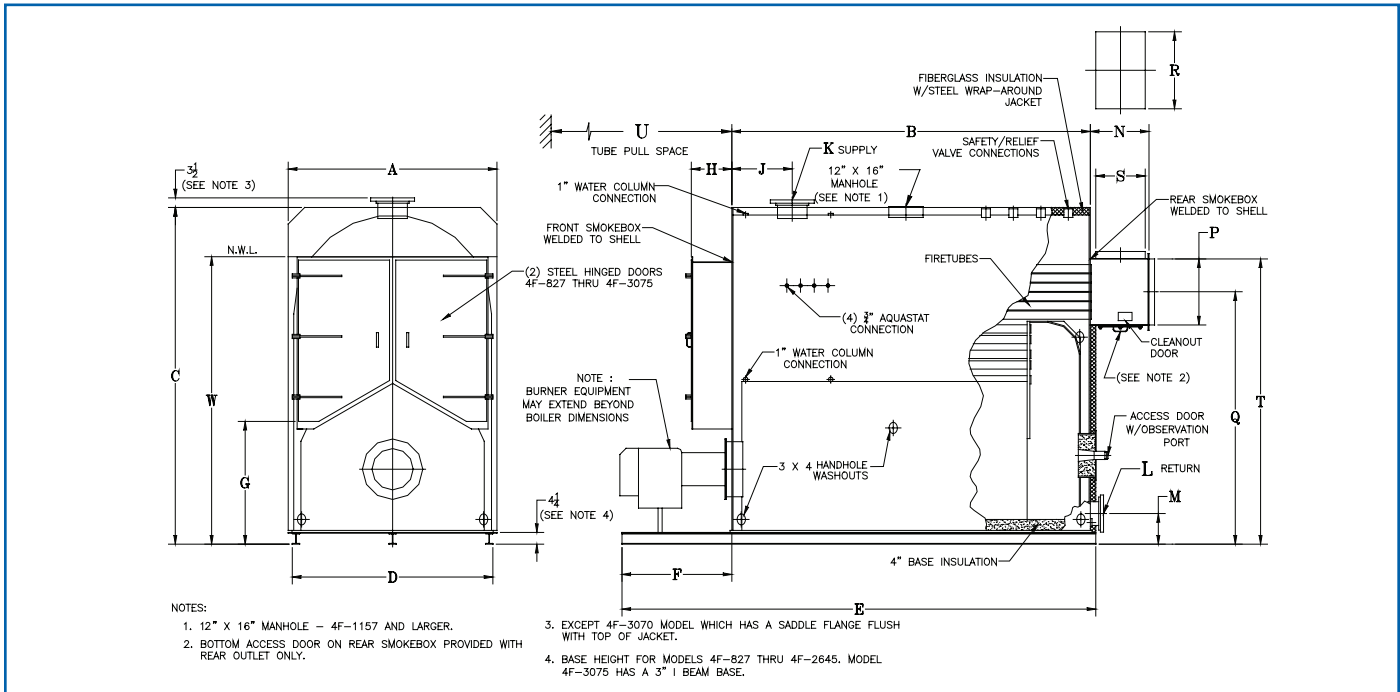


Dimensions (in Inches)

4F Boiler Models	63	78	92	107	127	154	180	209	240	277	311	345	360	450	563	675
A - Boiler Width	31	31	31	31	36-3/8	36-3/8	36-3/8	36-3/8	45-1/8	45-1/8	45-1/8	45-1/8	52-3/4	52-3/4	56-1/2	56-1/2
B - Boiler Length	32	39	45-1/2	52-1/2	44-1/2	53	61	70	57	65	72-1/2	80	80-3/4	93-1/4	104-3/8	122-1/4
C - Boiler Height	55-1/4	55-1/4	55-1/4	55-1/4	63-5/8	63-5/8	63-5/8	63-5/8	70-5/8	70-5/8	70-5/8	70-5/8	82-7/16	82-7/16	85-3/16	85-3/16
D - Base Width	33-1/4	33-1/4	33-1/4	33-1/4	38-5/8	38-5/8	38-5/8	38-5/8	47-3/8	47-3/8	47-3/8	47-3/8	53-1/8	53-1/8	57	57
E - Base Length	47-1/2	54-1/2	65	72	64	72-1/2	80-1/2	92-1/2	79-1/2	87-1/2	95	102-1/2	107-1/2	124	135-1/8	153
F - Base Extension	15-1/2	15-1/2	19-1/2	19-1/2	19-1/2	19-1/2	19-1/2	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	26-3/4	30-3/4	30-3/4	30-3/4
G - Front Smoke Box Height	27-5/16	27-5/16	27-5/16	27-5/16	29-7/16	29-7/16	29-7/16	29-7/16	35-1/8	35-1/8	35-1/8	35-1/8	38-1/2	38-1/2	41-9/16	41-9/16
H - Front Smoke Box Depth	5-1/2	5-1/2	5-1/2	5-1/2	6-1/2	6-1/2	6-1/2	6-1/2	7-1/2	7-1/2	7-1/2	7-1/2	6-1/2	6-1/2	7-1/2	7-1/2
J - Supply Location	13	13	13	13	16	16	16	16	19	19	19	19	28	28	28	28
*K - Supply Size	4	4	4	4	6	6	6	6	6	8	8	8	8	10	10	10
*L - Return Size - Steam	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4
M - Return Location	6-1/2	6-1/2	6-1/2	6-1/2	7	7	7	7	7	7	7	7	7-3/8	7-3/8	7-3/8	7-3/8
N - Top Vent Collar Dia.	7	7	7	7	10	10	10	10	12	12	12	12	—	—	—	—
P - Rear Vent Collar Dia.	—	—	—	—	—	—	—	—	—	—	—	—	14	14	18	18
Q - Rear Vent Collar Height	38	38	38	38	46-1/2	46-1/2	46-1/2	46-1/2	52	52	52	52	58-13/16	58-13/16	59-5/8	59-5/8
R - Smoke Box Depth	9	9	9	9	12	12	12	12	14	14	14	14	16	16	20	20
T - Top Vent Collar Height	42-1/2	42-1/2	42-1/2	42-1/2	52-1/2	52-1/2	52-1/2	52-1/2	59-1/4	59-1/4	59-1/4	59-1/4	66-5/16	66-5/16	69-1/8	69-1/8
U - Tube Pull Space	32	39	45-1/2	52-1/2	44-1/2	53	61	70	57	65	72-1/2	80	81-1/2	94	105	123
V - Supply Fitting Height	1-1/2	1-1/2	1-1/2	1-1/2	3-1/4	3-1/4	3-1/4	3-1/4	3-1/4	3-1/4	3-1/4	3-1/4	3-3/8	3-3/8	3-7/16	3-7/16
W - Normal Water Line Height	43-3/4	43-3/4	43-3/4	43-3/4	51-1/2	51-1/2	51-1/2	51-1/2	58	58	58	58	69-3/16	69-3/16	72	72

*3" and 4" are IPS female thread, 6" and larger are flanged. 150# bolt pattern. Specifications, Dimensions Data Subject to Change without Notice

Series 4F — Models 827 - 3075



Dimensions (in Inches)

4F Boiler Models	827	993	1157	1323	1654	1985	2315	2645	3075
A - Boiler Width	64	64	70	70	76	82	82	82	96
B - Boiler Length	106-1/4	129	116-1/2	136	130-1/2	128	148	163	163
C - Boiler Height	95-3/16	95-3/16	106-3/4	106-3/4	122-3/8	142-3/8	142-3/8	142-3/8	151-1/2
D - Base Width	61	61	67	67	73	79	79	79	93
E - Base Length	138-1/4	161	158-1/2	178	172-1/2	170	190	205	213
F - Base Extension	30	30	40	40	40	40	40	40	48
G - Front Smoke Box Height	29-1/8	29-1/8	33-11/16	33-11/16	41-7/8	55-1/8	55-1/8	55-1/8	69-3/4
H - Front Smoke Box Depth	12-3/4	12-3/4	13-1/2	13-1/2	14-1/2	15-1/2	15-1/2	15-1/2	16-1/2
J - Supply Location	22	22	22	22	22	22	22	22	68
*K - Supply Size	8	8	8	8	10	12	12	12	12
*L - Return Size - Steam	4	4	4	6	6	6	6	6	6
Return Size - Water	6	6	6	8	8	8	8	8	8
M - Return Location	10-1/4	10-1/4	11-1/8	11-1/8	11-1/8	11-1/2	11-1/2	11-1/2	10-1/2
N - Rear Smoke Box Depth	19-3/8	19-3/8	19-3/8	19-3/8	21-3/8	23-3/8	23-3/8	23-3/8	23-3/8
P - Rear Vent Collar Dia.	20	20	22	22	24	28	28	28	30
Q - Rear Vent Collar Height	66-3/16	66-3/16	76-13/16	76-13/16	90-11/16	106-5/16	106-5/16	106-5/16	110-1/2
R - Top Vent Collar Width	22	22	26	26	28	34	34	34	44
S - Top Vent Collar Depth	16	16	16	16	18	20	20	20	20
T - Top Vent Collar Height	76-1/8	76-1/8	87-3/16	87-3/4	102-5/8	120-1/4	120-1/4	120-1/4	123-15/16
U - Tube Pull Space	108	131	118-1/2	138	132-1/2	130	150	165	165
W - Normal Water Line Height	78-1/4	78-1/4	89-3/4	89-3/4	104-1/2	118-1/2	118-1/2	118-1/2	126

*4" are IPS female thread, 6" and larger are flanged. 150# bolt pattern. *Specifications, Dimensions Data Subject to Change without Notice*