



Vaughn Featherweight Indirect Fired Water Heater Recovery Rates for 180 °F Boiler

Ratings assume set point temperatures of 180°F for the boiler and 130°F for the water heater

Model: P30F					
HX Flowrate= 6 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
130,000	166.1	178.2	201.4	228.2	256.6
120,000	166.1	178.2	201.4	228.2	256.6
110,000	165.0	178.2	201.4	228.2	256.6
100,000	150.0	160.6	195.8	228.2	256.6
90,000	135.0	144.5	176.2	206.7	243.3
80,000	120.0	128.5	156.7	183.7	216.2
70,000	105.0	112.4	137.1	160.8	189.2
60,000	90.0	96.4	117.5	137.8	162.2
50,000	75.0	80.3	97.9	114.8	135.2
40,000	60.0	64.2	78.3	91.9	108.1
30,000	45.0	48.2	58.7	68.9	81.1
20,000	30.0	32.1	39.2	45.9	54.1
10,000	15.0	16.1	19.6	23.0	27.0
For First Hour Ratings, add 22 Gallons					

Model: P55F					
HX Flowrate= 6 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
130,000	166.1	178.2	201.4	228.2	256.6
120,000	166.1	178.2	201.4	228.2	256.6
110,000	165.0	178.2	201.4	228.2	256.6
100,000	150.0	160.6	195.8	228.2	256.6
90,000	135.0	144.5	176.2	206.7	243.3
80,000	120.0	128.5	156.7	183.7	216.2
70,000	105.0	112.4	137.1	160.8	189.2
60,000	90.0	96.4	117.5	137.8	162.2
50,000	75.0	80.3	97.9	114.8	135.2
40,000	60.0	64.2	78.3	91.9	108.1
30,000	45.0	48.2	58.7	68.9	81.1
20,000	30.0	32.1	39.2	45.9	54.1
10,000	15.0	16.1	19.6	23.0	27.0
For First Hour Ratings, add 40 Gallons					

Model: P80DF					
HX Flowrate= 14 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
220,000	301.4	330.7	342.7	392.7	462.4
210,000	301.4	330.7	342.7	392.7	462.4
200,000	296.3	330.7	342.7	392.7	462.4
190,000	281.5	316.7	334.6	392.7	462.4
180,000	266.7	300.0	317.0	387.5	462.4
170,000	251.9	283.3	299.4	366.0	449.1
160,000	237.0	266.7	281.8	344.4	422.7
150,000	222.2	250.0	264.2	322.9	396.3
140,000	207.4	233.3	246.6	301.4	369.8
130,000	192.6	216.7	229.0	279.8	343.4
120,000	177.8	200.0	211.4	258.3	317.0
110,000	163.0	183.3	193.7	236.8	290.6
100,000	148.1	166.7	176.1	215.3	264.2
For First Hour Ratings, add 66 Gallons					

Model: P120DF					
HX Flowrate= 14 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
300,000	423.2	441.1	464.9	514.5	630.8
290,000	423.2	441.1	464.9	514.5	630.8
280,000	414.8	441.1	464.9	514.5	630.8
270,000	400.0	433.6	464.9	514.5	630.8
260,000	385.2	417.6	459.0	514.5	630.8
250,000	370.4	401.5	441.3	514.5	630.8
240,000	355.6	385.5	423.7	498.3	616.7
230,000	340.7	369.4	406.0	477.5	591.0
220,000	325.9	353.3	388.4	456.8	565.3
210,000	311.1	337.3	370.7	436.0	539.6
200,000	296.3	321.2	353.1	415.3	513.9
190,000	281.5	305.2	335.4	394.5	488.2
180,000	266.7	289.1	317.8	373.7	462.5
170,000	251.9	273.0	300.1	353.0	436.8
160,000	237.0	257.0	282.5	332.2	411.2
150,000	222.2	240.9	264.8	311.4	385.5
140,000	207.4	224.8	247.1	290.7	359.8
130,000	192.6	208.8	229.5	269.9	334.1
120,000	177.8	192.7	211.8	249.2	308.4
110,000	163.0	176.7	194.2	228.4	282.7
100,000	148.1	160.6	176.5	207.6	257.0
For First Hour Ratings, add 96 Gallons					



Vaughn Featherweight Indirect Fired Water Heater Recovery Rates for 180 °F Boiler

Ratings assume set point temperatures of 180°F for the boiler and 130°F for the water heater

Model: P30F					
HX Flowrate= 4 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
110,000	136.2	146.1	165.1	187.1	210.4
100,000	136.2	146.1	165.1	187.1	210.4
90,000	124.4	135.5	161.5	187.1	210.4
80,000	110.6	120.4	143.5	168.3	195.8
70,000	96.8	105.4	125.6	147.3	171.3
60,000	82.9	90.3	107.6	126.2	146.8
50,000	69.1	75.3	89.7	105.2	122.4
40,000	55.3	60.2	71.8	84.1	97.9
30,000	41.5	45.2	53.8	63.1	73.4
20,000	27.6	30.1	35.9	42.1	48.9
10,000	13.8	15.1	17.9	21.0	24.5

For First Hour Ratings, add 22 Gallons

Model: P55F					
HX Flowrate= 4 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
110,000	136.2	146.1	165.1	187.1	210.4
100,000	136.2	146.1	165.1	187.1	210.4
90,000	124.4	135.5	161.5	187.1	210.4
80,000	110.6	120.4	143.5	168.3	195.8
70,000	96.8	105.4	125.6	147.3	171.3
60,000	82.9	90.3	107.6	126.2	146.8
50,000	69.1	75.3	89.7	105.2	122.4
40,000	55.3	60.2	71.8	84.1	97.9
30,000	41.5	45.2	53.8	63.1	73.4
20,000	27.6	30.1	35.9	42.1	48.9
10,000	13.8	15.1	17.9	21.0	24.5

For First Hour Ratings, add 40 Gallons

Model: P30F					
HX Flowrate= 8 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
140,000	181.0	194.2	219.4	248.6	279.6
130,000	181.0	194.2	219.4	248.6	279.6
120,000	171.8	187.1	219.4	248.6	279.6
110,000	157.5	171.5	204.4	239.7	279.6
100,000	143.2	155.9	185.8	217.9	253.5
90,000	128.8	140.3	167.2	196.1	228.1
80,000	114.5	124.7	148.7	174.3	202.8
70,000	100.2	109.1	130.1	152.5	177.4
60,000	85.9	93.6	111.5	130.7	152.1
50,000	71.6	78.0	92.9	108.9	126.7
40,000	57.3	62.4	74.3	87.1	101.4
30,000	42.9	46.8	55.7	65.4	76.0
20,000	28.6	31.2	37.2	43.6	50.7
10,000	14.3	15.6	18.6	21.8	25.3

For First Hour Ratings, add 22 Gallons

Model: P55F					
HX Flowrate= 8 GPM					
	Inlet Water Temp °F:				
	40	50	60	70	80
Boiler BTU/Hr.	Recovery Rate (Gallons Per Hr.)				
140,000	181.0	194.2	219.4	248.6	279.6
130,000	181.0	194.2	219.4	248.6	279.6
120,000	171.8	187.1	219.4	248.6	279.6
110,000	157.5	171.5	204.4	239.7	279.6
100,000	143.2	155.9	185.8	217.9	253.5
90,000	128.8	140.3	167.2	196.1	228.1
80,000	114.5	124.7	148.7	174.3	202.8
70,000	100.2	109.1	130.1	152.5	177.4
60,000	85.9	93.6	111.5	130.7	152.1
50,000	71.6	78.0	92.9	108.9	126.7
40,000	57.3	62.4	74.3	87.1	101.4
30,000	42.9	46.8	55.7	65.4	76.0
20,000	28.6	31.2	37.2	43.6	50.7
10,000	14.3	15.6	18.6	21.8	25.3

For First Hour Ratings, add 40 Gallons