

Sheet1

Capacities for On Demand Steam Boilers

Water to Steam Volumetric Conversion 1700 Cuft Steam per Cuft water (liquid)

Density of water 62.4 lb per cuft water (liquid)
 Specific Gravity of Steam 26.8 cuft/lb steam at 0PSI at 212 f

	Boiler Model		
	SF20	SF50	SF100
Steam Output (lb/hr)	680	1725	3450
Fuel Consumption (LPH)	5.65	14	28
Steam Output (lb/min)	11.33	28.75	57.50
Steam Output (cuft/min)	303.73	770.50	1541.00
Water Input (cuft/min)	0.178666667	0.453235294	0.906470588

2500 Square foot house with 8' Ceiling

	SF20	SF50	SF100
Theoretical time to flood and open concept building	65.85	25.96	12.98 (min)
Water volume used	11.76	11.76	11.76 (cuft)

Operation of boiler for one hour produces

	18224	46230	92460 (cuft)
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15' sidewall warehouse that would be filled in one hour

	SF20	SF50	SF100
	1214.93	3082.00	6164.00 (sqft)
40' X	30.37	77.05	154.10
50' X	24.30	61.64	123.28
60' X	20.25	51.37	102.73
70' X	17.36	44.03	88.06
80' X	15.19	38.53	77.05
90' X	13.50	34.24	68.49
100' X	12.15	30.82	61.64

8' sidewall building that would be filled in one hour

	2278	5778.75	11557.5 sqft
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how many houses that works out to per hour

sqft	SF20	SF50	SF100
1500	1.52	3.85	7.71
1750	1.30	3.30	6.60
2000	1.14	2.89	5.78
2500	0.91	2.31	4.62
3000	0.76	1.93	3.85