

AMTROL Commercial BoilerMate

Motel Sizing

Evaluation and Sizing Form

Job Site Information:

Present Water Heating Equipment

Type of Heater: Instantaneous Indirect Direct
 Fired
 Make and Model _____
 Storage Volume _____ Gal.
 Recovery _____
 Fuel _____
 Operating Temp. _____
 Boiler Make and Model _____
 BTU's _____
 Avg. Boiler Water Temp. _____
 Recirculating Line Size _____
 Circulator Make and Model _____
 Control _____
 Are there any problems with the present hot water? _____

Options

Will new boiler be installed? _____
 For hot water only? _____
 If no, will old boiler be used for both hot water and heat?

 *If for hot water and heating, what is the space heating load? _____ BTU's

Sizing Information

Input:

- Number of Rooms, A
- Average number of Occupants per Room, P

Sizing Commercial BoilerMate Modules for Motels

- Determine whether the motel should be classified as minimal, small shower head, 1 1/2 persons typical occupancy; or average, regular shower heads 4-6 GPM, 2 persons per room (convention motel with scheduled meetings or tour buses with scheduled departures).
- Select proper number of WH-7C modules from Table 1 and the required heat generator capacity from Figure 1.
- Laundry and food service are not included, these loads should be calculated separately.

WH-7C

Number of Rooms	No. of WH-7C	Flow (GPM)	Feet of Head	Size Manifold
2-5	1	7	20	3/4"
6-25	2	14	20	1"
26-44	3	21	20	1 1/4"
45-63	4	28	20	1 1/2"
64-82	5	35	20	1 1/2"
83-100	6	42	20	2"

For number of 7C's, $y = .053T + 1.7$ (note: round down)

WHS-60CZDW

Number of Rooms	No. of WHS-60CZDW	Flow (GPM)	Feet of Head	Size Manifold
2-9	1	10	20	1"
10-37	2	21	20	1 1/2"
38-62	3	31	20	1 1/2"
63-194	4	42	20	2"
95-128	5	52	20	2"

For number of 60C's, $y = .043T + 1.62$ (note: round down)

WHS-80CZDW

Number of Rooms	No. of WHS-80CZDW	Flow (GPM)	Feet of Head	Size Manifold
2-14	1	10	20	1"
15-48	2	21	20	1 1/2"
49-80	3	31	20	2"
81-115	4	42	20	2"

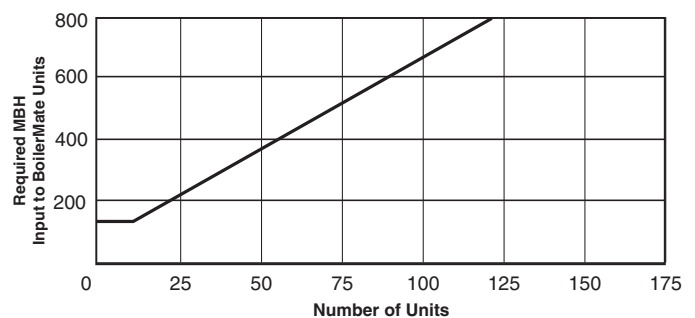
For number of 80C's, $y = .038T + 1.52$ (note: round down)

WHS-120CZDW

Number of Rooms	No. of WHS-120CZDW	Flow (GPM)	Feet of Head	Size Manifold
2-18	1	10	20	1"
19-72	2	21	20	1 1/2"
73-123	3	31	20	2"
124-176	4	42	20	2"

For number of 120C's, $y = .023T + 1.63$ (note: round down)

Figure 1. Required Heat Generator Capacity - MBH



Recommendations:

- Number _____ Models _____
- Flow (GPM) _____
- Feet of Head _____
- Size Manifold _____



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