

Plant Sizing Summary for Chiller

CESFAM VILLA ALEGRE
LBN CONSULTING

10-09-2020
09:41a. m

1. Plant Information:

Plant Name Chiller
Plant Type Generic Heat Recovery
Design Weather Concepcion, Chile

2. Cooling Plant Sizing Data:

Maximum Plant Load 192,2 kW
Load occurs at Jan 1600
m²/kW 7,3 m²/kW
Floor area served by plant 1403,7 m²

3. Coincident Cooling Loads for Jan 1600

Air System Name	Mult.	System Cooling Coil Load [kW]
FC-01	1	2,6
FC-02	1	2,6
FC-03	1	2,7
FC-04	1	1,7
FC-07	1	0,4
FC-08	1	0,5
FC-09	1	0,6
FC-10	1	2,0
FC-11	1	2,3
FC-12	1	1,8
FC-13	1	0,4
FC-14	1	17,0
FC-15	1	17,0
FC-16	1	3,3
FC-17	1	4,1
FC-18	1	1,6
FC-19	1	4,9
FC-20	1	9,4
FC-21	1	0,4
FC-23	1	0,9
FC-24	1	6,2
FC-26	1	1,8
FC-27	1	1,6
FC-28	1	5,6
FC-31	1	6,4
FC-33	1	3,9
FC-35	1	3,9
FC-37	1	5,2
FC-39	1	1,5
FC-41	1	5,2
FC-43	1	1,6
FC-44	1	2,7
FC-45	1	7,9
FC-47	1	2,2
FC-49	1	6,8
FC-51	1	18,6
FC-52	1	18,6
FC-53	1	1,6
FC-54	1	1,5
FC-55	1	2,6
FC-56	1	5,3
FC-58	1	1,7
FC-59	1	3,5

Air system loads are for coils whose cooling source is 'Chilled Water'.

5. Heating Plant Sizing Data:

Maximum Plant Load 192,3 kW
W/m² 137,0 W/m²

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Floor area served by plant 1403,7 m²

6. Coincident Heating Loads for Winter Design

Air System Name	Mult.	System Heating Coil Load [kW]
FC-01	1	2,0
FC-02	1	1,8
FC-03	1	2,1
FC-04	1	0,6
FC-07	1	0,3
FC-08	1	0,9
FC-09	1	0,3
FC-10	1	1,5
FC-11	1	2,0
FC-12	1	1,5
FC-13	1	1,0
FC-14	1	29,1
FC-15	1	29,1
FC-16	1	0,7
FC-17	1	0,8
FC-18	1	0,3
FC-19	1	6,9
FC-20	1	2,7
FC-21	1	0,6
FC-23	1	0,5
FC-24	1	5,6
FC-26	1	1,2
FC-27	1	1,2
FC-28	1	4,0
FC-31	1	3,7
FC-33	1	3,4
FC-35	1	3,4
FC-37	1	3,8
FC-39	1	0,8
FC-41	1	3,7
FC-43	1	1,6
FC-44	1	2,5
FC-45	1	4,4
FC-47	1	1,4
FC-49	1	3,7
FC-51	1	25,2
FC-52	1	25,2
FC-53	1	0,8
FC-54	1	2,3
FC-55	1	2,0
FC-56	1	5,0
FC-58	1	1,6
FC-59	1	1,1

Air system loads are for coils whose heating source is Winter Design


