

Coil Number	Unit or System Served	Flow, cfm	Maximum Fins per Inch	Rows	Minimum Face Area, sq ft	Airside Performance				Face Velocity, fpm	Pressure Drop, in. w.c.	Water-side Performance			Tons	Comments	
						Entering Air		Leaving Air				Entering Water Temperature	Leaving Water Temperature	Flow Rate, gpm			Pressure Drop, ft. w.c.
						Dry bulb, °F	Wet bulb, °F	Dry bulb, °F	Wet bulb, °F								
CH-1	AKG2 - Hotel Lobby and Administration	30,000	8	4	210	87.0	63.8	70.8	66.1	433	0.83	43.0	58.0	181.0	8.4	57.2	
CH-2	Main Ball Room	20,000	8	4	400	89.6	66.1	71.4	59.9	300	0.81	42.0	56.0	149.7	10.0	74.4	
CH-3	Teaser Ball Room	10,000	8	4	310	89.2	63.0	70.7	59.1	500	0.78	42.0	56.0	88.7	9.2	64.3	
CH-4	Ballroom East	10,000	8	4	220	90.3	67.6	72.4	61.0	500	0.81	42.0	48.0	101.1	9.1	62.1	
CH-5	Corridor Make-up Air	18,300	8	5	96.4	90.3	67.6	72.8	59.0	300	0.76	42.0	56.0	230.8	6.5	59.9	
CH-6	Corridor Make-up Air	18,300	8	4	96.4	90.3	67.6	72.8	58.0	472	0.70	42.0	56.0	220.8	6.9	59.9	
CH-7	Ball of House	10,000	8	4	220	87.0	63.0	70.9	61.0	500	0.79	42.0	48.0	97.9	11	29.0	
CH-8	Breakfast Lobby-G24	4,500	8	5	130	82.7	64.0	69.0	59.4	400	0.96	42.0	54.0	43.9	7.8	21.9	
CH-9	Restaurant and Lounge	10,000	8	4	230	82.7	64.0	69.8	59.2	479	0.70	42.0	56.0	73.7	9.3	36.8	
CH-10	Main Kitchen	10,000	8	4	380	83.9	67.6	71.0	59.0	390	0.96	42.0	56.0	107.2	9.2	78.6	
CH-11	Breakfast Room	4,500	8	5	140	82.7	67.6	69.7	59.9	400	0.90	42.0	54.0	45.0	9.8	31.0	
CH-0001	Typical North Exposure Guest Room (274' Head)	300	14	3	1.4	72.0	60.0	69.4	69.0	234	0.10	42.0	48.4	2.7	3.0	0.7	
CH-0002	Typical East Exposure Guest Room (24' Head)	400	14	3	1.4	72.0	60.0	70.2	69.0	280	0.10	42.0	49.4	2.8	3.7	0.9	
CH-0003	Typical South Exposure Guest Room (234' Head)	300	14	3	1.4	72.0	60.0	70.4	69.0	270	0.11	42.0	50.0	4.1	3.2	1.4	
CH-0004	Typical West Exposure Guest Room (23' Head)	400	14	3	1.4	72.0	60.0	70.2	69.0	280	0.11	42.0	49.4	3.4	3.7	0.9	
CH-0005	Typical Luxury Guest Room (8' Head)	1,000	14	3	3.2	72.0	60.0	70.2	69.4	310	0.30	42.0	50.3	6.3	8.9	2.7	

Note: All selections based on direct-drive.

Chiller Number	Unit or System Served	Make	Model	Nominal Tons	Evaporator			Condenser			kW	Motor			Comments		
					Flow, gpm	Entering Temperature, °F	Leaving Temperature, °F	Pressure Drop, ft. w.c.	Flow, gpm	Entering Temperature, °F		Leaving Temperature, °F	Pressure Drop, ft. w.c.	Hp		Speed	Phase
CH-1	Chiller 01	Trane	CHW0270	550	1,300	54.0	42.0	6.76	1,850	85.0	94.3	30.40	286.0	286.0	480.0	3.0	Note 1, 2
CH-2	Chiller 02	Trane	CHW0270	550	1,300	54.0	42.0	6.76	1,850	85.0	94.3	30.40	289.2	289.2	480.0	3.0	Note 1, 2

- Note:
- With adjustable frequency drive.
  - With hot gas bypass.
  - With free cooling & Delta Load Inversion starter.
  - Revised 1, VE Analysis.

Cooling Tower Number	Unit or System Served	Make	Type	Model	Nominal Tons	Flow, gpm	Entering Temperature, °F	Leaving Temperature, °F	Approach Temperature, °F	Rating Wet Bulb Temperature, °F	Airflow, cfm	Fan Speed, rpm	Sound Power, dBA	Lift, ft. w.c.	gpm/hp	Heat Rejection, Btu/hr	Motor				Comments
																	Hp	Speed	Volts	Phase	
CT-1	Cooling Tower 01	Granly	Induced Draft, Cross Flow	NCB409PA51-420	950	1,873	95.0	85.0	12.10	72.9	139,200	214	71	12.3	132	9,332,200	15.0	1,200	480	3	Note 1, 2
CT-2	Cooling Tower 02	Granly	Induced Draft, Cross Flow	NCB409PA51-420	950	1,873	95.0	85.0	12.10	72.9	139,200	214	71	12.3	132	9,332,200	15.0	1,200	480	3	Note 2, 2

- Note:
- Selection based on serving CH-01, CH-02 and a future nominal 550 to absorption chiller by adding a third identical cell. For this project, set up the towers for 1,650 gpm of flow per cell.
  - Revised 1, VE Analysis.

Pump Number	Unit or System Served	Make	Model	Flow, gpm	Head, ft. w.c.	Impeller Diameter, in.	Rpm	Bhp	Minimum Pump Efficiency	Motor			Comments
										Hp	Volts	Phase	
CHWP-01	Chiller 01 Evaporator Pump	Bell and Gossett	2020 66	1,300	40	20.7/8	1,000	13.6	82.3%	18.0	480.0	3.0	
CHWP-02	Chiller 02 Evaporator Pump	Bell and Gossett	1010 66	1,300	40	10.7/8	1,000	13.6	82.3%	18.0	480.0	3.0	
CHWP-03	Chiller Water Distribution Pump	Bell and Gossett	250 54	1,300	90	6	1,950	24.7	72.0%	40.0	480.0	3.0	Note 1, 3
CHWP-04	Chiller Water Distribution Pump	Bell and Gossett	2020 54	1,300	90	6	1,950	24.7	72.0%	40.0	480.0	3.0	Note 1, 3
CHWP-01	Chiller 01 Condenser Pump	Bell and Gossett	1010 48	1,850	84	10.3/4	1,770	40.7	85.0%	30.0	480.0	3.0	Note 2
CHWP-01	Chiller 02 Condenser Pump	Bell and Gossett	1010 48	1,850	84	10.3/4	1,770	40.7	85.0%	30.0	480.0	3.0	Note 2

- Note:
- VFD Rated Motor.
  - Pump selection listed for the head required for the future addition of a 500 ton absorption chiller.
  - Revised 1, VE Analysis.

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Chilled Water System Equipment Schedules

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