

Date 20th Jan 2026

Project Basra Office *Project no.* 34
Engineer KAL *Checked by* *Date checked*
File C:\Users\khalid\Documents\Hevacomp Projects\Crawford Basra Office\General\General\Hevacomp DDB\

Design basis

Location Basra *Design day* 15 July No external shading is considered
Resultant room design temperatures used, no room heat losses are added to project totals
Supply air temp 12 °C Primary fresh air 8 l/s/person (16°C,50%)
No fixed temperature air is included
Fins are considered
Outside 48.5 dry bulb/27.6 wet bulb, Room temperatures not allowed to rise

Rooms included : Room 04 selected

Summary results

Room ref.	No. off	Peak room loads (Watt)			Time of peak	Maximum temp.	Air flow (m³/s)
		Sensible	Latent	Total			
04	1	118752	2112	120864	17.00	23	8.9964

Project Basra Office

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Project total results

* Sensible fresh air load excluded

Sun time	Outside temp	Building loads		Fresh air loads		Plant total loads		
		Sensible (kW)	Latent (kW)	Sensible (kW)	Latent (kW)	Sensible (kW)	Latent (kW)	Total (kW)
(hrs)	(°C)							
1.00	34.2	13.37	0	18.19	6.12	31.56	6.12	37.69
2.00	32.3	11.33	0	16.29	5.16	27.61	5.16	32.77
3.00	30.7	9.14	0	14.68	4.43	23.83	4.43	28.26
4.00	29.5	7.11	0	13.46	3.93	20.57	3.93	24.5
5.00	28.7	6.16	0	12.68	3.64	18.84	3.64	22.48
6.00	28.4	5.77	0	12.38	3.53	18.15	3.53	21.68
7.00	28.8	7.77	0	12.78	3.67	20.55	3.67	24.22
8.00	30.2	15.55	0	14.14	4.21	29.69	4.21	33.9
9.00	32.4	101.6	0	16.33	5.18	117.93	5.18	123.11
10.00	35.2	106.55	0	19.13	6.64	125.68	6.64	132.31
11.00	38.3	109.81	0	22.25	8.58	132.06	8.58	140.63
12.00	41.4	111.74	0	25.39	10.88	137.13	10.88	148
13.00	44.3	112.67	0.19	28.23	13.29	140.9	13.47	154.38
14.00	46.5	114.41	1.24	30.49	15.44	144.9	16.68	161.59
15.00	48	117	1.98	31.95	16.95	148.95	18.92	167.87
16.00	48.5	118.52	2.24	32.45	17.49	150.97	19.73	170.7 peak
17.00	48.3	118.75	2.11	32.2	17.22	150.95	19.33	170.28
18.00	47.5	116.93	1.73	31.47	16.44	148.4	18.17	166.57
19.00	46.3	33.57	0	30.29	15.24	63.86	15.24	79.1
20.00	44.8	27.31	0	28.72	13.73	56.03	13.73	69.76
21.00	42.9	20.27	0	26.84	12.07	47.11	12.07	59.18
22.00	40.8	18.36	0	24.74	10.37	43.1	10.37	53.47
23.00	38.6	16.93	0	22.53	8.77	39.46	8.77	48.23
24.00	36.3	15.25	0	20.31	7.33	35.56	7.33	42.89

Peak coincident plant load **170.7 kW** at **16.00 hrs** (**163.3 W/m²** and **60.5 W/m³**)
 Supply air flow rate **8.9964 m³/s** Fresh air flow rate **0.832 m³/s** (Total **104 occupants**)