

## ATLANTA MUNICIPAL, GA, USA

WMO#: 722190

Lat: **33.64N** Long: **84.43W** Elev: **1027** StdP: **14.16** Time Zone: **-5 (NAE)** Period: **86-10** WBAN: **13874**

## Annual Heating and Humidification Design Conditions

Coldest Month	Heating DB		Humidification DP/MCDB and HR						Coldest month WS/MCDB				MCWS/PCWD to 99.6% DB	
			99.6%			99%			0.4%		1%			
	99.6%	99%	DP	HR	MCDB	DP	HR	MCDB	WS	MCDB	WS	MCDB	MCWS	PCWD
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
1	21.5	26.4	4.2	7.1	28.6	9.1	9.1	32.2	24.9	39.9	23.5	40.0	11.9	320

## Annual Cooling, Dehumidification, and Enthalpy Design Conditions

Hottest Month	Hottest Month DB Range	Cooling DB/MCWB						Evaporation WB/MCDB						MCWS/PCWD to 0.4% DB	
		0.4%		1%		2%		0.4%		1%		2%			
		DB	MCWB	DB	MCWB	DB	MCWB	WB	MCDB	WB	MCDB	WB	MCDB	MCWS	PCWD
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
7	17.0	93.9	74.2	91.7	73.9	89.8	73.5	77.3	88.5	76.4	86.7	75.4	85.0	8.7	300

Dehumidification DP/MCDB and HR									Enthalpy/MCDB						Hours 8 to 4 & 55/69
0.4%			1%			2%			0.4%		1%		2%		
DP	HR	MCDB	DP	HR	MCDB	DP	HR	MCDB	Enth	MCDB	Enth	MCDB	Enth	MCDB	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
74.3	133.1	81.3	73.3	128.7	80.2	72.6	125.5	79.6	41.4	88.5	40.4	86.7	39.5	85.6	800

## Extreme Annual Design Conditions

Extreme Annual WS			Extreme Max WB	Extreme Annual DB				n-Year Return Period Values of Extreme DB							
				Mean		Standard deviation		n=5 years		n=10 years		n=20 years		n=50 years	
1%	2.5%	5%		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
21.5	19.0	17.1	82.4	14.1	96.7	4.4	3.3	10.9	99.1	8.3	101.0	5.8	102.9	2.6	105.3

## Monthly Climatic Design Conditions

		Annual (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Oct (n)	Nov (o)	Dec (p)
(5) Temperatures, Degree-Days and Degree-Hours	Tavg	62.9	44.5	47.7	54.8	62.3	70.4	77.2	80.3	79.5	73.8	63.2	54.1	45.6
	Sd	9.42	9.11	8.92	7.69	5.89	4.52	3.46	3.93	5.54	7.10	8.13	8.92	
	HDD50	672	222	138	55	8	0	0	0	0	4	52	193	
	HDD65	2671	637	484	329	135	22	1	0	0	8	118	335	602
	CDD50	5370	50	75	204	378	634	817	938	916	713	414	174	57
	CDD65	1893	0	1	12	55	190	368	473	451	271	63	8	1
	CDH74	16504	0	5	98	467	1453	3331	4587	4215	1985	335	27	1
(13) Precipitation	CDH80	6259	0	0	9	85	390	1340	2009	1760	627	38	1	0
	PrecAvg	50.8	4.8	4.8	5.8	4.3	4.3	3.5	5.0	3.7	3.4	3.0	3.9	4.3
	PrecMax	64.9	10.2	12.8	11.7	11.9	8.4	7.4	8.5	8.7	6.1	7.5	7.2	9.9
	PrecMin	37.7	1.7	0.8	2.4	1.5	0.4	1.0	0.8	0.5	0.7	0.1	0.9	0.7
(17) Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	PrecSD	7.2	2.1	2.8	2.7	2.4	2.3	1.8	2.2	2.2	1.6	2.1	1.6	2.4
	0.4%	DB	70.5	73.5	80.8	85.8	90.0	94.5	97.8	97.4	92.6	83.7	77.7	72.1
		MCWB	59.7	61.7	62.5	66.1	71.6	73.0	74.7	75.0	72.5	69.4	63.9	63.0
	2%	DB	66.1	69.2	76.7	82.4	86.9	91.8	94.4	93.3	88.8	80.7	73.6	67.5
		MCWB	58.0	58.9	60.1	64.3	69.8	72.9	74.6	74.7	71.4	66.5	62.1	61.0
	5%	DB	62.8	65.9	73.3	79.5	84.3	90.0	91.9	90.9	86.3	78.0	70.8	63.8
		MCWB	56.5	57.1	58.7	62.8	68.7	72.4	74.4	74.6	70.9	64.8	61.0	58.5
	10%	DB	59.3	62.8	69.8	76.2	81.8	87.7	89.5	88.5	83.7	74.9	67.7	60.2
		MCWB	53.1	54.8	57.4	61.5	67.5	71.9	74.3	73.8	70.5	64.0	59.4	54.0
(25) Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB	64.0	65.4	66.5	70.8	75.0	77.3	78.8	78.4	76.3	72.7	69.3	66.1
		MCDB	67.3	67.6	73.1	79.1	83.5	88.6	89.7	90.1	85.9	80.0	72.3	69.2
	2%	WB	61.0	62.6	64.1	68.1	72.8	75.8	77.4	77.3	74.6	70.4	66.5	63.1
		MCDB	64.0	66.6	71.5	76.2	82.3	86.5	88.5	88.7	83.0	76.1	70.4	65.9
	5%	WB	58.0	59.9	62.1	66.2	71.3	74.9	76.5	76.3	73.5	68.8	64.0	59.9
		MCDB	61.5	64.1	69.4	74.1	80.4	84.9	86.9	86.5	81.1	73.5	68.0	63.5
	10%	WB	54.6	56.4	59.9	64.2	69.9	73.8	75.4	75.3	72.6	67.0	61.3	55.3
		MCDB	58.0	60.7	66.4	72.2	78.2	83.0	85.1	84.5	79.7	72.0	65.9	58.4
(33) Mean Daily Temperature Range	5% DB	MDBR	17.3	18.1	19.5	20.2	18.5	17.4	17.0	16.5	16.4	18.2	18.3	16.8
		MCDBR	20.4	21.0	23.0	22.8	20.3	20.2	20.5	19.4	19.1	20.3	20.8	19.8
		MCWBR	14.2	13.0	11.4	9.7	7.7	6.5	6.2	6.0	6.8	9.1	11.6	13.9
	5% WB	MCDWR	16.7	17.2	18.0	18.3	17.3	17.3	17.7	17.1	15.6	14.7	16.4	17.1
		MCWBR	14.0	13.3	11.6	10.0	7.7	6.8	6.5	6.1	7.0	8.9	12.4	14.3
(38) Clear Sky Solar Irradiance	taub		0.334	0.324	0.355	0.383	0.379	0.406	0.440	0.427	0.388	0.358	0.354	0.335
	taud		2.614	2.580	2.474	2.328	2.324	2.270	2.202	2.269	2.428	2.514	2.523	2.618
	Ebn,noon		281	296	292	287	288	278	268	270	277	279	269	273
	Edh,noon		24	28	33	40	41	43	46	42	34	29	26	23

## Nomenclature:

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