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WUHAN, China

WMO#: **574940**

Lat: **30.60N** Long: **114.05E** Elev: **34** StdP: **100.92** Time Zone: **8.00 (CHN)** Period: **86-10** WBAN: **99999**

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)	1	-2.1	-0.9	-11.3	1.4	3.6	-8.6	1.8	4.1	7.2	3.4	6.3	3.6	1.9	20	(1)

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)	
(2)	7	6.5	36.0	27.9	34.9	27.5	33.8	27.1	29.2	33.5	28.6	32.7	28.0	32.1	3.5	220	(2)

	Dehumidification DP/MCDB and HR									Enthalpy/MCDB						Hours 8 to 4 & 12.8/20.6	
	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)	
(3)	28.1	24.4	31.8	27.6	23.7	31.4	27.0	22.7	30.8	96.7	33.5	93.2	32.7	90.3	32.4	697	(3)

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)	
(4)	7.0	5.9	5.0	32.4	-4.3	37.5	1.8	1.3	-5.6	38.4	-6.6	39.1	-7.6	39.8	-8.9	40.7	(4)

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		17.5	4.5	7.2	11.2	17.6	22.7	26.3	29.3	28.6	24.5	18.8	12.4	6.9	(5)
(6)		Sd			2.92	3.89	4.28	3.98	3.42	2.77	2.87	2.84	3.13	3.50	4.04	3.29	(6)
(7)		HDD10.0		432	173	95	36	1	0	0	0	0	0	0	21	106	(7)
(8)		HDD18.3		1603	429	313	223	59	6	0	0	0	1	36	181	355	(8)
(9)		CDD10.0		3185	2	16	74	229	393	489	597	575	434	273	93	9	(9)
(10)		CDD18.3		1315	0	1	3	37	141	239	338	317	185	51	3	0	(10)
(11)		CDH23.3		13709	0	3	18	236	1074	2381	4346	3829	1538	271	13	0	(11)
(12)		CDH26.7		6001	0	1	3	56	344	915	2242	1827	553	58	1	0	(12)
(13)	Precipitation	PrecAvg		1218	34	58	96	132	150	212	151	129	85	87	58	28	(13)
(14)		PrecMax		1690	67	121	218	256	267	386	534	483	220	208	167	107	(14)
(15)		PrecMin		762	1	2	17	56	48	13	29	0	10	5	1	0	(15)
(16)		PrecSD		260.6	16.7	28.5	49.2	54.9	54.6	98.1	125.2	154.8	58.1	50.3	41.4	26.1	(16)
(17)	Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB		15.3	22.0	25.4	31.0	33.5	35.2	37.2	37.1	35.1	30.7	25.1	18.8	(17)
(18)			MCWB		9.8	16.0	19.1	22.1	23.3	26.6	28.1	28.8	26.9	22.1	16.9	12.4	(18)
(19)		2%	DB		12.9	17.9	22.5	28.2	31.8	33.9	36.2	35.8	33.0	28.2	22.5	16.0	(19)
(20)			MCWB		8.8	12.7	16.2	21.1	22.9	26.4	27.9	28.1	25.9	20.7	15.7	10.4	(20)
(21)		5%	DB		10.9	15.1	20.1	26.0	30.2	32.5	35.2	34.5	31.3	26.2	20.5	13.9	(21)
(22)			MCWB		7.1	10.1	14.9	19.7	22.4	25.7	27.6	27.7	24.9	19.5	14.8	9.3	(22)
(23)		10%	DB		9.1	12.9	17.9	24.0	28.6	31.1	34.1	33.2	29.9	24.5	18.7	12.0	(23)
(24)			MCWB		6.1	9.1	13.3	18.7	22.0	25.1	27.5	27.2	23.8	18.6	13.9	8.2	(24)
(25)	Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB		11.7	16.8	20.6	24.1	26.1	28.9	30.2	30.2	28.5	23.9	19.4	13.3	(25)
(26)			MCDB		13.8	21.3	24.4	28.9	30.4	33.1	34.5	34.8	32.6	28.1	21.9	17.0	(26)
(27)		2%	WB		9.3	13.5	17.5	22.2	24.7	27.7	29.3	29.3	27.2	22.2	17.3	11.3	(27)
(28)			MCDB		11.9	16.5	21.1	26.3	28.8	31.4	33.6	33.6	31.2	26.0	20.4	14.7	(28)
(29)		5%	WB		7.8	11.2	15.7	20.8	23.9	26.9	28.6	28.6	26.3	21.0	15.9	9.9	(29)
(30)			MCDB		10.2	13.9	19.0	24.7	28.0	30.6	32.9	32.7	30.1	25.1	19.4	12.9	(30)
(31)		10%	WB		6.5	9.8	14.0	19.5	22.9	26.2	28.1	28.0	25.3	19.8	14.6	8.7	(31)
(32)			MCDB		8.4	12.2	17.0	23.0	26.8	29.7	32.4	31.9	28.6	23.0	17.8	11.4	(32)
(33)	Mean Daily Temperature Range		MDBR		6.2	6.7	7.1	7.7	7.6	6.8	6.5	6.7	7.3	7.7	7.9	7.1	(33)
(34)		5% DB	MCDBR		9.9	10.9	10.9	10.8	10.2	8.6	7.9	8.1	9.1	10.3	11.1	11.0	(34)
(35)			MCWBR		6.0	6.0	6.1	5.1	4.2	3.7	3.2	3.4	3.8	4.2	5.2	6.1	(35)
(36)		5% WB	MCDBR		8.8	9.2	10.0	9.6	8.7	7.7	7.8	7.9	8.2	8.9	9.3	10.0	(36)
(37)			MCWBR		5.8	5.7	6.2	5.3	4.5	3.9	3.8	3.9	4.3	4.3	5.0	6.0	(37)
(38)	Clear Sky Solar Irradiance	taub			0.651	0.715	0.799	0.823	0.804	0.760	0.653	0.660	0.706	0.698	0.625	0.614	(38)
(39)		taud			1.704	1.579	1.463	1.419	1.420	1.485	1.687	1.689	1.628	1.646	1.789	1.778	(39)
(40)		Ebn,noon			562	570	561	574	591	616	684	672	615	574	579	565	(40)
(41)		Edh,noon			201	247	296	319	320	299	243	240	247	228	183	178	(41)

Nomenclature: See separate page