

2021 ASHRAE Handbook - Fundamentals (SI)

BUENOS AIRES NEWBERY, ARGENTINA (WMO: 875820)																
Lat:34.5589S			Long:58.4197W			Elev:6		StdP: 101.25		Time zone:-3.00 (W03)			Period:94-19		WBAN:99999	
Annual Heating, Humidification, and Ventilation Design Conditions																
Coldest Month	Heating DB		Humidification DP/MCDB and HR						Coldest month WS/MCDB				MCWS/PCWD		WSF	
			99.6%			99%			0.4%		1%		to 99.6% DB			
	99.6%	99%	DP	HR	MCDB	DP	HR	MCDB	WS	MCDB	WS	MCDB	MCWS	PCWD		
7	4.8	5.9	-4.1	2.7	9.4	-2.1	3.2	9.9	11.0	10.9	10.0	11.3	3.6	230	0.453	
Annual Cooling, Dehumidification, and Enthalpy Design Conditions																
Hottest Month	Hottest Month DB Range	Cooling DB/MCWB						Evaporation WB/MCDB						MCWS/PCWD		
		0.4%		1%		2%		0.4%		1%		2%		to 0.4% DB		
		DB	MCWB	DB	MCWB	DB	MCWB	WB	MCDB	WB	MCDB	WB	MCDB	MCWS	PCWD	
1	6.8	31.6	23.2	30.1	23.0	29.0	22.5	25.3	29.2	24.5	28.4	23.7	27.5	4.0	0	
Dehumidification DP/MCDB and HR									Enthalpy/MCDB						Extreme Max WB	
0.4%			1%			2%			0.4%		1%		2%			
DP	HR	MCDB	DP	HR	MCDB	DP	HR	MCDB	Enth	MCDB	Enth	MCDB	Enth	MCDB		
24.1	19.0	28.2	23.1	17.9	27.3	22.2	16.9	26.5	77.6	29.5	74.3	28.4	71.3	27.6	31.6	
Extreme Annual Design Conditions																
Extreme Annual WS				Extreme Annual Temperature				n-Year Return Period Values of Extreme Temperature								
				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	
11.0	9.7	8.6	DB	2.3	35.0	1.0	1.6	1.6	36.2	1.0	37.1	0.4	38.1	-0.3	39.3	
			WB	0.2	27.4	1.1	1.2	-0.6	28.3	-1.2	29.0	-1.9	29.7	-2.7	30.6	
Monthly Climatic Design Conditions																
			Annual	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Temperatures, Degree-Days and Degree-Hours	DBAvg	18.1	24.6	23.8	21.9	18.6	15.4	12.5	11.6	13.1	14.7	17.7	20.7	23.3		
	DBStd	5.34	2.55	2.67	2.69	3.02	2.98	2.90	3.07	3.25	2.95	2.90	3.05	2.99		
	HDD10.0	39	0	0	0	0	2	9	18	8	2	0	0	0		
	HDD18.3	862	0	1	4	33	99	177	208	166	113	46	12	2		
	CDD10.0	3001	452	385	369	257	167	83	69	104	143	239	321	412		
	CDD18.3	784	194	153	116	39	7	1	1	3	4	27	83	156		
	CDH23.3	4664	1492	1006	501	89	8	1	2	9	10	73	387	1087		
	CDH26.7	1040	391	215	62	11	1	0	0	1	1	9	66	284		
Wind		WSAvg	4.3	4.7	4.5	4.3	3.9	3.7	3.6	3.8	4.0	4.7	4.8	4.9	4.7	
Precipitation	PrecAvg	1049	108	103	125	99	76	55	59	64	64	104	100	99		
	PrecMax	1452	280	270	586	242	389	185	191	203	201	316	237	285		
	PrecMin	651	15	26	26	5	0	4	11	0	1	18	20	20		
	PrecStd	212	65	61	97	65	81	43	34	48	42	63	53	65		
Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB	33.8	32.6	30.1	28.1	24.2	21.5	21.3	24.3	24.8	27.8	30.6	33.9		
		MCWB	24.9	23.7	23.2	21.8	19.3	18.1	17.4	18.9	17.9	20.5	21.7	22.4		
	2%	DB	31.7	30.2	28.2	25.7	22.0	19.3	18.9	21.1	22.1	25.1	28.3	31.1		
		MCWB	23.7	23.8	22.5	20.7	18.4	16.4	15.9	16.6	16.5	19.1	20.7	22.5		
	5%	DB	30.1	29.1	27.0	24.0	20.6	18.0	17.1	19.2	20.5	23.5	26.9	29.4		
		MCWB	23.2	23.4	22.1	19.8	17.7	15.3	14.6	15.5	15.9	18.3	20.5	22.2		
	10%	DB	28.9	27.9	26.0	22.9	19.5	16.7	16.0	17.9	19.1	22.1	25.4	28.0		
		MCWB	22.7	22.8	21.6	19.2	16.9	14.3	13.4	14.5	15.0	17.5	19.7	21.7		
Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB	26.7	26.2	25.2	23.4	20.7	19.6	18.0	19.7	20.2	22.6	23.8	25.7		
		MCDB	31.1	30.0	27.9	26.5	23.1	21.1	20.6	23.4	23.1	26.2	27.8	30.1		
	2%	WB	25.4	25.2	24.0	21.9	19.4	17.6	16.6	17.9	18.4	20.6	22.6	24.4		
		MCDB	29.6	28.9	26.8	24.2	21.2	18.8	18.3	20.4	20.8	23.6	26.7	28.8		
	5%	WB	24.5	24.2	23.0	20.9	18.4	16.2	15.4	16.6	17.0	19.6	21.6	23.5		
		MCDB	28.7	27.9	25.9	23.0	20.0	17.5	16.8	18.6	19.3	22.3	25.6	27.8		
	10%	WB	23.6	23.4	22.2	19.9	17.4	14.8	14.1	15.2	15.9	18.6	20.6	22.6		
		MCDB	27.7	26.9	25.2	22.2	19.2	16.2	15.4	17.1	18.2	21.3	24.4	26.8		

Historical Trends										
	DBAvg	Heating		Cooling			Degree-Days			
		99% DB	99% DP	1% DB	1% WB	1% DP	HDD10.0	HDD18.3	CDD10.0	CDD18.3
Station Only	+0.24	N/A	-0.82	+0.62	+0.49	N/A	N/A	N/A	+106	+62
Regional (0 neighbors)	+0.27	N/A	N/A	+0.60	+0.40	+0.40	N/A	N/A	+82	+42