BLUEFIELD/MERCER WV	
Latitude = 37.30 N	WMO No. 724125
Longitude = 81.20 W	Elevation = 2858 feet
Period of Record = 1973 to 1996	Average Pressure = 27.09 inches Hg

Design Criteria Data

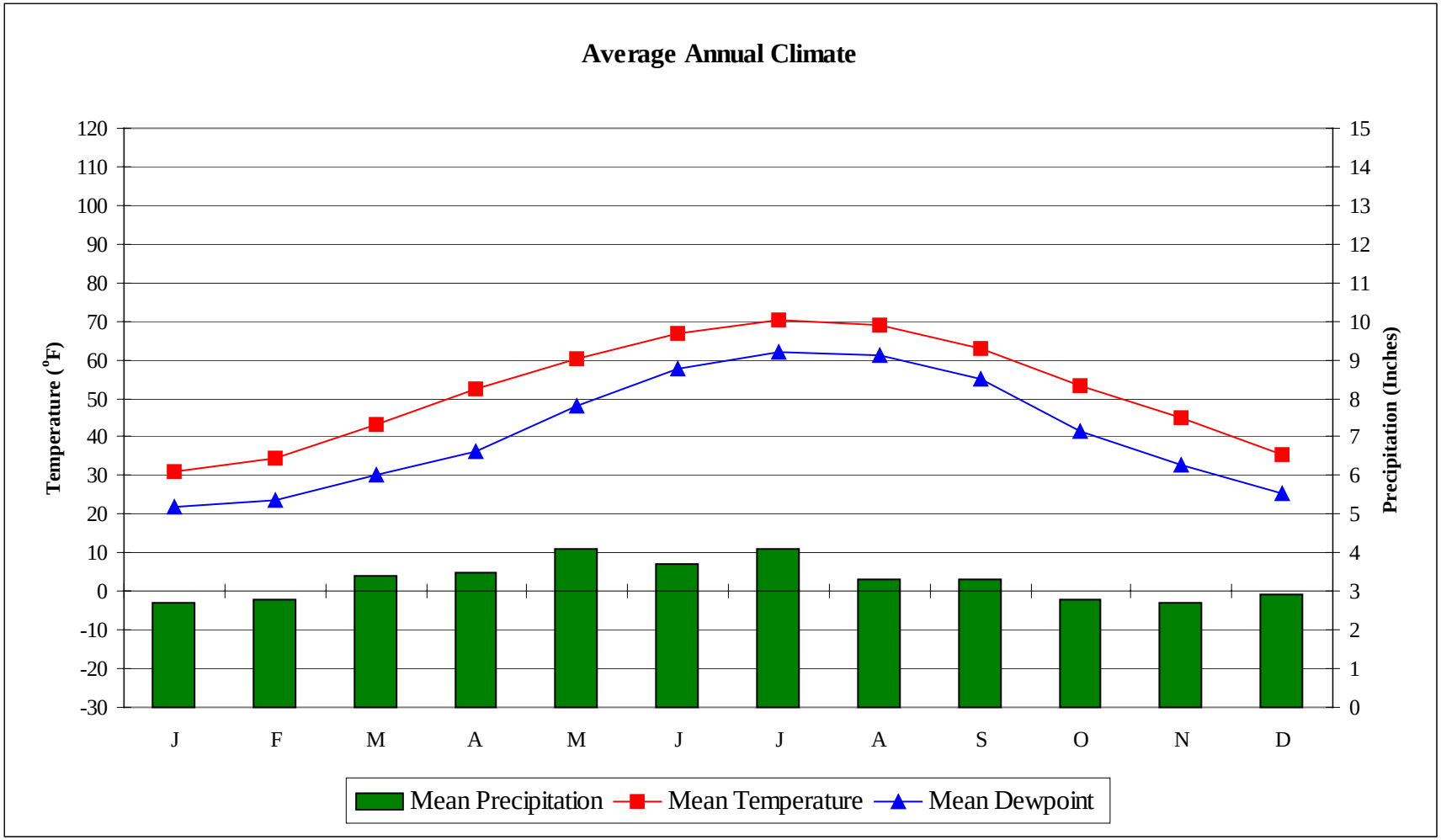
		Mean Coincident (Average) Values			
Dry Bulb Temperature (T)	**Design Value (^oF)**	Wet Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	87	70	94	5.9	W
0.4% Occurrence	84	69	95	5.8	W
1.0% Occurrence	82	69	94	6.0	W
2.0% Occurrence	80	68	93	6.0	W
Mean Daily Range	16	-	-	-	-
97.5% Occurrence	16	14	10	7.8	W
99.0% Occurrence	9	8	7	8.2	W
99.6% Occurrence	4	3	5	7.7	W
Median of Extreme Lows	-2	-2	4	9.0	W
		Mean Coincident (Average) Values			
Wet Bulb Temperature (T_{wb})	**Design Value (^oF)**	Dry Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	74	81	123	5.9	W
0.4% Occurrence	72	80	114	5.4	W
1.0% Occurrence	71	79	111	5.4	W
2.0% Occurrence	70	77	108	5.3	W
		Mean Coincident (Average) Values			
Humidity Ratio (HR)	**Design Value (gr/lb)**	Dry Bulb Temperature (^oF)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	130	79	0.79	5.4	WSW
0.4% Occurrence	119	76	0.72	4.8	W
1.0% Occurrence	114	74	0.69	4.8	W
2.0% Occurrence	109	74	0.67	4.5	WSW
Air Conditioning/		$T \geq 93^oF$	$T \geq 80^oF$	$T_{wb} \geq 73^oF$	$T_{wb} \geq 67^oF$
Humid Area Criteria	# of Hours	0	195	21	694

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75^oF-RH 60% Latent + Sensible
7	2.8	90	1.0 + 0.2
Ground Water Temperature (^oF) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft^2)	Average Annual Freeze-Thaw Cycles (#)
54.6	N/A	N/A	49

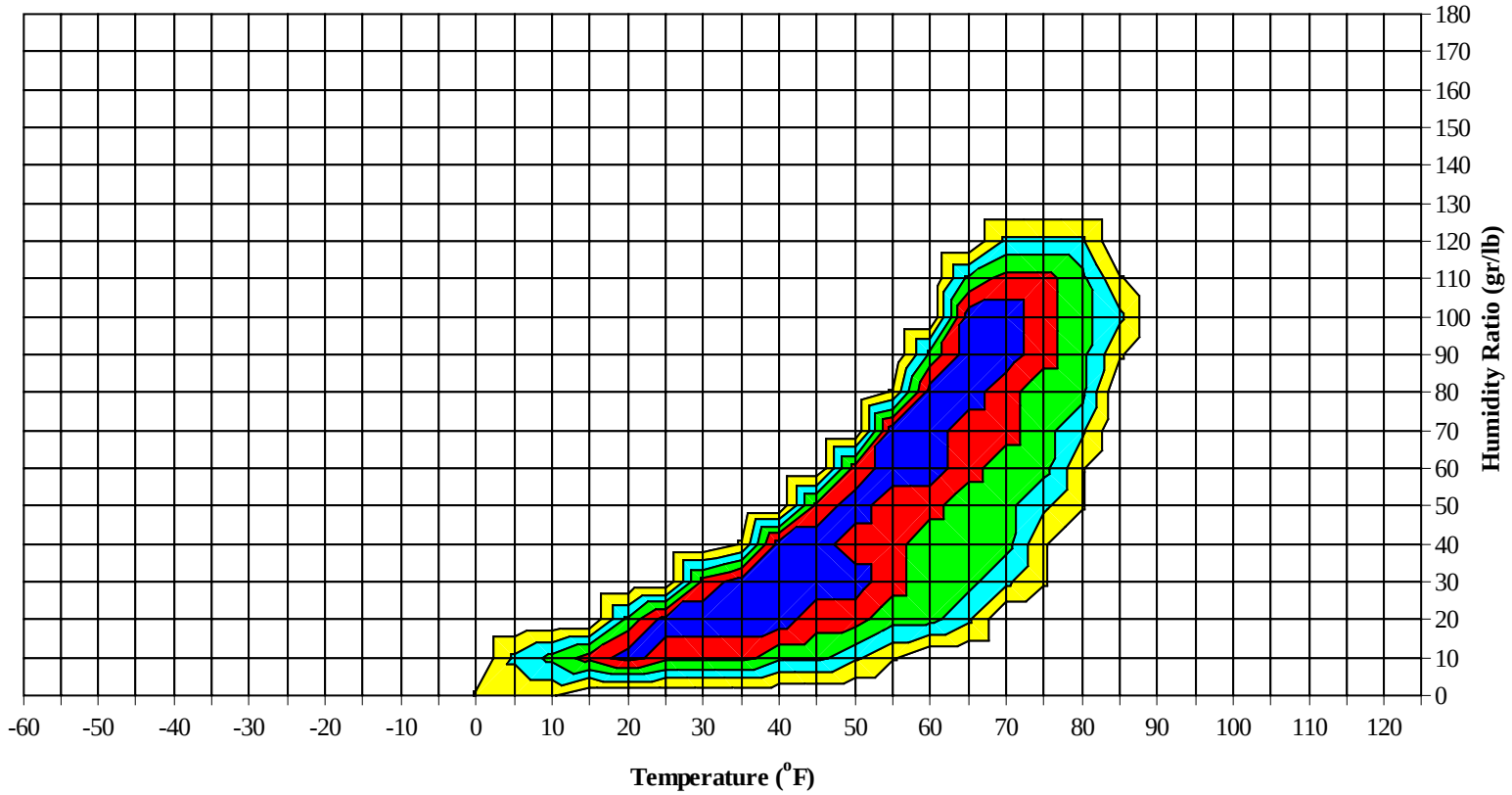
*Note: Temperatures at greater depths can be estimated by adding 1.5^oF per 100 feet additional depth.

BLUEFIELD/MERCER WV WMO No. 724125



BLUEFIELD/MERCER WV WMO No. 724125

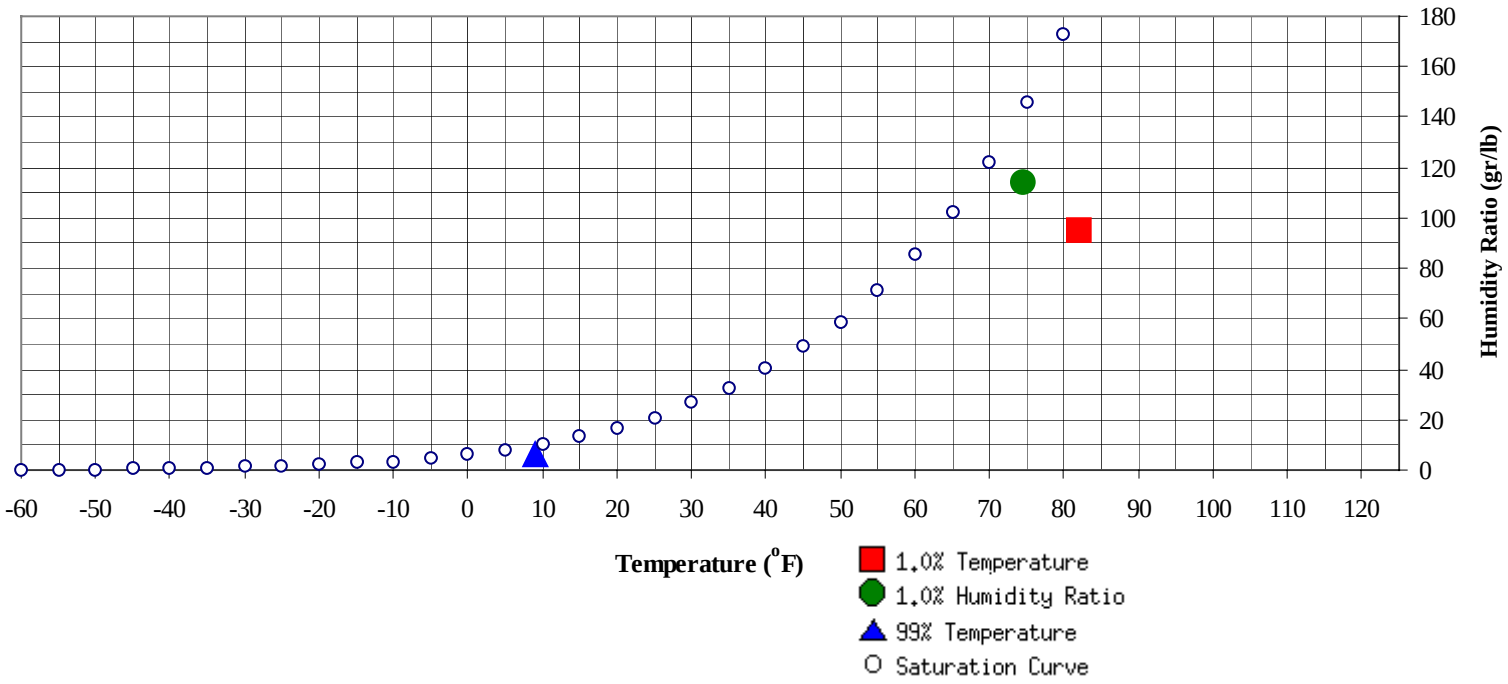
Long Term Psychrometric Summary



- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

BLUEFIELD/MERCER WV WMO No. 724125

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)
99% Dry Bulb	9	6.7	3.2

	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
1.0% Humidity Ratio	114.1	74.5	70	68	35.7

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	82	95.2	68.8	34.6

BLUEFIELD/MERCER WV WMO No. 724125

Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January Hour Group (LST) 01 To 08	January 09 To 16	January 17 To 00	January Total Obs	January MCWB (°F)	February Hour Group (LST) 01 To 08	February 09 To 16	February 17 To 00	February Total Obs	February MCWB (°F)	March Hour Group (LST) 01 To 08	March 09 To 16	March 17 To 00	March Total Obs	March MCWB (°F)
95 / 99															
90 / 94															
85 / 89															
80 / 84												0		0	60.0
75 / 79							0		0	52.0		2	0	2	57.2
70 / 74							0	0	0	54.1		7	3	10	54.6
65 / 69		0		0	56.3		3	0	3	52.9	1	17	8	26	53.2
60 / 64	0	2	0	2	51.0	1	9	5	15	50.1	8	21	19	49	51.2
55 / 59	2	9	4	15	48.8	5	13	10	29	48.1	16	28	28	73	48.4
50 / 54	8	18	13	40	45.5	14	21	20	56	45.4	30	34	33	97	44.9
45 / 49	15	23	22	61	41.4	19	24	24	68	40.9	33	30	34	97	40.9
40 / 44	24	29	29	82	37.6	21	26	27	75	36.7	34	30	34	98	37.4
35 / 39	29	31	33	93	33.1	30	27	29	85	32.5	36	28	29	93	33.0
30 / 34	44	42	45	131	29.1	37	31	35	102	29.0	32	24	27	83	29.0
25 / 29	40	31	36	107	24.8	30	27	25	82	24.6	29	16	18	63	24.7
20 / 24	29	25	22	76	20.2	23	19	21	64	20.0	15	7	8	30	20.1
15 / 19	20	16	19	55	15.7	16	12	13	41	15.4	7	3	3	13	15.6
10 / 14	18	11	12	41	10.7	12	8	9	29	10.6	4	1	1	6	11.0
5 / 9	7	6	7	20	6.0	10	4	3	17	6.3	2	0	1	3	6.1
0 / 4	7	3	3	13	1.4	3	1	1	5	1.9	1	0	0	1	2.0
-5 / -1	2	1	1	4	-3.1	1	0	0	1	-3.0	0			0	-1.3
-10 / -6	1	1	1	3	-7.4	1	0	0	1	-6.8					
-15 / -11	1	1	0	2	-11.7										
-20 / -16	0	0	0	0	-16.6										
-25 / -21	0		0	0											

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

BLUEFIELD/MERCER WV WMO No. 724125

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April Hour Group (LST) 01 To 08	April 09 To 16	April 17 To 00	April Total Obs	April MCWB (°F)	May Hour Group (LST) 01 To 08	May 09 To 16	May 17 To 00	May Total Obs	May MCWB (°F)	June Hour Group (LST) 01 To 08	June 09 To 16	June 17 To 00	June Total Obs	June MCWB (°F)
95 / 99															
90 / 94												0		0	70.5
85 / 89		0	0	0	60.9		0	0	0	66.0		2	0	2	69.0
80 / 84		5	1	6	59.6		8	2	10	64.6		22	6	28	67.8
75 / 79	0	14	5	19	58.1	0	30	10	40	62.6	0	59	24	83	66.2
70 / 74	1	23	13	38	56.3	2	49	28	79	60.5	12	72	55	139	64.2
65 / 69	8	33	25	66	53.7	21	49	49	119	58.4	67	49	76	193	62.0
60 / 64	27	34	36	96	51.8	61	44	59	164	55.9	91	24	50	165	58.7
55 / 59	35	32	41	108	49.0	60	30	43	133	52.2	42	9	20	71	53.9
50 / 54	40	26	34	100	44.6	44	21	29	95	47.5	18	3	6	27	49.2
45 / 49	36	25	26	86	41.1	30	12	15	57	43.4	7	0	2	9	44.7
40 / 44	30	19	26	75	37.6	18	6	10	34	39.8	2	0	0	2	41.5
35 / 39	31	15	18	64	33.7	9	0	2	11	35.0					
30 / 34	20	10	11	41	29.6	2	0	0	2	30.8					
25 / 29	10	4	4	18	25.5	0			0	28.3					
20 / 24	3	1	1	5	20.8										
15 / 19	0	0		0	15.5										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

BLUEFIELD/MERCER WV WMO No. 724125

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	July					August					September				
	Hour Group (LST)				MCWB	Hour Group (LST)				MCWB	Hour Group (LST)				MCWB
	01 To 08	09 To 16	17 To 00	Total Obs	(°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)
95 / 99		0		0	73.0		0		0	69.0					
90 / 94		1	0	1	69.4		1	0	1	69.9					
85 / 89	0	10	3	13	70.5		8	1	9	69.6		1		1	68.2
80 / 84	0	44	14	58	69.8		36	10	46	69.1		13	2	15	68.1
75 / 79	3	76	41	119	68.1	1	72	31	104	67.4	0	35	9	44	66.2
70 / 74	35	72	77	183	66.2	24	72	74	170	65.5	4	54	32	91	64.1
65 / 69	114	35	79	228	64.0	103	41	85	229	63.6	51	54	65	170	62.1
60 / 64	70	11	29	110	60.1	83	16	38	137	60.0	70	43	61	174	58.5
55 / 59	22	1	4	27	55.6	27	3	8	39	55.3	50	23	37	111	53.7
50 / 54	4		0	4	50.2	7	0	1	8	50.8	35	12	19	65	49.0
45 / 49	0			0	46.0	2	0	0	2	46.2	17	5	11	33	44.4
40 / 44						0		0	0	42.0	11	1	3	15	40.1
35 / 39											2		0	2	35.6
30 / 34											0		0	0	32.9
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

BLUEFIELD/MERCER WV WMO No. 724125

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	October Hour Group (LST) 01 To 08	October 09 To 16	October 17 To 00	October Total Obs	October MCWB (°F)	November Hour Group (LST) 01 To 08	November 09 To 16	November 17 To 00	November Total Obs	November MCWB (°F)	December Hour Group (LST) 01 To 08	December 09 To 16	December 17 To 00	December Total Obs	December MCWB (°F)
95 / 99															
90 / 94															
85 / 89															
80 / 84		0		0	61.4		0		0	53.0					
75 / 79		7	0	7	62.2		0		0	56.0					
70 / 74		25	6	31	58.9		6	1	7	57.3		0	0	0	61.1
65 / 69	6	41	21	68	57.0	0	14	4	18	55.1	0	2	0	2	57.0
60 / 64	23	45	43	110	54.7	10	28	18	56	53.3	2	8	4	14	54.4
55 / 59	45	40	53	137	51.2	24	32	34	90	50.3	10	17	13	40	51.5
50 / 54	46	38	43	126	46.4	33	33	37	103	45.8	15	23	21	59	46.5
45 / 49	41	23	33	97	42.2	32	30	33	95	41.4	21	30	26	77	41.1
40 / 44	39	18	27	84	38.4	34	30	35	99	37.0	26	33	31	90	36.9
35 / 39	30	9	17	56	34.3	34	26	30	90	33.0	32	32	38	102	32.7
30 / 34	14	3	4	21	29.9	31	24	26	81	28.9	44	35	41	120	28.8
25 / 29	4	0	1	5	25.9	23	12	17	51	25.0	36	29	31	97	24.7
20 / 24	0			0	22.6	13	5	5	22	20.6	26	18	20	63	20.0
15 / 19						3	1	2	6	16.0	14	11	12	36	15.3
10 / 14						1	0	0	1	11.0	11	6	7	24	11.0
5 / 9						0	0	0	0	8.0	5	2	3	10	6.3
0 / 4											2	1	1	4	1.3
-5 / -1											1	1	1	3	-2.7
-10 / -6											1	0	1	2	-7.1
-15 / -11											1	0		1	-11.3
-20 / -16															
-25 / -21															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

BLUEFIELD/MERCER WV WMO No. 724125

Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

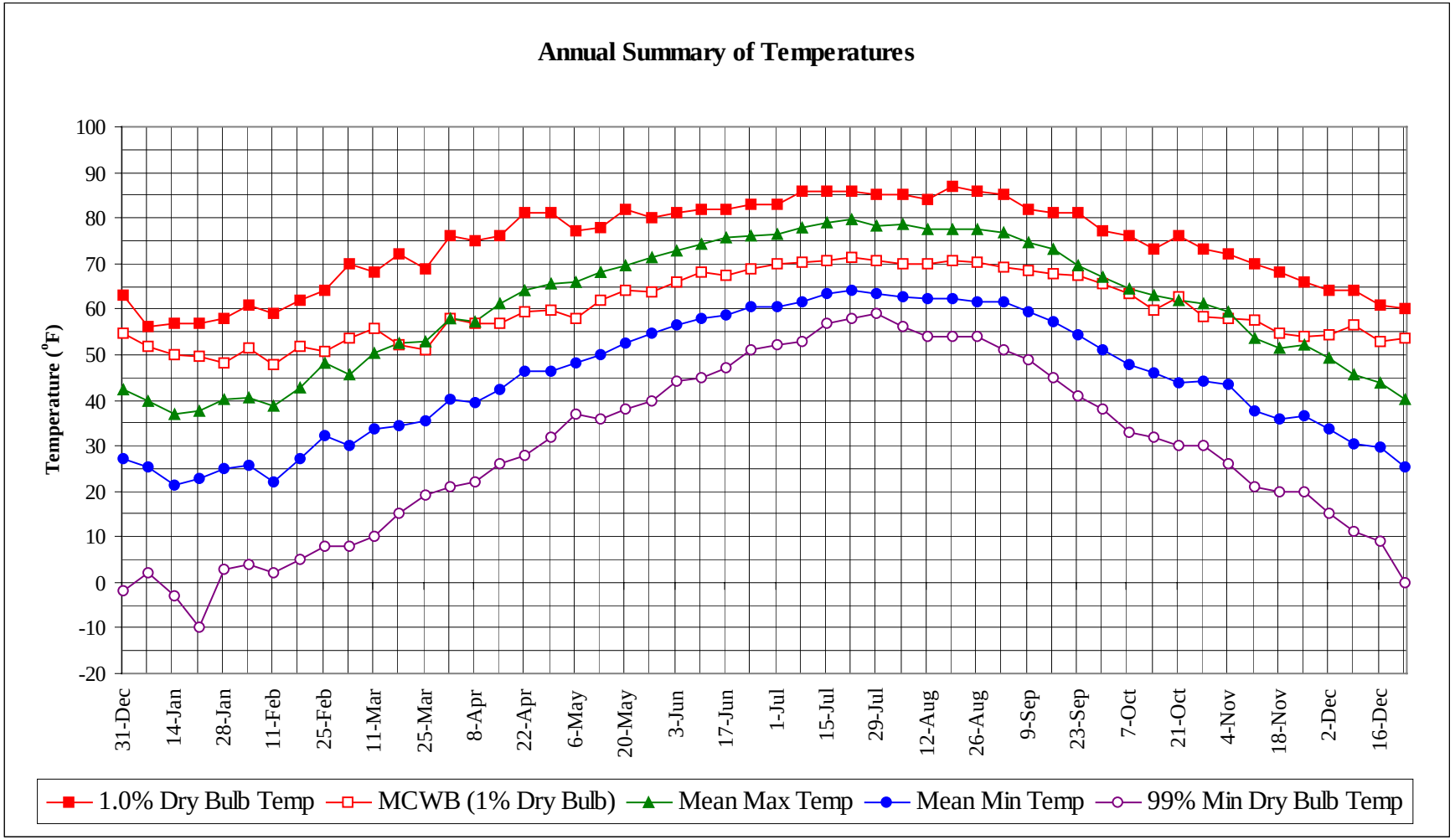
Period of Record = 1973 to 1996

Annual Totals

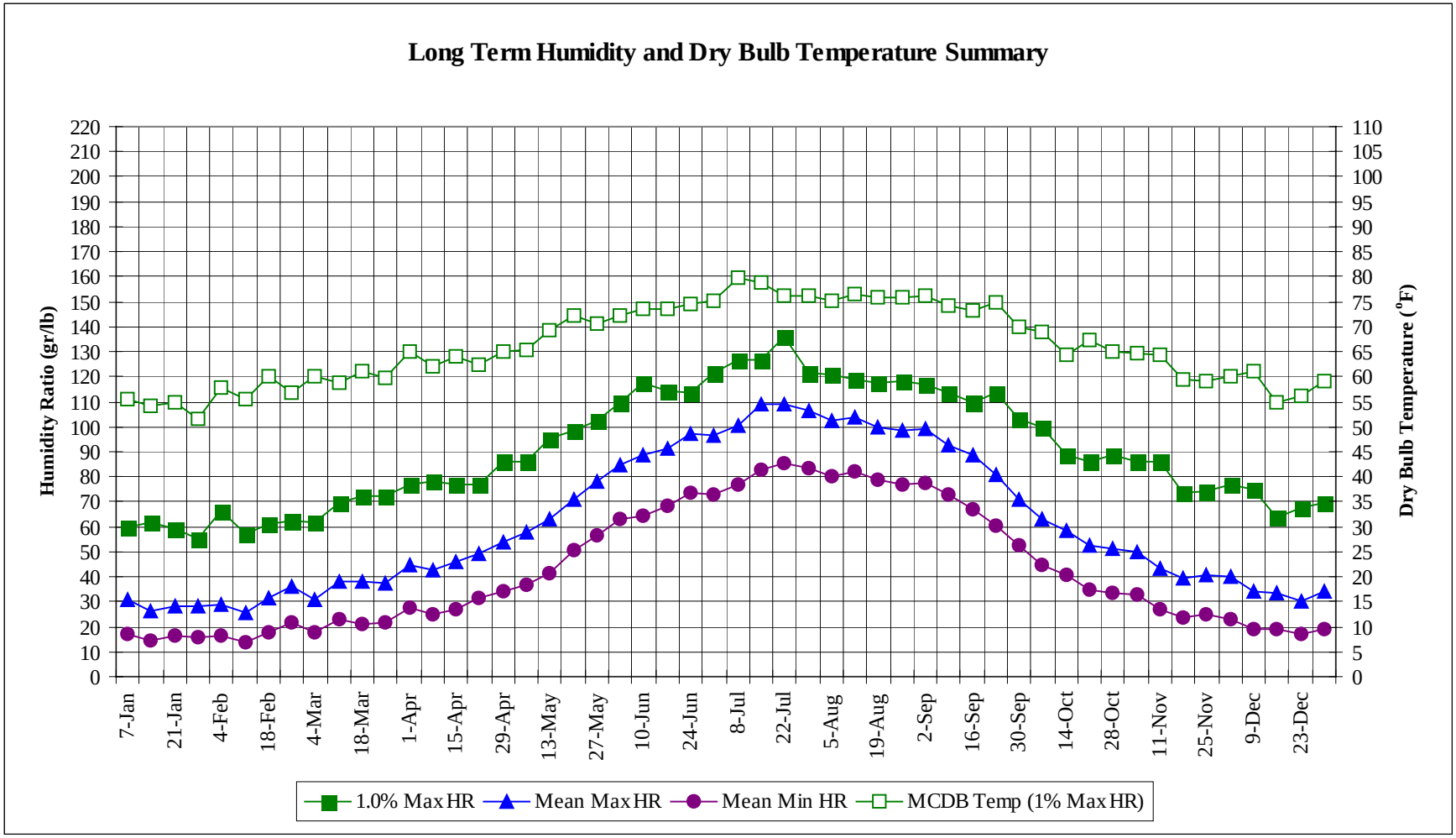
Temperature Range (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
95 / 99		0		0	71.0
90 / 94		2	0	2	69.8
85 / 89	0	20	4	24	69.7
80 / 84	0	128	35	163	68.4
75 / 79	4	293	120	417	66.2
70 / 74	78	380	287	745	63.7
65 / 69	373	337	408	1118	61.2
60 / 64	450	283	361	1094	56.7
55 / 59	341	237	296	874	51.5
50 / 54	294	229	258	781	46.3
45 / 49	252	202	227	681	41.7
40 / 44	239	193	222	654	37.6
35 / 39	232	169	195	597	33.2
30 / 34	223	168	190	581	29.1
25 / 29	172	119	133	424	24.8
20 / 24	109	74	78	261	20.1
15 / 19	60	41	50	151	15.5
10 / 14	47	26	30	104	10.7
5 / 9	25	12	15	51	6.2
0 / 4	13	5	5	23	1.5
-5 / -1	4	2	2	8	-2.9
-10 / -6	2	1	1	4	-7.2
-15 / -11	2	1	0	3	-11.6
-20 / -16	0	0	0	0	-16.6
-25 / -21	0		0	0	

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

BLUEFIELD/MERCER WV WMO No. 724125



BLUEFIELD/MERCER WV WMO No. 724125

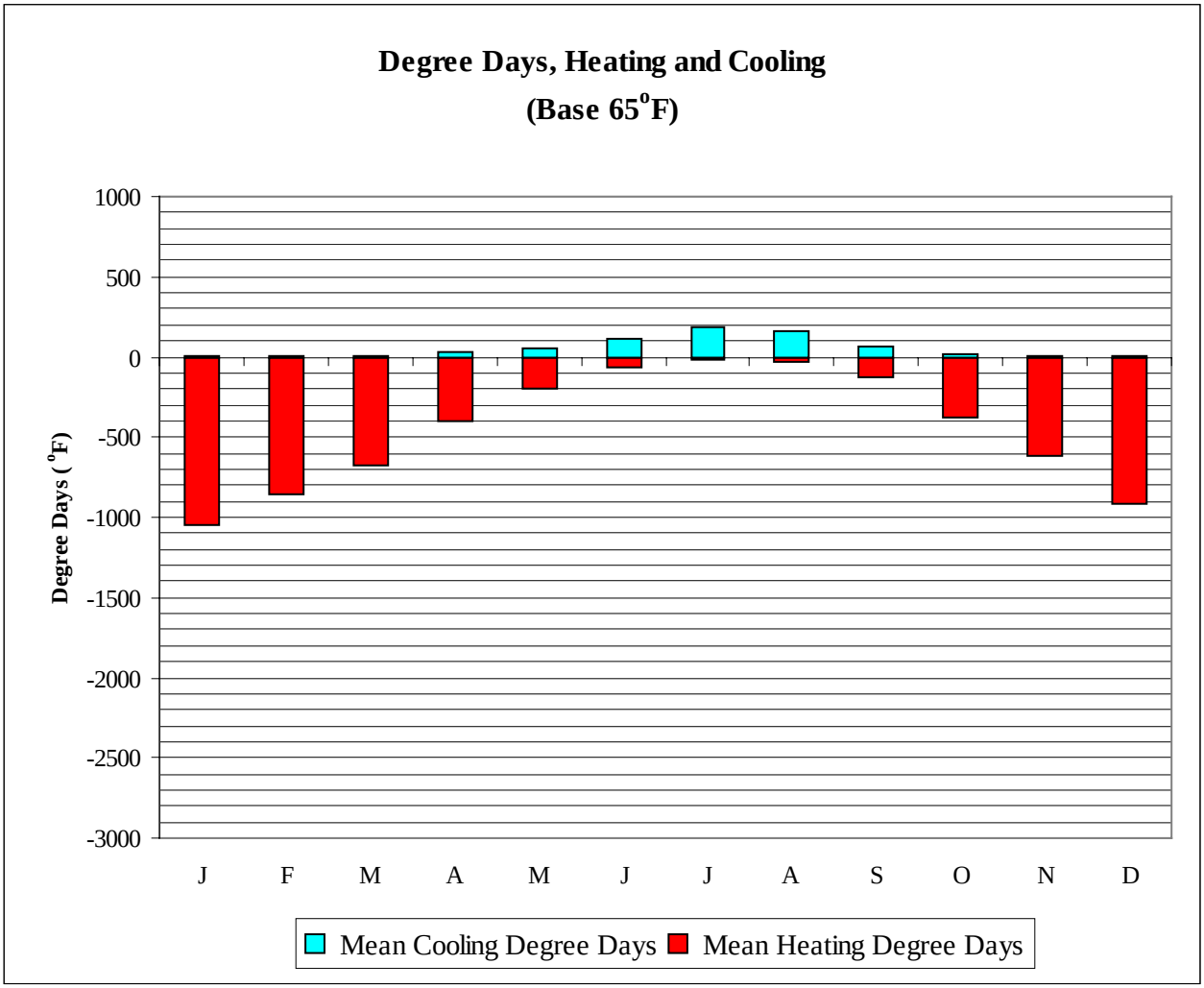


BLUEFIELD/MERCER WV WMO No. 724125

Long Term Dry Bulb Temperature and Humidity Summary

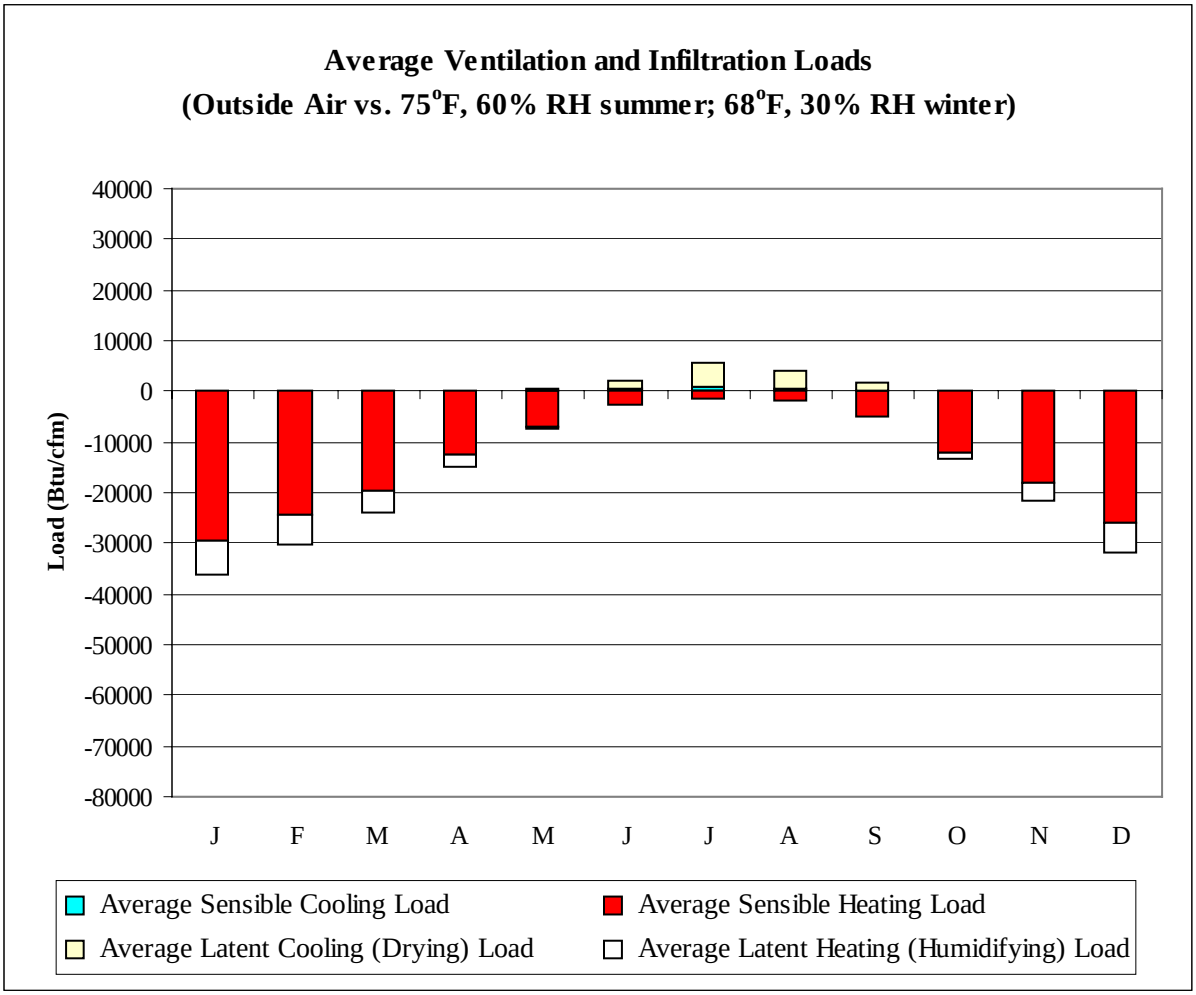
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	56.0	51.6	39.8	25.4	2.0	59.5	55.4	31.0	17.2
14-Jan	57.0	50.0	37.0	21.5	-3.0	61.6	54.1	26.4	14.2
21-Jan	57.0	49.4	37.6	22.9	-10.0	58.8	54.7	28.4	16.6
28-Jan	58.0	48.1	40.3	24.9	3.0	55.3	51.6	28.0	15.8
4-Feb	61.0	51.4	40.6	25.5	4.0	66.5	57.9	29.0	16.3
11-Feb	59.0	47.8	38.8	21.9	2.0	57.4	55.5	25.6	13.6
18-Feb	62.0	51.9	42.5	27.2	5.0	60.9	60.0	31.7	17.9
25-Feb	64.0	50.8	48.3	32.2	8.0	62.3	56.9	36.4	21.5
4-Mar	70.0	53.5	45.6	30.0	8.0	61.6	60.1	30.7	17.8
11-Mar	68.0	55.7	50.2	33.7	10.0	69.3	58.8	38.4	23.2
18-Mar	72.0	52.1	52.4	34.2	15.0	72.1	61.2	37.9	20.7
25-Mar	69.0	51.1	53.0	35.6	19.0	72.1	59.9	37.6	21.6
1-Apr	76.0	57.9	57.8	40.1	21.0	77.0	65.0	44.7	27.5
8-Apr	75.0	56.8	57.2	39.5	22.0	78.4	61.9	42.7	24.9
15-Apr	76.0	56.9	61.3	42.2	26.0	77.0	64.0	46.1	27.1
22-Apr	81.0	59.3	64.1	46.2	28.0	77.0	62.4	49.5	31.4
29-Apr	81.0	59.9	65.6	46.5	32.0	86.1	65.0	54.1	33.9
6-May	77.0	58.1	65.8	48.2	37.0	86.1	65.5	58.0	36.9
13-May	78.0	61.8	68.1	49.9	36.0	95.2	69.4	62.8	41.3
20-May	82.0	64.2	69.7	52.4	38.0	98.7	72.3	71.2	50.7
27-May	80.0	63.6	71.3	54.9	40.0	102.2	70.7	78.4	56.4
3-Jun	81.0	65.9	72.7	56.6	44.0	109.9	72.2	84.8	63.1
10-Jun	82.0	68.1	74.1	57.8	45.0	117.6	73.4	88.3	64.6
17-Jun	82.0	67.4	75.6	58.7	47.0	114.1	73.5	91.0	68.4
24-Jun	83.0	68.8	76.0	60.6	51.0	113.4	74.4	97.4	73.6
1-Jul	83.0	69.9	76.4	60.4	52.0	121.8	75.4	96.4	72.7
8-Jul	86.0	70.4	77.8	61.5	53.0	126.7	79.8	100.3	76.5
15-Jul	86.0	70.7	79.1	63.6	57.0	126.7	78.9	109.0	82.5
22-Jul	86.0	71.2	79.8	64.2	58.0	135.8	76.1	109.0	85.4
29-Jul	85.0	70.6	78.3	63.4	59.0	121.8	76.2	106.7	83.5
5-Aug	85.0	69.9	78.5	62.8	56.0	121.1	75.3	102.7	80.1
12-Aug	84.0	69.8	77.4	62.4	54.0	119.0	76.4	103.5	81.8
19-Aug	87.0	70.8	77.5	62.1	54.0	117.6	75.8	99.8	79.0
26-Aug	86.0	70.3	77.6	61.4	54.0	118.3	75.8	98.8	76.7
2-Sep	85.0	69.1	76.9	61.5	51.0	116.9	76.2	98.9	77.4
9-Sep	82.0	68.4	74.5	59.4	49.0	113.4	74.2	92.5	73.2
16-Sep	81.0	67.6	73.2	57.4	45.0	109.9	73.3	88.5	67.1
23-Sep	81.0	67.4	69.5	54.3	41.0	113.4	74.8	80.6	60.1
30-Sep	77.0	65.6	67.0	51.1	38.0	102.9	70.1	71.0	52.5
7-Oct	76.0	63.2	64.5	47.8	33.0	100.1	69.1	63.1	44.7
14-Oct	73.0	59.7	62.9	46.1	32.0	88.9	64.3	58.6	41.0
21-Oct	76.0	62.7	62.0	43.8	30.0	86.1	67.3	52.5	34.8
28-Oct	73.0	58.2	61.2	44.1	30.0	88.9	65.0	51.4	33.5
4-Nov	72.0	57.9	59.5	43.4	26.0	86.1	64.7	49.6	32.6
11-Nov	70.0	57.5	53.7	37.8	21.0	86.1	64.2	43.2	26.7
18-Nov	68.0	54.6	51.6	36.0	20.0	73.5	59.4	39.7	23.9
25-Nov	66.0	53.9	52.2	36.5	20.0	74.2	59.3	40.6	25.0
2-Dec	64.0	54.2	49.2	33.6	15.0	77.0	60.0	40.0	22.8
9-Dec	64.0	56.4	45.7	30.2	11.0	74.9	61.2	33.9	19.0
16-Dec	61.0	53.0	43.7	29.6	9.0	63.7	54.8	33.2	19.2
23-Dec	60.0	53.6	40.1	25.3	0.0	67.9	56.2	30.5	17.2
31-Dec	63.0	54.8	42.2	27.3	-2.0	69.3	59.0	34.4	19.1

BLUEFIELD/MERCER WV WMO No. 724125



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1050
FEB	0	860
MAR	6	673
APR	29	401
MAY	57	203
JUN	117	61
JUL	183	21
AUG	162	30
SEP	70	129
OCT	17	378
NOV	3	612
DEC	0	914
ANN	644	5332

BLUEFIELD/MERCER WV WMO No. 724125



	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	0	-29637	0	-6658
FEB	0	-24489	0	-5700
MAR	5	-19774	0	-4117
APR	74	-12401	8	-2344
MAY	133	-7036	294	-448
JUN	344	-2709	1852	-2
JUL	785	-1276	4795	-2
AUG	639	-1645	3477	0
SEP	180	-4880	1383	-57
OCT	11	-11965	56	-1291
NOV	1	-18139	9	-3419
DEC	0	-26086	0	-5742
ANN	2172	-160037	11874	-29780

Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: CHARLESTON
State: WV
WBAN No: 13866
Lat(N): 38.37
Long(W): 81.6
Elev(ft): 951

Stn Type: Secondary
SHADING GEOMETRY IN DIMENSIONLESS UNITS
Window: 1
Overhang: 0.487
Vert Gap: 0.312

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 9

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Global	620	850	1180	1510	1780	1910	1840	1670	1370	1040	680	530	1250
	Std Dev	46	79	99	152	141	125	123	99	88	76	77	42	49
	Minimum	550	700	970	1160	1530	1680	1480	1490	1210	890	530	460	1110
	Maximum	710	1030	1340	1870	2030	2200	2090	1850	1660	1260	830	620	1360
	Diffuse	380	490	610	740	840	900	890	800	650	480	370	320	620
Clear Day	Global	970	1320	1790	2240	2520	2620	2530	2270	1870	1400	1010	850	1790
NORTH	Global	210	280	360	440	540	610	570	480	390	300	220	190	380
	Diffuse	210	280	360	440	500	540	520	470	390	300	220	190	370
Clear Day	Global	190	250	330	430	580	680	620	480	370	280	210	170	380
EAST	Global	390	520	690	860	970	1000	950	880	760	620	420	330	700
	Diffuse	260	340	430	530	590	630	620	560	470	370	270	220	440
Clear Day	Global	710	920	1150	1340	1420	1440	1400	1310	1150	930	730	640	1100
SOUTH	Global	840	930	990	900	800	750	770	900	1010	1110	890	760	890
	Diffuse	360	430	500	540	560	580	580	570	530	450	360	320	480
Clear Day	Global	1940	1980	1770	1370	1030	880	930	1200	1560	1810	1870	1860	1510
WEST	Global	400	540	710	870	980	1060	1020	970	830	670	440	350	740
	Diffuse	260	340	440	530	600	650	630	580	490	370	270	220	450
Clear Day	Global	710	920	1150	1340	1420	1440	1400	1310	1150	930	730	640	1100

Average Annual Solar Heat and Illumination – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

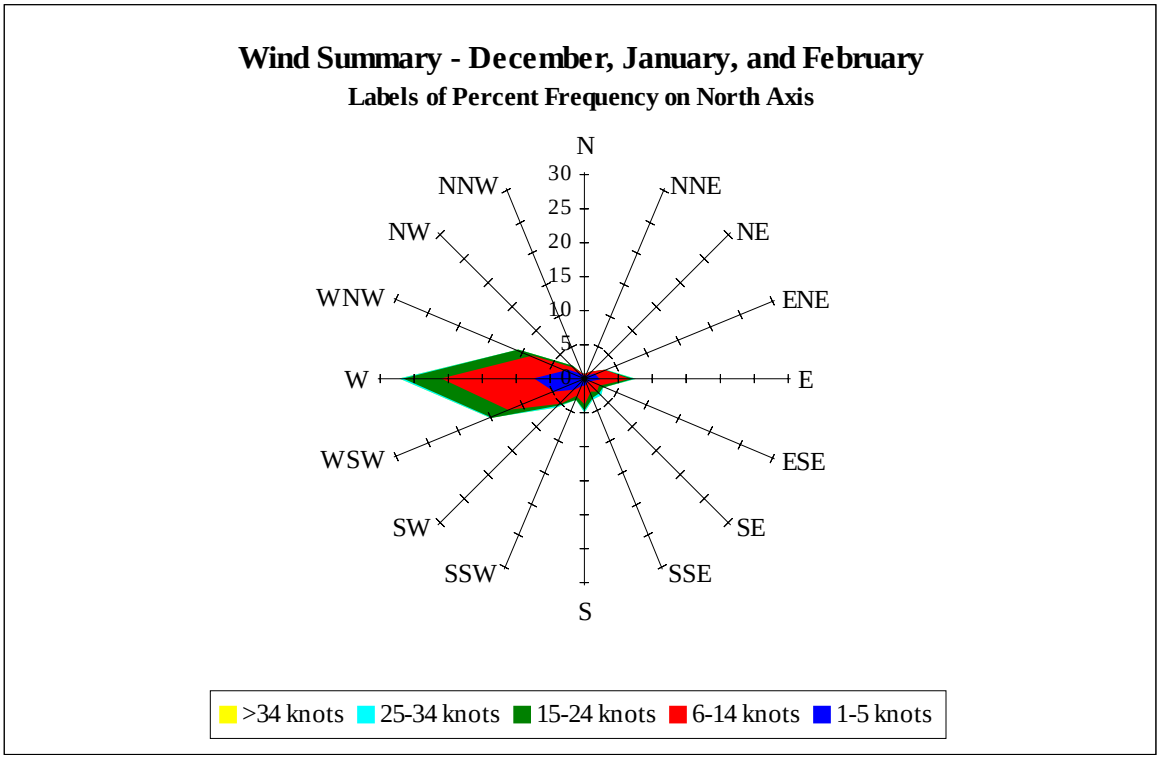
AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	410	580	830	1090	1290	1390	1330	1210	980	730	460	350	890
NORTH	Unshaded	150	200	250	300	360	400	380	330	270	210	150	130	260
	Shaded	130	170	220	270	320	360	340	290	240	190	140	110	230
EAST	Unshaded	270	360	490	610	690	710	680	620	540	430	290	230	490
	Shaded	240	320	430	540	600	610	580	540	470	380	260	200	430
SOUTH	Unshaded	630	670	680	590	500	460	470	570	680	800	660	570	610
	Shaded	600	620	550	410	350	360	360	390	510	700	630	550	500
WEST	Unshaded	280	380	500	620	700	750	730	690	590	470	310	240	520
	Shaded	250	330	440	540	610	650	630	600	520	420	280	220	460

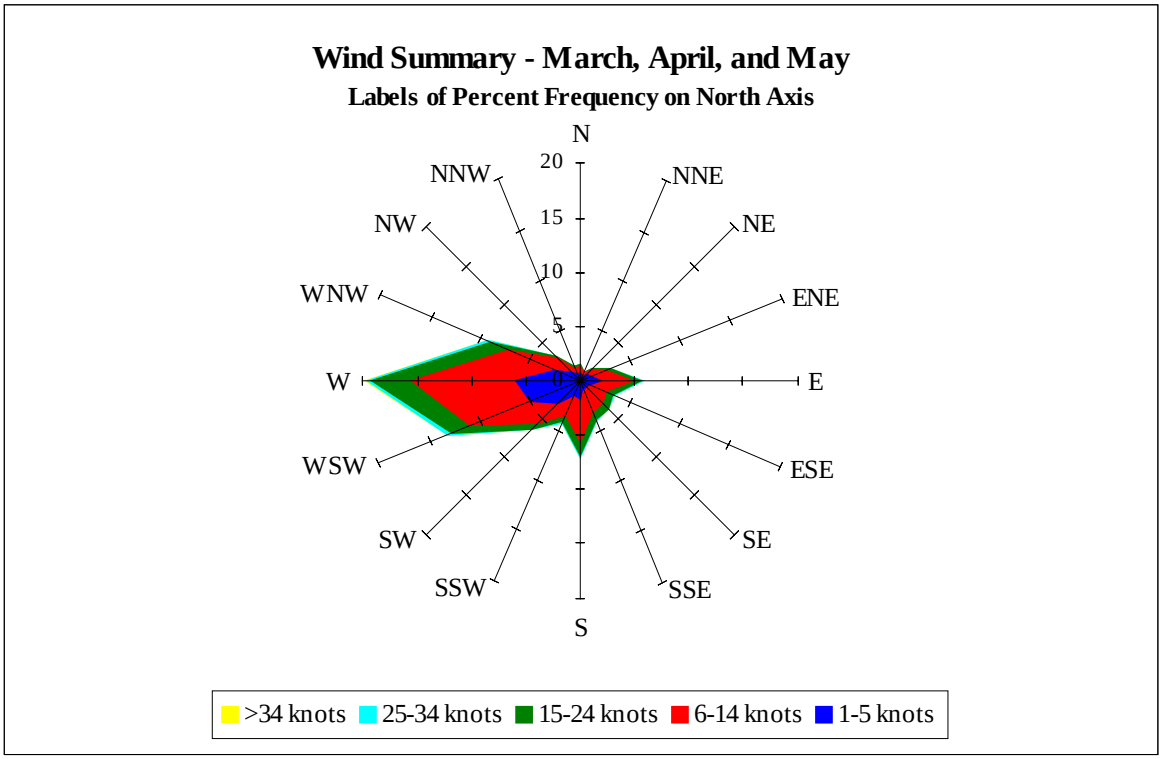
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9

		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	31	68	82	70	35	37	77	98	97	74
	M.Cloudy	18	40	49	43	21	24	50	70	70	49
NORTH	M.Clear	9	14	15	14	9	21	16	17	17	16
	M.Cloudy	8	15	17	15	9	13	17	19	19	16
EAST	M.Clear	68	63	17	14	9	67	76	41	17	16
	M.Cloudy	20	30	18	15	9	29	41	32	19	16
SOUTH	M.Clear	30	66	81	69	35	11	26	43	42	24
	M.Cloudy	12	31	39	34	15	10	21	33	34	20
WEST	M.Clear	9	14	15	60	72	11	16	17	43	75
	M.Cloudy	8	15	17	31	25	10	17	19	34	43
M.Clear	(% hrs)	26	26	27	25	27	28	34	28	28	36

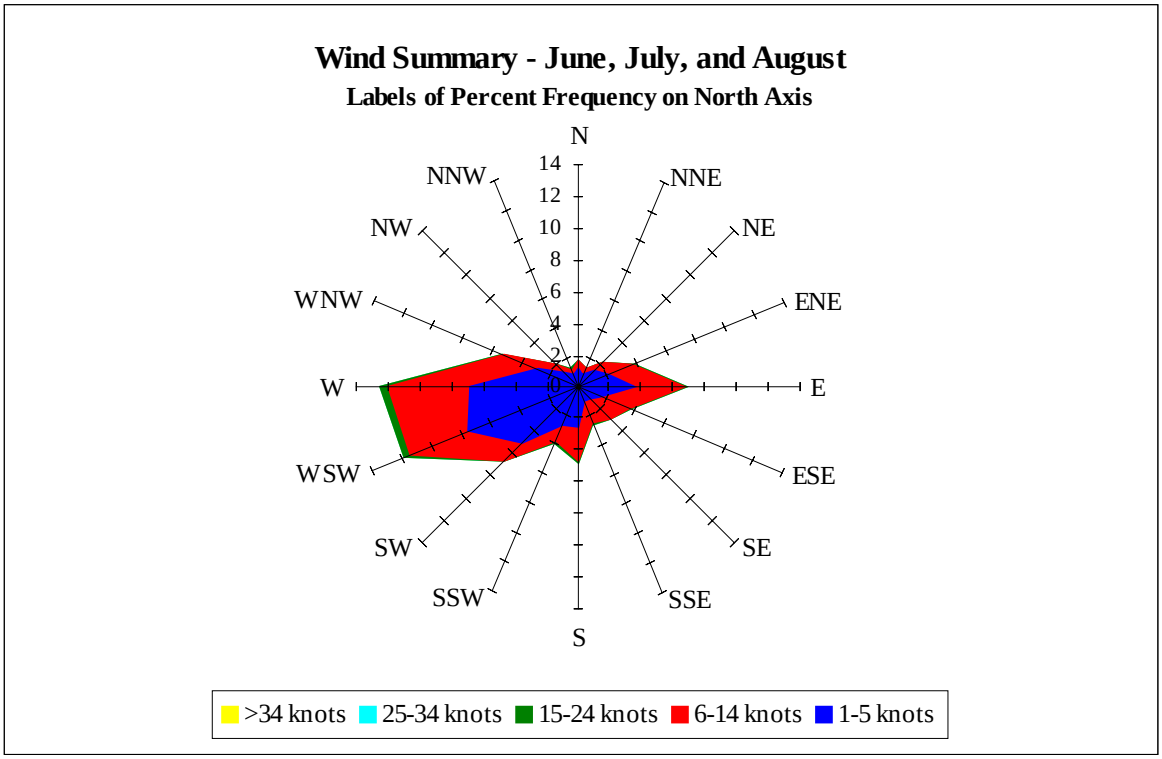
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	19	60	83	80	54	10	38	49	35	6
	M.Cloudy	11	35	54	54	33	6	21	26	20	4
NORTH	M.Clear	7	14	16	16	13	4	10	11	9	3
	M.Cloudy	5	13	18	18	13	3	9	11	9	2
EAST	M.Clear	48	72	38	16	13	31	43	11	9	3
	M.Cloudy	15	30	27	18	13	7	16	11	9	2
SOUTH	M.Clear	13	49	71	68	43	25	73	88	69	16
	M.Cloudy	7	23	41	41	22	6	22	27	21	4
WEST	M.Clear	7	14	16	44	72	4	10	14	47	22
	M.Cloudy	5	13	18	30	32	3	9	12	17	6
M.Clear	(% hrs)	25	38	34	35	41	20	21	22	23	25



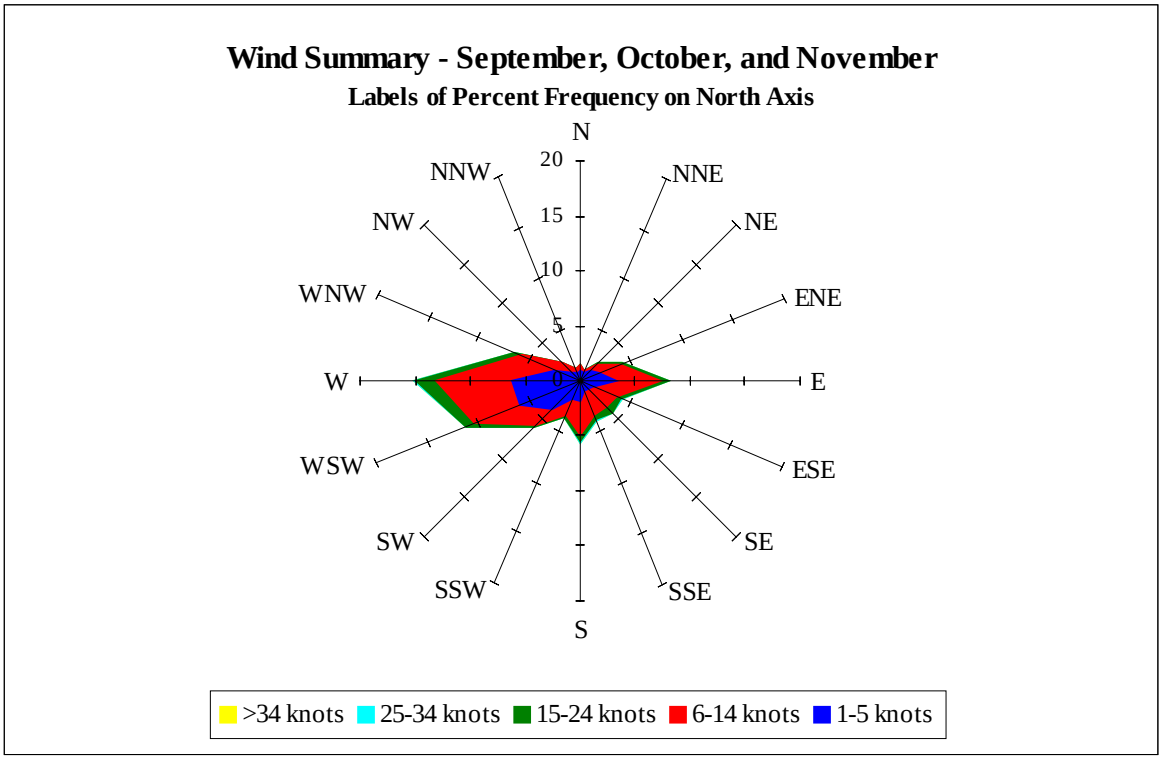
Percent Calm = 9.30



Percent Calm = 13.02



Percent Calm = 27.63



Percent Calm = 18.93