FORT LEWIS/GRAY WA	
Latitude = 47.08 N	WMO No. 742070
Longitude =122.50 W	Elevation = 302 feet
Period of Record = 1967 to 1996	Average Pressure = 29.68 inches Hg

Design Criteria Data

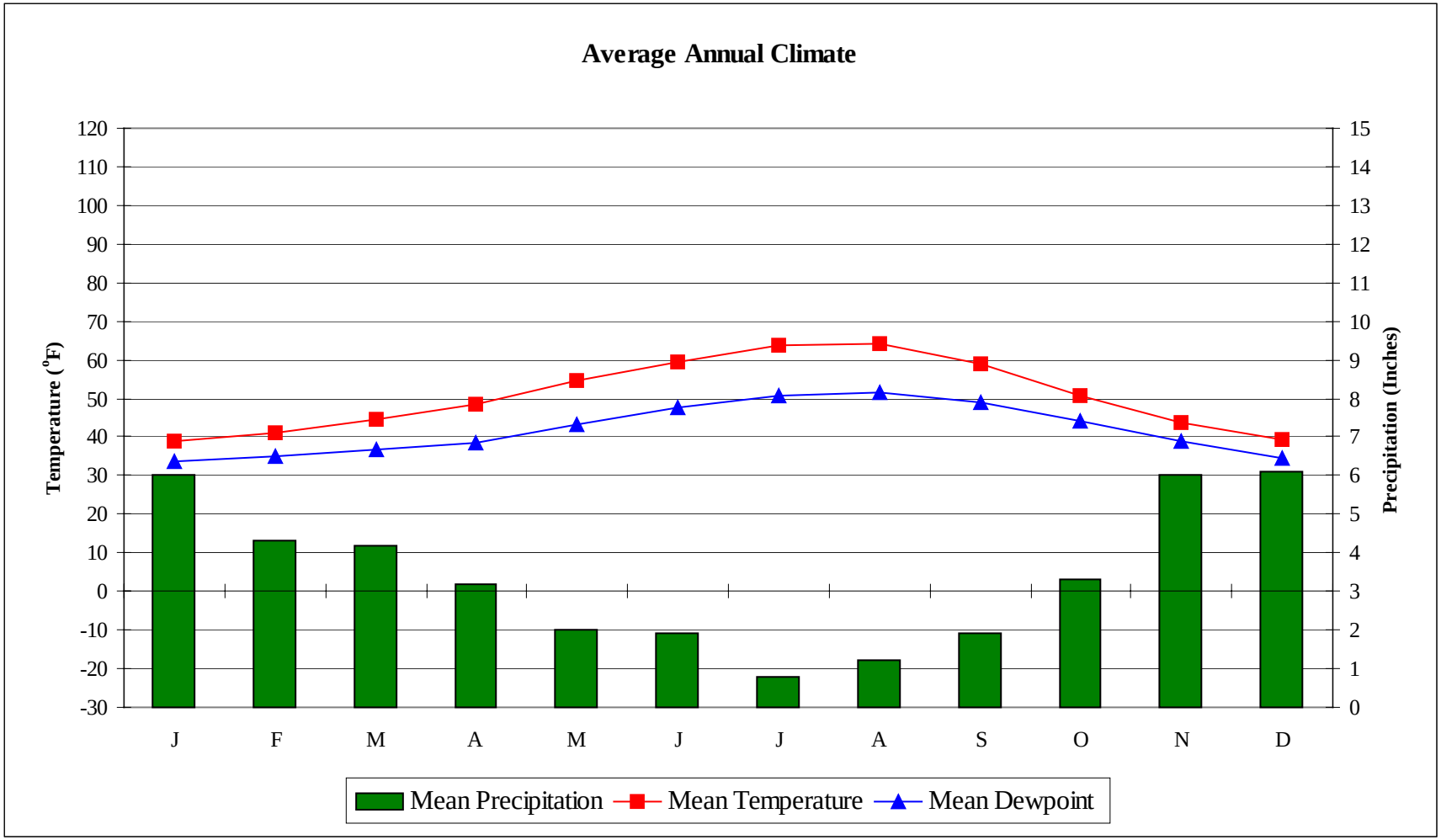
		Mean Coincident (Average) Values			
Dry Bulb Temperature (T)	**Design Value (^oF)**	Wet Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	94	67	57	5.7	N
0.4% Occurrence	86	65	60	6.0	N
1.0% Occurrence	82	64	59	6.2	NNE
2.0% Occurrence	79	62	58	6.1	N
Mean Daily Range	17	-	-	-	-
97.5% Occurrence	29	28	19	1.6	S
99.0% Occurrence	24	23	14	2.2	S
99.6% Occurrence	19	18	11	2.1	S
Median of Extreme Lows	16	15	9	2.7	S
		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	69	87	76	5.5	NNE
0.4% Occurrence	66	82	68	5.9	N
1.0% Occurrence	65	80	67	5.8	N
2.0% Occurrence	63	76	65	5.6	N
		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	87	78	0.58	4.9	N
0.4% Occurrence	78	71	0.52	4.3	WNW
1.0% Occurrence	73	68	0.49	4.5	WNW
2.0% Occurrence	70	67	0.47	4.6	WNW
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	5	149	0	33

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°F-RH 60% Latent + Sensible
7	1.0	85	0.0 + 0.1
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 (#)
53.2	9	20	43

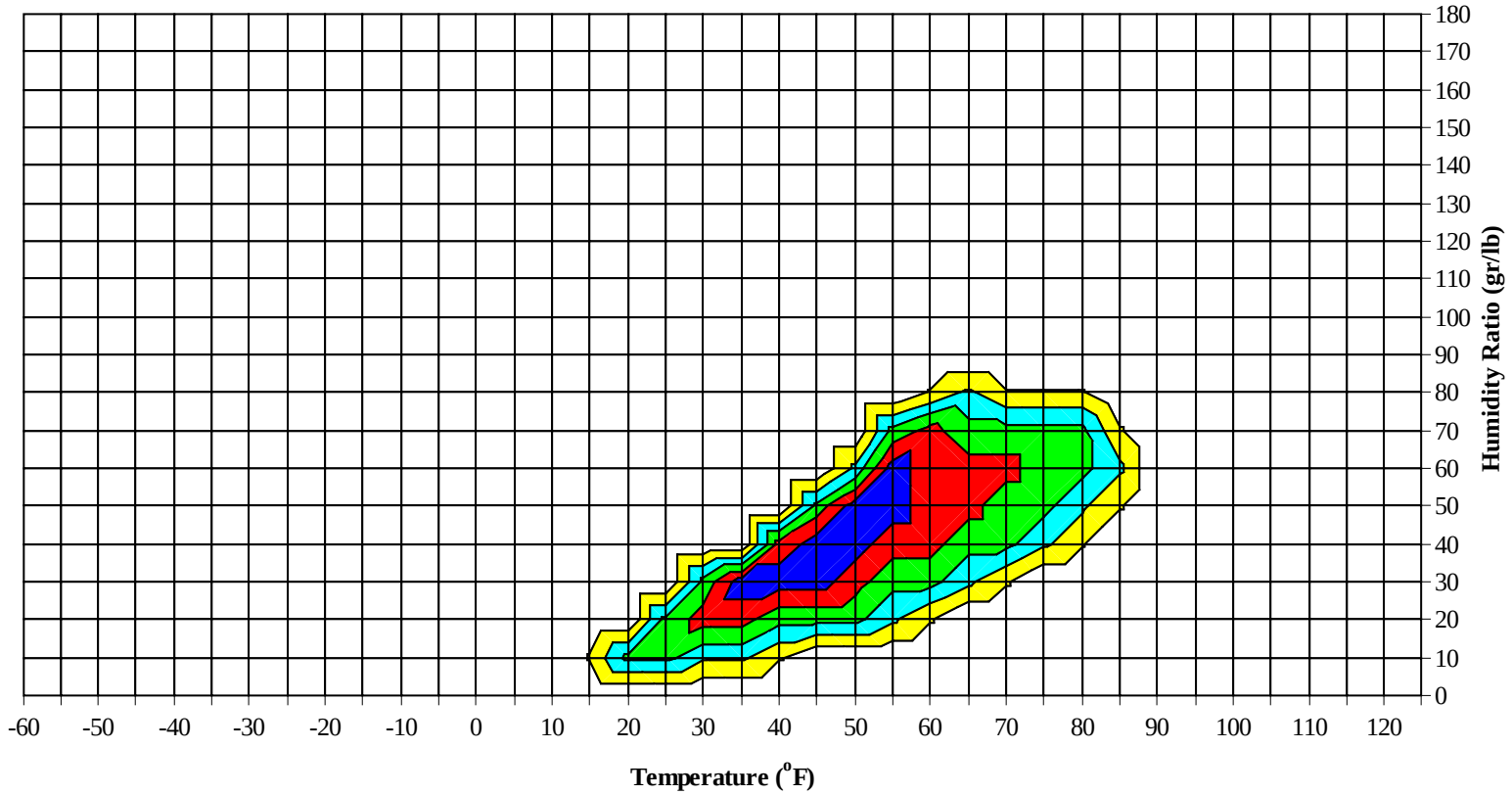
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

FORT LEWIS/GRAY WA WMO No. 742070



FORT LEWIS/GRAY WA WMO No. 742070

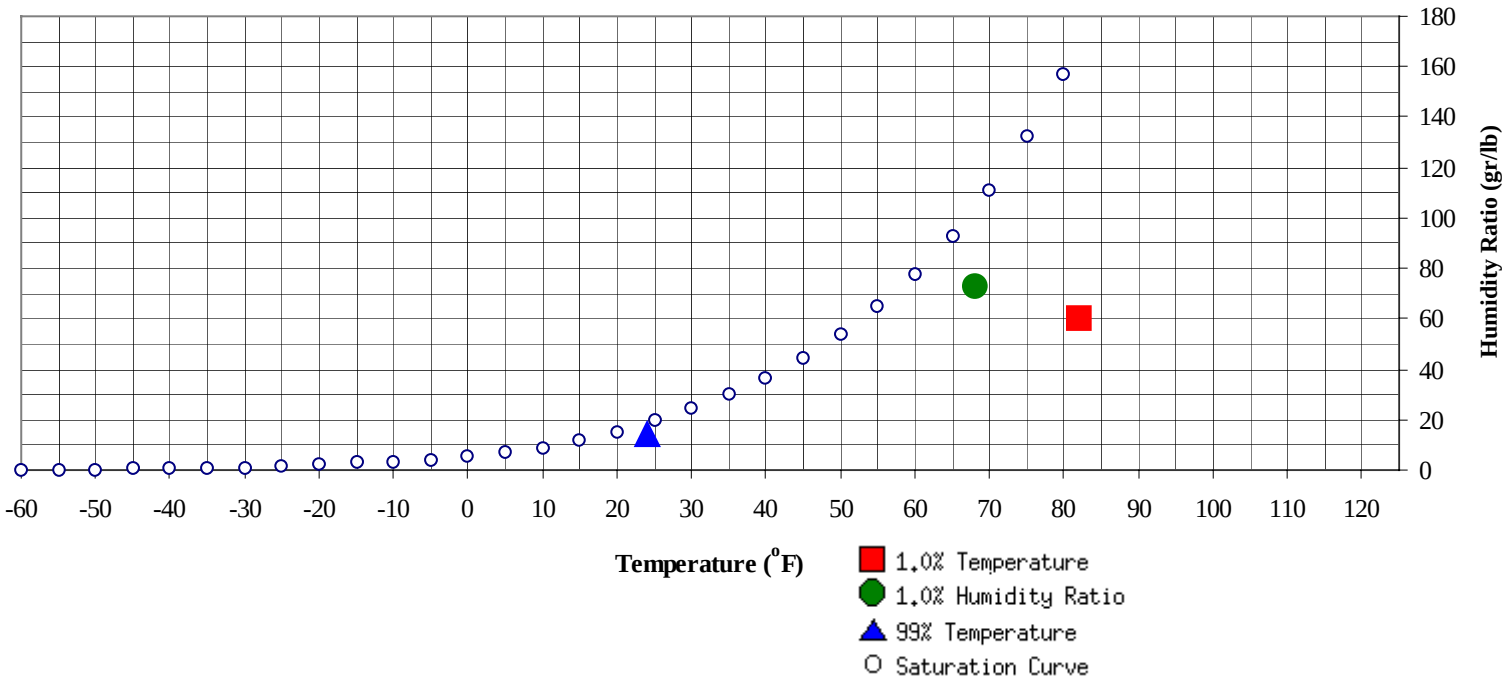
Long Term Psychrometric Summary



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

FORT LEWIS/GRAY WA WMO No. 742070

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)
99% Dry Bulb	24	13.9	7.9

	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
1.0% Humidity Ratio	72.8	68.1	61.6	57.9	27.7

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	82	60	63.8	29.1

FORT LEWIS/GRAY WA WMO No. 742070

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

Period of Record = 1967 to 1996

Temperature Range (°F)	January Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)	February Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)	March Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79															
70 / 74							0		0	54.5		1	0	1	53.2
65 / 69							1	0	1	53.9		3	1	4	51.6
60 / 64		0	0	0	52.2	0	3	1	4	50.9	0	11	3	14	49.9
55 / 59	1	6	2	9	51.3	2	16	6	24	50.7	2	32	14	48	48.7
50 / 54	12	28	16	56	48.4	9	38	22	69	47.5	10	68	42	120	46.2
45 / 49	30	53	41	124	44.3	31	62	51	143	43.8	46	75	72	194	43.4
40 / 44	51	63	61	175	39.9	49	56	59	164	39.7	70	45	68	184	39.5
35 / 39	55	52	55	162	35.1	52	30	49	131	35.2	59	11	36	106	35.4
30 / 34	51	31	47	129	30.6	51	14	27	91	30.8	44	2	10	56	31.0
25 / 29	26	11	19	55	25.5	21	2	7	30	26.1	15	0	1	16	26.6
20 / 24	12	3	5	20	20.7	5	1	2	8	20.8	1	0	0	1	21.6
15 / 19	6	1	2	9	16.1	3	1	1	5	16.0	0		0	0	15.5
10 / 14	3	0	0	3	11.2	2	0	0	2	11.4	0		0	0	13.5
5 / 9	1	0	0	1	6.6	0			0	7.6					
0 / 4															

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.

FORT LEWIS/GRAY WA WMO No. 742070

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

Period of Record = 1967 to 1996

Temperature Range (°F)	April					May					June				
	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)
100 / 104															
95 / 99								0	0	67.0					
90 / 94							0	0	0	67.2		1	1	2	64.9
85 / 89							1	1	2	63.6		3	2	5	64.2
80 / 84		0	0	0	59.6		4	2	6	62.0		9	5	14	62.8
75 / 79		1	1	2	57.1		10	5	15	59.8	0	17	10	28	60.9
70 / 74		5	2	7	56.1	0	17	9	26	57.4	1	29	18	48	58.9
65 / 69		13	6	19	53.9	1	28	17	46	55.1	3	45	32	80	56.5
60 / 64	0	24	12	36	51.6	4	48	31	83	52.8	15	67	53	136	54.4
55 / 59	3	46	28	77	49.1	23	68	57	149	50.5	66	54	69	188	52.2
50 / 54	21	75	53	149	46.4	65	56	69	190	47.7	98	15	40	153	49.1
45 / 49	60	60	69	189	43.5	92	16	41	149	44.5	45	1	8	54	45.4
40 / 44	82	16	51	148	39.9	48	1	14	63	40.4	10		1	11	41.1
35 / 39	52	1	17	70	35.8	13		1	14	36.2	1		0	1	36.6
30 / 34	19		1	20	31.4	1			1	32.1	0			0	33.5
25 / 29	2			2	27.8	0			0	29.0					
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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.

FORT LEWIS/GRAY WA WMO No. 742070

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

Period of Record = 1967 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)
100 / 104			0	0	67.0										
95 / 99		1	0	1	67.0		1	0	1	68.9		0	0	0	67.3
90 / 94		3	2	5	66.5		3	2	5	67.7		1	0	1	65.9
85 / 89		8	5	13	65.7		10	5	15	65.8		2	1	3	64.2
80 / 84		20	13	33	63.9		19	11	30	64.2		10	3	13	62.7
75 / 79	0	34	22	56	61.9	0	34	20	54	62.2		19	7	26	61.3
70 / 74	2	45	31	78	59.9	2	51	33	86	60.1	0	32	14	46	59.6
65 / 69	8	61	51	120	57.9	7	60	52	119	58.2	1	50	29	80	57.4
60 / 64	39	56	65	159	56.1	42	53	69	164	56.7	16	69	58	144	55.9
55 / 59	110	21	47	178	53.4	114	17	45	177	54.0	65	46	71	182	53.6
50 / 54	71	1	10	82	49.8	62	1	9	72	49.9	83	11	42	136	49.7
45 / 49	17	0	1	18	45.9	19		1	20	45.6	49	1	12	62	45.5
40 / 44	1			1	42.3	2			2	41.4	19	0	2	21	41.0
35 / 39											6		0	6	36.3
30 / 34											0			0	32.1
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															

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.

FORT LEWIS/GRAY WA WMO No. 742070

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

Period of Record = 1967 to 1996

Temperature Range (°F)	October					November					December				
	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)
100 / 104															
95 / 99															
90 / 94															
85 / 89		0	0	0	63.1										
80 / 84		0	0	0	61.8										
75 / 79		2	0	2	60.7										
70 / 74		6	1	7	58.5		0		0	64.7					
65 / 69	0	18	4	23	56.1		1	0	1	59.1	0			0	53.0
60 / 64	2	40	14	56	54.4	0	4	1	5	55.6	0	0	0	0	53.6
55 / 59	22	74	46	142	52.2	7	22	9	38	52.5	2	5	3	10	52.1
50 / 54	52	65	74	191	48.9	24	58	35	117	48.5	16	25	15	56	48.5
45 / 49	69	31	65	165	45.2	56	76	66	197	44.6	33	57	42	132	44.4
40 / 44	58	10	32	100	40.8	58	49	67	174	40.4	53	67	59	178	39.9
35 / 39	31	2	10	43	36.0	43	18	36	97	35.7	54	53	62	169	35.5
30 / 34	12	0	2	14	31.6	34	9	18	61	31.1	51	27	44	122	31.0
25 / 29	2		0	2	27.1	12	3	7	22	25.8	27	8	16	51	26.0
20 / 24	0			0	23.5	5	1	1	7	21.1	7	3	4	14	20.3
15 / 19						1	0	1	2	16.7	3	2	3	8	15.5
10 / 14						0	0	0	0	11.3	2	1	1	4	10.8
5 / 9						0	0	0	0	6.1	1	0	0	1	6.7
0 / 4						0			0	2.0	0	0		0	3.0

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.

FORT LEWIS/GRAY WA WMO No. 742070

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

Period of Record = 1967 to 1996

Annual Totals

Temperature Range (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
100 / 104			0	0	67.0
95 / 99		1	1	2	67.9
90 / 94		9	4	13	66.7
85 / 89		24	13	37	65.3
80 / 84		61	33	95	63.5
75 / 79	0	119	66	185	61.5
70 / 74	5	187	110	303	59.4
65 / 69	20	279	193	492	57.1
60 / 64	120	374	307	801	55.1
55 / 59	418	405	395	1217	52.3
50 / 54	522	437	424	1383	48.3
45 / 49	545	431	468	1444	44.3
40 / 44	501	306	416	1223	40.0
35 / 39	366	168	269	802	35.5
30 / 34	265	83	150	498	30.9
25 / 29	104	24	50	179	25.9
20 / 24	31	8	12	51	20.7
15 / 19	13	3	6	22	15.9
10 / 14	7	1	2	10	11.1
5 / 9	3	0	0	3	6.6
0 / 4	0	0		0	2.9

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.

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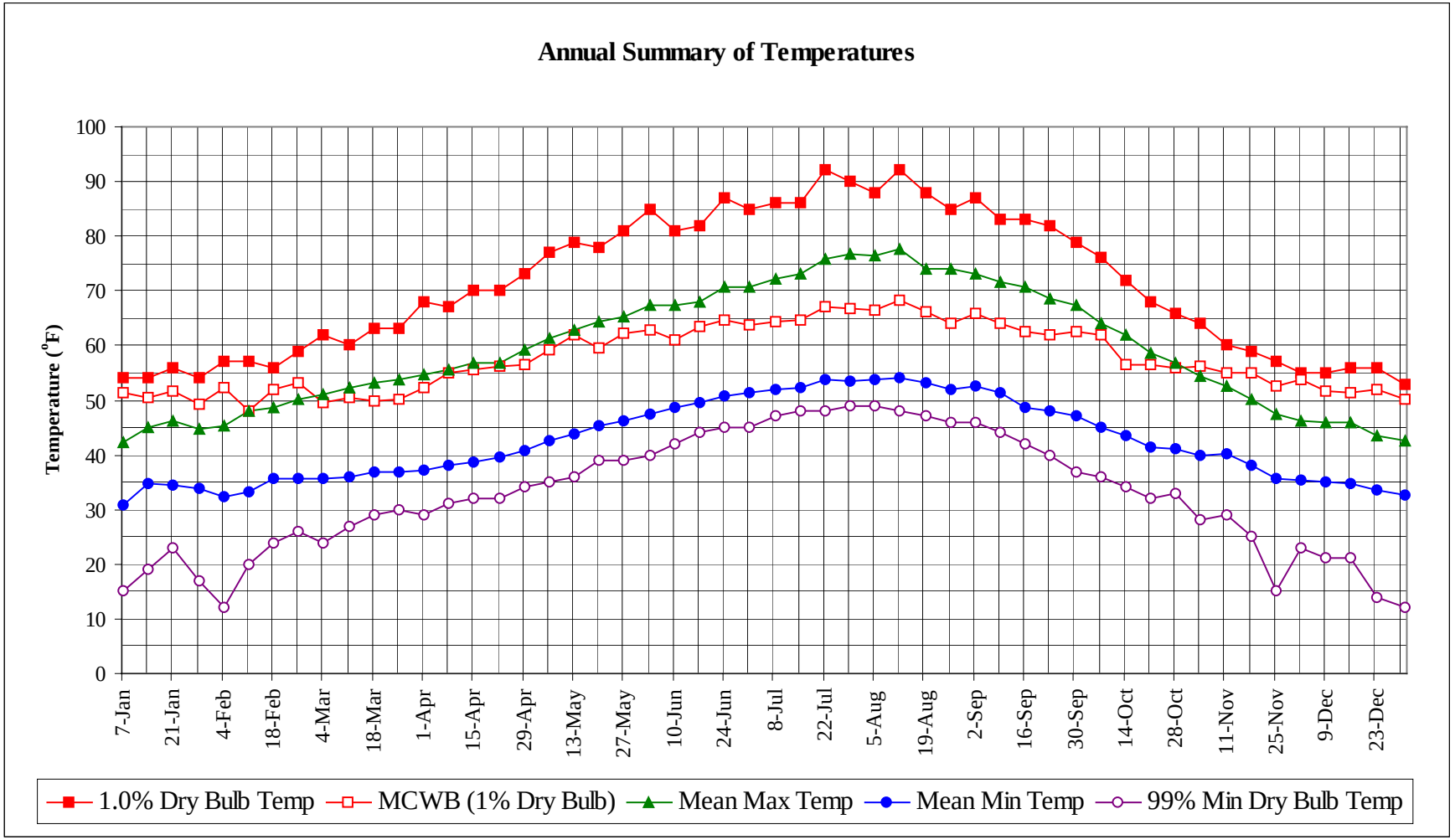

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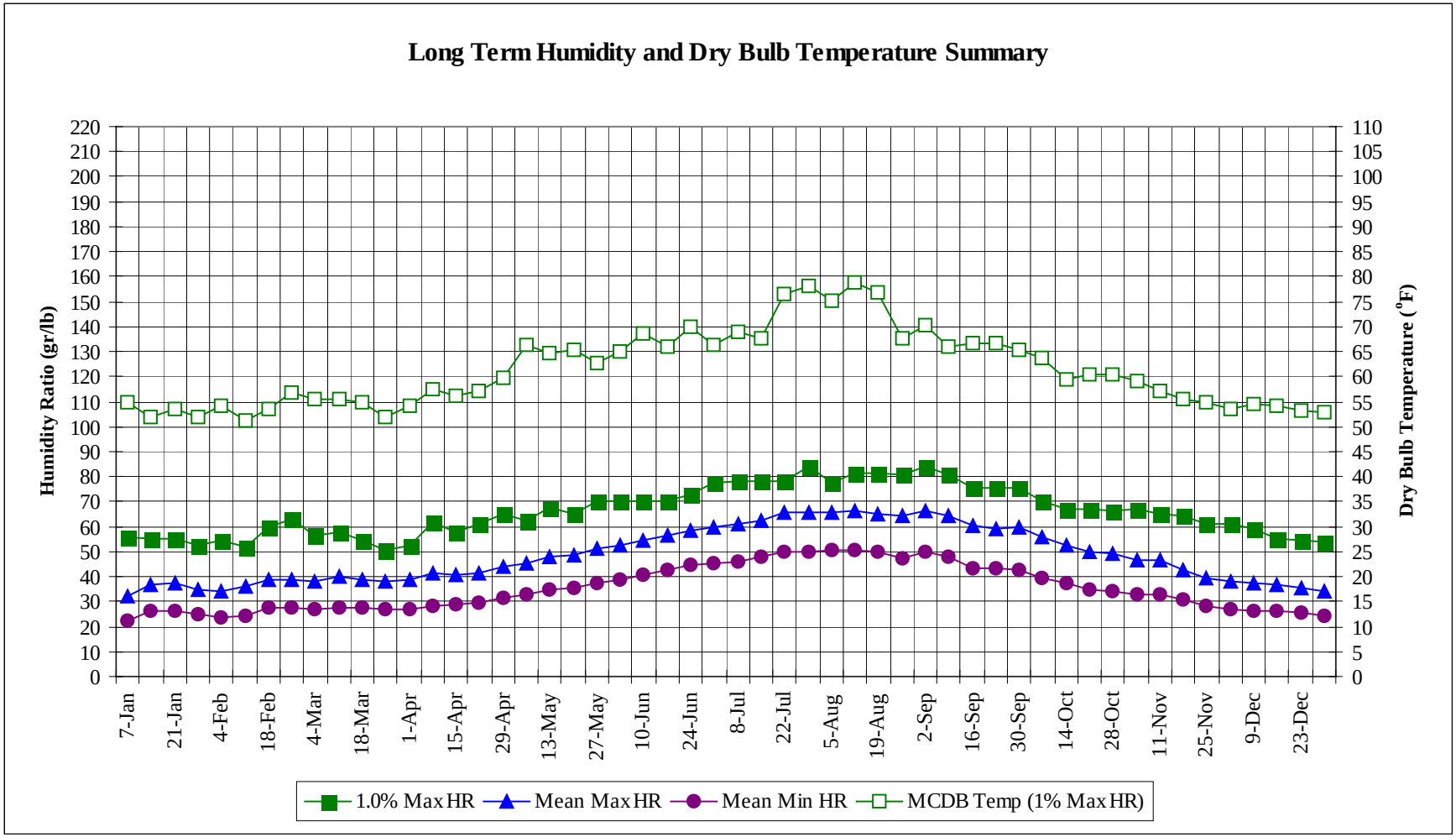
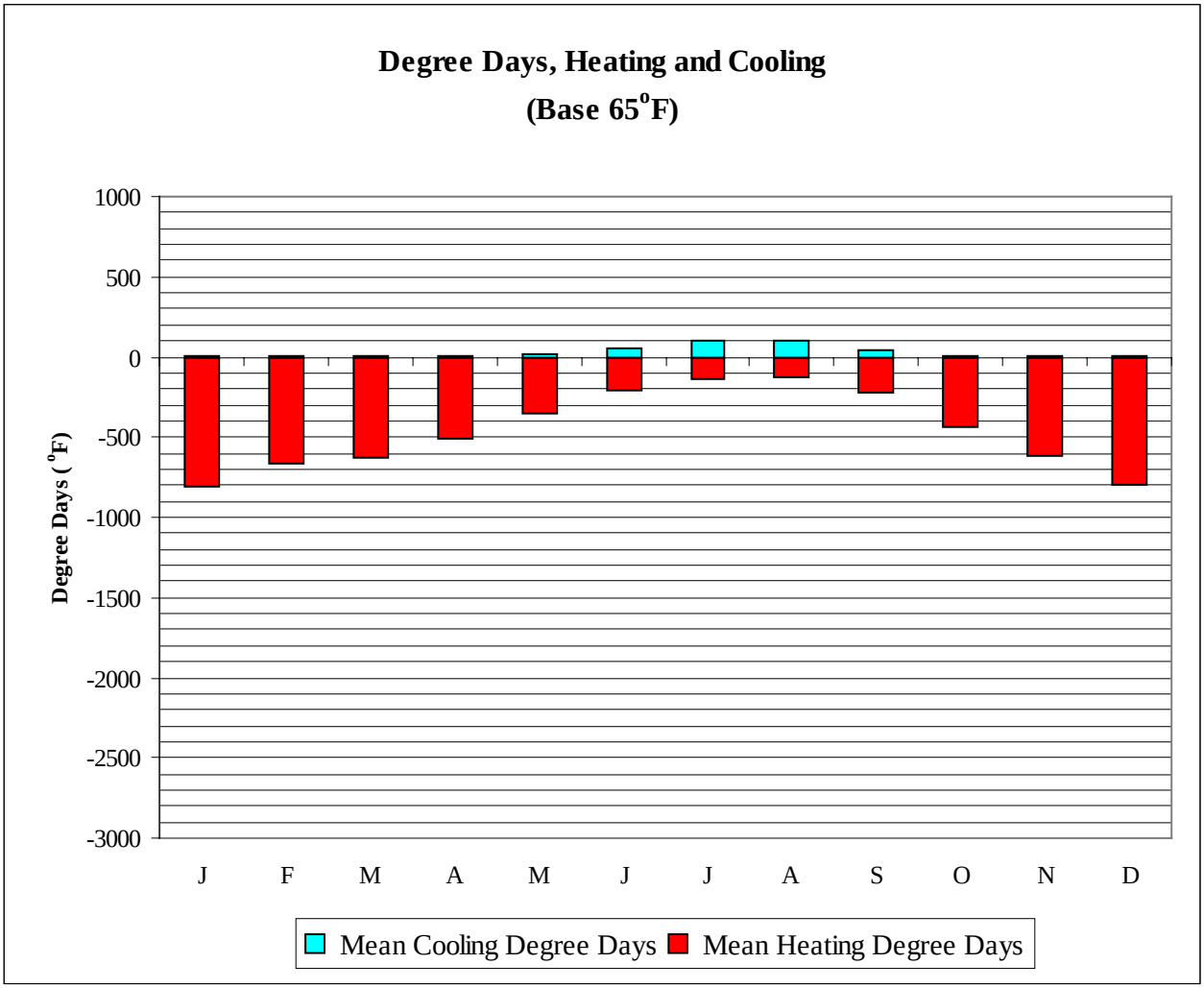


FORT LEWIS/GRAY WA WMO No. 742070

Long Term Dry Bulb Temperature and Humidity Summary

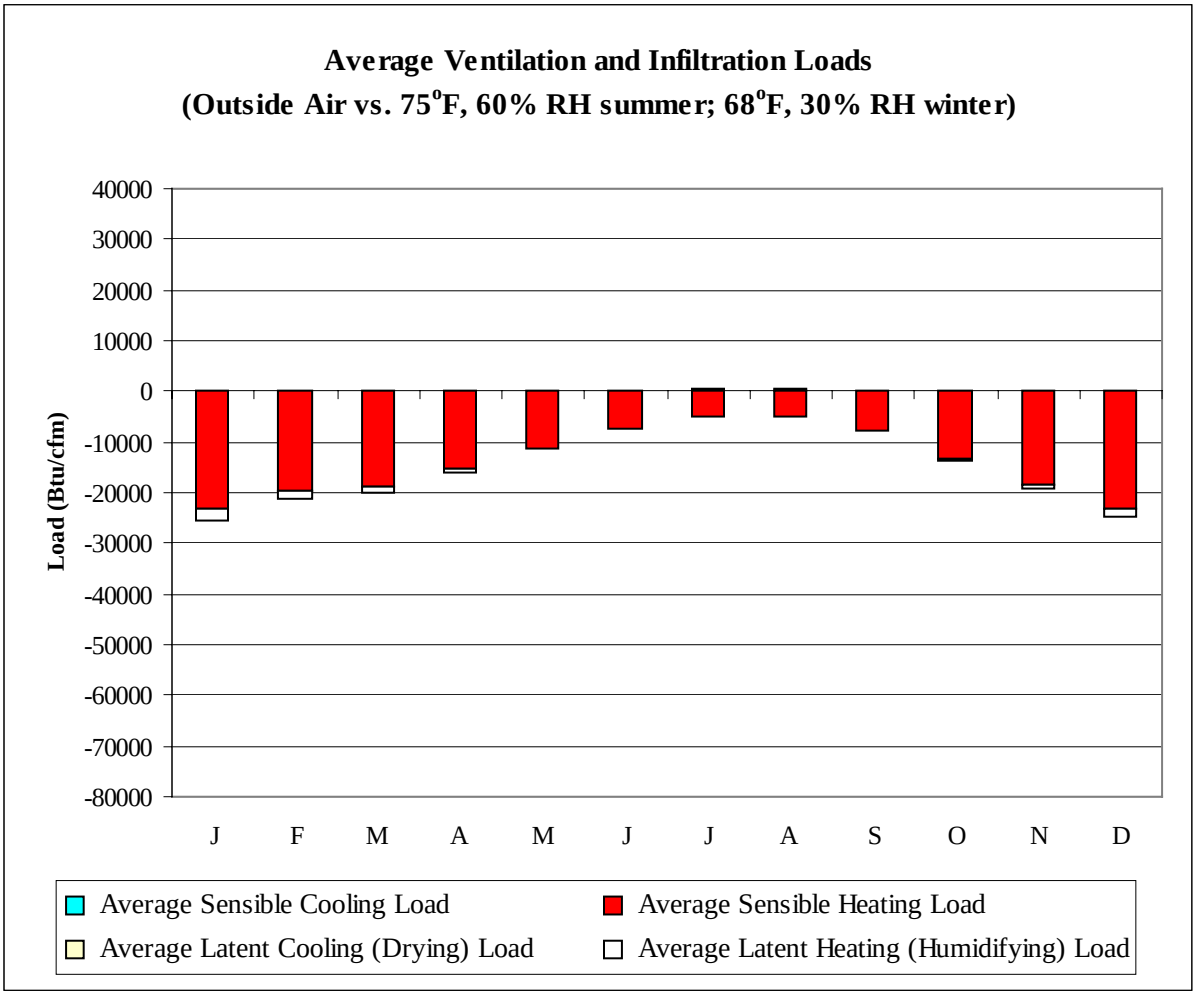
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	54.0	51.4	42.4	30.8	15.0	56.0	54.7	32.0	22.4
14-Jan	54.0	50.4	45.0	34.6	19.0	55.3	51.8	36.5	26.0
21-Jan	56.0	51.6	46.2	34.6	23.0	55.3	53.5	37.3	26.5
28-Jan	54.0	49.4	44.8	33.7	17.0	52.5	51.8	34.6	25.2
4-Feb	57.0	52.4	45.3	32.2	12.0	54.6	54.2	34.1	23.6
11-Feb	57.0	48.1	48.1	33.2	20.0	51.8	51.1	36.1	24.6
18-Feb	56.0	51.9	48.5	35.5	24.0	59.5	53.5	38.9	27.5
25-Feb	59.0	53.1	50.2	35.6	26.0	63.0	56.7	39.0	27.6
4-Mar	62.0	49.7	51.1	35.5	24.0	56.7	55.4	38.3	26.6
11-Mar	60.0	50.5	52.3	36.1	27.0	58.1	55.5	39.8	27.7
18-Mar	63.0	49.9	53.1	36.8	29.0	54.6	54.8	38.9	27.5
25-Mar	63.0	50.2	53.9	36.8	30.0	50.4	51.9	38.2	26.8
1-Apr	68.0	52.4	54.7	37.1	29.0	52.5	54.3	38.8	26.9
8-Apr	67.0	55.1	55.7	37.9	31.0	61.6	57.6	41.1	28.4
15-Apr	70.0	55.7	56.8	38.6	32.0	58.1	56.2	40.7	28.7
22-Apr	70.0	56.1	56.9	39.6	32.0	60.9	57.3	41.6	29.8
29-Apr	73.0	56.6	59.1	40.8	34.0	65.1	59.8	43.7	31.5
6-May	77.0	59.2	61.2	42.6	35.0	62.3	66.4	45.5	33.0
13-May	79.0	61.9	63.0	43.8	36.0	67.9	64.7	48.2	34.9
20-May	78.0	59.5	64.3	45.2	39.0	65.1	65.3	48.8	35.8
27-May	81.0	62.1	65.3	46.2	39.0	70.0	62.8	51.4	37.8
3-Jun	85.0	62.9	67.3	47.3	40.0	70.0	64.9	52.5	38.7
10-Jun	81.0	61.1	67.4	48.7	42.0	70.0	68.8	54.7	41.0
17-Jun	82.0	63.4	67.9	49.4	44.0	70.0	66.0	56.8	42.8
24-Jun	87.0	64.8	70.7	50.8	45.0	72.8	70.0	58.8	44.6
1-Jul	85.0	63.8	70.8	51.3	45.0	77.7	66.4	59.5	45.5
8-Jul	86.0	64.3	72.3	51.9	47.0	78.4	68.8	61.2	46.1
15-Jul	86.0	64.8	73.0	52.4	48.0	78.4	67.6	62.4	47.8
22-Jul	92.0	66.9	76.0	53.7	48.0	78.4	76.5	65.5	49.8
29-Jul	90.0	66.7	76.7	53.5	49.0	84.0	78.2	65.6	50.2
5-Aug	88.0	66.5	76.4	53.7	49.0	77.7	75.3	65.5	50.7
12-Aug	92.0	68.1	77.5	54.1	48.0	81.2	78.8	66.6	50.6
19-Aug	88.0	66.2	74.1	53.3	47.0	81.2	77.0	65.3	50.2
26-Aug	85.0	64.1	73.9	52.0	46.0	80.5	67.5	64.0	47.6
2-Sep	87.0	66.0	73.1	52.7	46.0	84.0	70.3	66.3	50.0
9-Sep	83.0	64.0	71.5	51.2	44.0	80.5	66.0	64.3	47.6
16-Sep	83.0	62.6	70.6	48.6	42.0	75.6	66.7	60.1	43.5
23-Sep	82.0	61.9	68.6	48.0	40.0	75.6	66.7	59.1	43.4
30-Sep	79.0	62.5	67.4	47.0	37.0	75.6	65.2	59.6	42.8
7-Oct	76.0	62.0	64.0	44.9	36.0	70.0	63.6	55.6	39.4
14-Oct	72.0	56.4	61.9	43.6	34.0	67.2	59.6	52.5	37.2
21-Oct	68.0	56.4	58.6	41.4	32.0	67.2	60.5	49.8	34.9
28-Oct	66.0	56.0	56.8	41.1	33.0	66.5	60.3	49.3	34.4
4-Nov	64.0	56.2	54.4	39.8	28.0	67.2	59.2	46.9	33.0
11-Nov	60.0	54.8	52.7	40.2	29.0	65.1	57.0	46.5	33.1
18-Nov	59.0	55.1	50.1	38.2	25.0	64.4	55.5	42.8	30.8
25-Nov	57.0	52.4	47.5	35.6	15.0	60.9	54.8	39.6	28.0
2-Dec	55.0	53.8	46.4	35.2	23.0	60.9	53.4	38.0	27.0
9-Dec	55.0	51.7	45.9	34.9	21.0	58.8	54.5	37.4	26.5
16-Dec	56.0	51.5	45.9	34.7	21.0	55.3	54.3	36.8	26.3
23-Dec	56.0	51.9	43.6	33.5	14.0	54.6	53.1	35.2	25.6
31-Dec	53.0	50.0	42.6	32.7	12.0	53.9	52.8	33.9	24.4

FORT LEWIS/GRAY WA WMO No. 742070



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	806
FEB	0	670
MAR	0	634
APR	4	506
MAY	23	350
JUN	49	211
JUL	100	133
AUG	100	128
SEP	44	222
OCT	5	432
NOV	0	617
DEC	0	794
ANN	326	5503

FORT LEWIS/GRAY WA WMO No. 742070



	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	-23284	0	-2058
FEB	0	-19557	0	-1493
MAR	0	-18847	0	-1115
APR	5	-15403	0	-538
MAY	87	-11246	0	-105
JUN	239	-7357	1	-9
JUL	616	-5047	14	-1
AUG	590	-4894	23	-4
SEP	186	-7673	9	-35
OCT	9	-13464	0	-184
NOV	0	-18256	0	-845
DEC	0	-22979	0	-1812
ANN	1732	-168007	47	-8199

Average Annual Solar Radiation – Nearest Available Site

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

City: OLYMPIA
State: WA
WBAN No: 24227
Lat(N): 46.97
Long(W): 122.9
Elev(ft): 200

Stn Type: Secondary
SHADING GEOMETRY IN DIMENSIONLESS UNITS
Window: 1
Overhang: 0.735
Vert Gap: 0.328

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	320	530	880	1250	1590	1770	1860	1600	1200	700	380	270	1030
	Std Dev	31	65	97	116	143	186	167	150	103	76	38	17	38
	Minimum	260	390	710	1020	1280	1460	1540	1260	960	590	300	240	940
	Maximum	400	700	1140	1460	1880	2090	2180	1900	1450	880	480	310	1100
	Diffuse	250	370	530	730	860	900	810	700	550	410	280	210	550
Clear Day	Global	590	930	1460	2040	2460	2640	2540	2180	1650	1080	660	490	1560
NORTH	Global	130	200	300	420	540	610	590	470	350	240	150	110	340
	Diffuse	130	200	300	410	500	540	520	440	340	240	150	110	330
Clear Day	Global	130	190	290	400	580	700	650	460	320	220	140	110	350
EAST	Global	200	320	520	730	880	950	1000	870	700	400	230	170	580
	Diffuse	160	240	360	490	590	620	600	530	420	280	180	130	380
Clear Day	Global	510	730	1030	1330	1500	1560	1520	1380	1130	820	550	440	1040
SOUTH	Global	450	640	830	890	870	860	950	1020	1080	810	490	390	770
	Diffuse	230	320	430	540	590	600	590	550	490	370	250	200	430
Clear Day	Global	1640	1840	1870	1620	1340	1200	1240	1470	1750	1830	1670	1530	1580
WEST	Global	220	360	570	770	970	1080	1160	1040	820	510	260	180	660
	Diffuse	160	240	370	500	600	640	630	550	430	300	180	140	400
Clear Day	Global	510	730	1030	1330	1500	1560	1520	1380	1130	820	550	440	1040

Average Annual Solar Heat and Illumination – Nearest Available Site

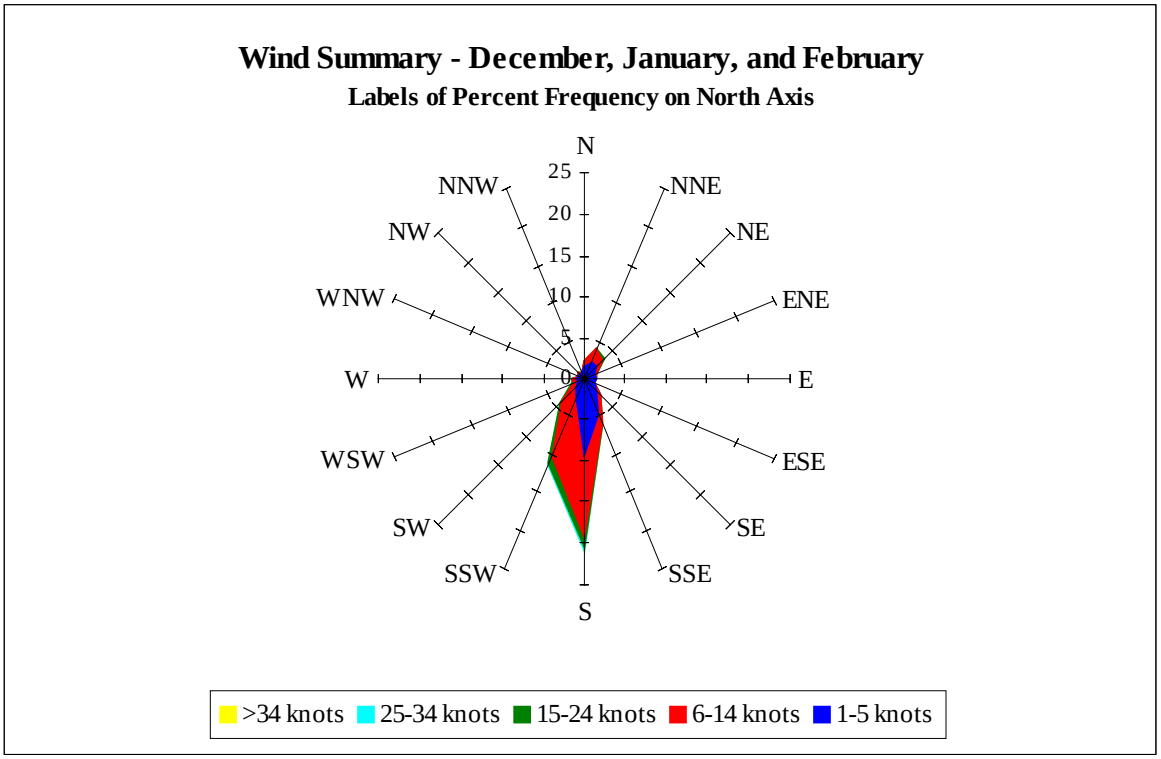
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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

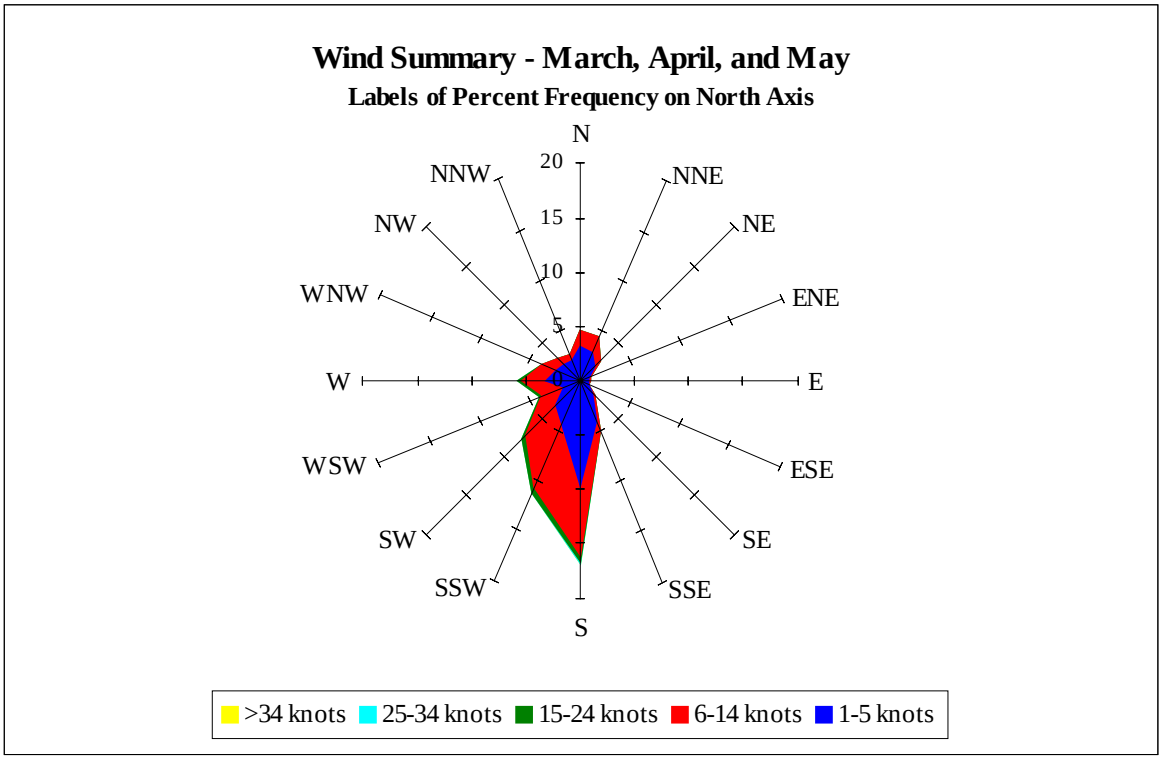
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	210	360	610	890	1130	1270	1340	1150	850	480	250	170	730
NORTH	Unshaded	93	140	210	290	360	410	390	310	240	170	100	79	230
	Shaded	71	110	170	230	290	330	320	260	200	130	81	61	190
EAST	Unshaded	140	220	370	510	620	670	710	610	490	280	160	120	410
	Shaded	110	180	290	400	480	520	550	480	390	220	130	95	320
SOUTH	Unshaded	330	470	590	600	570	550	600	680	750	590	370	290	530
	Shaded	310	410	440	360	330	340	340	350	490	480	330	270	370
WEST	Unshaded	150	250	400	550	690	770	830	750	580	360	180	120	470
	Shaded	120	200	320	440	540	600	650	590	470	290	140	100	370

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

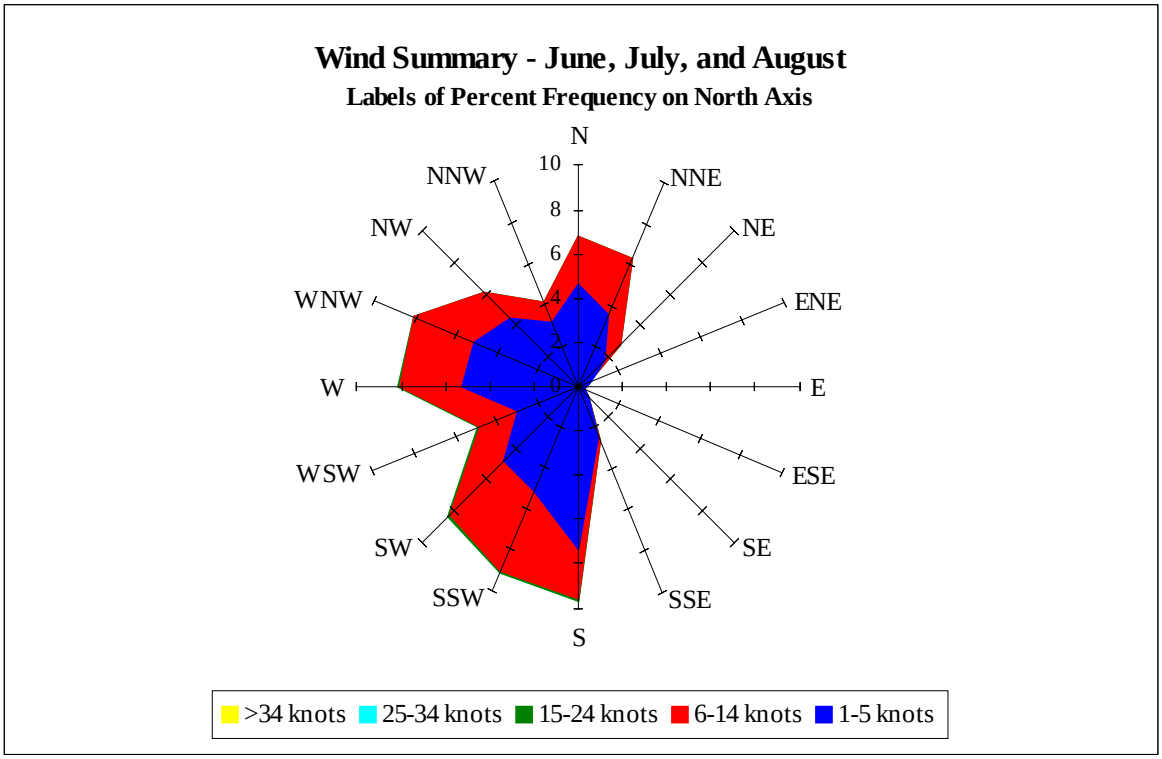
		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	29	59	69	55	24	46	79	97	93	70
	M.Cloudy	16	33	38	32	15	26	45	60	59	43
NORTH	M.Clear	8	12	13	12	7	15	15	17	16	15
	M.Cloudy	7	13	14	12	6	11	16	19	19	15
EAST	M.Clear	62	54	13	12	7	78	73	34	16	15
	M.Cloudy	18	24	14	12	6	27	34	26	19	15
SOUTH	M.Clear	35	73	86	69	28	11	39	58	54	30
	M.Cloudy	12	28	35	29	12	11	24	36	34	21
WEST	M.Clear	8	12	17	59	59	11	15	17	48	79
	M.Cloudy	7	13	15	26	20	11	16	19	32	38
M.Clear	(% hrs)	15	14	15	17	18	23	23	24	28	31
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	23	57	75	71	45	5	25	31	18	0
	M.Cloudy	12	31	46	45	26	3	14	16	10	0
NORTH	M.Clear	7	13	15	14	11	2	8	8	6	0
	M.Cloudy	6	12	16	15	10	2	6	7	5	0
EAST	M.Clear	59	68	30	14	11	17	31	8	6	0
	M.Cloudy	15	27	22	15	10	3	10	7	5	0
SOUTH	M.Clear	19	58	81	75	44	15	62	74	48	0
	M.Cloudy	8	24	40	40	20	3	14	16	11	0
WEST	M.Clear	7	13	15	48	73	2	8	15	34	0
	M.Cloudy	6	12	16	29	29	2	6	8	9	0
M.Clear	(% hrs)	27	31	35	38	43	8	9	10	11	13



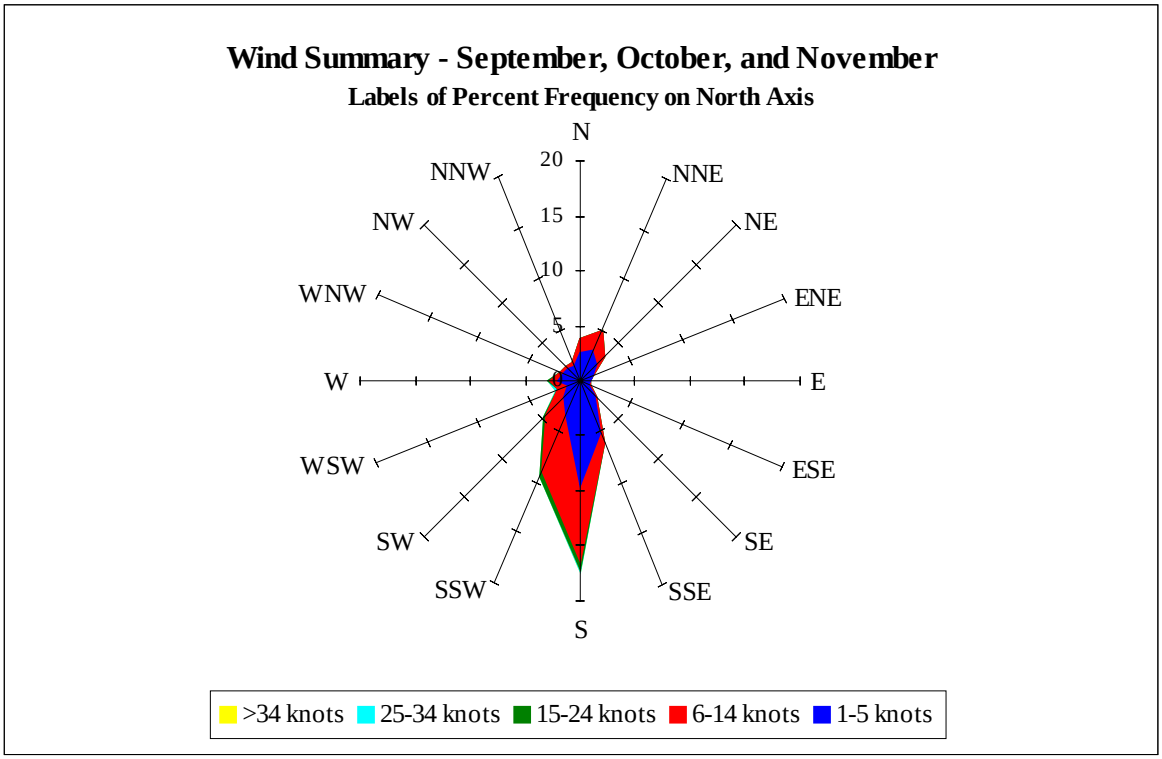
Percent Calm = 35.56



Percent Calm = 24.76



Percent Calm = 21.71



Percent Calm = 34.86