

DESIGN LOAD FOR COMBINED WIND LOAD + SNOW LOAD + STRUCTURE WEIGHT (PSF)

Table of Wind Speed and Snow Load

D = 5.00			Wind Load (Exp. C)					
Snow Load (psf)			70 mph	80 mph	90 mph	100 mph	110 mph	120 mph
Ground	Roof	Ce factor	4	5	7	8	10	12
30	27	.9 roof	28	29	31	31	33	34
	21	.7 roof	24	25	26	27	28	30
35	32	.9 roof	32	32	34	35	36	38
	25	.7 roof	26	27	29	29	31	32
40	36	.9 roof	35	36	37	38	40	41
	28	.7 roof	29	30	31	32	34	35
45	41	.9 roof	38	39	41	41	43	44
	32	.7 roof	32	32	34	35	36	38
50	45	.9 roof	42	43	44	45	46	48
	35	.7 roof	34	35	37	37	39	40
55	50	.9 roof	45	46	47	48	50	51
	39	.7 roof	37	38	39	40	41	43
60	54	.9 roof	64	65	66	66	68	69
	42	.7 roof	40	40	42	43	44	46

Values presented are for the governing load combination of D+.75[S+W].

Load Combinations per UBC 1612.3.1

Roof Snow = Ce x 1.0 x Ground Snow

Wind Pressure = Ce x Cq x qs x Iw per UBC 1620

Ce = .9 for Structures located in densely forested or sheltered areas

Ce = .7 for All Other Structures

* For structures located in areas where Ground Snow is less than 30 psf, the U.B.C. requires 20 psf Live Load at roof level, therefore, use values for 30 psf Ground Snow with a Ce factor of .7 roof.

Table of High Wind Speed and Live Load

D = 5.00		Wind Load (Exp. C)				
Roof Live Load (psf)	100 mph	110 mph	120 mph	130 mph	140 mph	150 mph
3:12 Slope	8	10	12	14	16	18
	20	26	28	29	31	34

Values presented are for the governing load combination of D+.75[L+W].

Maximum load is an outward or upward pressure.

MAXIMUM ALLOWABLE LOAD ON FRAME (PSF)

Maximum Frame Load (psf) for 8' Eve Height			
Span (ft)	No Truss	Standard	Web
12	50	60	65
20	30	40	45
24	N/A	35	40
30	N/A	30	35

5' center spacing

STRONGEST

Maximum Frame Load (psf) for 8' Eve Height			
Span (ft)	No Truss	Standard	Web
12	55	65	70
20	35	45	50
24	N/A	40	45
30	N/A	35	40

4' center spacing

Maximum Frame Load (psf) for 10' Eve Height			
Span (ft)	No Truss	Standard	Web
12	45	55	60
20	25	35	40
24	N/A	30	35
30	N/A	20	25

5' center spacing

Maximum Frame Load (psf) for 10' Eve Height			
Span (ft)	No Truss	Standard	Web
12	50	60	65
20	30	40	45
24	N/A	35	40
30	N/A	30	35

4' center spacing

Maximum Frame Load (psf) for 12' Eve Height			
Span (ft)	No Truss	Standard	Web
12	40	50	55
20	20	30	35
24	N/A	25	30
30	N/A	20	25

5' center spacing

Maximum Frame Load (psf) for 12' Eve Height			
Span (ft)	No Truss	Standard	Web
12	45	55	60
20	25	35	40
24	N/A	30	35
30	N/A	25	30

4' center spacing

WEAKEST