

Components and Cladding – Method 1
Figure 30.5-1 (cont'd) Design Wind Pressures
Enclosed Buildings
Walls & Roofs
h ≤ 60 ft.

Net Design Wind Pressure, P_{net30} (psf) (Exposure B at h = 30 ft.)

Zone	Effective wind area (sf)	Basic Wind Speed V (mph)																	
		110	115	120	130	140	150	160	180	200									
Roof 0 to 7 degrees																			
1	10	12.5	-19.9	13.7	-21.8	14.9	23.7	17.5	-27.8	20.3	-32.3	23.3	-37.0	26.5	-42.1	33.6	-53.3	41.5	-65.9
1	20	11.4	-19.4	12.5	-21.2	13.6	-23.0	16.0	-27.0	18.5	-31.4	21.3	-36.0	24.2	-41.0	30.6	-51.9	37.8	-64.0
1	50	10.0	-18.6	10.9	-20.4	11.9	-22.2	13.9	-26.0	16.1	-30.2	18.5	-34.6	21.1	-39.4	26.7	-49.9	32.9	-61.6
1	100	8.9	-18.1	9.7	-19.8	10.5	-21.5	12.4	-25.2	14.3	-29.3	16.5	-33.6	18.7	-38.2	23.7	-48.4	28.3	-59.8
2	10	12.5	-34.7	13.7	-37.9	14.9	-41.3	17.5	-48.4	20.3	-56.2	23.3	-64.5	26.5	-73.4	33.6	-82.9	41.5	-114.6
2	20	11.4	-31.9	12.5	-34.9	13.6	-38.0	16.0	-44.6	18.5	-51.7	21.3	-59.3	24.2	-67.5	30.6	-85.4	37.8	-105.5
2	50	10.0	-28.2	10.9	-30.9	11.9	-33.6	13.9	-39.4	16.1	-45.7	18.5	-52.5	21.1	-59.7	26.7	-75.6	32.9	-93.3
2	100	8.9	-25.5	9.7	-27.8	10.5	-30.3	12.4	-35.6	14.3	-41.2	16.5	-47.3	18.7	-53.9	23.7	-68.2	28.3	-84.2
Roof > 7 to 27 degrees																			
3	10	12.5	-51.3	13.7	-56.0	14.9	-61.0	17.5	-71.6	20.3	-83.1	23.3	-95.4	26.5	-108.5	33.6	-137.3	41.5	-169.5
3	20	11.4	-47.9	12.5	-52.4	13.6	-57.1	16.0	-67.0	18.5	-77.7	21.3	-89.2	24.2	-101.4	30.6	-128.4	37.8	-159.5
3	50	10.0	-43.5	10.9	-47.6	11.9	-51.8	13.9	-60.8	16.1	-70.5	18.5	-81.0	21.1	-92.1	26.7	-116.6	32.9	-143.9
3	100	8.9	-40.2	9.7	-44.0	10.5	-47.9	12.4	-56.2	14.3	-65.1	16.5	-74.8	18.7	-85.1	23.7	-107.7	29.3	-132.9
Roof > 27 to 45 degrees																			
1	10	19.9	-21.8	21.8	-23.8	23.7	-25.9	27.8	-30.4	32.3	-35.3	37.0	-40.5	42.1	-46.1	53.3	-58.3	65.9	-72.0
1	20	19.4	-20.7	21.2	-22.6	23.0	-24.6	27.0	-28.9	31.4	-33.5	36.0	-38.4	41.0	-43.7	51.9	-55.3	64.0	-68.3
1	50	18.6	-19.2	20.4	-21.0	22.2	-22.8	26.0	-26.8	30.2	-31.1	34.6	-35.7	39.4	-40.6	49.9	-51.4	61.6	-63.4
1	100	18.1	-18.1	19.8	-19.8	21.5	-21.5	25.2	-25.2	29.3	-29.3	33.6	-33.6	38.2	-38.2	48.4	-48.4	59.8	-69.8
2	10	19.9	-25.5	21.8	-27.8	23.7	-30.3	27.8	-35.6	32.3	-41.2	37.0	-47.3	42.1	-53.9	53.3	-68.2	65.9	-84.2
2	20	19.4	-24.3	21.2	-26.6	23.0	-29.0	27.0	-34.0	31.4	-39.4	36.0	-45.3	41.0	-51.5	51.9	-65.2	64.0	-80.5
2	50	18.6	-22.9	20.4	-25.0	22.2	-27.2	26.0	-32.0	30.2	-37.1	34.6	-42.5	38.4	-48.4	49.9	-61.3	61.6	-75.6
2	100	18.1	-21.8	19.8	-23.8	21.5	-25.9	25.2	-30.4	29.3	-35.3	33.6	-40.5	38.2	-46.1	48.4	-58.3	59.8	-72.0
Wall																			
4	10	21.8	-23.6	23.8	-25.8	25.9	-28.1	30.4	-33.0	35.3	-38.2	40.5	-43.9	46.1	-50.0	58.3	-63.2	72.0	-78.1
4	20	20.8	-22.6	22.7	-24.7	24.7	-26.9	29.0	-31.6	33.7	-36.7	38.7	-42.1	44.0	-47.9	55.7	-60.6	68.7	-74.8
4	50	19.5	-21.3	21.3	-23.3	23.2	-25.4	27.2	-29.8	31.6	-34.6	36.2	-39.7	41.2	-45.1	52.2	-57.1	64.4	-70.5
4	100	18.5	-20.4	20.2	-22.2	22.0	-24.2	25.9	-28.4	30.0	-33.0	34.4	-37.8	39.2	-43.1	49.6	-54.5	61.2	-67.3
5	10	21.8	-29.1	23.8	-31.9	25.9	-34.7	30.4	-40.7	35.3	-47.2	40.5	-54.2	46.1	-61.7	58.3	-78.0	72.0	-96.3
5	20	20.8	-27.2	22.7	-29.7	24.7	-32.4	29.0	-38.0	33.7	-44.0	38.7	-50.5	44.0	-57.5	55.7	-72.8	68.7	-89.9
5	50	19.5	-24.6	21.3	-26.9	23.2	-29.3	27.2	-34.3	31.6	-39.8	36.2	-45.7	41.2	-52.0	52.2	-65.8	64.4	-81.3
5	100	18.5	-22.6	20.2	-24.7	22.0	-26.9	25.9	-31.6	30.0	-36.7	34.4	-42.1	39.2	-47.9	49.6	-60.6	61.2	-74.8
5	500	16.2	-18.1	17.7	-19.8	19.3	-21.5	22.7	-25.2	26.3	-29.3	30.2	-33.6	34.3	-38.2	43.5	-48.4	53.7	-59.8

Note: For effective areas between the those given above the load may be interpolated, otherwise use the load associated with the lower effective area.

The final value, including all permitted reductions, used in the design shall not be less than that required by Section 30.2.2.

Unit Conversions – 1.0 ft = 0.3048 m; 1.0 sf = 0.0929 m²; 1.0 psf = 0.0479 kN/m²

Components and Cladding – Method 1
Figure 30.5-1 (cont'd) Design Wind Pressures
Enclosed Buildings
Walls & Roofs
h ≤ 60 ft.

Roof Overhang Net Design Wind Pressure, P_{net30} (psf) (Exposure B at h = 30 ft.)

Zone	Wind Area (sf)	Basic Wind Speed V (mph)																	
		110	115	130	140	150	160	180	200										
Roof 0 to 7 degrees																			
2	10	-40.6	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4
2	20	-40.6	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4
2	50	-40.6	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4
2	100	-40.6	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4	-44.4
Roof > 7 to 27 degrees																			
2	10	-61.6	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3
2	20	-61.6	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3
2	50	-61.6	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3
2	100	-61.6	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3	-67.3
Roof > 27 to 45 degrees																			
3	100	-62.8	-50.4	-64.4	-74.7	-85.8	-97.6	-123.5	-152.4	-182.4	-203.6	-225.6	-247.6	-269.6	-291.6	-313.6	-335.6	-357.6	-379.6

Adjustment Factor for Building Height and Exposure, λ

Mean roof height (ft)	Exposure			
	B	C	D	
15	1.00	1.21	1.47	
20	1.00	1.29	1.55	
25	1.00	1.35	1.61	
30	1.00	1.40	1.66	
35	1.05	1.45	1.70	
40	1.09	1.49	1.74	
45	1.12	1.53	1.78	
50	1.16	1.56	1.81	
55	1.19	1.59	1.84	
60	1.22	1.62	1.87	

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