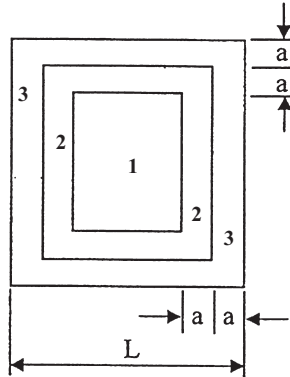
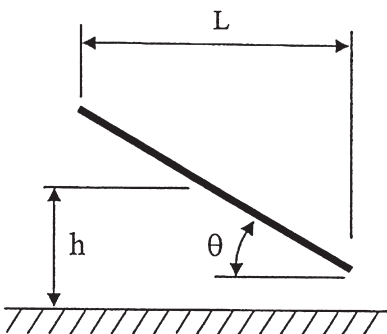


Components and Cladding				0.25 ≤ h/L ≤ 1.0			
Figure 30.8-1		Net Pressure Coefficient, C _N		Monoslope Free Roofs			
Open Buildings				θ ≤ 45°			





Roof Angle θ	Effective Wind Area	C _N											
		Clear Wind Flow						Obstructed Wind Flow					
		Zone 3		Zone 2		Zone 1		Zone 3		Zone 2		Zone 1	
0°	≤ a ²	2.4	-3.3	1.8	-1.7	1.2	-1.1	1	-3.6	0.8	-1.8	0.5	-1.2
	> a ² , ≤ 4.0a ²	1.8	-1.7	1.8	-1.7	1.2	-1.1	0.8	-1.8	0.8	-1.8	0.5	-1.2
	> 4.0a ²	1.2	-1.1	1.2	-1.1	1.2	-1.1	0.5	-1.2	0.5	-1.2	0.5	-1.2
7.5°	≤ a ²	3.2	-4.2	2.4	-2.1	1.6	-1.4	1.6	-5.1	1.2	-2.6	0.8	-1.7
	> a ² , ≤ 4.0a ²	2.4	-2.1	2.4	-2.1	1.6	-1.4	1.2	-2.6	1.2	-2.6	0.8	-1.7
	> 4.0a ²	1.6	-1.4	1.6	-1.4	1.6	-1.4	0.8	-1.7	0.8	-1.7	0.8	-1.7
15°	≤ a ²	3.6	-3.8	2.7	-2.9	1.8	-1.9	2.4	-4.2	1.8	-3.2	1.2	-2.1
	> a ² , ≤ 4.0a ²	2.7	-2.9	2.7	-2.9	1.8	-1.9	1.8	-3.2	1.8	-3.2	1.2	-2.1
	> 4.0a ²	1.8	-1.9	1.8	-1.9	1.8	-1.9	1.2	-2.1	1.2	-2.1	1.2	-2.1
30°	≤ a ²	5.2	-5	3.9	-3.8	2.6	-2.5	3.2	-4.6	2.4	-3.5	1.6	-2.3
	> a ² , ≤ 4.0a ²	3.9	-3.8	3.9	-3.8	2.6	-2.5	2.4	-3.5	2.4	-3.5	1.6	-2.3
	> 4.0a ²	2.6	-2.5	2.6	-2.5	2.6	-2.5	1.6	-2.3	1.6	-2.3	1.6	-2.3
45°	≤ a ²	5.2	-4.6	3.9	-3.5	2.6	-2.3	4.2	-3.8	3.2	-2.9	2.1	-1.9
	> a ² , ≤ 4.0a ²	3.9	-3.5	3.9	-3.5	2.6	-2.3	3.2	-2.9	3.2	-2.9	2.1	-1.9
	> 4.0a ²	2.6	-2.3	2.6	-2.3	2.6	-2.3	2.1	-1.9	2.1	-1.9	2.1	-1.9

Notes:

1.

C_N denotes net pressures (contributions from top and bottom surfaces).

2.

Clear wind flow denotes relatively unobstructed wind flow with blockage less than or equal to 50%. Obstructed wind flow denotes objects below roof inhibiting wind flow (>50% blockage).

3.

For values of θ other than those shown, linear interpolation is permitted.

4.

Plus and minus signs signify pressures acting towards and away from the top roof surface, respectively.

5.

Components and cladding elements shall be designed for positive and negative pressure coefficients shown.

6.

Notation:

a

: 10% of least horizontal dimension or 0.4h, whichever is smaller but not less than 4% of least horizontal dimension or 3 ft. (0.9 m)

h

: mean roof height, ft. (m)

L

: horizontal dimension of building, measured in along wind direction, ft. (m)

θ

: angle of plane of roof from horizontal, degrees