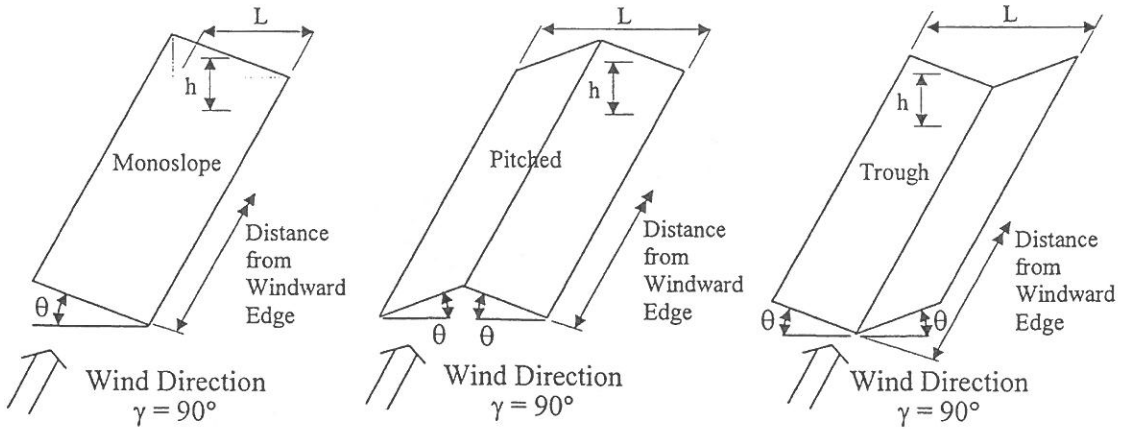


Main Wind Force Resisting System – Part 1		$0.25 \leq h/L \leq 1.0$
Figure 27.4-7	Net Pressure Coefficient, $C_N$	Free Roofs $\theta \leq 45^\circ, \gamma = 90^\circ, 270^\circ$
Open Buildings		



Horizontal Distance from Windward Edge	Roof Angle $\theta$	Load Case	Clear Wind Flow	Obstructed Wind Flow
			$C_N$	$C_N$
$\leq h$	All Shapes	A	-0.8	-1.2
	$\theta \leq 45^\circ$	B	0.8	0.5
$> h, \leq 2h$	All Shapes	A	-0.6	-0.9
	$\theta \leq 45^\circ$	B	0.5	0.5
$> 2h$	All Shapes	A	-0.3	-0.6
	$\theta \leq 45^\circ$	B	0.3	0.3

**Notes:**

- $C_N$  denotes net pressures (contributions from top and bottom surfaces).
- 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).
- Plus and minus signs signify pressures acting towards and away from the top roof surface, respectively.
- All load cases shown for each roof angle shall be investigated.
- For monoslope roofs with theta less than 5 degrees,  $C_N$  values shown apply also for cases where gamma = 0 degrees and 0.05 less than or equal to h/L less than or equal to 0.25. See Figure 27.4-4 for other h/L values.
- Notation:
  - L : horizontal dimension of roof, measured in the along wind direction, ft. (m)
  - h : mean roof height, ft. (m). See Figures 27.4-4, 27.4-5 or 27.4-6 for a graphical depiction of this dimension.
  - $\gamma$  : direction of wind, degrees
  - $\theta$  : angle of plane of roof from horizontal, degrees