

Main Force Resisting System – Part 2		$h \leq 160 \text{ ft.}$
Table 27.6-1	Wind Pressures - Walls	Application of Wall Pressures
Enclosed Simple Diaphragm Buildings		

Plan Wind Pressure Elevation

Notes to Wall Pressure Table 27.6-1:

- From table for each Exposure (B, C or D), V, L/B and h, determine p_h (top number) and p_0 (bottom number) horizontal along-wind net wall pressures.
- Side wall external pressures shall be uniform over the wall surface acting outward and shall be taken as 54% of the tabulated p_h pressure for $0.2 \leq L/B \leq 1.0$ and 64% of the tabulated p_h pressure for $2.0 \leq L/B \leq 5.0$. Linear interpolation shall apply for $1.0 < L/B < 2.0$. Side wall external pressures do not include effect of internal pressure.
- Apply along-wind net wall pressures as shown above to the projected area of the building walls in the direction of the wind and apply external side wall pressures to the projected area of the building walls normal to the direction wind, simultaneously with the roof pressures from Table 27.6-2.
- Distribution of tabulated net wall pressures between windward and leeward wall faces shall be based on the linear distribution of total net pressure with building height as shown above and the leeward external wall pressures assumed uniformly distributed over the leeward wall surface acting outward at 38% of p_h for $0.2 \leq L/B \leq 1.0$ and 27% of p_h for $2.0 \leq L/B \leq 5.0$. Linear interpolation shall be used for $1.0 < L/B < 2.0$. The remaining net pressure shall be applied to the windward walls as an external wall pressure acting towards the wall surface. Windward and leeward wall pressures so determined do not include effect of internal pressure.
- Interpolation between values of V, h and L/B is permitted.

Notation:

L = building plan dimension parallel to wind direction (ft.)
B = building plan dimension perpendicular to wind direction (ft.)
h = mean roof height (ft.)
 p_h, p_0 = along-wind net wall pressure at top and base of building respectively (psf)