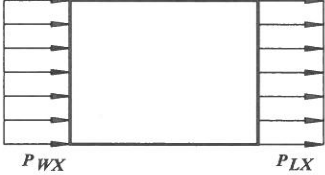
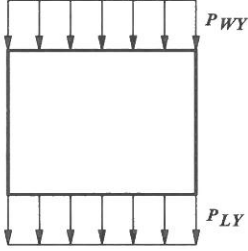
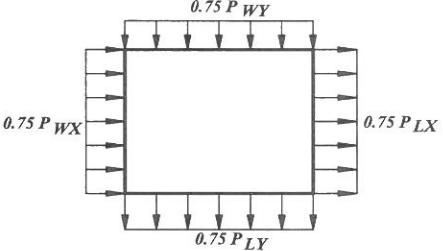
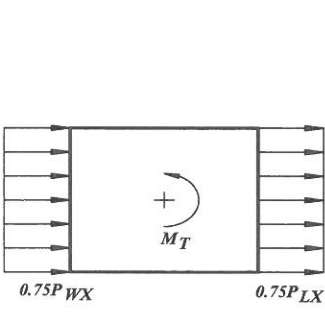
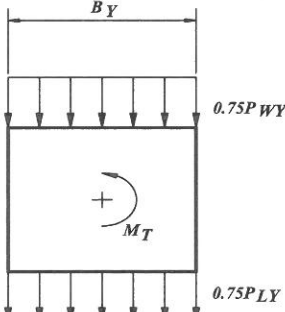
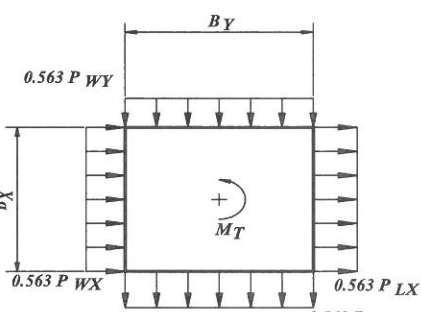


Main Wind Force Resisting System – Part 1		All Heights
Figure 27.4-8	Design Wind Load Cases	
 <p style="text-align: center;"><b>CASE 1</b></p>	 <p style="text-align: center;"><b>CASE 2</b></p>	 <p style="text-align: center;"><b>CASE 3</b></p>
 <p style="text-align: center;"><b>CASE 4</b></p>		
$M_T = 0.75 (P_{WX} + P_{LX}) B_X e_X$ $e_X = \pm 0.15 B_X$	$M_T = 0.75 (P_{WY} + P_{LY}) B_Y e_Y$ $e_Y = \pm 0.15 B_Y$	$M_T = 0.563 (P_{WX} + P_{LX}) B_X e_X + 0.563 (P_{WY} + P_{LY}) B_Y e_Y$ $e_X = \pm 0.15 B_X \quad e_Y = \pm 0.15 B_Y$
<p><b>Case 1.</b> Full design wind pressure acting on the projected area perpendicular to each principal axis of the structure, considered separately along each principal axis.</p> <p><b>Case 2.</b> Three quarters of the design wind pressure acting on the projected area perpendicular to each principal axis of the structure in conjunction with a torsional moment as shown, considered separately for each principal axis.</p> <p><b>Case 3.</b> Wind loading as defined in Case 1, but considered to act simultaneously at 75% of the specified value.</p> <p><b>Case 4.</b> Wind loading as defined in Case 2, but considered to act simultaneously at 75% of the specified value.</p>		
<p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>Design wind pressures for windward and leeward faces shall be determined in accordance with the provisions of 27.4.1 and 27.4.2 as applicable for building of all heights.</li> <li>Diagrams show plan views of building.</li> <li>Notation:                     <ul style="list-style-type: none"> <li><math>P_{WX}, P_{WY}</math>: Windward face design pressure acting in the x, y principal axis, respectively.</li> <li><math>P_{LX}, P_{LY}</math>: Leeward face design pressure acting in the x, y principal axis, respectively.</li> <li><math>e (e_X, e_Y)</math>: Eccentricity for the x, y principal axis of the structure, respectively.</li> <li><math>M_T</math>: Torsional moment per unit height acting about a vertical axis of the building.</li> </ul> </li> </ol>		