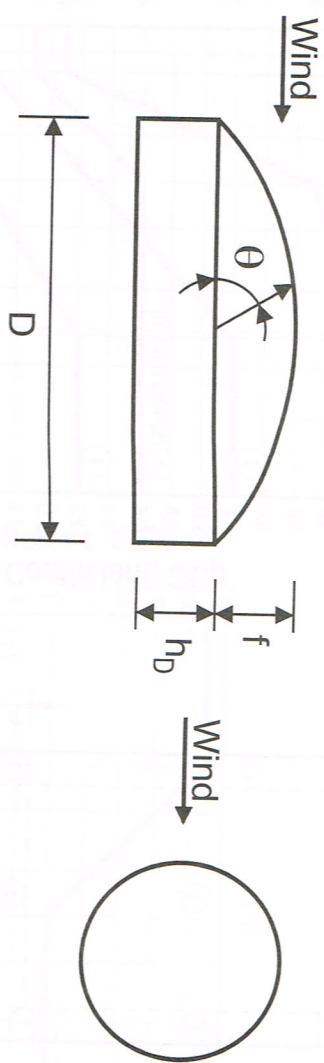


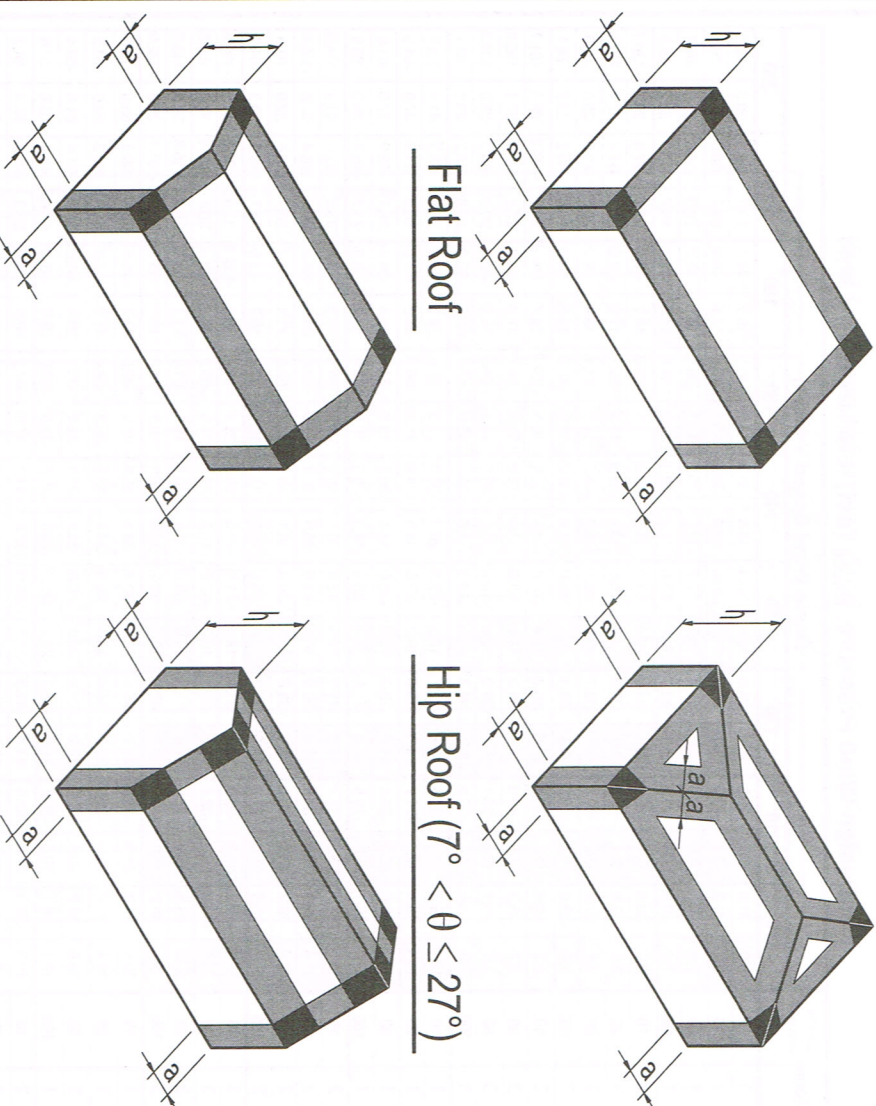
Components and Cladding		All Heights
Figure 30.4-7	External Pressure Coefficients, $G_{Cp}$	Domed Roofs
Enclosed, Partially Enclosed Buildings and Structures		



External Pressure Coefficients for Domes with a Circular Base			
$\theta$ , degrees	Negative Pressures	Positive Pressures	Positive Pressures
		0 - 90	0 - 60
$G_{Cp}$	-0.9	+0.9	+0.5

- Notes:
1. Values denote  $G_{Cp}$  to be used with  $q_{(h_p+f)}$  where  $h_p + f$  is the height at the top of the dome.
  2. Plus and minus signs signify pressures acting toward and away from the surfaces, respectively.
  3. Each component shall be designed for the maximum positive and negative pressures.
  4. Values apply to  $0 \leq h_p/D \leq 0.5$ ,  $0.2 \leq f/D \leq 0.5$ .
  5.  $\theta = 0$  degrees on dome springline,  $\theta = 90$  degrees at dome center top point.  $f$  is measured from springline to top.

Components and Cladding - Method 1		$h \leq 60$ ft.
Figure 30.5-1	Design Wind Pressures	Walls & Roofs
Enclosed Buildings		



- Interior Zones  End Zones  Corner Zones
- Roofs - Zone 1 / Walls - Zone 4 Roofs - Zone 2 / Walls - Zone 5 Roofs - Zone 3

- Notes:
1. Pressures shown are applied normal to the surface, for exposure B, at  $h=30$  ft (9.1m). Adjust to other conditions using Equation 30.5-1.
  2. Plus and minus signs signify pressures acting toward and away from the surfaces, respectively.
  3. For hip roofs with  $\theta \leq 25^\circ$ , Zone 3 shall be treated as Zone 2.
  4. For effective wind areas between those given, value may be interpolated, otherwise use the value associated with the lower effective wind area.
  5. Notation:
    - $a$ : 10 percent of least horizontal dimension or  $0.4h$ , whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft (0.9 m).
    - $h$ : Mean roof height, in feet (meters), except that eave height shall be used for roof angles  $< 10^\circ$ .
    - $\theta$ : Angle of plane of roof from horizontal, in degrees.