

Components and Cladding	All Heights
Figure 30.4-7	External Pressure Coefficients, GC_p
Enclosed, Partially Enclosed Buildings and Structures	Domed Roofs

External Pressure Coefficients for Domes with a Circular Base			
θ, degrees	Negative Pressures	Positive Pressures	Positive Pressures
θ, degrees	0 – 90	0 – 60	61 – 90
GC_p	-0.9	+0.9	+0.5

Notes:

1. Values denote GC_p to be used with $q_{(h_D+f)}$ where $h_D + f$ 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 $0 \leq h_D/D \leq 0.5$, $0.2 \leq f/D \leq 0.5$.
5. $\theta = 0$ degrees on dome springline, $\theta = 90$ degrees at dome center top point. f is measured from springline to top.