

| Other Structures | | All Heights | | |
|--|------------------------------|--|-----|-----|
| Figure 29.5-1 | Force Coefficients, C_f | Chimneys, Tanks, Rooftop Equipment, & Similar Structures | | |
| | | | | |
| Cross-Section | Type of Surface | h/D | | |
| | | 1 | 7 | 25 |
| Square (wind normal to face) | All | 1.3 | 1.4 | 2.0 |
| Square (wind along diagonal) | All | 1.0 | 1.1 | 1.5 |
| Hexagonal or octagonal | All | 1.0 | 1.2 | 1.4 |
| Round ($D\sqrt{q_z} > 2.5$) ($D\sqrt{q_z} > 5.3$, D in m, q_z in N/m^2) | Moderately smooth | 0.5 | 0.6 | 0.7 |
| | Rough ($D'/D = 0.02$) | 0.7 | 0.8 | 0.9 |
| | Very rough ($D'/D = 0.08$) | 0.8 | 1.0 | 1.2 |
| Round ($D\sqrt{q_z} \leq 2.5$) ($D\sqrt{q_z} \leq 5.3$, D in m, q_z in N/m^2) | All | 0.7 | 0.8 | 1.2 |

Notes:

- The design wind force shall be calculated based on the area of the structure projected on a plane normal to the wind direction. The force shall be assumed to act parallel to the wind direction.
- Linear interpolation is permitted for h/D values other than shown.
- Notation:
 D : diameter of circular cross-section and least horizontal dimension of square, hexagonal or octagonal cross-sections at elevation under consideration, in feet (meters);
 D' : depth of protruding elements such as ribs and spoilers, in feet (meters); and
 h : height of structure, in feet (meters); and
 q_z : velocity pressure evaluated at height z above ground, in pounds per square foot (N/m^2).
- For rooftop equipment on buildings with a mean roof height of $h \leq 60$ ft, use Section 29.5.1.