

Velocity Pressure Exposure Coefficients,  $K_h$  and  $K_z$   
Table 29.3-1

Height above ground level, z	Exposure			
	B	C	D	
ft				
(m)				
0-15	(0-4.6)	0.57	0.85	1.03
20	(6.1)	0.62	0.90	1.08
25	(7.6)	0.66	0.94	1.12
30	(9.1)	0.70	0.98	1.16
40	(12.2)	0.76	1.04	1.22
50	(15.2)	0.81	1.09	1.27
60	(18)	0.85	1.13	1.31
70	(21.3)	0.89	1.17	1.34
80	(24.4)	0.93	1.21	1.38
90	(27.4)	0.96	1.24	1.40
100	(30.5)	0.99	1.26	1.43
120	(36.6)	1.04	1.31	1.48
140	(42.7)	1.09	1.36	1.52
160	(48.8)	1.13	1.39	1.55
180	(54.9)	1.17	1.43	1.58
200	(61.0)	1.20	1.46	1.61
250	(76.2)	1.28	1.53	1.68
300	(91.4)	1.35	1.59	1.73
350	(106.7)	1.41	1.64	1.78
400	(121.9)	1.47	1.69	1.82
450	(137.2)	1.52	1.73	1.86
500	(152.4)	1.56	1.77	1.89

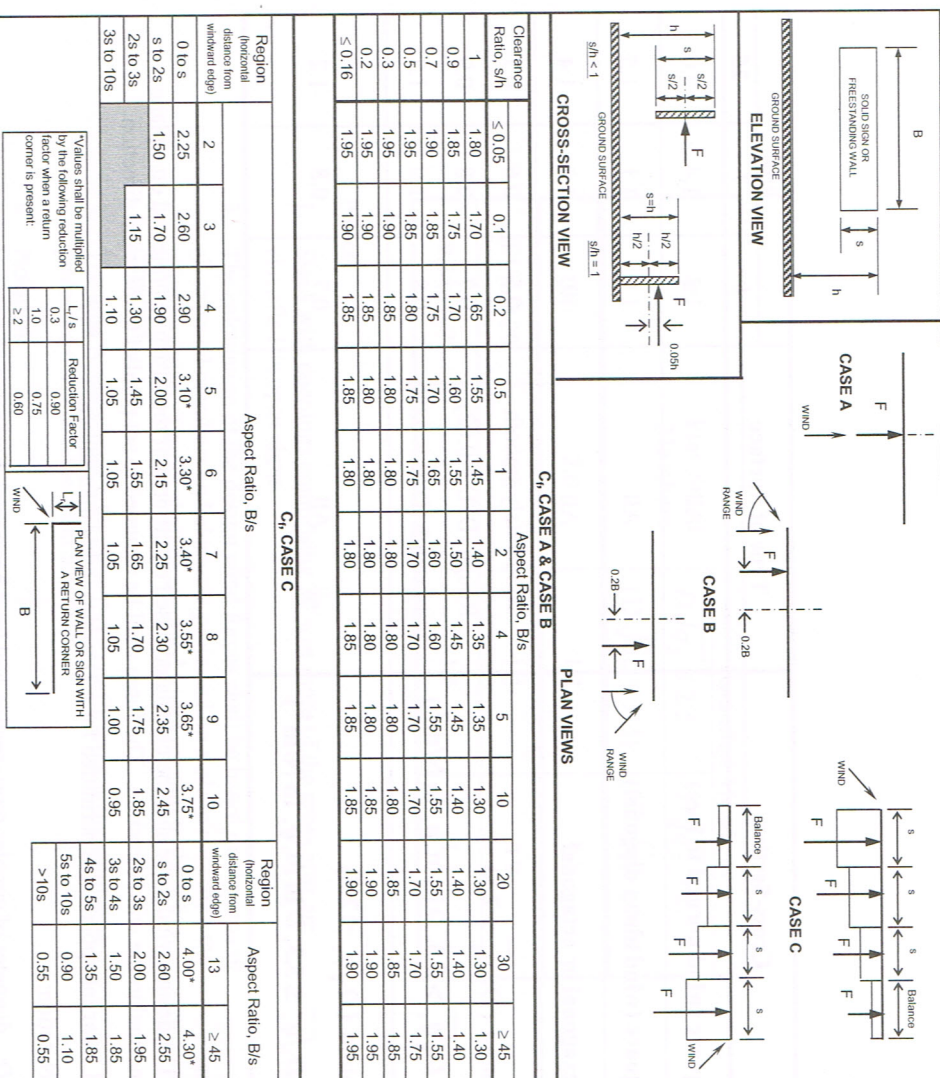
Notes:

1. The velocity pressure exposure coefficient  $K_z$  may be determined from the following formula:

For  $15 \text{ ft} \leq z \leq z_g$  For  $z < 15 \text{ ft}$ .  
 $K_z = 2.01 (z/z_g)^{2/\alpha}$   $K_z = 2.01 (15/z_g)^{2/\alpha}$

- $\alpha$  and  $z_g$  are tabulated in Table 26.9.1.
- Linear interpolation for intermediate values of height  $z$  is acceptable.
- Exposure categories are defined in Section 26.7.

Design Wind Loads  
Figure 29.4-1  
Other Structures  
Force Coefficients,  $C_f$   
All Heights  
Solid Freestanding Walls  
& Solid Freestanding Signs



Notes:

- The term "signs" in notes below also applies to "freestanding walls".
- Signs with openings comprising less than 30% of the gross area are classified as solid signs. Force coefficients for solid signs with openings shall be permitted to be multiplied by the reduction factor  $(1 - (1 - \rho)^3)$ .
- To allow for both normal and oblique wind directions, the following cases shall be considered:
  - For  $s/h < 1$ :
    - CASE A: resultant force acts normal to the face of the sign through the geometric center.
    - CASE B: resultant force acts normal to the face of the sign at a distance from the geometric center toward the windward edge equal to 0.2 times the average width of the sign.
    - For  $B/s \geq 2$ , CASE C must also be considered:
    - CASE C: resultant forces act normal to the face of the sign through the geometric centers of each region.
    - For  $s/h = 1$ :
      - The same cases as above except that the vertical locations of the resultant forces occur at a distance above the geometric center equal to 0.05 times the average height of the sign.
  - For CASE C where  $s/h > 0.8$ , force coefficients shall be multiplied by the reduction factor  $(1.8 - s/h)$ .
- Linear interpolation is permitted for values of  $s/h$ ,  $B/s$  and  $L/s$  other than shown.
- Notation:
  - B: horizontal dimension of sign, in feet (meters);
  - h: height of the sign, in feet (meters);
  - s: vertical dimension of the sign, in feet (meters);
  - e: ratio of solid area to gross area;
  - L: horizontal dimension of return corner, in feet (meters)