$G = \gamma \upsilon_s^2/g$ = the average shear modulus for the soils beneath the foundation at large strain levels (psf or Pa)
$G_0 = \gamma \upsilon_{s0}^2/g$ = the average shear modulus for the soils beneath the foundation at small strain levels (psf or Pa)
g = acceleration due to gravity
H = thickness of soil
h = height of a shear wall measured as the maximum clear height from top of foundation to bottom of diaphragm framing above, or the maximum clear height from top of diaphragm to bottom of diaphragm framing above
h = average roof height of structure with respect to the base; see Chapter 13
$\bar{h}$ = effective height of the building as determined in Section 19.2.1.1 or 19.3.1 (ft or m)
h_c = core dimension of a component measured to the outside of the special lateral reinforcement (in. or mm)
h_i, h_x = the height above the base to Level i or x, respectively
h_n = structural height as defined in Section 11.2
h_p = the height of the rectangular glass panel
h_{sx} = the story height below Level $x = (h_x - h_{x-1})$
I_e = the importance factor as prescribed in Section 11.5.1
I_0 = the static moment of inertia of the load-carrying foundation; see Section 19.2.1.1 (in.^{4} or mm^4)
I_p = the component importance factor as prescribed in Section 13.3.1
i = the building level referred to by the subscript i; i = 1 designates the first level above the base
K_p = the stiffness of the component or attachment, Section 13.6.2
K_y = the lateral stiffness of the foundation as defined in Section 19.2.1.1 (lb/in. or N/m)
K_θ = the rocking stiffness of the foundation as defined in Section 19.2.1.1 (ft-lb/degree or N-m/rad)
KL/r = the lateral slenderness ratio of a compression member measured in terms of its effective length, KL, and the least radius of gyration of the member cross section, r
k = distribution exponent given in Section 12.8.3
$\bar{k}$ = stiffness of the building as determined in Section 19.2.1.1 (lb/ft or N/m)
k_a = coefficient defined in Sections 12.11.2 and 12.14.7.5
L = overall length of the building (ft or m) at the base in the direction being analyzed
L_0 = overall length of the side of the foundation in the direction being analyzed, Section 19.2.1.2 (ft or m)
M_0, M_{01} = the overturning moment at the foundation–soil interface as determined in Sections 19.2.3 and 19.3.2 (ft-lb or N-m)
M_t = torsional moment resulting from eccentricity between the locations of center of mass and the center of rigidity (Section 12.8.4.1)
M_{ta} = accidental torsional moment as determined in Section 12.8.4.2
m = a subscript denoting the mode of vibration under consideration; that is, m = 1 for the fundamental mode
N = standard penetration resistance, ASTM D-1586
N = number of stories above the base (Section 12.8.2.1)
$\bar{N}$ = average field standard penetration resistance for the top 100 ft (30 m); see Sections 20.3.3 and 20.4.2
$\bar{N}_{ch}$ = average standard penetration resistance for cohesionless soil layers for the top 100 ft (30 m); see Sections 20.3.3 and 20.4.2
N_i = standard penetration resistance of any soil or rock layer i (between 0 and 100 ft [30 m]); see Section 20.4.2
n = designation for the level that is uppermost in the main portion of the building
PGA = mapped MCE_G peak ground acceleration shown in Figs. 22-6 through 22-10
PGA_M = MCE_G peak ground acceleration adjusted for Site Class effects; see Section 11.8.3
P_x = total unfactored vertical design load at and above level x, for use in Section 12.8.7
PI = plasticity index, ASTM D4318
Q_E = effect of horizontal seismic (earthquake-induced) forces
R = response modification coefficient as given in Tables 12.2-1, 12.14-1, 15.4-1, or 15.4-2
R_p = component response modification factor as defined in Section 13.3.1
r = a characteristic length of the foundation as defined in Section 19.2.1.2
r_a = characteristic foundation length as defined by Eq. 19.2-7 (ft or m)