R_p = component response modification factor that varies from 1.00 to 12 (select appropriate value from Table 13.5-1 or 13.6-1)
z = height in structure of point of attachment of component with respect to the base. For items at or below the base, z shall be taken as 0. The value of z/h need not exceed 1.0
h = average roof height of structure with respect to the base

The force (F_p) shall be applied independently in at least two orthogonal horizontal directions in combination with service loads associated with the component, as appropriate. For vertically cantilevered systems, however, the force F_p shall be assumed to act in any horizontal direction. In addition, the component shall be designed for a concurrent vertical force $\pm 0.2 S_{DS} W_p$. The redundancy factor, ρ, is permitted to be taken equal to 1 and the overstrength factor, Ω_0, does not apply.

EXCEPTION: The concurrent vertical seismic force need not be considered for lay-in access floor panels and lay-in ceiling panels.

Where nonseismic loads on nonstructural components exceed F_p, such loads shall govern the strength design, but the detailing requirements and limitations prescribed in this chapter shall apply.

In lieu of the forces determined in accordance with Eq. 13.3-1, accelerations at any level are permitted to be determined by the modal analysis procedures of Section 12.9 with $R = 1.0$. Seismic forces shall be in accordance with Eq. 13.3-4:

$$F_p = \frac{a_i a_p W_p}{\left(\frac{R_p}{I_p}\right)} A_x \qquad (13.3\text{-}4)$$

where a_i is the acceleration at level i obtained from the modal analysis and where A_x is the torsional amplification factor determined by Eq.12.8-14. Upper and lower limits of F_p determined by Eqs. 13.3-2 and 13.3-3 shall apply.

13.3.2 Seismic Relative Displacements

The effects of seismic relative displacements shall be considered in combination with displacements caused by other loads as appropriate. Seismic relative displacements, D_{pI}, shall be determined in accordance with with Eq. 13.3-5 as:

$$D_{pI} = D_p I_e \qquad (13.3\text{-}5)$$

where

I_e = the importance factor in Section 11.5.1
D_p = displacement determined in accordance with the equations set forth in Sections 13.3.2.1 and 13.3.2.2.

13.3.2.1 Displacements within Structures

For two connection points on the same Structure A or the same structural system, one at a height h_x and the other at a height h_y, D_p shall be determined as

$$D_p = \Delta_{xA} - \Delta_{yA} \qquad (13.3\text{-}6)$$

Alternatively, D_p is permitted to be determined using modal procedures described in Section 12.9, using the difference in story deflections calculated for each mode and then combined using appropriate modal combination procedures. D_p is not required to be taken as greater than

$$D_p = \frac{(h_x - h_y)\Delta_{aA}}{h_{sx}} \qquad (13.3\text{-}7)$$

13.3.2.2 Displacements between Structures

For two connection points on separate Structures A and B or separate structural systems, one at a height h_x and the other at a height h_y, D_p shall be determined as

$$D_p = |\delta_{xA}| + |\delta_{yB}| \qquad (13.3\text{-}8)$$

D_p is not required to be taken as greater than

$$D_p = \frac{h_x \Delta_{aA}}{h_{sx}} + \frac{h_y \Delta_{aB}}{h_{sx}} \qquad (13.3\text{-}9)$$

where

D_p = relative seismic displacement that the component must be designed to accommodate
δ_{xA} = deflection at building Level x of Structure A, determined in accordance with Eq. (12.8-15)
δ_{yA} = deflection at building Level y of Structure A, determined in accordance with Eq. (12.8-15).
δ_{yB} = deflection at building Level y of Structure B, determined in accordance with Eq. (12.8-15).
h_x = height of Level x to which upper connection point is attached
h_y = height of Level y to which lower connection point is attached
Δ_{aA} = allowable story drift for Structure A as defined in Table 12.12-1
Δ_{aB} = allowable story drift for Structure B as defined in Table 12.12-1
h_{sx} = story height used in the definition of the allowable drift Δ_a in Table12.12-1. Note that Δ_a/h_{sx} = the drift index.