

CODE

11.4.1.3 Slenderness effects shall be calculated in accordance with 6.6.4, 6.7, or 6.8. Alternatively, out-of-plane slenderness analysis shall be permitted using 11.8 for walls meeting the requirements of that section.

COMMENTARY

R11.4.1.3 The forces typically acting on a wall are illustrated in Fig. R11.4.1.3.

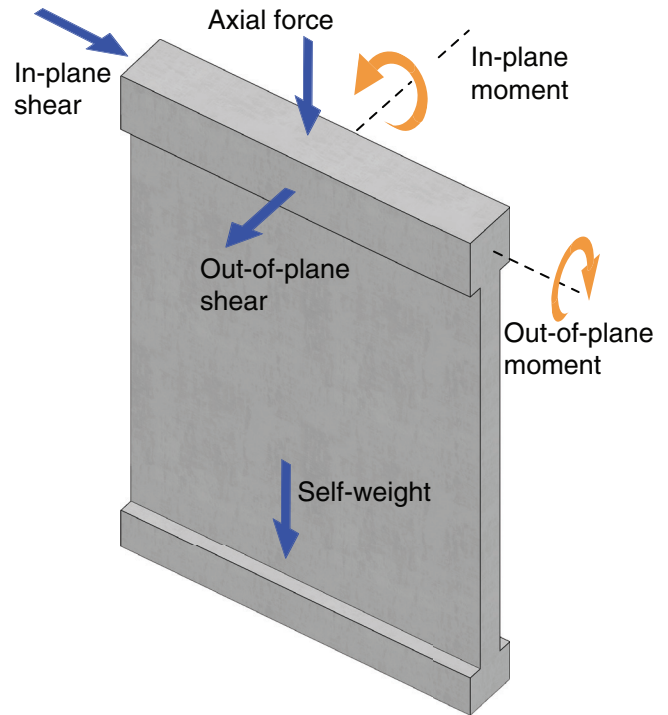


Fig. R11.4.1.3—In-plane and out-of-plane forces.

11.4.1.4 Walls shall be designed for eccentric axial loads and any lateral or other loads to which they are subjected.

11.4.2 Factored axial force and moment

11.4.2.1 Walls shall be designed for the maximum factored moment M_u that can accompany the factored axial force for each applicable load combination. The factored axial force P_u at given eccentricity shall not exceed $\phi P_{n,max}$, where $P_{n,max}$ shall be as given in 22.4.2.1 and strength reduction factor ϕ shall be that for compression-controlled sections in 21.2.2. The maximum factored moment M_u shall be magnified for slenderness effects in accordance with 6.6.4, 6.7, or 6.8.

11.4.3 Factored shear

11.4.3.1 Walls shall be designed for the maximum in-plane V_u and out-of-plane V_u .

11.5—Design strength

11.5.1 General

11.5.1.1 For each applicable factored load combination, design strength at all sections shall satisfy $\phi S_u \geq U$, including (a) through (c). Interaction between axial load and moment shall be considered.

R11.5—Design strength