

# P-DELTA EFFECT

P-Delta effect, one type of geometric nonlinearity, involves the equilibrium compatibility relationships of a structural system loaded about its deflected configuration. Of particular concern is the application of gravity load on laterally displaced multi-story building structures. This condition magnifies story drift and certain mechanical behaviors while reducing deformation capacity.

P-Delta effect typically involves large external forces upon relatively small displacements. If deformations become sufficiently large as to break from linear compatibility relationships, then Large-Displacement and/or Large-Deformation analyses may become necessary.

