

with design or construction issues that do not appear directly related to computation of equivalent loads, because the specified loads are derived assuming certain levels of damping and ductile behavior. In many instances this behavior is not necessarily delivered by designs conforming to conventional standards, which is why there are so many seemingly “nonload” provisions in this standard and appendix.

Past design practices (the SEAOC and UBC requirements prior to 1997) for earthquake loads produce loads intended for use with allowable stress design methods. Such procedures generally appear very similar to this standard, but a coefficient  $R_w$  was used in place of the response modification factor  $R$ .  $R_w$  was always larger than  $R$ , generally by a factor of about 1.4; thus the loads produced were smaller, much as allowable stresses are smaller than nominal strengths. However, the other procedures contain as many, if not more, seemingly “nonload”

provisions for seismic design to assure the assumed performance.

**Story Above Grade.** Figure C11-1 illustrates this definition.

**Occupancy Importance Factor.** The NEHRP 1997 Provisions introduced the occupancy importance factor,  $I$ . It was a new factor in NEHRP provisions, but not for ASCE 7 or UBC provisions. Editions of this standard prior to 1995, as well as other current design procedures for earthquake loads, make use of an occupancy importance factor,  $I$ , in the computation of the total seismic force. This factor was removed from the 1995 edition of the standard when it introduced the provisions consistent with the 1994 edition of NEHRP provisions. The 1995 edition did include a classification of buildings by occupancy, but this classification did not affect the total seismic force.

The NEHRP provisions in Section 1.1, identify two purposes of the provisions, one of which

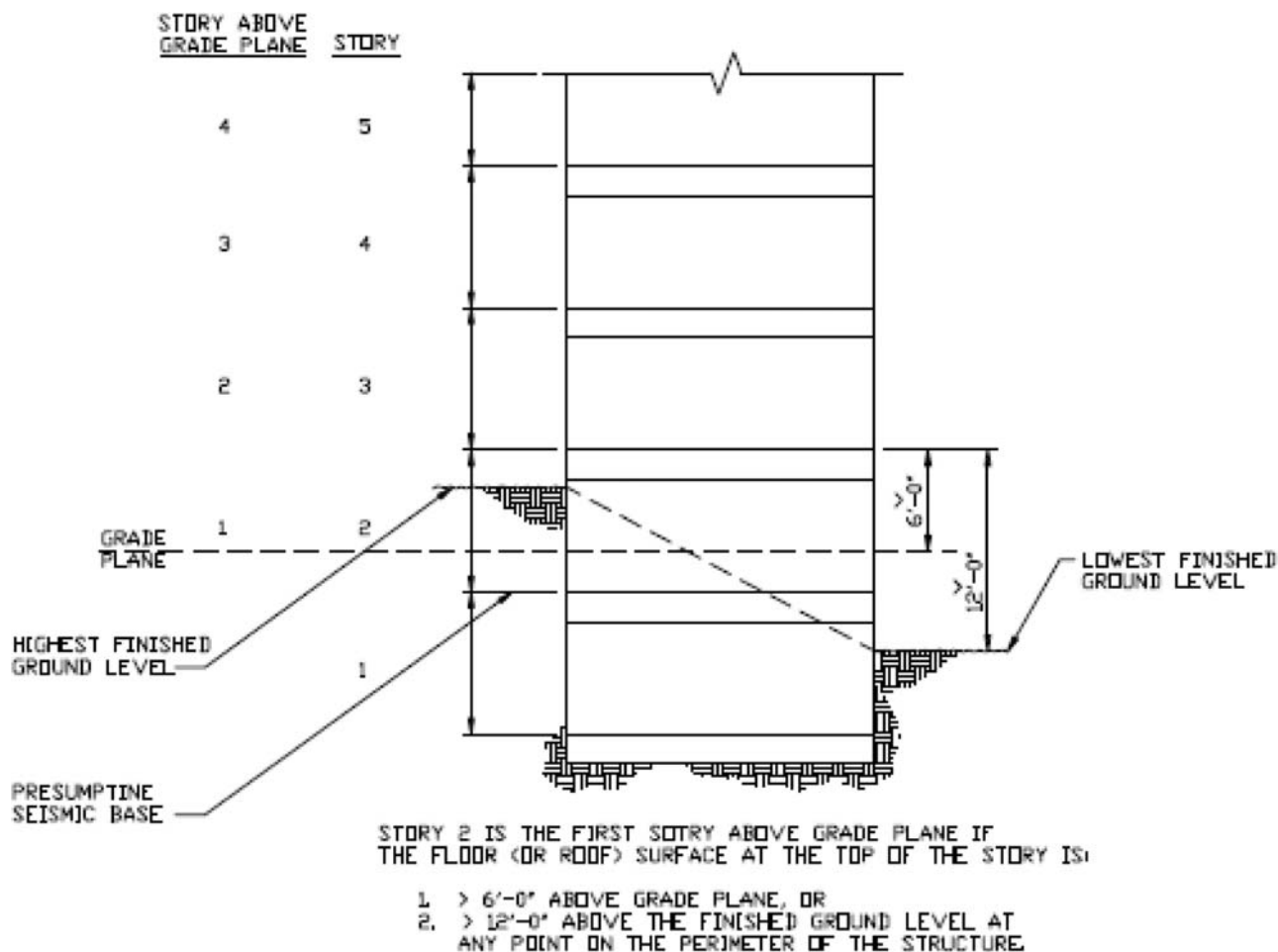


FIGURE C11-1 Illustration of Definition of Story above Grade Plane.