

is a multiplicative factor which is the minimum of the following values: the minimum value of  $\Omega_i = 1.5 (V_{p,link,i} / V_{Ed,i})$  among all short links; the minimum value of  $\Omega_i = 1.5 (M_{p,link,i} / M_{Ed,i})$  among all intermediate and long links; where  $V_{Ed,i}$ ,  $M_{Ed,i}$  are the design values of the shear force and of the bending moment in link  $i$  in the seismic design situation;  $V_{p,link,i}$ ,  $M_{p,link,i}$  are the shear and bending plastic design resistances of link  $i$  as in **4.5.2.3**.

#### 4.5.4. Connections of seismic links

**4.5.4.1** – If the structure is designed to dissipate energy in the seismic links, the connections of the links or of the element containing the links should be designed for action effects  $E_d$  computed as follows:

$$E_d \geq E_{d,G} + 1.1 \gamma_{ov} \Omega N_{d,E} \quad (4.22)$$

where  $E_{d,G}$  is the action effect in the connection due to the non-seismic actions included in the combination of actions for the seismic design situation;  $E_{d,E}$  is the action effect in the connection due to the design seismic action;  $\gamma_{ov}$  is the overstrength factor,  $\Omega_i$  is the overstrength factor computed in accordance with **4.5.3** for the link.

**4.5.4.2** – In the case of semi-rigid and/or partial strength connections, the energy dissipation may be assumed to originate from the connections only. This is allowable, provided that all of the following conditions are satisfied:

- (a) the connections have rotation capacity sufficient for the corresponding deformation demands;
- (b) members framing into the connections are demonstrated to be stable at the ULS;
- (c) the effect of connection deformations on global drift is taken into account.

**4.5.4.3** – When partial strength connections are used for the seismic links, the capacity design of the other elements in the structure should be derived from the plastic capacity of the links connections.