

$$\begin{aligned}
e &\leq 1.6 \frac{M_{p,link}}{V_{p,link}} && (\text{if } R < 0.3) \\
e &\leq 1.6 \frac{M_{p,link}}{V_{p,link}} (1.15 - 0.5R) && (\text{if } R \geq 0.3)
\end{aligned} \tag{4.16}$$

where

$$R = \frac{N_{Ed} t_w (d - 2t_f)}{V_{Ed} A} \tag{4.17}$$

in which A is the gross area of the link.

4.5.2.7 – To achieve a global dissipative behaviour of the structure, it should be checked that the individual values of the ratios Ω_i defined in **4.5.2.1** do not exceed the minimum value Ω resulting from **4.5.2.1** by more than 25% of this minimum value.

4.5.2.8 – When equal moments develop simultaneously at both ends of the link, links may be classified according to the length e . For I sections, the categories are:

$$\begin{aligned}
\text{Short links: } e &\leq e_s = 1.6 \frac{M_{p,link}}{V_{p,link}} \\
\text{Long links: } e &> e_L = 3.0 \frac{M_{p,link}}{V_{p,link}} \\
\text{Intermediate links: } e_s &< e < e_L
\end{aligned} \tag{4.18}$$

4.5.2.9 – When only one plastic hinge develops at one end of the link, the value of the length e defines the categories of the links. For I sections the categories are:

$$\begin{aligned}
\text{Short links: } e &\leq e_s = 0.8(1+\alpha) \frac{M_{p,link}}{V_{p,link}} \\
\text{Long links: } e &> e_L = 1.5(1+\alpha) \frac{M_{p,link}}{V_{p,link}} \\
\text{Intermediate links: } e_s &< e < e_L
\end{aligned} \tag{4.19}$$

where α is the ratio of the smaller bending moments $M_{Ed,A}$ at one end of the link in the seismic design situation, to the greater bending moments $M_{Ed,B}$ at the end where the plastic hinge develops, both moments being taken as absolute values.

4.5.2.10 – The link rotation angle θ_p between the link and the element outside of the link as defined in **4.3.4.3** should be consistent with global deformations. It should not exceed the following values:

$$\begin{aligned}
\text{Short links: } \theta_p &\leq \theta_{pR} = 0.08 \text{ radian} \\
\text{Long links: } \theta_p &\leq \theta_{pR} = 0.02 \text{ radian} \\
\text{Intermediate links: } \theta_p &\leq \theta_{pR} = \text{by interpolation}
\end{aligned} \tag{4.20}$$