

4.5.2.11 – Full-depth web stiffeners should be provided on both sides of the link web at the diagonal brace ends of the link. These stiffeners should have a combined width of not less than $(b_f - 2t_w)$ and a thickness not less than $0.75 t_w$ nor 10 mm, whichever is larger.

4.5.2.12 – Links should be provided with intermediate web stiffeners as follows:

(a) Short links should be provided with intermediate web stiffeners spaced at intervals not exceeding $(30t_w - d/5)$ for a link rotation angle θ_p of 0.08 radians or $(52t_w - d/5)$ for link rotation angles θ_p of 0.02 radians or less. Linear interpolation should be used for values of θ_p between 0.08 and 0.02 radians;

(b) Long links should be provided with one intermediate web stiffener placed at a distance of 1.5 times b from each end of the link where a plastic hinge would form;

(c) Intermediate links should be provided with intermediate web stiffeners meeting the requirements of (a) and (b) above;

(d) Intermediate web stiffeners are not required in links of length e greater than $5 M_p/V_p$;

(e) intermediate web stiffeners should be full depth. For links that are less than 600 mm in depth d , stiffeners are required on only one side of the link web. The thickness of one-sided stiffeners should be not less than t_w or 10 mm, whichever is larger, and the width should be not less than $(b/2) - t_w$. For links that are 600 mm in depth or greater, similar intermediate stiffeners should be provided on both sides of the web.

4.5.2.13 – Fillet welds connecting a link stiffener to the link web should have a design strength adequate to resist a force of $\gamma_{ov} f_y A_{st}$, where A_{st} is the area of the stiffener. The design strength of fillet welds fastening the stiffener to the flanges should be adequate to resist a force of $\gamma_{ov} f_y A_{st} / 4$.

4.5.2.14 – Lateral supports should be provided at both the top and bottom link flanges at the ends of the link. End lateral supports of links should have a design axial resistance sufficient to provide lateral support for forces of 6% of the expected nominal axial strength of the link flange computed as $f_y b t_f$.

4.5.2.15 – In beams where a seismic link is present, the shear buckling resistance of the web panels outside of the link should be checked to conform to EN 1993-1-5:2004, Section 5.

4.5.3. Members not containing seismic links

The members not containing seismic links, like the columns and diagonal members, if horizontal links in beams are used, and also the beam members, if vertical links are used, should be verified in compression considering the most unfavourable combination of the axial force and bending moments:

$$N_{Rd}(M_{Ed}, N_{Ed}) \geq N_{Ed,G} + 1.1 \gamma_{ov} \Omega N_{Ed,E} \quad (4.21)$$

where $N_{Rd}(M_{Ed}, N_{Ed})$ is the axial design resistance of the column or diagonal member in accordance with EN 1993, taking into account the interaction with the bending moment M_{Ed} and the shear V_{Ed} taken at their design value in the seismic situation; $N_{Ed,G}$ is the compression force in the column or diagonal member due to the nonseismic actions included in the combination of actions for the seismic design situation; $N_{Ed,E}$ is the compression force in the column or diagonal member due to the design seismic action; γ_{ov} is the overstrength factor Ω