where b_o is the minimum dimension of the concrete core (to the centreline of the hoops, in millimetres); d_{bL} is the minimum diameter of the longitudinal rebars (in millimetres).

5.4.4.4 – The diameter of the hoops shall be at least $d_{bw} = 6$ mm.

5.4.4.5 – In critical regions, the distance between consecutive longitudinal bars restrained by hoop bends or cross-ties should not exceed 250 mm.

5.4.4.6 – In the lower two storeys of a building, hoops in accordance with **5.4.4.3**, **5.4.4.4** and **5.4.4.5** shall be provided beyond the critical regions for an additional length equal to half the length of the critical regions.

5.4.4.7 – In dissipative composite columns, the shear resistance should be determined on the basis of the structural steel section alone.

5.4.4.8 – The relationship between the ductility class of the structure and the allowable slenderness (c/t_f) of the flange outstand in dissipative zones is given in **Table 5.3**.

5.4.4.9 – Confining hoops can delay local buckling in the dissipative zones. The limits given in **Table 5.3** for flange slenderness may be increased if the hoops are provided at a longitudinal spacing, s, which is less than the flange outstand: $s/c < 1.0$. For $s/c < 0.5$ the limits given in **Table 5.3** may be increased by up to 50%. For values of $0.5 < s/c < 1.0$ linear interpolation may be used.

5.4.4.10 – The diameter d_{bw} of confining hoops used to prevent flange buckling shall be not less than

$$d_{bw} = \sqrt{\frac{bt_f}{8}\frac{f_{ydf}}{f_{ydw}}} \qquad \textbf{(5.8)}$$

in which b and t_f are the width and thickness of the flange, respectively, and f_{ydf} and f_{ydw} are the design yield strengths of the flange and reinforcement, respectively.

5.4.5. Partially-encased members

5.4.5.1 – In dissipative zones where energy is dissipated by plastic bending of a composite section, the longitudinal spacing of the transverse reinforcement, s, should satisfy the requirements of **5.4.4.3** over a length greater or equal to l_{cr} for dissipative zones at the end of a member and $2l_{cr}$ for dissipative zones in the member.

5.4.5.2 – In dissipative members, the shear resistance should be determined on the basis of the structural steel section alone, unless special details are provided to mobilise the shear resistance of the concrete encasement.

5.4.5.3 – The allowable slenderness (c/t) of the flange outstand in dissipative zones is as given in **Table 5.3**.

5.4.5.4 – Straight links welded to the inside of the flanges, as additional to the reinforcements required by EN 1994-1-1, can delay local buckling in the dissipative zones. In this case, the limits given in **Table 5.3** for flange slenderness may be increased if these bars are provided at a longitudinal spacing, s_1 , which is less than the flange outstand: $s_1/c < 1.0$. For $s_1/c < 0.5$ the