

Table A3 Beams

Minimum reinforcement:

Longitudinal steel: high yield – 0.25% $b_w h$
 mild steel – 0.50% $b_w h$

where b_w is the width of beam and h is the overall depth of beam

Links: mild steel: 0.25% of a horizontal section through the web
 high yield steel: 0.12% of horizontal section through web

	A_s required	Weight kg/m	Remarks
Longitudinal steel	At midspan for T- and L-beams (and at supports for upstand beams) $\frac{M}{0.87f_y (d-0.5h_t)}$ For rectangular beams and at supports for T- and L-beams (and at midspan for upstand-beams) $\frac{M}{(0.87f_y)(0.75d)}$	0.011 A'_s	A'_s is the area (in mm ²) of main reinforcement selected at midspan or supports whichever is greater M is the design ultimate bending moment
Links	Shear stress design ultimate shear force $v = \frac{\quad}{b_w d}$ If $v > 0.6N/mm^2$ $\frac{A_{sv}}{S_v} = \frac{b_w(v-0.6)}{0.87f_y}$ If $v \leq 0.6N/mm^2$ choose A'_{sv} and S'_v to satisfy minimum steel	Single links (i.e. two legs) $0.016 (B_w + H) \frac{A'_{sv}}{S'_v}$ Double links (i.e. four legs) $0.016 (1.5 B_w + 2H) \frac{A'_{sv}}{S'_v}$ Treble links (i.e. six legs) $0.016 (2B_w + 3H) \frac{A'_{sv}}{S'_v}$	B_w is the width of beam in metres H is the depth of beam in metres A'_{sv} is the area selected for one leg of a link in mm ² S'_v is the selected spacing of links in metres

Table A4 Columns

Minimum reinforcement:

Longitudinal steel: 1% of the necessary concrete area

Links – make the choice to satisfy the following:

size at least one-quarter of the biggest longitudinal bar

spacing: $12 \times$ size of smallest longitudinal bar but not more than 300mm

every corner and each alternate longitudinal bar should be restrained by a link in each direction

	Weight kg per m height of column	Remarks
Main steel	$0.011 A_s$	A_s area of all vertical bars (mm^2)
Links	peripheral links	b and h are dimensions of column cross-section in metres
	$0.016 (b + h) \frac{A}{S_v}$	A is the cross-sectional area of one leg of a link in mm^2 S_v is the spacing of links in metres
	sausage links	For sausage links (shape code 81) b is the dimension parallel to the link
	$0.016b \frac{A}{S_v}$	

Table A5 Walls

Minimum reinforcement:

Vertically 0.4% of cross-sectional area

Horizontally 0.2% of cross-sectional area

Weight of reinforcement in kg/m^2 of wall elevation

$$0.011 (A_{sv} + A_{sh})$$

where A_{sv} and A_{sh} are areas of reinforcement in mm^2 selected per metre width and height.

Note to Table A5

Consistent units must be used in obtaining areas of reinforcement.