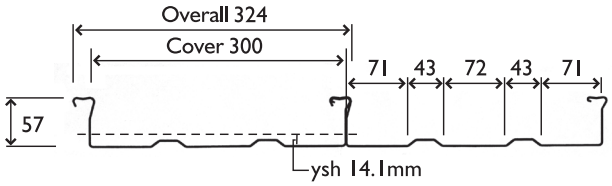
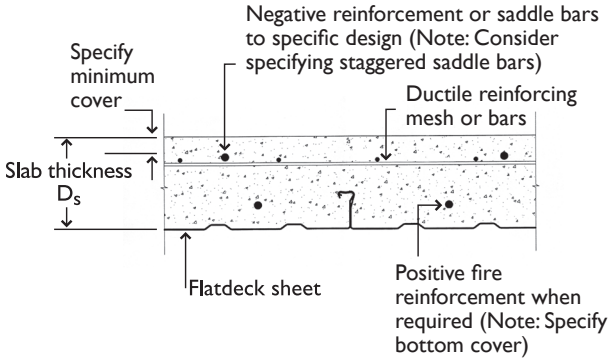
FLATDECK SECTION PROPERTIES



All dimensions (mm) are nominal



FORMWORK PROPERTIES

Flatdeck Formwork Properties (Per Metre Width)

Thickness (mm)	Weight (kN/m)	Cross Sectional Area, A_p (mm^2)	Design Strength P_y (MPa)	Bending Strengths	
				M_c+ (kNm)	M_c- (kNm)
0.75	0.094	1180	550	4.2	2.73
0.95	0.118	1495	550	5.10	3.61

Thickness (mm)	Shear Strength P_v (kN)	Second Moment of Area ($10^6 mm^4$)		Web Crushing Strength, P_w (kN)	
		Single Span (I_x^{+ve})	Multispan (I_x^{-ve})	End Support	Internal Support
0.75	95.1	0.503	0.369	68.3	90.5
0.95	123.6	0.670	0.502	95.0	126.5

Notes:
1. Design strength Py is 0.84 x ultimate tensile strength.
2. ysh is the distance from the bottom of the Flatdeck formwork to the neutral axis.

COMPOSITE FLOOR SLAB PROPERTIES

0.75mm Flatdeck Composite Floor Slab Properties (Per Metre Width)

D_s (mm)	Weight (kN/m)	I_g (10^6mm^4)		Y_g (mm)		I_{cr} (10^6mm^4)		Y_{cr} (mm)		I_{av} (10^6mm^4)	
		medium	long	medium	long	medium	long	medium	long	medium	long
110	2.63	13.4	8.3	59.0	61.7	6.3	5.3	37.4	46.2	9.9	6.8
120	2.86	17.2	10.6	64.2	67.0	7.8	6.6	39.8	49.3	12.5	8.6
130	3.09	21.6	13.3	69.3	72.2	9.5	8.0	42.0	52.3	15.6	10.7
140	3.32	26.8	16.4	74.4	77.4	11.4	9.6	44.2	55.2	19.1	13.0
150	3.55	32.7	20.0	79.5	82.6	13.4	11.4	46.3	57.9	23.1	15.7
160	3.78	39.5	24.0	84.6	87.8	15.6	13.3	48.3	60.6	27.6	18.7
170	4.01	47.1	28.6	89.7	93.0	18.1	15.4	50.2	63.2	32.6	22.0
180	4.24	55.6	33.7	94.7	98.1	20.7	17.8	52.1	65.7	38.1	25.7
190	4.47	65.0	39.3	99.8	103.2	23.5	20.2	54.0	68.1	44.3	29.8
200	4.70	75.5	45.5	104.8	108.3	26.5	22.9	55.8	70.5	51.0	34.2

0.95mm Flatdeck Composite Floor Slab Properties (Per Metre Width)

D_s (mm)	Weight (kN/m)	I_g (10^6mm^4)		Y_g (mm)		I_{cr} (10^6mm^4)		Y_{cr} (mm)		I_{av} (10^6mm^4)	
		medium	long	medium	long	medium	long	medium	long	medium	long
110	2.65	14.0	8.8	59.9	63.1	7.5	6.1	40.8	50.0	10.7	7.5
120	2.88	17.9	11.2	65.1	68.5	9.3	7.6	43.5	53.4	13.6	9.4
130	3.12	22.5	14.0	70.3	73.8	11.3	9.3	46.0	56.8	16.6	11.7
140	3.35	27.8	17.3	75.5	79.1	13.5	11.2	48.4	59.9	20.6	14.3
150	3.58	33.9	21.0	80.6	84.4	16.0	13.3	50.8	63.0	24.9	17.2
160	3.81	40.8	25.2	85.7	89.6	18.7	15.6	53.0	66.0	29.7	20.4
170	4.04	48.6	29.9	90.8	94.8	21.6	18.1	55.2	68.9	35.1	24.0
180	4.27	57.3	35.2	95.9	100.0	24.8	20.9	57.3	71.6	41.0	28.0
190	4.50	67.0	41.1	101.0	105.1	28.2	23.9	59.4	74.4	47.6	32.5
200	4.73	77.7	47.5	106.0	110.3	31.8	27.0	61.4	77.0	54.7	37.3

Notes:
1. D_s is the overall thickness of the composite floor slab.
2. Composite floor slab weights are based on a dry concrete density of 2350 kg/m^3 with no allowance for ponding.
3. Section properties are presented in terms of equivalent steel units as follows:
   (a) Medium term superimposed loads are based on 2/3 short term and 1/3 long term load (i.e. modular ratio = 10) and apply to buildings of normal usage.
   (b) Long term superimposed loads are based on all loads being long term (i.e. modular ratio = 18) and apply to storage loads and loads which are permanent in nature.
4. I_g is the second moment of area of the Flatdeck composite floor slab for the gross section.
5. I_{cr} is the second moment of area of the Flatdeck composite floor slab for the gross section.
6. I_{av} is the average value of gross (I_g) and cracked (I_{cr}) sections to be used for deflection calculations.
7. Y_g is the distance from top of composite floor slab to neutral axis of the Flatdeck composite floor slab for the gross section.
8. Y_{cr} is the distance from top of composite floor slab to neutral axis of the Flatdeck composite floor slab for the cracked section.