SECTION ONE

SLAB REINFORCEMENT

SECTION ONE : SLAB REINFORCEMENT

This Section enables engineer to select welded wire fabric (WWF) from design tables based on the design considerations shown below for one-way and two-way continuous slabs.

1.1 Design Considerations

1. 25mm nominal cover to steel reinforcement is adopted.
2. 2.7 kN/m^2 is taken as Superimposed Dead Loads (including dead load for finishes, partition, services, etc.).
3. Concrete Grade 30 is adopted in the design for Table 'SA1' to Table 'SA18'.
4. Design criteria complies to BS 8110: Part 1: 1985: Section Three.
5. Design Tables are categorised based on shortest slab span, L_x criteria followed by ultimate design loads (excluding slab self weight) as shown in Table 'A' below.

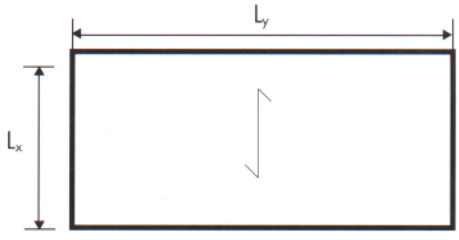
TABLE 'A'

Slab Span, L_x	Ultimate Design Loads, W (kN/m^2)	Design Table
$Lx \leq 3.0$	$W \leq 8.6$	'SA1'
	$8.6 < W \leq 11.8$	'SA2'
	$11.8 < W \leq 15.8$	'SA3'
	$15.8 < W \leq 23.8$	'SA4'
	$23.8 < W \leq 27.8$	'SA5'
	$27.8 < W \leq 35.8$	'SA6'
$3.0 < Lx \leq 3.6$	$W \leq 8.6$	'SA7'
	$8.6 < W \leq 11.8$	'SA8'
	$11.8 < W \leq 15.8$	'SA9'
	$15.8 < W \leq 23.8$	'SA10'
	$23.8 < W \leq 27.8$	'SA11'
	$27.8 < W \leq 35.8$	'SA12'
$3.6 < Lx \leq 4.8$	$W \leq 8.6$	'SA13'
	$8.6 < W \leq 11.8$	'SA14'
	$11.8 < W \leq 15.8$	'SA15'
	$15.8 < W \leq 23.8$	'SA16'
	$23.8 < W \leq 27.8$	'SA17'
	$27.8 < W \leq 35.8$	'SA18'

6. Mesh provided in Table 'SA1' to Table 'SA18' are designed based on the longest slab span dimension, L_x and highest end of ultimate design load category, W of the Table 'A' above.
7. Engineer shall consider the continuity effect if adjacent slab panels are of different thickness and/or having drop affecting the design effective depth.
8. Extra allowance of reinforcement areas i.e. 50mm has been provided to the designed required steel area when selecting the mesh.

1.2 Examples On Slab Design

EXAMPLE (1)



Design Data :

Slab sizes: L_y = 6.5 m, L_x = 3.0 m.

1. Slab type: Two Adjacent Edges Discontinuous.
2. Design Live Load, LL = 3.0 kN/m^2
   Superimposed Dead Load, SDL = 2.7 kN/m^2

Design Method:

Step 1: For L_x = 3.0 m ⇒ Table 'SA1' to Table 'SA6'

Step 2: Calculate the ultimate design load (excluding slab self-weight),

W = (1.4 x SDL) + (1.6 x LL) = (1.4 x 2.7) + (1.6 x 3.0)
= 8.58 kN/m^2

W < 8.6 kN/m^2 ⇒ go to Table 'SA1'

Step 3: Span Ratio = L_y/L_x = 6.5/3.0 = 2.17 > 2.0 ⇒ One-Way Slab ⇒ Column "9"
Slab Panel Type : Two Adjacent Edges Discontinuous ⇒ Row "4"
RESULT ⇒ 125 mm thick slab with
WWF B8 (Top Mesh - L_x Direction), WWF A7 (Top Mesh - L_y Direction) and
WWF B6 (Bottom Mesh) satisfying deflection, shear and moment criteria.

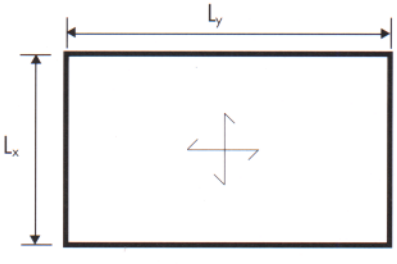
(Note: If engineer prefers other slab thickness to be used, the design has to be extended to *Step 4*.)

Step 4: Work out the self-weight difference between the slab thickness preferred and one recommended in the Design Table 'SA1'.
For instance, slab thickness 150 mm is preferred.

- New additional weight due to increase in slab thickness
  = (0.15 - 0.125) x 24 = 0.6 kN/m^2
- New ultimate design load = (1.4 x 0.6 + 8.58) = 9.42 kN/m^2 ⇒ go to Table 'SA2'
- Repeat *Step 3*⇒ read Column "9" & Row "4"
- RESULT⇒ 125 mm thick slab with
  WWF B8 (Top Mesh - L_x Direction), WWF B6 (Top Mesh – L_y Direction) and
  WWF B8 (Bottom Mesh) satisfying deflection, shear and moment criteria.

Therefore, engineer can use the preferred slab thickness 150 mm with the above designed mesh.

EXAMPLE (2) :



Design Data:

1. Slab Sizes: L_y = 6.0 m, L_x = 4.0 m.
2. Slab Type: Interior Panel.
3. Design Live Load, LL = 6.0 kN/m^2
   Superimposed Dead Load, SDL = 5.0 kN/m^2

Design Method:

Step 1: For L_x = 4.0 m⇒ Table 'SA13' to Table 'SA18'

Step 2: Calculate the ultimate design load (excluding slab self-weight),

W = (1.4 x SDL) + (1.6 x LL) = (1.4 x 5.0) + (1.6 x 6.0)
= 16.6 kN/m^2

15.8 kN/m^2 < W ≤ 23.8 kN/m^2 ⇒ go to Table 'SA16'

Step 3: Span Ratio = L_y/L_x = 6/4 = 1.5 < 2.0 ⇒ Two-Way Slab ⇒ Column "6"
Slab Type: Interior Panel ⇒ Row "1"

- RESULT ⇒ 175 mm thick slab with

WWF DA10/10 (Top Mesh - L_x Direction), WWF B8 (Top Mesh - L_y Direction) and
WWF DE9/8 (Bottom Mesh) satisfying deflection, shear and moment criteria.

Step 4: Slab thickness 225 mm is preferred.

- New additional weight due to increase in slab thickness
  = (0.225 - 0.175) x 24 = 1.2 kN/m^2
- 'New' ultimate design load = (1.4 x 1.2 + 16.6) = 18.28 kN/m^2 ⇒ go to Table 'SA16'
- RESULT ⇒ 225 mm thick slab with
  WWF DA10/10 (Top Mesh - L_x Direction), WWF B8 (Top Mesh - L_y Direction) and
  WWF DE9/8 (Bottom Mesh) satisfying deflection, shear and moment criteria.

1.3 Slab Design Tables

TABLE SA1	SLAB SPAN	$L_x \leq 3.0m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	$W \leq 8.6$ kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	A7	A7	B6	B6	B6	B6	B6
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	B6
	Bottom mesh	A7	A7	A7	A7	A7	A7	A7	A7	B6
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	B6	B6	B6	B6	B6	B6	B6
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	A7	A7	A7	A7	A7	B6	B6
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	B6	B6	B6	B6	B6	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	A7	A7	A7	A7	A7	B6	B6
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B6	B6	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	B6	B6	B6	B6	B6	B6	B6
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	B6	B6	B6	B6	B6	B6	B6	B6
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	A7	A7	A7	B6	B6	B6	B6
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	B6	B6	B6	B8	B8	B8	B8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B6	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	B6	B6	B6	B6	B6	B6	B6	B6
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	A7	B6	B6	B6	B8	B8	B8	B8	B8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	B6	B6	B6	B8	B8	B8	B8	B8	B8

TABLE SA2	SLAB SPAN	$L_x \leq 3.0m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	8.6 kN/m^2 < W ≤ 11.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	B6	B6	B6	B6	B6	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	A7	A7	A7	B6	B6	B6	B6
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B6	B6	B6	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	A7	B6	B6	B6	B6	B6	B6
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	B6	B6	B6	B6	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	A7	B6	B6	B6	B6	B6	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B6	B6	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	**A7**	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	B6	B6	B6	B6	B6	B6	B6	B6
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	A7	B6	B6	B8	B8	B8	B8	B8	B8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	B6	B6	B6	B6	B6	B8	B8	B8	B8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	150	150
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A8	A8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A8	A8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8

TABLE SA3	SLAB SPAN	$L_x \leq 3.0m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	11.8 kN/m^2 < W ≤ 15.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B6	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	A7	A7	B6	B6	B6	B6	B6	B6	B6
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B6	B6	B6	B6	B6	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B6	B8	B8	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B9	B9
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B8	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	B6	B6	B6	B6	B6	B6	B8	B8	B8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A8	A8	A8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B9	B9
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	E7	B8	B8	B8	B8	B8	B8	B8	B8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	150	150
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A7	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B6	B6
	Bottom mesh	A8	B8	B8	B8	B8	B8	B9	B8	B8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	150	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A8	A8	A8	A8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A8	A8	A8	A8
	Bottom mesh	A9	D7	DE8/8	DE8/8	DE8/8	B8	B8	B8	B8

TABLE SA4	SLAB SPAN	$L_x \leq 3.0m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	15.8 kN/m^2 < W ≤ 23.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B9	B9
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B9	B9	B9	B10	B10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B6	B8	B8	B8	B8	B8	B8	B9	B9
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	B9	B9	B9
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B9	B9	B9
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B9	B9	B9
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	150	150	150	150	150
	Top mesh (lx direction)	B8	B8	B9	B9	B9	B9	B9	B9	B9
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A8	A8	A8	A8
	Bottom mesh	D7	D7	DE8/8	DE8/8	DE8/8	B8	B8	B8	B8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	150	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A7	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	DE8/8	B8	B8	B8	B9	B9	B10	B10
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	125	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A7	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	E9	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	DE10/8	DE10/8

TABLE SA5	SLAB SPAN	$L_x \leq 3.0m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	23.8 kN/m^2 < W $\leq$ 27.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (Ix direction)	B8	B8	B8	B8	B8	B8	B9	B9	B9
	Top mesh (Iy direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (Ix direction)	D7	A10	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8
	Top mesh (Iy direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	150	150	150	150
	Top mesh (Ix direction)	D7	DE8/8	DE8/8	DE9/8	DE9/8	B9	B9	B9	B9
	Top mesh (Iy direction)	B8	B8	B8	B8	B8	B6	B6	B6	B6
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	150	150	150	150	150
	Top mesh (Ix direction)	E9	EA10/10	AA13/10	AA13/10	EA10/10	DE9/8	DE9/8	AA13/10	AA13/10
	Top mesh (Iy direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	D7	DE8/8	DE8/8	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (Ix direction)	B8	B8	B8	B8	B9	B9	B9	B9	B9
	Top mesh (Iy direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A9	D7	D7	D7	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	150	150	150	150	150	150	150
	Top mesh (Ix direction)	A7	A7	A8	A8	A8	A8	A8	A8	A8
	Top mesh (Iy direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	A9	DE8/8	B8	B8	B8	B9	B9	B10	B10
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	150	125	150	150	150	150
	Top mesh (Ix direction)	B8	B9	B9	B9	B9	B9	B10	B10	B10
	Top mesh (Iy direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Bottom mesh	D7	E9	EA10/10	DE8/8	DE8/8	DE8/8	DE8/8	EA10/10	EA10/10
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (Ix direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Top mesh (Iy direction)	B9	B9	B9	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	EA10/10	AA13/10	DE8/8	DE9/8	DE9/8	DE10/8	DE10/8	DE10/8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (Ix direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (Iy direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A10	EA10/10	EA10/10	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	DA10/10

TABLE SA6	SLAB SPAN	$L_x \leq 3.0m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	27.8 kN/m^2 < W ≤ 35.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	B9	B9	B9
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	EA10/10	EA10/10	EA10/10	AA13/10	DE8/8	AA13/10	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	D7	DE8/8	DE8/8	B8	DE8/8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	EA10/10	AA13/10	AA13/10	DE9/8	DE9/8	DE9/8	DE10/8	DE10/8	DE10/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	B8	B8	B8	B9	B9	B9
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	150	150	150	150	150	150	175
	Top mesh (lx direction)	E10	E11	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	EA13/10	EA13/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B9	B8	B8
	Bottom mesh	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	150	150	150	150	150
	Top mesh (lx direction)	B8	B9	B9	B9	B9	B9	B9	B9	B9
	Top mesh (ly direction)	A7	A7	A7	A7	A8	A8	A8	A8	A8
	Bottom mesh	D7	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	DE9/8	DE9/8	DE10/8	EA13/10	EA13/10	EA13/10
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	B8	B9	B9	B10	B10	B10	B11	B11	B11
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D7	E9	EA10/10	EA10/10	EA10/10	AA13/10	AA13/10	AA13/10	AA13/10
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B9	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	A11	EA10/10	AA13/10	AA13/10	DA10/10	DA10/10	EA13/10	DE11/9	DE11/9
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D8	A12	A13	E12	E12	E13	D11	D12	D12

TABLE SA7	SLAB SPAN	3.0m < $L_x \leq$ 3.6m	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	W $\leq$ 8.6 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	A7	B6	B6	B6	B6	B6	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A7	A7	A7	B6	B6	B6	B6	B6	B6
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B6	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	A7	B6	B6	B6	B6	B6	B6	B6	B6
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	A7	B6	B6	B6	B6	B6	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	E7	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B6	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	B6	B6	B6	B6	B6	B6	B6	B6	B6
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A8	A8	A8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	A8	B8	B8	B8	B8	B8	B8	B8	B8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A7	A7	A7	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B6	B6	B6
	Bottom mesh	A8	B8	B8	B8	B8	B8	B8	B8	B8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8

TABLE SA8	SLAB SPAN	$3.0m < L_x \leq 3.6m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$8.6\ kN/m^2 < W \leq 11.8kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B6	B6	B6	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	E6	B6	B6	B6	B6	B6	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B6	B6	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B9	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B8	B8	B8	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B6	B6	B6
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A7
	Bottom mesh	B6	B6	B6	B8	B8	B8	B8	B8	B8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B8	B8	B8	B8	B8	B8	B9	B9
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	125	125	125	125	125	150	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B9	B9	B8	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A8	A8	A8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A7	A7	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B9	B9
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A9	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8

TABLE SA9	SLAB SPAN	$3.0m < L_x \leq 3.6m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$11.8\ kN/m^2 < W \leq 15.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	125
	Top mesh (lx direction)	**DE7/7**	**DE7/7**	**DE7/7**	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	DE7/7	A10	DE8/8	B8	B8	B8	B9	B9	B9
	Top mesh (ly direction)	B8	B8	B8	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B8	B8	B8	B8	B8	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	150	150	150	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	125	125	125	125	125	125	125	125	150
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B9	B8	B8
	Top mesh (ly direction)	A7	A7	A7	A7	A7	A7	A7	A7	A8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	125	125	150	150	150	150	150	150	175
	Top mesh (lx direction)	A7	A7	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B6	B6
	Bottom mesh	B8	B8	B8	B8	B8	B8	B9	B9	B9
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	125	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B9	B9	B9	B9	B9
	Top mesh (ly direction)	A7	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D7	B8	B8	B8	B8	B8	B8	B8	B8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	125	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	A7	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	B8	B8	B8	B8	B9	B9	B10	B10
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	B10
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	B10
	Bottom mesh	D7	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8	DE9/8	DE9/8

TABLE SA10	SLAB SPAN	$3.0m < L_x \leq 3.6m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$15.8\ kN/m^2 < W \leq 23.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	125	125	125	150	150	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	EA10/10	B8	B8	B9	B9	B9
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE9/8	DE9/8	AA13/10	DE10/8	DE10/8	DE10/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B9	B9	B9
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	E9	EA10/10	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	EA13/10	EA13/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	D7	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B9	B9	B9	B9	B9
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A9	D7	D7	A10	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	A9	DE8/8	DE8/8	DE8/8	B9	B9	B10	B10	B10
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	150	150	150	150	150	150	150	175	175
	Top mesh (lx direction)	B8	**B9**	B9	B10	B10	B10	B11	B10	B10
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A10	EA10/10	EA10/10	EA10/10	AA13/10	AA13/10	AA13/10	DE9/8	DE9/8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	150	150	150	150	150	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B9	B9	B9	B9	B9	B8	B8	B8	B8
	Bottom mesh	D7	EA10/10	AA13/10	AA13/10	DA10/10	DE9/8	DE10/8	DE10/8	DE10/8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	150	175	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D8	E11	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	EA13/10	EA13/10

TABLE SA11	SLAB SPAN	$3.0m < L_x \leq$ **3.6m**	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	23.8 kN/m^2 < W ≤ 27.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	E8	D7	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	175	175	175
	Top mesh (lx direction)	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	DE8/8	DE8/8	DE9/8	DE9/8	DE10/8	DE10/8	EA13/10	DE11/8	DE11/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B9	B9	B9	B10	B10
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	175	175	175	175
	Top mesh (lx direction)	DE8/9	DE9/9	DE9/9	DE10/8	DE10/9	AA13/10	DA10/10	DA10/10	DA10/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	EA10/10	DE9/8	DE8/8	DE9/8	DE9/8	DE9/8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	B8	B8	B9	B9	B9	B9	B10	B10	B10
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D7	A10	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE9/8	DE9/8	DE9/8	AA13/10	DE10/8	EA13/10	EA13/10
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	150	150	150	150	150	175	175	175	175
	Top mesh (lx direction)	B9	B10	B10	B10	B11	B10	B10	B11	B11
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	DE8/9	DE8/9	DE9/9	DE9/9	DE9/9	DE9/8	DE9/8	DE9/8	DE9/8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	150	150	175	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B9	B9	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	DE8/9	DE9/9	DE9/8	DE9/8	AA12/10	DE10/8	A13/10	EA13/10	EA13/10
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A12	DE9/9	DE9/9	DE10/9	DE10/9	DE10/9	DE11/9	DE11/9	DE11/9

TABLE SA12	SLAB SPAN	$3.0m < L_x \leq 3.6m$	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	$27.8\ kN/m^2 < W \leq 35.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	150	150	150	150	150	150	150	150	175
	Top mesh (lx direction)	B8	B8	B9	B9	B9	B10	B10	B10	B9
	Top mesh (ly direction)	**B8**	**B8**	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	A9	D7	D7	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE8/8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	175
	Top mesh (lx direction)	B8	B9	B9	B9	B10	B10	B11	B11	B10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	D7	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	DE8/8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	175	175	175	175	175
	Top mesh (lx direction)	B8	B9	B10	B10	B10	B11	B11	B11	B11
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	DE9/8	DE8/8	DE9/8	DE9/8	DE10/8	DE10/8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	175	175	175	175	175	175
	Top mesh (lx direction)	B10	B10	B11	B10	B10	B11	B11	B11	B11
	Top mesh (ly direction)	B9	B9	B9	B8	B8	B8	B8	B8	B8
	Bottom mesh	EA10/10	EA10/10	AA13/10	DE9/8	DE9/8	DE9/8	DE10/8	DE10/8	DE10/8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	175	175
	Top mesh (lx direction)	B9	B9	B10	B10	B10	B11	B11	B10	B10
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	E9	EA10/10	EA10/10	EA10/10	AA13/10	AA13/10	AA13/10	DE9/8	DE9/8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B9	B9	B9	B8	B8	B8	B8	B8	B8
	Bottom mesh	E9	AA13/10	AA13/10	DE10/8	DE10/8	DE11/8	DE11/8	DE12/8	DE12/8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	150	150	175	175	175	175	175	175	175
	Top mesh (lx direction)	B10	B11	B11	B11	B11	B11	B12	B12	B12
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	E10	E11	E10	E11	E11	E11	DE10/9	DE11/9	DE11/9
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	150	150	175	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	B10	B10	B9	B9	B9	B9	B9	B9	B9
	Bottom mesh	E10	E11	DE10/9	DE10/9	DE11/9	DE11/9	DE12/9	DE12/9	DE12/9
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	150	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A13	A13	D10	D11	D11	D12	D12	D13	B13

TABLE SA13	SLAB SPAN	$3.6m < L_x \leq 4.8m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$W \leq 8.6\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	E7	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B6	B6	B6	B6	B6	B6	B6	B6	B6
	Bottom mesh	B6	B6	B6	B6	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B6	B6	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	175	175	175
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B9	B9	B9	B9
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B6	B6	B6
	Bottom mesh	B6	B8	B8	B8	B8	B8	B8	B8	B8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	D7	DE8/8	DE8/8	EA10/10	DE9/8	DE8/8	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	150	150	150
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B8	B9	B9
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	175	175	175	175	175	200	200
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	D6	D6
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B9	B9	B9
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	175	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	B8	B8	B8	B8	B9	B9	B9	B9	B9
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	A9	DE7/7	DE7/7	DE7/7	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	150	150	175	175	175	175	175	200	200
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	A8	D6	D6
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	B9	B9
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	175	175	175	175	175	175	200	200	200
	Top mesh (lx direction)	A8	A8	A8	A8	A8	A8	D6	D6	D6
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	D6	D6	D6
	Bottom mesh	D7	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	DE9/8	DE9/8	DE9/8

TABLE SA14	SLAB SPAN	3.6m < Lx ≤ 4.8m	Concrete Grade 30N/mm^2
	ULTIMATE (SDL +LL)	8.6 kN/m^2 < W ≤ 11.8 kN/m^2	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/ L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	125	150	150	150	150	150	150	175	175
	Top mesh (lx direction)	D7	D7	A10	DE8/8	DE8/8	DE8/8	DE9/8	B8	B8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B6	B6
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	150	150	150	175	175	175
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE8/8	EA10/10	EA10/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	150	150	150	175	175	175	175	175	175
	Top mesh (lx direction)	D7	DE8/8	EA10/10	DE8/8	DE9/8	DE9/8	AA13/10	DE10/8	DE10/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B9	B9
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	150	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	EA10/10	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	DE10/8	DE10/8	DE10/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	B8	B8	B8	B8	B8	B9	B9	B9
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	150	175	175	175	175	175	175	175
	Top mesh (lx direction)	B8	B8	B8	B8	B8	B8	B9	B9	B9
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	E8	D7	B8	B8	B8	B8	B8	B8	B8
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	150	175	175	175	175	200	200	200	200
	Top mesh (lx direction)	A8	A8	A8	A8	A8	D6	D6	D6	D6
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	B8	B8	B9	B9	B9	B9	B10	B10
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	175	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	B8	B9	B9	B9	B10	B10	B10	B10	B10
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D7	A10	DE8/8	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	175	175	175	175	200	200	200	200	200
	Top mesh (lx direction)	A8	A8	A8	A8	D6	D6	D6	D6	D6
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	AA13/10	DE10/8	DE10/8
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	175	175	175	200	200	200	200	200	200
	Top mesh (lx direction)	A8	A8	A8	D6	D6	D6	D6	D6	D6
	Top mesh (ly direction)	A8	A8	A8	D6	D6	D6	D6	D6	D6
	Bottom mesh	DE8/9	E10	DE9/9	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	DA10/10

TABLE SA15	SLAB SPAN	$3.6m < L_x \leq 4.8m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$11.8\ kN/m^2 < W \leq 15.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	150	150	150	175	175	175	175	175	175
	Top mesh (lx direction)	D7	DE8/8	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	**B8**	B6
	Bottom mesh	B8	B8	B8	B8	B8	B8	B8	B8	B8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	150	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	EA10/10	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	AA13/10	AA13/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	B8	B8	B8	B8	B8	B8	B8	B8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	150	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	EA10/10	DE8/8	DE9/8	DE9/8	AA13/10	DE10/8	DE10/8	EA13/10	EA13/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	B8	B8	B8	B8	B9	B9	B10	B10
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	175	175	175	200	200	200
	Top mesh (lx direction)	EA10/10	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	DA10/10	DA10/10	DA10/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	DE9/8	DE9/8	DE9/8
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	175	175	175	175	175	175
	Top mesh (lx direction)	B8	B8	B9	B9	B9	B9	B10	B10	B10
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	A8	A8	A8
	Bottom mesh	D7	D7	DE8/8	DE8/8	DE8/8	DE8/8	DE8/8	EA10/10	EA10/10
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	200	200	200	200	200	200
	Top mesh (lx direction)	A8	A8	A8	D6	D6	D6	D6	D6	D6
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE9/8	DE9/8	DE9/8	AA13/10	EA13/10	EA13/10	EA13/10
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	175	175	175	175	175	175	200	200	200
	Top mesh (lx direction)	B9	B9	B10	B10	B11	B11	B10	B11	B11
	Top mesh (ly direction)	A8	A8	A8	A8	A8	A8	D6	D6	D6
	Bottom mesh	E9	EA10/10	EA10/10	AA13/10	AA13/10	AA13/10	AA13/10	AA13/10	AA13/10
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	175	175	175	175	200	200	200	200	200
	Top mesh (lx direction)	A8	A8	A8	A8	D6	D6	D6	D6	D6
	Top mesh (ly direction)	B9	B9	B9	B9	B8	B8	B8	B8	B8
	Bottom mesh	E9	EA10/10	AA13/10	DA10/10	AA13/10	DA10/10	**EA13/10**	EA13/10	EA13/10
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	175	200	200	200	200	200	200	200	200
	Top mesh (lx direction)	A8	D6	D6	D6	D6	D6	D6	D6	D6
	Top mesh (ly direction)	A8	D6	D6	D6	D6	D6	D6	D6	D6
	Bottom mesh	A12	A12	E11	E12	E12	D10	E13	D11	D11

TABLE SA16	SLAB SPAN	$3.6m < L_x \leq 4.8m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$15.8\ kN/m^2 < W \leq 23.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	175	175	175	175	175	175	175	200	200
	Top mesh (lx direction)	E9	EA10/10	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	DE10/8	DE10/8
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	E8	D7	DE8/8	DE8/8	DE8/8	DE9/8	DE9/8	B9	B9
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	175	175	200	200	200	200
	Top mesh (lx direction)	E10	E11	E11	E12	E12	AA13/10	DA10/10	DA10/10	DA10/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	DE8/8	DE8/8	DE8/8	EA10/10	DE9/8	DE8/8	DE9/8	DE9/8	DE9/8
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	175	200	200	200	225	225
	Top mesh (lx direction)	E10	A13	E12	B11	DA10/10	EA13/10	DE11/9	DE11/9	DE11/9
	Top mesh (ly direction)	B8	B8	B8	B9	B8	B8	B8	B8	B8
	Bottom mesh	DE8/8	DE8/8	DE9/8	DE11/9	DE9/8	DE9/8	DE10/8	DE10/8	DE10/8
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	175	175	200	200	200	200	200	200	200
	Top mesh (lx direction)	E11	E12	E12	D10	E13	E13	D12	D12	D12
	Top mesh (ly direction)	B9	B9	B9	B9	B9	B9	B9	B9	B9
	Bottom mesh	DE8/9	DE9/9	AA13/10	AA13/10	AA13/10	DA10/10	DA10/10	EA13/10	EA13/10
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	175	175	200	200	200	200
	Top mesh (lx direction)	B9	B10	B10	B10	B10	B10	B10	B11	B11
	Top mesh (ly direction)	A8	A8	A8	A8	A8	D6	D6	D6	D6
	Bottom mesh	DE8/9	DE8/9	DE9/9	DE9/9	DE9/9	AA13/10	AA13/10	AA13/10	AA13/10
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	175	175	200	200	200	200	225	250	250
	Top mesh (lx direction)	A8	A8	D6	D6	D6	D6	A9	D7	D7
	Top mesh (ly direction)	B9	B9	B9	B9	B9	B9	B8	B8	B8
	Bottom mesh	DE8/9	DE9/9	AA13/10	**DA10/10**	EA13/10	EA13/10	DE11/8	DE11/8	DE11/8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	200	200	200	200	200	200	200	200	200
	Top mesh (lx direction)	B10	B10	B11	B11	B11	B12	B12	B12	B12
	Top mesh (ly direction)	D6	D6	D6	D6	D6	D6	D6	D6	D6
	Bottom mesh	D8	A12	E11	A13	E12	E12	D10	E13	E13
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	175	200	200	200	200	200	225	225	225
	Top mesh (lx direction)	A8	D6	D6	D6	D6	D6	A9	A9	A9
	Top mesh (ly direction)	B10	B10	B10	B10	B10	B10	B9	B9	B9
	Bottom mesh	A12	E11	E12	E13	E13	D12	DE12/9	DE12/9	DE12/9
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	200	200	200	200	200	200	225	225	225
	Top mesh (lx direction)	D6	D6	D6	D6	D6	D6	A9	A9	A9
	Top mesh (ly direction)	D6	D6	D6	D6	D6	D6	A9	A9	A9
	Bottom mesh	E11	E12	E13	D11	D12	D12	D12	D12	D12

TABLE SA17	SLAB SPAN	$3.6m < L_x \leq 4.8m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$23.8\ kN/m^2 < W \leq 27.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	175	175	175	175	175	175	200	200	200
	Top mesh (lx direction)	A11	A12	E11	E12	E12	E12	DA10/10	EA13/10	EA13/10
	Top mesh (ly direction)	B8	B8	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	D7	DE8/8	DE8/8	EA10/10	DE9/8	DE9/8	DE9/8	DE9/8	DE9/8
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	175	175	175	175	175	200	200	200	200
	Top mesh (lx direction)	E11	A13	E12	D10	E13	E12	E13	E13	E13
	Top mesh (ly direction)	B9	B9	B9	B9	B9	B8	B8	B8	B8
	Bottom mesh	EA10/10	EA10/10	AA13/10	AA13/10	AA13/10	DE9/8	DE9/8	AA13/10	AA13/10
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	175	175	200	200	200	200	200	**200**	225
	Top mesh (lx direction)	E11	**E12**	E12	E13	E13	D11	D12	D13	D13
	Top mesh (ly direction)	B9	B9	B8	B8	B8	B8	B8	B8	B8
	Bottom mesh	EA10/10	AA13/10	DE9/8	DE9/8	AA13/10	DE10/8	EA13/10	EA13/10	EA13/10
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	175	200	200	200	200	200	200	200	200
	Top mesh (lx direction)	E12	E12	E13	E13	D11	D12	D12	D13	D13
	Top mesh (ly direction)	B10	B9	B9	B9	B9	B9	B9	B9	B9
	Bottom mesh	A12	DE9/9	DE9/9	DE10/9	DE10/9	DE10/9	DE11/9	DE11/9	DE11/9
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	175	200	200	200	200	200	200	200	200
	Top mesh (lx direction)	B10	B10	B10	B10	B10	B11	B11	B11	B11
	Top mesh (ly direction)	A8	D6	D6	D6	D6	D6	D6	D6	D6
	Bottom mesh	E10	DE8/9	E10	DE9/9	DE9/9	DE9/9	DE10/9	DE10/9	DE10/9
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	175	200	200	200	200	200	225	225	225
	Top mesh (lx direction)	A8	D6	D6	D6	D6	D6	A9	A9	A9
	Top mesh (ly direction)	B10	B9	B9	B9	B9	B9	B8	B8	B8
	Bottom mesh	E10	DE9/9	DE10/9	DE11/9	DE11/9	DE12/9	DE11/8	DE11/8	DE11/8
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	200	200	200	200	200	200	200	225	225
	Top mesh (lx direction)	B10	B11	B11	B12	B12	B12	DE13/8	B12	B12
	Top mesh (ly direction)	D6	D6	D6	D6	D6	D6	D6	A9	A9
	Bottom mesh	A12	E11	E12	E12	D10	E13	E13	E13	E13
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	200	200	200	200	200	225	225	225	225
	Top mesh (lx direction)	D6	D6	D6	D6	D6	A9	A9	A9	A9
	Top mesh (ly direction)	B10	B10	B10	B10	B10	B10	B10	B10	B10
	Bottom mesh	A12	E12	E13	E13	D12	D12	D12	D13	D13
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	200	200	225	225	225	225	225	225	225
	Top mesh (lx direction)	D6	D6	A9	A9	A9	A9	A9	A9	A9
	Top mesh (ly direction)	D6	D6	A9	A9	A9	A9	A9	A9	A9
	Bottom mesh	E12	E13	E13	D11	D12	D12	D13	D13	D13

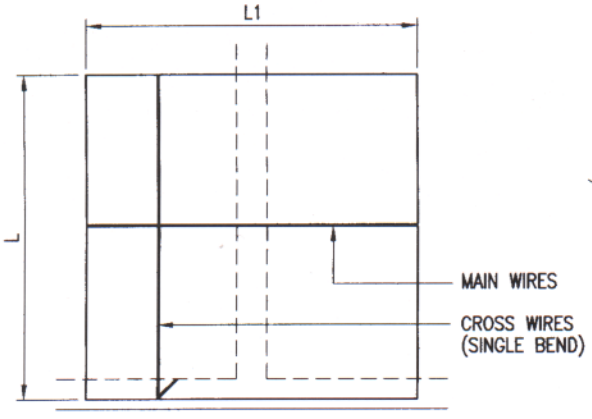
TABLE SA18	SLAB SPAN	$3.6m < L_x \leq 4.8m$	Concrete Grade $30N/mm^2$
	ULTIMATE (SDL +LL)	$27.8\ kN/m^2 < W \leq 35.8\ kN/m^2$	

TWO-WAY SLAB DESIGN IN ACCORDANCE TO BS 8110: PART 1: 1985 : SECTION THREE

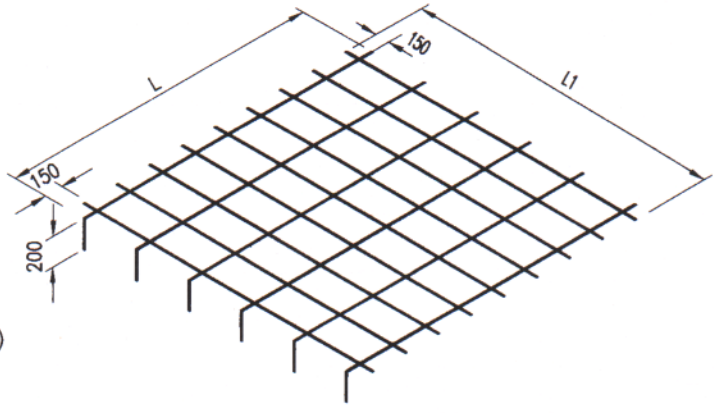
TYPES OF SLAB PANEL		(L_y/L_x) Ratio								ONE-WAY SLAB
		1.0	1.1	1.2	1.3	1.4	1.5	1.75	2.0	
1. INTERIOR PANELS	Thickness (mm)	175	175	175	175	175	200	200	200	200
	Top mesh (lx direction)	E11	E12	D10	E13	D11	E13	D11	D12	D12
	Top mesh (ly direction)	B9	B9	B9	B9	B9	B9	B9	B9	B9
	Bottom mesh	E9	E10	DE9/9	**DE10/9**	DE10/9	AA13/10	DA10/10	DA10/10	DA10/10
2. ONE SHORT EDGE DISCONTINUOUS	Thickness (mm)	175	200	200	200	200	200	200	200	200
	Top mesh (lx direction)	E12	E12	D10	E13	E13	D11	D12	D12	D12
	Top mesh (ly direction)	B10	B9	B9	B9	B9	B9	B9	B9	**B9**
	Bottom mesh	A12	DE9/9	DE9/9	DE9/9	DE10/9	DE10/9	DE10/9	DE11/9	DE11/9
3. ONE LONG EDGE DISCONTINUOUS	Thickness (mm)	175	200	200	200	200	200	200	225	225
	Top mesh (lx direction)	E12	D10	E13	D12	D12	D13	D13	D13	D13
	Top mesh (ly direction)	B10	B9	B9	B9	B9	B9	B9	B9	B9
	Bottom mesh	A12	DE9/9	DE10/9	DE10/9	DE11/9	DE11/9	DE12/9	DE11/9	DE11/9
4. TWO ADJACENT EDGE DISCONTINUOUS	Thickness (mm)	200	200	200	200	200	200	225	225	225
	Top mesh (lx direction)	E12	E13	D12	D12	D13	D13	D13	D13	D13
	Top mesh (ly direction)	B10	B10	B10	B10	B10	B10	B9	B9	B9
	Bottom mesh	E11	A13	E12	E13	E13	D11	D11	D12	D12
5. TWO SHORT EDGE DISCONTINUOUS	Thickness (mm)	200	200	200	200	200	200	200	200	200
	Top mesh (lx direction)	B10	B11	B11	B11	B11	B12	B12	B12	B12
	Top mesh (ly direction)	D6	D6	D6	D6	D6	D6	D6	D6	D6
	Bottom mesh	A12	E11	E11	E12	E12	E12	E13	E13	E13
6. TWO LONG EDGE DISCONTINUOUS	Thickness (mm)	200	200	200	200	200	225	225	250	250
	Top mesh (lx direction)	D6	D6	D6	D6	D6	A9	A9	D7	D7
	Top mesh (ly direction)	B10	B10	B10	B10	B10	B9	B9	B9	B9
	Bottom mesh	A12	E12	E13	D12	D13	D12	D13	DE13/9	DE13/9
7. THREE EDGE DISCONTINUOUS (ONE LONG EDGE CONTINUOUS)	Thickness (mm)	200	200	200	200	225	225	225	250	250
	Top mesh (lx direction)	B11	B12	DE13/8	DE13/8	DE13/8	DE13/8	DE13/8	DE13/8	DE13/8
	Top mesh (ly direction)	D6	D6	D6	D6	A9	A9	A9	D7	D7
	Bottom mesh	E12	D10	E13	D11	E13	E13	D12	D11	D11
8. THREE EDGE DISCONTINUOUS (ONE SHORT EDGE CONTINUOUS)	Thickness (mm)	200	200	200	200	225	225	250	250	250
	Top mesh (lx direction)	D6	D6	D6	D6	A9	A9	D7	D7	D7
	Top mesh (ly direction)	B11	B11	B11	B11	B11	B11	B10	B10	B10
	Bottom mesh	A13	E13	D12	D13	D12	D13	D13	D13	D13
9. FOUR EDGES DISCONTINUOUS	Thickness (mm)	200	200	225	225	225	225	250	275	275
	Top mesh (lx direction)	D6	D6	A9	A9	A9	A9	D7	A10	A10
	Top mesh (ly direction)	D6	D6	A9	A9	A9	A9	D7	A10	A10
	Bottom mesh	E13	D12	D12	D13	D13	D13	D13	D13	D13

1.4 Illustration On Use Of Mesh

SINGLE-BEND FABRIC

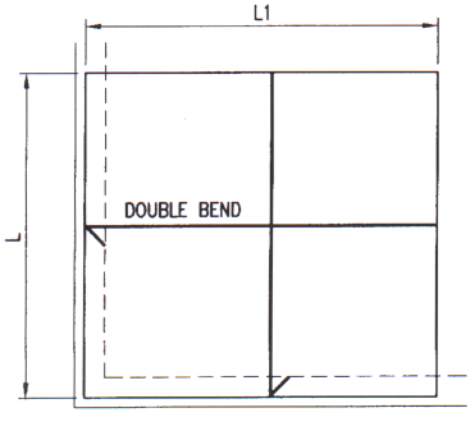


Plan of Top Reinforcement at Slab

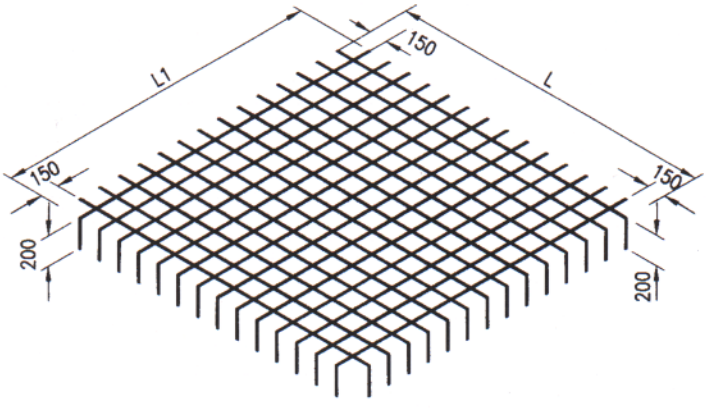


Isometric View

DOUBLE-BEND FABRIC

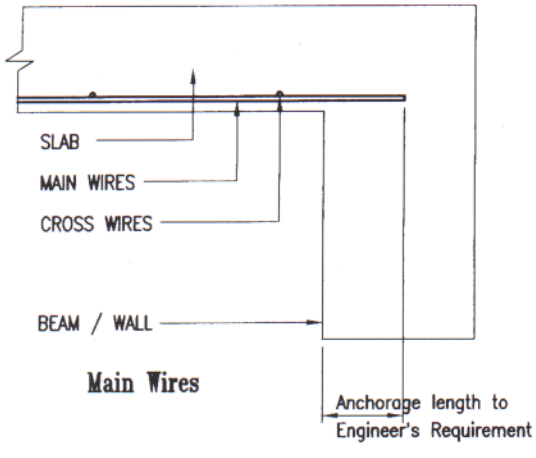


Plan of Top Reinforcement at Slab

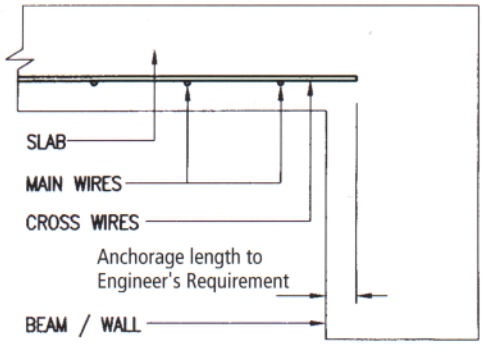


Isometric View

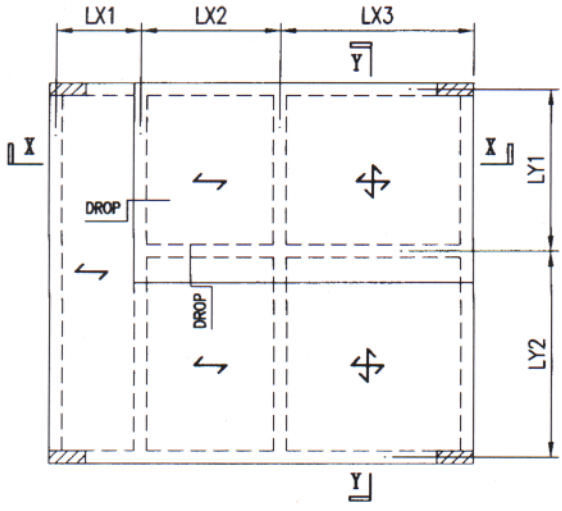
ANCHORAGE LENGTH



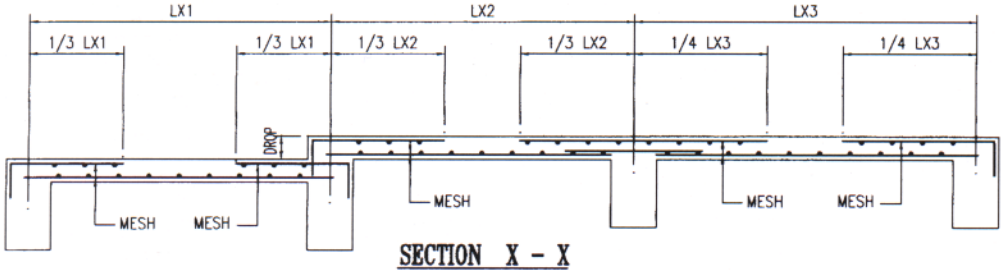
Main Wires



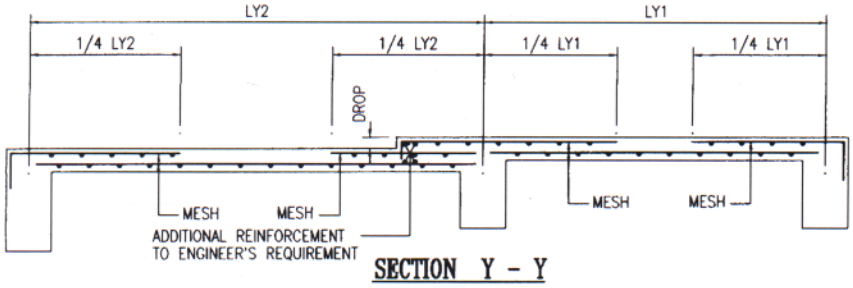
Cross Wires



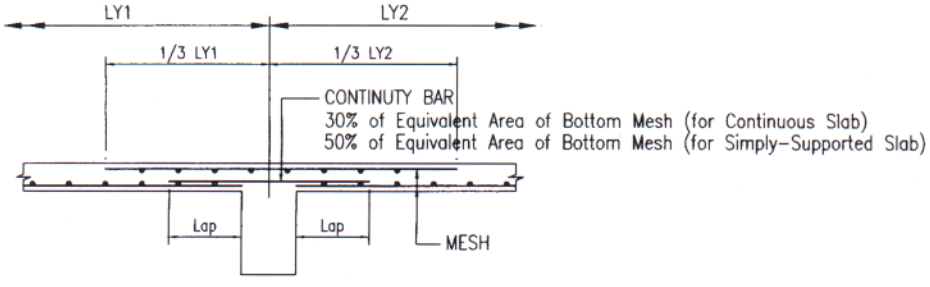
TYPICAL LAYOUT PLAN FOR ONE-WAY & TWO-WAY SLAB



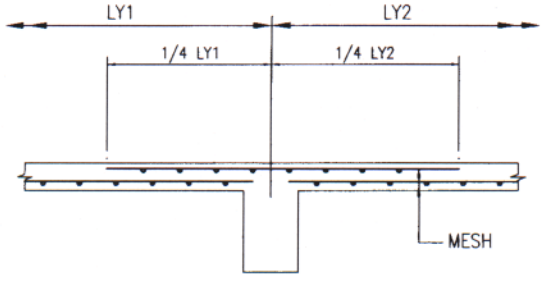
SECTION X - X



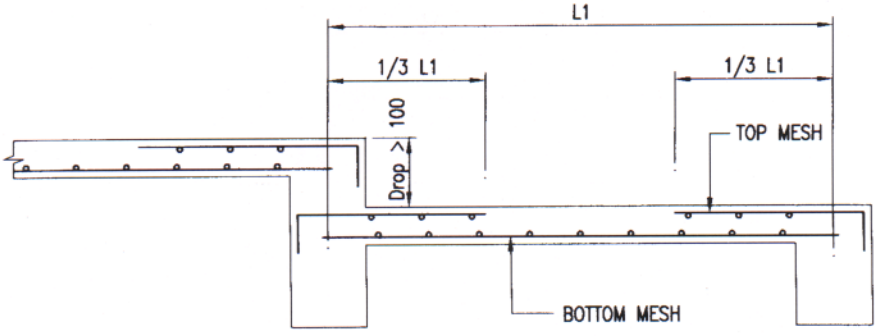
SECTION Y - Y



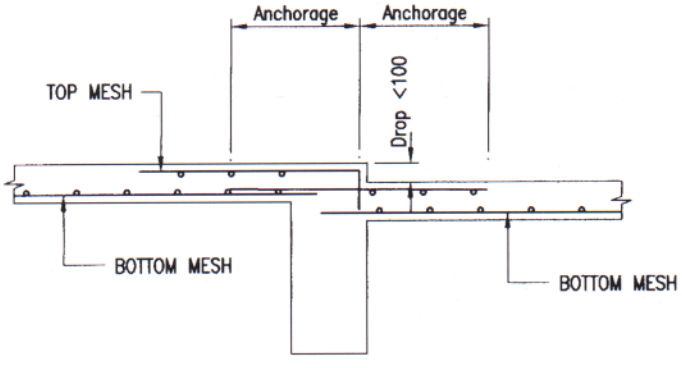
TYPICAL DETAIL OF CONTINUTY BAR IN THE MAIN DIRECTION
(For Bottom Mesh not anchoring into Beam)



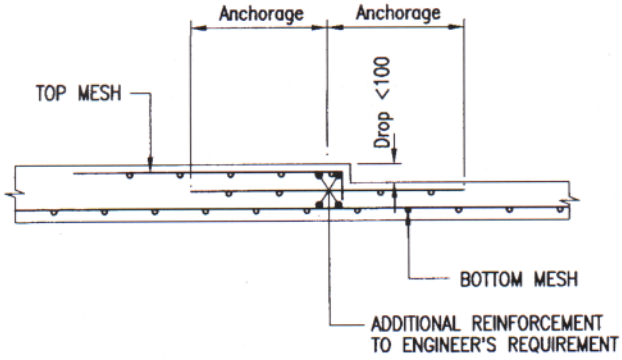
TYPICAL DETAIL IN THE SECONDARY DIRECTION
(For One-Way Slab)



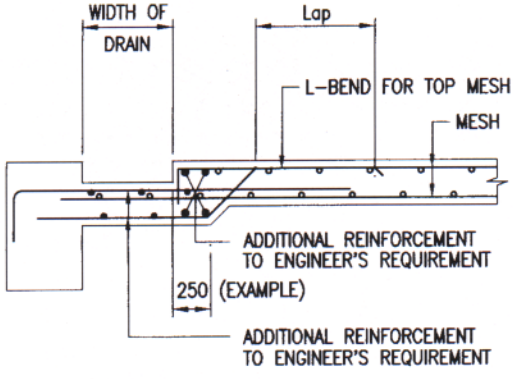
DROP > 100 AT SUPPORT



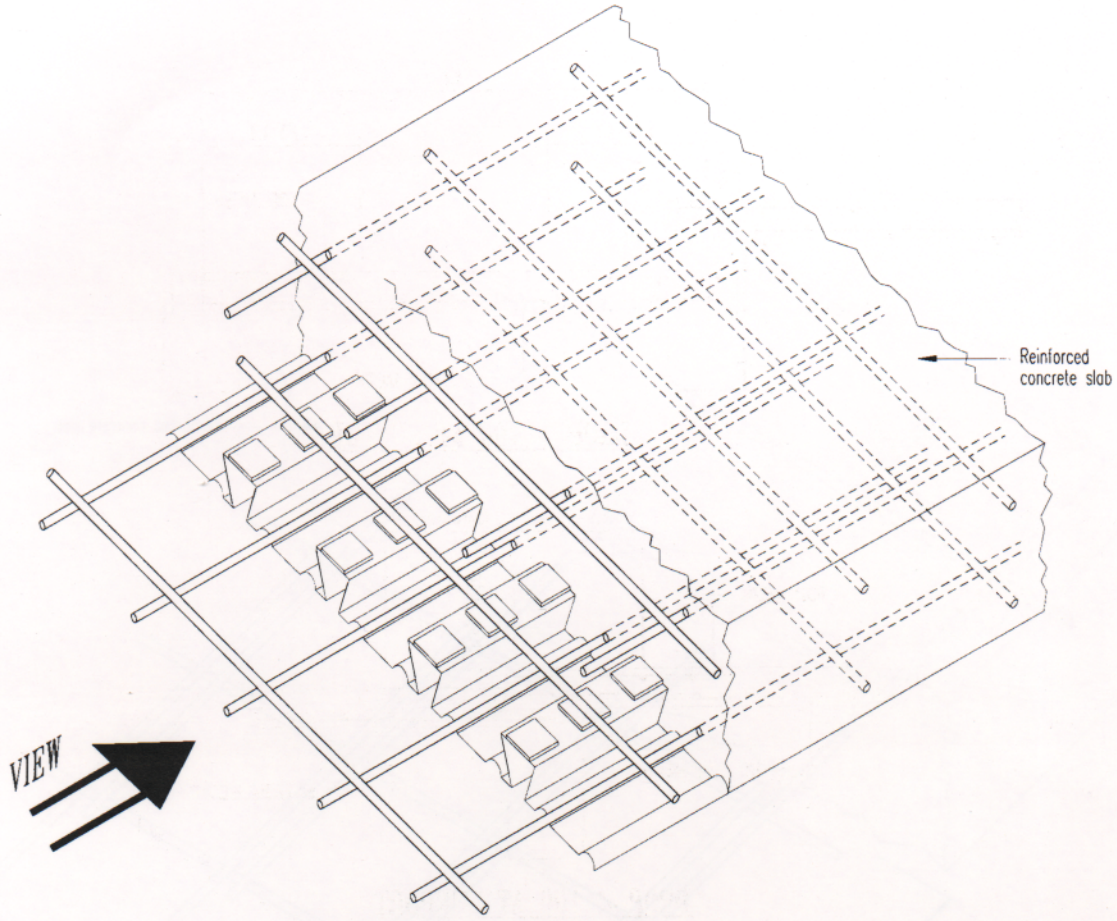
DROP ≤ 100 AT SUPPORT



TYPICAL DETAIL OF DROP AT SLAB

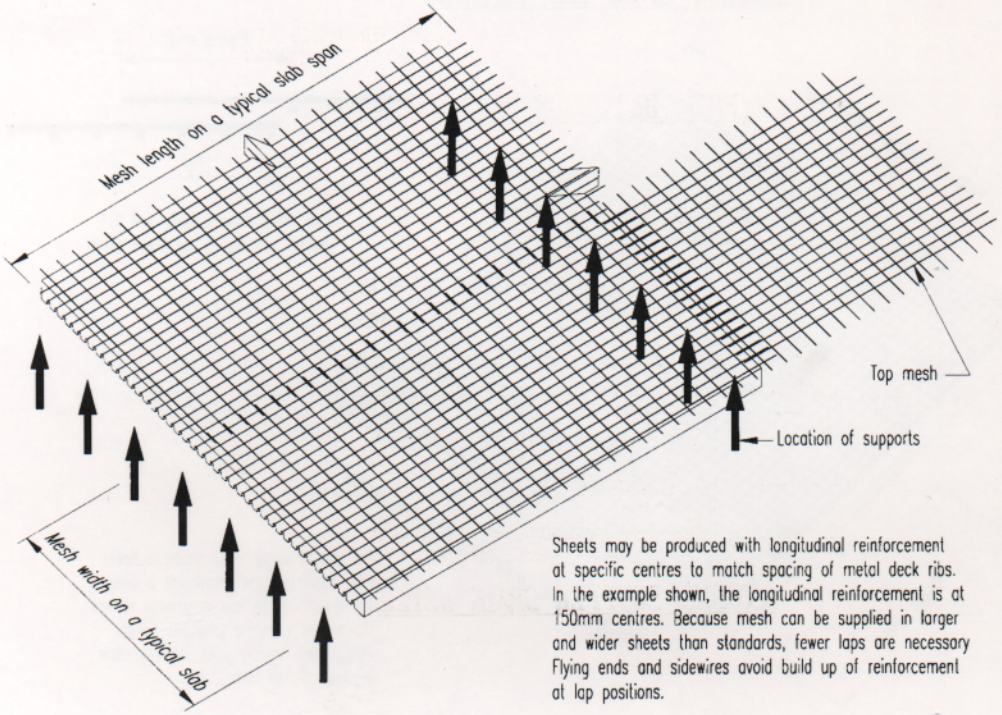


TYPICAL SCUPPER DRAIN DETAIL

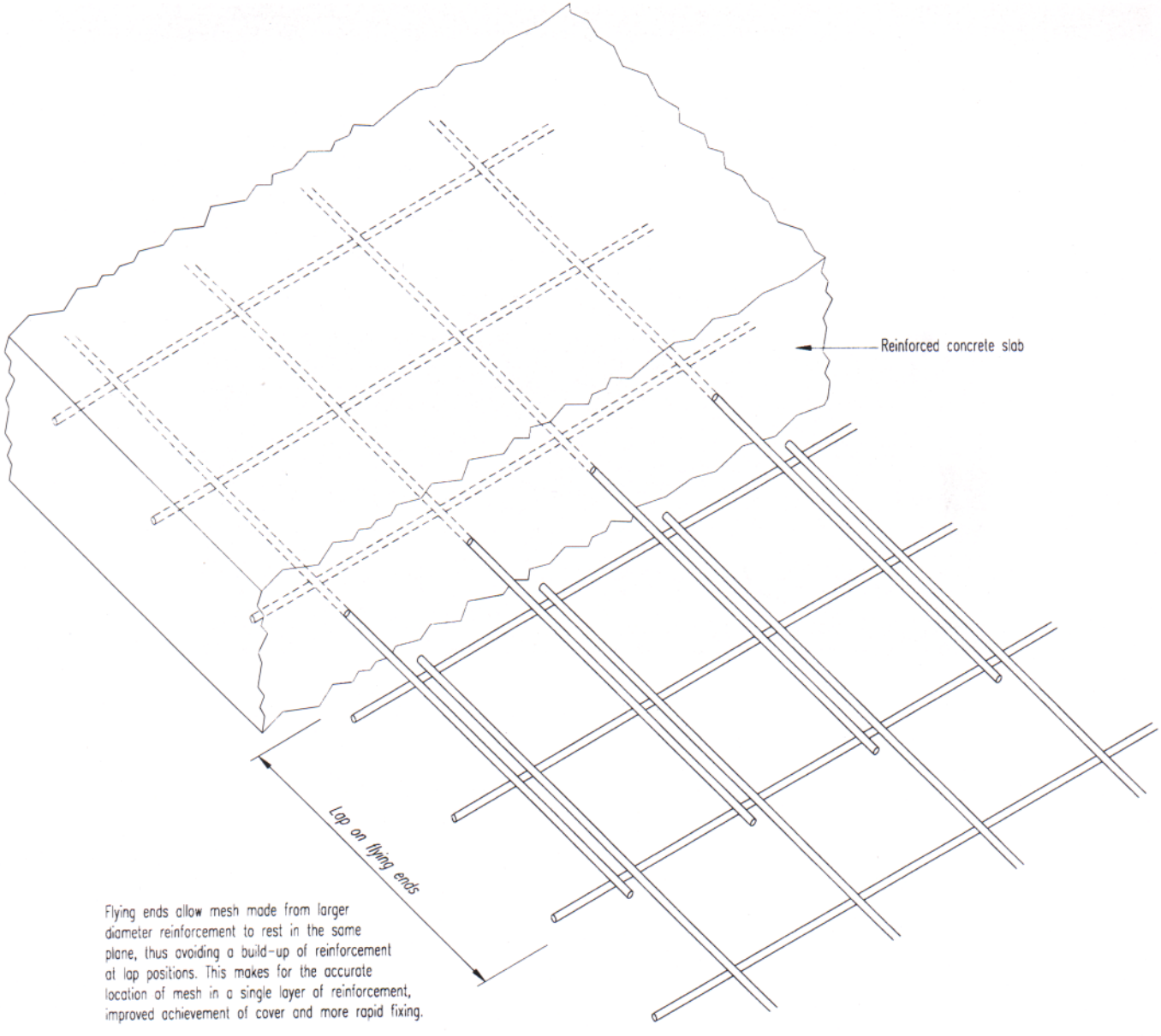


SUSPENDED SLABS

View through section

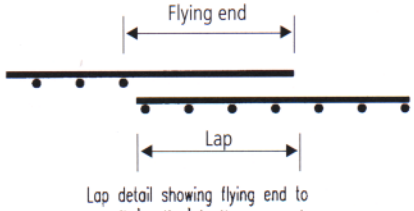


Sheets may be produced with longitudinal reinforcement at specific centres to match spacing of metal deck ribs. In the example shown, the longitudinal reinforcement is at 150mm centres. Because mesh can be supplied in larger and wider sheets than standards, fewer laps are necessary Flying ends and sidewires avoid build up of reinforcement at lap positions.

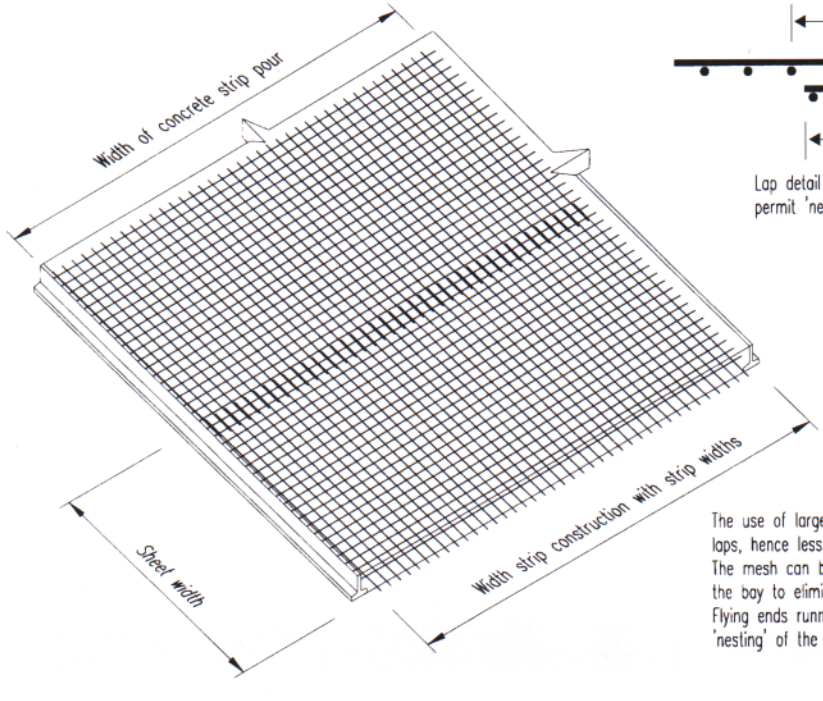


Flying ends allow mesh made from larger diameter reinforcement to rest in the same plane, thus avoiding a build-up of reinforcement at lap positions. This makes for the accurate location of mesh in a single layer of reinforcement, improved achievement of cover and more rapid fixing.

FLYING ENDS LAP DETAILS



Lap detail showing flying end to permit 'nesting' in the same plane



The use of larger mesh leads to fewer laps, hence less reinforcement is used. The mesh can be laid lengthways across the bay to eliminate longitudinal laps. Flying ends running down the bay allow 'nesting' of the mats.