

450mm PRESTRESSED CONCRETE SLAB 09.1312-29 - SAFE LOAD TABLE							08/05/2019	
Self Weight 818Kg/m - SAFE LOADS are exclusive of self weight								
EFFECTIVE SPAN (see fig A for explanation)		PRELIMINARY UNIFORM SAFE LOAD (0 infilled holes)	SHEAR 0 INFILLED HOLES	BEARING 0 INFILLED HOLES	PRELIMINARY UNIFORM SAFE LOAD (2 infilled holes)	SHEAR* 2 INFILLED HOLES	BEARING 2 INFILLED HOLES	9mm TOP WIRES
meters	feet	Kg/m <sup>2</sup>	T/panel	mm	Kg/m <sup>2</sup>	T/panel	mm	
3.0	9'10"	13,411	24.14	100	17,289	31.12	100	2
3.5	11'6"	11,376	23.89	100	14,700	30.87	100	2
4.0	13'1"	9,850	23.64	100	12,759	30.62	100	2
4.5	14'9"	8,663	23.39	100	11,248	30.37	100	2
5.0	16'5"	7,713	23.14	100	10,040	30.12	100	2
5.5	18'0"	6,940	22.90	100	9,055	29.88	100	2
6.0	19'8"	6,292	22.65	100	8,231	29.63	100	2
6.5	21'4"	5,744	22.40	100	7,005	29.38	100	2
7.0	23'0"	5,274	22.15	100	5,939	29.13	100	2
7.5	24'7"	4,867	21.90	100	5,079	28.88	100	2
8.0	26'3"	4,376	21.65	100	4,376	28.63	100	2
8.5	27'11"	3,792	21.40	100	3,792	28.38	100	2
9.0	29'6"	3,304	21.16	100	3,304	28.14	100	2
9.5	31'2"	2,890	20.91	100	2,890	27.89	102	2
10.0	32'10'	2,537	20.66	100	2,537	27.64	104	2
10.5	34'5"	2,233	20.41	100	2,233	27.39	106	2
11.0	36'0"	1,969	20.16	100	1,969	27.14	108	2
11.5	37'9"	1,740	19.91	102	1,740	26.89	110	2
12.0	39'4"	1,538	19.66	104	1,538	26.64	112	2
12.5	41'0"	1,360	19.42	106	1,360	26.40	114	2
13.0	42'8"	1,202	19.17	108	1,202	26.15	116	2
13.5	44'4"	1,061	18.92	110	1,061	25.90	118	2
14.0	45'11"	936	18.67	112	936	25.65	120	2
14.5	47'7"	823	18.42	114	823	25.40	122	2
15.0	49'3"	721	18.17	116	721	25.15	124	2
15.5	50'10"	628	17.92	118	628	24.90	126	2
16.0	52'6"	545	17.68	120	545	24.66	128	2
16.5	54'2"	469	17.43	122	469	24.41	130	2
17.0	55'9"	399	17.18	124	399	24.16	132	2
17.5	57'5"	316	16.93	126	316	23.91	134	2
18.0	59'0"	241	16.68	128	241	23.66	136	2

**Notes to Periti:**

- (A) Load tables conforming to MSA EN 1992-1-2 Eurocode 2: Design of concrete structures - Part 1-1: General with both the safe load values satisfying the serviceability limit state (SLS)
- (B) For HC slabs resting on beams, filling of hollows in C30 concrete at supports is recommended.
- (C) The min. bearing of HC slabs as per table above is to be 100mm up to a max. of 135mm depending on the loads & strength C30 of suletta.
- (D) For all load patterns, eg point loads, these are to be converted to equivalent uniform loads.
- (E) The selection of *plank* type is the responsibility of the client's *Perit*.
- (F) Lengths of slabs longer than 9m to have additional 2 wires of 9 in the top corners
- \* For enhanced shear values each infilled hole has an additional shear value given at 3.49T/hole. Length of infill is to be determined by the project *Perit*.

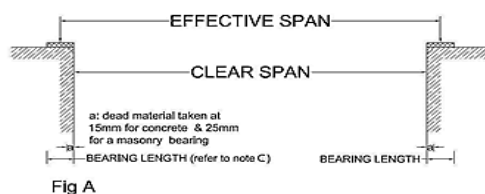


Fig A

450

Concrete grade: C35/45  
 AREA: 0.341 Sq.m  
 HOLE AREA: 0.0488 Sq.m  
 WEIGHT/m: 818 Kg/m  
 Bw: 456 mm  
 Ixx: 811,082 cm<sup>4</sup>  
 Yc: 237mm  
 Yb: 223mm

