

450mm PRESTRESSED CONCRETE SLAB 09.1112-29 - 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 ²	T/panel	mm	Kg/m ²	T/panel	mm	
3.0	9'10"	12,734	22.92	100	16,611	29.90	100	2
3.5	11'6"	10,795	22.67	100	14,119	29.65	100	2
4.0	13'1"	9,342	22.42	100	12,250	29.40	100	2
4.5	14'9"	8,211	22.17	100	10,797	29.15	100	2
5.0	16'5"	7,307	21.92	100	9,634	28.90	100	2
5.5	18'0"	6,570	21.68	100	8,612	28.66	100	2
6.0	19'8"	5,953	21.43	100	7,120	28.41	100	2
6.5	21'4"	5,431	21.18	100	5,958	28.16	100	2
7.0	23'0"	4,983	20.93	100	5,037	27.91	100	2
7.5	24'7"	4,293	20.68	100	4,293	27.66	100	2
8.0	26'3"	3,685	20.43	100	3,685	27.41	100	2
8.5	27'11"	3,180	20.18	100	3,180	27.16	100	2
9.0	29'6"	2,758	19.94	100	2,758	26.92	100	2
9.5	31'2"	2,400	19.69	100	2,400	26.67	101	2
10.0	32'10'	2,095	19.44	100	2,095	26.42	103	2
10.5	34'5"	1,832	19.19	100	1,832	26.17	105	2
11.0	36'0"	1,604	18.94	100	1,604	25.92	107	2
11.5	37'9"	1,405	18.69	100	1,405	25.67	109	2
12.0	39'4"	1,231	18.44	102	1,231	25.42	111	2
12.5	41'0"	1,077	18.20	104	1,077	25.18	113	2
13.0	42'8"	940	17.95	106	940	24.93	115	2
13.5	44'4"	819	17.70	108	819	24.68	117	2
14.0	45'11"	710	17.45	110	710	24.43	119	2
14.5	47'7"	612	17.20	112	612	24.18	121	2
15.0	49'3"	524	16.95	114	524	23.93	123	2
15.5	50'10"	444	16.70	116	444	23.68	125	2
16.0	52'6"	372	16.46	118	372	23.44	127	2
16.5	54'2"	306	16.21	120	306	23.19	129	2
17.0	55'9"	246	15.96	122	246	22.94	131	2
17.5	57'5"	191	15.71	124	191	22.69	133	2
18.0	59'0"	138	15.46	126	138	22.44	135	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: 450 mm
 Ixc: 811.082 cm⁴
 Yt: 237mm
 Yb: 223mm

