

525mm PRESTRESSED CONCRETE SLAB 09.1412-29 - SAFE LOAD TABLE								14/01/2024
Self Weight 1078Kg/m - SAFE LOADS are exclusive of self weight (2hrs fire resistance)								
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"	16,517	26.76	100	20,539	34.00	110	2
3.5	11'6"	14,005	26.47	100	17,453	33.71	110	2
4.0	13'1"	12,121	26.18	100	15,138	33.42	110	2
4.5	14'9"	10,659	25.90	100	13,341	33.14	110	2
5.0	16'5"	9,487	25.61	100	11,900	32.85	110	2
5.5	18'0"	8,530	25.34	100	10,724	32.58	110	2
6.0	19'8"	7,731	25.05	100	9,742	32.29	110	2
6.5	21'4"	7,054	24.76	100	8,910	32.00	110	2
7.0	23'0"	6,476	24.48	100	7,737	31.72	110	2
7.5	24'7"	5,973	24.19	100	6,618	31.43	110	2
8.0	26'3"	5,536	23.91	100	5,702	31.15	110	2
8.5	27'11"	4,632	23.63	100	4,944	30.87	110	2
9.0	29'6"	4,308	23.34	100	4,308	30.58	110	2
9.5	31'2"	3,770	23.06	100	3,770	30.30	110	2
10.0	32'10"	3,310	22.77	105	3,310	30.01	110	2
10.5	34'5"	2,915	22.49	105	2,915	29.73	115	2
11.0	36'0"	2,572	22.20	105	2,572	29.44	115	2
11.5	37'9"	2,273	21.92	110	2,273	29.16	115	2
12.0	39'4"	2,011	21.64	110	2,011	28.88	120	2
12.5	41'0"	1,779	21.35	115	1,779	28.59	120	2
13.0	42'8"	1,574	21.06	115	1,574	28.30	125	2
13.5	44'4"	1,391	20.78	115	1,391	28.02	125	2
14.0	45'11"	1,227	20.49	120	1,227	27.73	130	2
14.5	47'7"	1,080	20.21	120	1,080	27.45	130	2
15.0	49'3"	947	19.93	125	947	27.17	130	2
15.5	50'10"	827	19.64	125	827	26.88	135	2
16.0	52'6"	719	19.36	125	719	26.60	135	2
16.5	54'2"	619	19.07	130	619	26.31	140	2
17.0	55'9"	529	18.79	130	529	26.03	140	2
17.5	57'5"	446	18.50	135	446	25.74	140	2
18.0	59'0"	370	18.22	135	370	25.46	145	2

**Notes to Periti:** Refer also to guidelines: <http://www.gmfprecast.sandbox.local.com.mt/technical-specs>

- (A) Load tables conforming to *MSA EN 1992-1-1 Eurocode 2: Design of concrete structures - Part 1-1: General rules and rules for buildings*, 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 minimum bearing of HC slabs as per table above is to be a minimum of 100mm depending on the loads & strength C30 of padstone suletta, important to have a fair-faced finish to the top surface.
- (D) For all load patterns, eg point loads, these are to be converted to equivalent uniform loads, whilst the **actual** shear load needs to be addressed.
- (E) The selection of *plank* type is the responsibility of the client's *Perit*.
- (F) Embodied carbon is measured per square meter on plan.

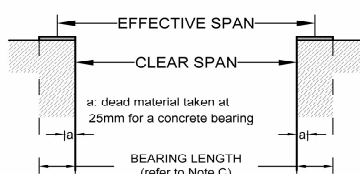


Fig. A

**525**  
 Concrete Grade: C45  
 Area: 0.441m<sup>2</sup>  
 Hole Area: 0.174m<sup>2</sup>  
 Weight / m: 1,078kg/m  
 R<sub>w</sub>: 527mm  
 I<sub>xx</sub>: 1,288,220cm<sup>4</sup>  
 Y<sub>1</sub>: 274mm  
 Y<sub>2</sub>: 251mm  
 Embodied Carbon: 186kgCO<sub>2</sub>e/m<sup>2</sup>

