

525mm PRESTRESSED CONCRETE SLAB 09.1312-29 - 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"	16,145	26.15	100	20,167	33.39	110	2
3.5	11'6"	13,691	25.88	100	17,138	33.12	110	2
4.0	13'1"	11,846	25.59	100	14,863	32.83	110	2
4.5	14'9"	10,415	25.31	100	13,097	32.55	110	2
5.0	16'5"	9,267	25.02	100	11,680	32.26	110	2
5.5	18'0"	8,327	24.73	100	10,521	31.97	110	2
6.0	19'8"	7,547	24.45	100	9,559	31.69	110	2
6.5	21'4"	6,885	24.17	100	8,550	31.41	110	2
7.0	23'0"	6,317	23.88	100	7,242	31.12	110	2
7.5	24'7"	5,827	23.60	100	6,187	30.84	110	2
8.0	26'3"	5,324	23.31	100	5,324	30.55	110	2
8.5	27'11"	4,608	23.03	100	4,608	30.27	110	2
9.0	29'6"	4,008	22.74	100	4,008	29.98	110	2
9.5	31'2"	3,501	22.46	100	3,501	29.70	110	2
10.0	32'10"	3,068	22.18	100	3,068	29.42	110	2
10.5	34'5"	2,695	21.89	105	2,695	29.13	115	2
11.0	36'0"	2,372	21.61	105	2,372	28.85	115	2
11.5	37'9"	2,090	21.32	110	2,090	28.56	115	2
12.0	39'4"	1,842	21.03	110	1,842	28.27	120	2
12.5	41'0"	1,624	20.75	110	1,624	27.99	120	2
13.0	42'8"	1,430	20.47	115	1,430	27.71	125	2
13.5	44'4"	1,258	20.19	115	1,258	27.43	125	2
14.0	45'11"	1,103	19.90	120	1,103	27.14	125	2
14.5	47'7"	965	19.61	120	965	26.85	130	2
15.0	49'3"	840	19.33	120	840	26.57	130	2
15.5	50'10"	727	19.04	125	727	26.28	135	2
16.0	52'6"	624	18.77	125	624	26.01	135	2
16.5	54'2"	530	18.48	130	530	25.72	135	2
17.0	55'9"	445	18.19	130	445	25.43	140	2
17.5	57'5"	367	17.91	130	367	25.15	140	2
18.0	59'0"	295	17.62	135	295	24.86	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.

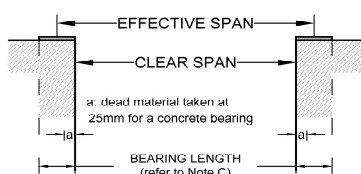


Fig. A

**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>x</sub>: 274mm  
 Y<sub>y</sub>: 251mm  
 Embodied Carbon: 185kgCO<sub>2</sub>e/m<sup>2</sup>

