

250mm PRESTRESSED CONCRETE SLAB 29.512-00 - SAFE LOAD TABLE 14/01/2024
 Self Weight 365Kg/m - SAFE LOADS are exclusive of self weight (90mins 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 ²	T/panel	mm	Kg/m ²	T/panel	mm	
3.0	9'10"	4,195	7.55	100	5,828	10.49	100	-
3.5	11'6"	3,543	7.44	100	4,943	10.38	100	-
4.0	13'1"	3,054	7.33	100	4,279	10.27	100	-
4.5	14'9"	2,678	7.23	100	3,767	10.17	100	-
5.0	16'5"	2,373	7.12	100	3,091	10.06	100	-
5.5	18'0"	2,124	7.01	100	2,500	9.95	100	-
6.0	19'8"	1,917	6.90	100	2,050	9.84	100	-
6.5	21'4"	1,701	6.79	100	1,701	9.73	100	-
7.0	23'0"	1,423	6.69	100	1,423	9.63	100	-
7.5	24'7"	1,119	6.58	100	1,119	9.52	100	-
8.0	26'3"	1,016	6.47	100	1,016	9.41	100	-
8.5	27'11"	864	6.36	100	864	9.30	100	-
9.0	29'6"	737	6.25	100	737	9.19	100	2
9.5	31'2"	629	6.15	100	629	9.09	100	2

SPANS BELOW TO APPLY SHED TYPE ROOFING ONLY

10.0	32'10"	537	6.04	100	537	8.98	100	2
10.5	34'5"	458	5.93	100	458	8.87	100	2
11.0	36'0"	389	5.82	100	389	8.76	100	2
11.5	37'9"	330	5.71	100	330	8.65	100	2
12.0	39'4"	277	5.61	100	277	8.55	100	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.

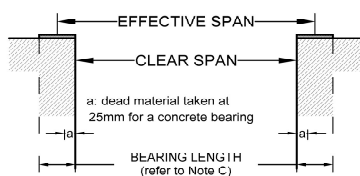


Fig. A

250
 Concrete Grade: C45
 Area: 0.149m²
 Hole Area: 0.142m²
 Weight / m: 365kg/m
 Dw: 270mm
 I_{xx}: 110,973cm⁴
 Y_t: 126mm
 Y_b: 124mm
 Embodied Carbon: 65kgCO₂e/m²

