



# Lance Brown Import-Export

51A Harrison Street • Balcatta 6021 • AUSTRALIA  
International: Tel +614 1893 4827 • Fax +618 9349 9255  
Australia: Tel 0418 934 827 • Fax (08) 9349 9255  
E-mail: mail@LBIE.com • Website: www.LBIE.com  
ABN 47 243 059 295

## FRP Grating Load and Deflection Data – page 1/2

### (1) 50mm molded FRP grating (Sq mesh of 2x2")

A) Concentrated Load: Full Panel

Span (in)	Pounds						
100	250	500	750	1000	1500	2000	
12	---	---	---	---	---	---	---
18	<0.01	0.01	0.02	0.04	0.05	0.07	0.10
24	<0.01	0.02	0.04	0.05	0.07	0.11	0.14
36	0.01	0.04	0.07	0.11	0.15	0.22	0.29
48	0.03	0.07	0.15	0.22	0.30	0.45	0.60

B) Concentrated Load: 12" wide strip

Span (in)	Pounds						
100	250	500	750	1000	1500	2000	
12	<0.01	0.015	0.02	0.025	0.03	0.05	0.06
18	0.01	0.03	0.05	0.07	0.09	0.14	0.18
24	0.02	0.05	0.08	0.12	0.16	0.24	---
36	0.05	0.14	0.23	0.35	0.47	---	---
48	0.11	0.33	0.56	0.84	---	---	---

C) Uniform Load: Full panel

Span (in)	Pounds/Sq. Ft							
50	100	200	300	400	500	700	1000	
12	---	---	---	<0.01	0.01	0.01	0.02	0.02
18	<0.01	0.01	0.02	0.03	0.03	0.04	0.06	0.09
24	0.01	0.02	0.04	0.06	0.08	0.10	0.15	0.20
36	0.04	0.09	0.18	0.26	0.35	0.44	0.65	---
48	0.14	0.28	0.56	0.84	1.12	---	---	---

Continued on page 2

## FRP Grating Load and Deflection Data – page 2/2

### (2) 38mm molded FRP grating (Sq mesh of 1.5"X1.5")

#### A) Concentrated Load: Full Panel

Span (in)	Pounds						
	100	250	500	750	1000	1500	2000
12	---	---	---	---	---	---	---
18	---	0.017	0.035	0.052	0.069	0.107	0.138
24	<0.014	0.032	0.059	0.092	0.128	0.179	0.242
36	0.028	0.068	0.132	0.199	0.263	0.394	---
48	0.062	0.152	0.293	0.443	---	---	---

#### B) Concentrated Load: on 12" wide strip

Span (in)	Pounds						
	100	250	500	750	1000	1500	2000
12	<0.01	0.018	0.028	0.043	0.056	0.086	0.115
18	0.015	0.036	0.066	0.098	0.132	0.197	0.262
24	0.032	0.075	0.148	0.218	0.292	0.434	---
36	0.102	0.252	0.498	---	---	---	---
48	0.251	---	---	---	---	---	---

#### C) Uniform Load: Full panel

Span (in)	Pounds/Sq. Ft						
	25	50	75	100	150	200	250
12	---	---	---	---	---	---	---
18	<0.01	0.01	0.013	0.018	0.026	0.034	0.043
24	0.011	0.023	0.034	0.045	0.064	0.087	0.112
36	0.056	0.109	0.161	0.214	0.315	0.424	---
48	0.171	0.335	0.505	---	---	---	---

### (3) 25mm molded FRP grating (Sq mesh of 1.5 x1.5")

#### A) Concentrated Load: Full Panel

Span (in)	Pounds						
	100	250	500	750	1000	1500	2000
12	---	---	---	---	---	---	---
18	0.016	0.037	0.073	0.106	0.142	0.213	0.281
24	<0.031	0.071	0.139	0.206	0.275	0.409	---
36	0.075	0.184	0.363	---	---	---	---
48	0.161	0.392	---	---	---	---	---

#### B) Concentrated Load: on 12" wide strip

Span (in)	Pounds						
	100	250	500	750	1000	1500	2000
12	<0.013	0.034	0.063	0.095	0.126	0.188	0.251
18	0.037	0.093	0.183	0.272	0.361	---	---
24	0.085	0.214	0.423	---	---	---	---
36	0.296	---	---	---	---	---	---
48	---	---	---	---	---	---	---

#### C) Uniform Load: Full panel

Span (in)	Pounds/Sq. Ft						
	25	50	75	100	150	200	250
12	---	---	0.013	0.015	0.023	0.029	0.032
18	0.015	0.029	0.043	0.058	0.087	0.115	0.143
24	0.044	0.088	0.131	0.173	0.261	0.347	0.433
36	0.265	0.456	---	---	---	---	---
48	---	---	---	---	---	---	---

Note: Deflection less than 0.01" (0.25mm) and greater than 0.5" (13mm) are not shown and recommended.