

# Safegrid Grating

When you are involved in specifying, distributing, purchasing, fabricating, or installing steel gratings, it is advised that you provide products that comply with the British and European standards for ball proof requirements. Your commitment to ensuring site safety by using compliant products is essential to upholding industry standards.



## Safegrid 20 Ball Proof Grating

Specification to: **BS4592-0:2006+A1:2012**

Our 20mm ball proof grating covers a wide variety of applications and is EPD certified.

This product has been designed in line with British Standard BS4592-1:2006 and European Standard BS EN ISO 14122-2-2016, in doing so we have ensured that it meets the ball proof requirements when used for access where a walkway or platform is in constant use, traffic may pass beneath regularly and where there are often people working below. 20mm ball-proof flooring must also be used for fire escape stairs.



## Safegrid 35 Ball Proof Grating

Specification to: **BS4592-0:2006+A1:2012**

Our 35mm ball proof grating will suit most applications, is EPD certified and is a fully compliant alternative to 41/100 (W).

This product has been designed to comply with British Standard BS4592-1:2006 and European Standard BS EN ISO 14122-2-2016, in doing so we have ensured that it meets the ball proof requirements when used for access where a walkway or platform is in occasional use, traffic may pass beneath occasionally and where there are no people working below.



## Safegrid Utility Grating

Specification to: **BS4592-0:2006+A1:2012**

Our Utility Grating product is the most efficient and sustainable solution available on the market as it uses the least amount of steel.

This flooring will suit most applications that do not require a ball proof product, is compliant to current BS4592-1:2006 under the provision that no personnel can gain access underneath, and it is EPD certified.

This product has been designed in line with British Standard BS4592-1:2006 and European Standard BS EN ISO 14122-2-2016.

# Safegrid Load Tables

## 3MM LK20BP (MESH SIZE 21/100)

Bearing Bar Dimensions (mm)	Loading Category	Max Clear Span 4mm Deflection	Deflection (mm)	Max Clear Span L/200 or 10mm Max Deflection	Deflection (mm)	Self Colour Weights Per Square Metre (kgs)	Binding Bar Weight Based on 2x1m (kgs)
25 x 3	5kn/m <sup>2</sup>	985	3.98	1155	5.75	30.49	1.18
	7.5kn/m <sup>2</sup>	985	3.98	1060	5.24		
30 x 3	5kn/m <sup>2</sup>	1210	3.97	1470	7.28	36.03	1.41
	7.5kn/m <sup>2</sup>	1145	3.93	1295	6.43		
35 x 3	5kn/m <sup>2</sup>	1430	3.99	1735	8.64	41.56	1.65
	7.5kn/m <sup>2</sup>	1300	3.99	1530	7.65		
40 x 3	5kn/m <sup>2</sup>	1585	3.96	1995	9.93	47.09	1.88
	7.5kn/m <sup>2</sup>	1445	3.99	1760	8.76		

## 5MM LK20BP (MESH SIZE - 23/100)

Bearing Bar Dimensions (mm)	Loading Category	Max Clear Span 4mm Deflection	Deflection (mm)	Max Clear Span L/200 or 10mm Max Deflection	Deflection (mm)	Self Colour Weights Per Square Metre (kgs)	Binding Bar Weight Based on 2x1m (kgs)
25 x 5	5kn/m <sup>2</sup>	1215	3.96	1400	6.98	45.01	1.96
	7.5kn/m <sup>2</sup>	1105	3.95	1235	6.17		
30 x 5	5kn/m <sup>2</sup>	1410	3.99	1700	8.43	53.45	2.36
	7.5kn/m <sup>2</sup>	1280	3.94	1500	7.43		
35 x 5	5kn/m <sup>2</sup>	1590	3.97	2000	9.93	61.89	2.75
	7.5kn/m <sup>2</sup>	1450	3.97	1770	8.82		
40 x 5	5kn/m <sup>2</sup>	1765	3.98	2220	9.96	70.33	3.14
	7.5kn/m <sup>2</sup>	1610	3.97	2025	9.93		
45 x 5	5kn/m <sup>2</sup>	1930	3.96	2430	9.96	78.77	3.53
	7.5kn/m <sup>2</sup>	1765	3.98	2220	9.95		
50 x 5	5kn/m <sup>2</sup>	2095	4.00	2630	9.93	87.21	3.93
	7.5kn/m <sup>2</sup>	1915	3.99	2405	9.92		
60 x 5	5kn/m <sup>2</sup>	2400	3.99	3015	9.94	104.09	4.71
	7.5kn/m <sup>2</sup>	2200	3.99	2765	9.96		

## 3MM LK35BP (MESH SIZE - 37/125)

Bearing Bar Dimensions (mm)	Loading Category	Max Clear Span 4mm Deflection	Deflection (mm)	Max Clear Span L/200 or 10mm Max Deflection	Deflection (mm)	Self Colour Weights Per Square Metre (kgs)	Binding Bar Weight Based on 2x1m (kgs)
25 x 3	5kn/m <sup>2</sup>	800	3.96	805	4.02	18.74	1.18
	7.5kn/m <sup>2</sup>	800	3.96	805	4.02		
30 x 3	5kn/m <sup>2</sup>	985	3.99	1070	4.86	22.03	1.41
	7.5kn/m <sup>2</sup>	985	3.99	1070	5.02		
35 x 3	5kn/m <sup>2</sup>	1170	4.00	1320	5.29	25.33	1.65
	7.5kn/m <sup>2</sup>	1140	3.93	1290	6.45		
40 x 3	5kn/m <sup>2</sup>	1355	3.98	1585	5.72	28.63	1.88
	7.5kn/m <sup>2</sup>	1270	3.96	1485	7.40		

## 5MM LK35BP (MESH SIZE - 38/125)

Bearing Bar Dimensions (mm)	Loading Category	Max Clear Span 4mm Deflection	Deflection (mm)	Max Clear Span L/200 or 10mm Max Deflection	Deflection (mm)	Self Colour Weights Per Square Metre (kgs)	Binding Bar Weight Based on 2x1m (kgs)
25 x 5	5kn/m <sup>2</sup>	1050	4.00	1205	6.01	28.74	1.96
	7.5kn/m <sup>2</sup>	985	3.96	1055	5.21		
30 x 5	5kn/m <sup>2</sup>	1260	3.97	1465	7.26	34.04	2.36
	7.5kn/m <sup>2</sup>	1145	3.98	1290	6.42		
35 x 5	5kn/m <sup>2</sup>	1425	3.97	1730	8.63	39.34	2.75
	7.5kn/m <sup>2</sup>	1295	3.97	1520	7.54		
40 x 5	5kn/m <sup>2</sup>	1585	4.00	1990	9.93	44.64	3.14
	7.5kn/m <sup>2</sup>	1440	3.98	1750	8.68		
45 x 5	5kn/m <sup>2</sup>	1735	3.98	2180	9.92	49.94	3.53
	7.5kn/m <sup>2</sup>	1580	3.99	1980	9.84		
50 x 5	5kn/m <sup>2</sup>	1880	3.97	2365	9.93	55.24	3.93
	7.5kn/m <sup>2</sup>	1715	3.99	2155	9.95		
60 x 5	5kn/m <sup>2</sup>	2160	3.97	2720	9.98	65.84	4.71
	7.5kn/m <sup>2</sup>	1970	3.97	2480	9.96		

## 3MM UTILITY GRATING (MESH SIZE - 47/125)

Bearing Bar Dimensions (mm)	Loading Category	Max Clear Span 4mm Deflection	Deflection (mm)	Max Clear Span L/200 or 10mm Max Deflection	Deflection (mm)	Self Colour Weights Per Square Metre (kgs)	Binding Bar Weight Based on 2x1m (kgs)
25 x 3	5kn/m <sup>2</sup>	635	2.78	635	2.78	15.20	1.18
	7.5kn/m <sup>2</sup>	635	2.78	635	2.78		
30 x 3	5kn/m <sup>2</sup>	900	4.00	950	4.55	17.79	1.41
	7.5kn/m <sup>2</sup>	900	4.00	950	4.55		
35 x 3	5kn/m <sup>2</sup>	1065	3.97	1165	4.91	20.38	1.65
	7.5kn/m <sup>2</sup>	1065	3.97	1165	5.47		
40 x 3	5kn/m <sup>2</sup>	1235	3.97	1395	5.28	22.97	1.88
	7.5kn/m <sup>2</sup>	1195	3.96	1370	6.83		

## 5MM UTILITY GRATING (MESH SIZE - 47/125)

Bearing Bar Dimensions (mm)	Loading Category	Max Clear Span 4mm Deflection	Deflection (mm)	Max Clear Span L/200 or 10mm Max Deflection	Deflection (mm)	Self Colour Weights Per Square Metre (kgs)	Binding Bar Weight Based on 2x1m (kgs)
25 x 5	5kn/m <sup>2</sup>	960	3.95	1115	5.57	23.84	1.96
	7.5kn/m <sup>2</sup>	935	3.95	985	4.86		
30 x 5	5kn/m <sup>2</sup>	1180	3.97	1370	6.79	28.16	2.36
	7.5kn/m <sup>2</sup>	1085	3.94	1205	6.00		
35 x 5	5kn/m <sup>2</sup>	1355	3.97	1615	8.01	32.47	2.75
	7.5kn/m <sup>2</sup>	1230	3.96	1420	7.04		
40 x 5	5kn/m <sup>2</sup>	1505	3.96	1860	9.24	36.79	3.14
	7.5kn/m <sup>2</sup>	1370	3.99	1640	8.20		
45 x 5	5kn/m <sup>2</sup>	1650	3.96	2075	9.91	41.11	3.53
	7.5kn/m <sup>2</sup>	1500	3.96	1855	9.27		
50 x 5	5kn/m <sup>2</sup>	1790	3.96	2255	9.97	45.43	3.93
	7.5kn/m <sup>2</sup>	1630	3.98	2050	9.95		
60 x 5	5kn/m <sup>2</sup>	2060	3.98	2590	9.93	54.06	4.71
	7.5kn/m <sup>2</sup>	1875	3.97	2360	9.96		

### Notes

1. Deflection in the table above is limited to span/200 or 10mm, whichever is the lesser.
2. It should be noted that the difference in level between a loaded and a neighbouring unloaded flooring shall not exceed 4mm. LK panel joint clips can be used to negate this issue. The tables have both options listed.
3. The tables are based upon BS4592-0:2006+A1:2012 & BS5950-1:2000.
4. The tables take into consideration MINIMUM bearing bar rolling tolerances as defined by LKFS-STD-98.
5. Material is BS EN 10025 Grade S275JR



EN 15804 EPD Verification Scheme  
EPD Number: 000542



**PANEL JOINING CLIPS ARE REQUIRED IF L/200 OR 10MM DEFLECTION IS USED**

Email [technical@lk-uk.com](mailto:technical@lk-uk.com) or call us on **+44(0) 1642 233 297** to find out more.