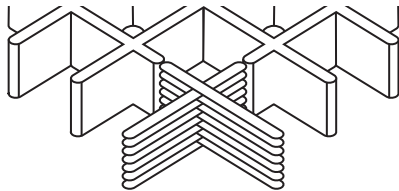
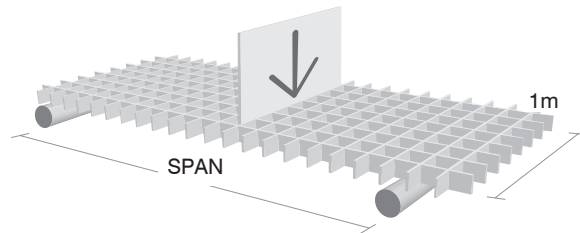


LOAD AND DEFLECTION DATA

Loading Deflection Table of
Molded Gratings in Common Sizes



Concentrated Line Load
Table Deflection in mm

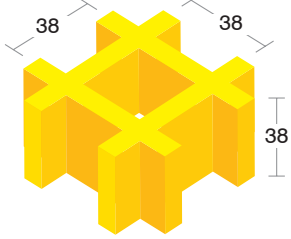


	H25 Mesh size 38*38	
	Bar Thickness (Top/Bottom)	6.4/5.0
	Open Area	68%
	Weight per Square Meter	12.3 kg/m²
	Distance Between Centers of Bearing Bars	38
	Standard Panel Sizes: 1220*4000, 1220*3660, 1220*2440, 915*3050 Both directions	

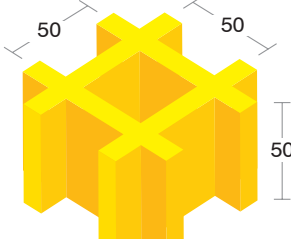
Deflection	kg/m						Break Point
	75	150	300	450	600	750	
SPAN	75	150	300	450	600	750	
450	0.559	1.146	2.159	3.073	4.115	4.75	3910
600	0.864	1.702	3.505	5.156	6.706	8.179	2924
900	2.896	5.918	12.116	18.44	-	-	1948
1200	5.715	11.633	-	-	-	-	1491

	H30 Mesh size 38*38	
	Bar Thickness (Top/Bottom)	6.4/5.0
	Open Area	68%
	Weight per Square Meter	14.6 kg/m²
	Distance Between Centers of Bearing Bars	38
	Standard Panel Sizes: 1220*4000, 1220*3660, 1220*2440, 915*3050 Both directions	

Deflection	kg/m						Break Point
	75	150	300	450	750	1500	
SPAN	75	150	300	450	750	1500	
300	<0.254	<0.254	0.254	0.508	0.762	1.524 9	923.4
450	0.254	0.508	1.016	1.524	2.54	-	4827.6
600	0.508	1.27	2.286	3.556	5.842	-	4112.4
750	1.27	2.54	4.826	7.366	12.446	-	3173.7
900	1.778	3.81	7.62	11.43	-	-	2637.3

	H38 Mesh size 38*38						
	Bar Thickness (Top/Bottom)						7.0/5.0
	Open Area						68%
	Weight per Square Meter						19.5 kg/m²
	Distance Between Centers of Bearing Bars						38
	Standard Panel Sizes: 1220*4000, 1220*3660, 1220*2440, 915*3050, 1524*3050, 1254*4000 Both directions						

Deflection	kg/m						Break Point
	75	150	300	450	600	750	
450	0.279	0.356	0.483	0.61	0.762	0.889	17116
600	0.356	0.66	1.245	1.85	2.464	3.073	8718
900	0.864	1.803	3.683	5.563	7.417	9.296	5817
1200	2.261	4.749	9.677	14.63	19.583	-	3755

	H50 Mesh size 38*38						
	Bar Thickness (Top/Bottom)						8.0/6.0
	Open Area						78%
	Weight per Square Meter						23.7 kg/m²
	Distance Between Centers of Bearing Bars						50
	Standard Panel Sizes: 1220*4000, 1220*3660, 1220*2440, 915*3050 Both directions						

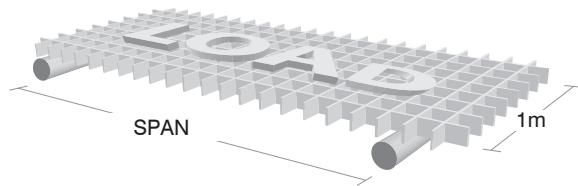
Deflection	kg/m						Break Point
	75	150	300	450	600	750	
300	0.279	0.305	0.406	0.483	0.636	1.041	21727
600	0.356	0.508	0.813	1.128	1.753	3.327	11713
900	0.508	1.118	2.235	3.2	5.156	10.058	7780
1200	0.914	1.93	3.937	5.918	9.957	-	5834

Load and deflection data was derived from lab tests. These values are for design selection and are not intended to be exact.

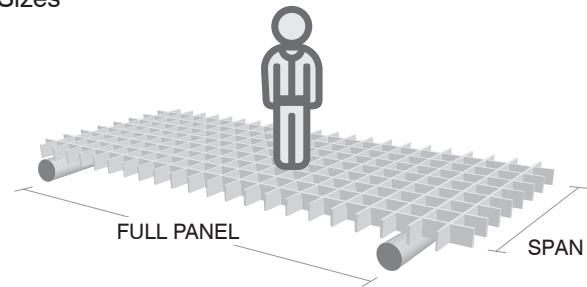
It is recommended to select gratings based on a deflection of 1/4" or less for excellent pedestrian comfort. This deflection may be exceeded at the discretion of the designer. Deflection of 3/8" or less will give satisfactory pedestrian comfort.



Loading Deflection Table of Molded Gratings in Common Sizes



Uniform Load
Table Deflection in mm



Concentrated Full Panel Load
1220X3660 Deflection in mm

H25 Mesh size 38*38

Deflection	kg/m ²						
SPAN	240	480	980	1450	2450	3650	4880
450	0.66	1.092	1.93	2.769	4.47	6.579	-
600	1.118	2.108	4.14	6.172	10.211	15.265	-
750	2.667	5.387	10.82	16.28	-	-	-
900	5.537	11.176	21.717	-	-	-	-

Deflection	kg						
SPAN	150	370	750	1120	1500	2200	2980
450	0.254	0.686	1.55	2.159	2.667	4.166	5.232
600	0.734	1.651	3.175	4.623	6.121	9.119	12.116
900	1.778	4.445	8.814	13.157	-	-	-
1200	2.946	7.544	15.062	-	-	-	-

H30 Mesh size 38*38

Deflection	kg/m ²						Break Point
SPAN	350	500	750	1000	1500	2500	
300	<.254	<.254	<.254	<.254	<.254	0.508	32500.8
450	0.254	0.508	0.762	1.016	1.524	2.286	21661.2
600	1.016	1.524	2.286	2.794	4.318	7.366	12980.8
750	2.54	3.81	5.842	7.62	11.684	-	8296
900	4.572	7.112	10.668	-	-	-	5758.4

Deflection	kg				
SPAN	25	45	100	150	250
600	<0.254	0.254	0.760	1.016	1.778
750	0.254	0.762	1.72	2.032	3.302
900	0.508	0.762	1.778	2.54	4.064
1050	0.762	1.524	2.794	43.18	7.112
1200	1.016	1.778	3.81	5.588	9.398

H38 Mesh size 38*38

Deflection	kg/m ²						
SPAN	240	480	980	1450	2450	3650	4880
300	0.254	0.305	0.381	0.457	0.635	0.838	-
600	0.432	0.813	1.549	2.311	3.8354	5.74	-
900	1.702	3.454	6.959	10.465	17.475	-	-
1200	5.969	12.167	24.511	-	-	-	-

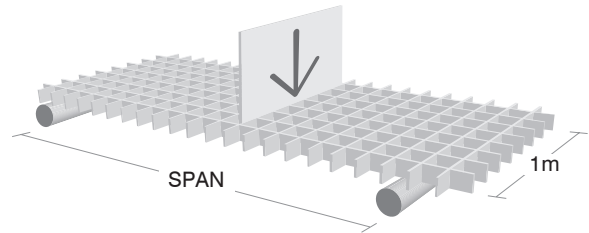
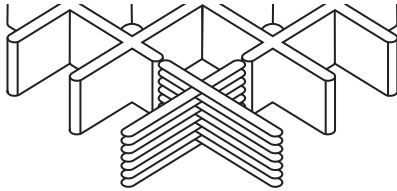
Deflection	kg						
SPAN	150	370	750	1120	1500	2200	2980
450	0.203	0.406	0.711	0.889	1.143	1.676	2.21
600	0.356	0.889	1.499	1.905	2.413	3.531	4.267
900	0.61	1.5	2.9	4.14	5.41	7.95	10.566
1200	0.914	2.388	4.699	6.96	9.195	13.665	

H50 Mesh size 50*50

Deflection	kg/m						
SPAN	240	480	980	1450	2450	3650	4880
300	0.254	0.279	0.33	0.381	0.483	0.737	-
600	0.381	0.584	0.965	1.372	2.134	4.115	-
900	1.194	2.108	3.937	5.766	9.449	18.593	-
1200	2.413	4.928	9.957	14.961	-	-	-

Deflection	kg						
SPAN	300	600	900	1500	2200	2980	3700
450	0.254	0.33	0.457	0.711	1.016	1.346	1.7018
600	0.381	0.8636	1.1176	1.524	2.032	2.54	3.1242
900	0.6604	1.2192	1.778	2.896	4.191	5.512	6.7564
1200	0.9398	1.8542	2.7432	4.547	6.807	9.271	11.252

Concentrated Line Load
Table Deflection in mm

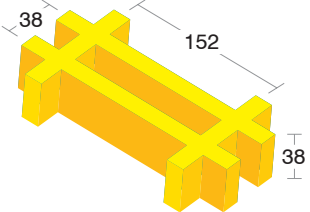


	H25 Mesh size 25*100	
	Bar Thickness (Top/Bottom)	7.0/5.5
	Open Area	67%
	Weight per Square Meter	13.0 kg/m²
	Distance Between Centers of Bearing Bars	25
Standard Panel Sizes: 1007*3007 Width direction		

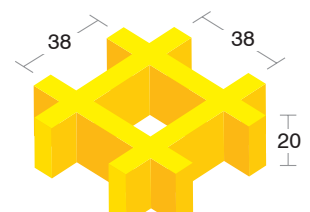
Deflection	kg/m						Break Point
	75	150	300	450	600	750	
SPAN	75	150	300	450	600	750	
300	0.33	0.483	0.737	0.991	1.27	1.52	9442
600	0.864	1.727	3.454	5.182	6.909	8.636	4305
750	1.397	2.718	5.105	7.163	9.55	11.938	3589
900	2.413	4.724	8.814	12.369	16.51	20.625	3216

	H25 Mesh size 25*100 Heavy Duty	
	Bar Thickness (Top/Bottom)	9.5/8.0
	Open Area	52%
	Weight per Square Meter	19.5 kg/m²
	Distance Between Centers of Bearing Bars	25
Standard Panel Sizes: 1220*3660 Width direction		

Deflection	kg/m						Break Point
	75	150	300	450	600	750	
SPAN	75	150	300	450	600	750	
300	<0.254	0.254	0.762	1.016	1.27	1.524	10057.5
450	0.508	0.762	1.778	2.54	3.302	4.318	7263.75
600	0.762	1.778	3.556	5.08	6.858	-	5773.75
750	1.524	3.048	6.096	9.144	11.938	-	4842.5
900	2.286	4.826	9.65	-	-	-	4172
1050	3.556	7.112	-	-	-	-	3687.75
1200	5.08	10.16	-	-	-	-	3501.50

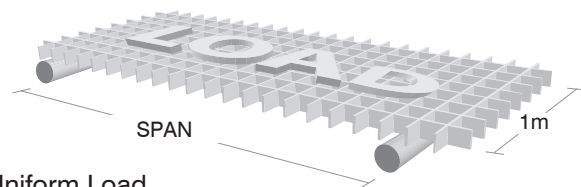
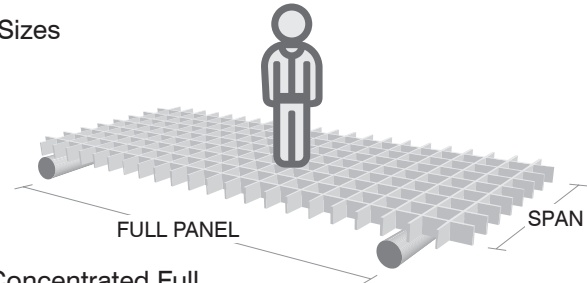
	H38 Mesh size 38*152	
	Bar Thickness (Top/Bottom)	8.0/6.0
	Open Area	67%
	Weight per Square Meter	15.92 kg/m²
	Distance Between Centers of Bearing Bars	38
	Standard Panel Sizes: 1220*3660 Length direction, Width direction	

Deflection	kg/m						Break Point
	75	150	300	450	600	750	
SPAN	75	150	300	450	600	750	
300	<0.254	<0.254	0.254	0.508	0.508	0.762	12627.75
450	<0.254	0.254	0.762	1.016	1.524	1.778	9945.75
600	0.254	0.762	1.524	2.286	3.048	3.81	8232.25
750	0.762	1.27	2.794	4.064	5.334	6.604	7040.25
900	1.016	2.286	4.318	6.604	8.636	10.92	6146.25
1050	1.524	3.302	6.604	9.906	-	-	5438.5
1200	2.286	4.826	9.652	-	-	-	5140.5

	H20 Mesh size 38*38	
	Bar Thickness (Top/Bottom)	6.0/5.0
	Open Area	65%
	Weight per Square Meter	9.8 kg/m²
	Distance Between Centers of Bearing Bars	38
	Standard Panel Sizes: 1220*4000, 1220*3660, 1220*2440, 915*3050 Both directions	

Deflection	kg/m					Break Point
	75	150	300	450	750	
SPAN	75	150	300	450	750	
300	0.254	0.508	1.016	1.524	2.54	4470
450	0.762	1.524	3.302	4.826	8.128	2980
600	1.778	3.81	7.62	11.176	-	2235
750	2.794	5.588	11.43	-	-	1788
900	5.334	10.668	-	-	-	1490

Loading Deflection Table of Molded Gratings in Common Sizes

Uniform Load
Table Deflection in mmConcentrated Full
Panel Load 1220X3660 Deflection in mm

H25 Mesh size 25*100

Deflection	kg/m ²						
SPAN	240	480	980	1450	2450	3650	4880
300	0.279	0.381	0.533	0.711	1.041	-	1.905
600	0.914	1.854	3.683	5.537	9.22	-	18.466
900	3.632	6.6	12.572	18.542	-	-	-
1050	8.007	14.884	-	-	-	-	-

Deflection	kg						
SPAN	150	370	750	1120	1500	2200	2980
450	0.279	0.686	1.448	2.209	2.718	4.191	5.41
600	0.711	1.524	3.531	4.623	6.02	9.22	12.294
900	1.626	3.962	7.823	11.811	-	-	-
1200	-	-	-	-	-	-	-

H25 Mesh size 25*100

Deflection	kg/m ²						Break Point
SPAN	250	350	500	750	1000	1500	
300	<0.254	<0.254	<0.254	0.254	0.508	0.508	32940
450	0.508	0.508	0.752	1.27	1.524	2.286	18910
600	1.016	1.27	2.032	3.302	4.318	6.35	15860
750	2.286	3.048	4.572	7.112	9.398	-	12688
900	4.572	8.89	8.89	-	-	-	9110.96
1050	7.874	10.16	-	-	-	-	6900.32
1200	12.7	-	-	-	-	-	5734

Deflection	kg						
SPAN	25	45	100	150	250	450	1000
250	<0.254	<0.254	0.254	0.508	0.762	1.27	2.54
400	<0.254	0.254	0.762	1.016	1.524	3.302	6.53
550	0.254	0.508	1.27	1.778	3.048	6.096	12.192
700	0.508	1.106	2.032	3.048	5.08	10.16	-
850	0.762	1.524	3.048	4.572	7.62	-	-
1000	1.016	2.032	3.81	5.874	9.652	-	-
1150	1.27	2.54	5.334	7.874	-	-	-

H38 Mesh size 38*152

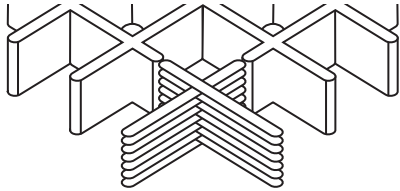
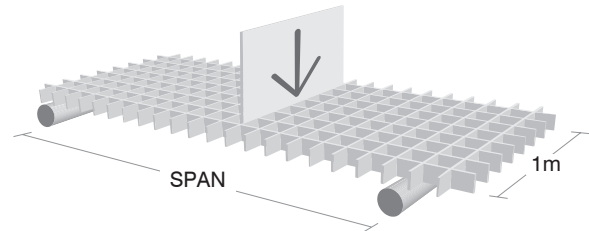
Deflection	kg/m ²						Break Point
SPAN	350	500	750	1000	1500	2500	
300	<0.254	<0.254	<0.254	0.254	0.254	0.508	41358
450	<0.254	0.254	0.508	0.762	1.016	1.778	26962
600	0.508	1.016	1.27	1.778	2.794	4.572	21716
750	1.27	2.032	3.048	4.064	6.35	-	9110.96
900	2.54	4.064	6.096	8.128	12.192	-	13420
1050	4.572	7.112	10.668	-	-	-	10179.68
1200	7.874	11.938	-	-	-	-	8418

Deflection	kg						
SPAN	25	45	100	150	250	450	1000
250	<0.254	<0.254	<0.254	0.254	0.254	0.762	1.27
400	<0.254	0.254	0.508	0.762	1.016	2.032	4.318
550	<0.254	0.254	0.762	1.016	1.778	3.302	6.858
700	0.254	0.508	1.016	1.524	2.54	5.334	10.414
850	0.508	0.762	1.524	2.286	4.064	7.874	-
1000	0.508	1.016	2.286	3.302	5.588	11.176	-
1150	0.762	1.524	3.048	4.572	7.366	-	-

H20 Mesh size 38*38

Deflection	kg/m ²						Break Point
SPAN	350	500	750	1000	1500	2500	
300	<0.254	<0.254	<0.254	0.254	0.254	0.508	41358
450	<0.254	0.254	0.508	0.762	1.016	1.778	26962
600	0.508	1.016	1.27	1.778	2.794	4.572	21716
750	1.27	2.032	3.048	4.064	6.35	-	9110.96
900	2.54	4.064	6.096	8.128	12.192	-	13420



Loading Deflection Table of
Molded Gratings in Common SizesConcentrated Line Load
Table Deflection in mm

	H38 Mesh size 50*25	
	Bar Thickness (Top/Bottom)	11.0/9.0
	Open Area	48%
	Weight per Square Meter	30.3 kg/m²
	Distance Between Centers of Bearing Bars	25
Standard Panel Sizes: 1220*3660 Length direction		

Deflection	kg/m						Break Point
	SPAN	300	750	1500	3000	4500	
300	<.25	<.25	0.254	0.762	1.016	1.524	62580
450	<.25	0.508	1.016	1.778	2.794	3.81	41720
600	0.508	1.016	2.286	4.318	6.604	8.636	30396
750	0.762	2.032	4.318	8.636	-	-	24287
900	1.524	3.556	7.112	-	-	-	20264
1050	2.286	5.588	11.176	-	-	-	17284

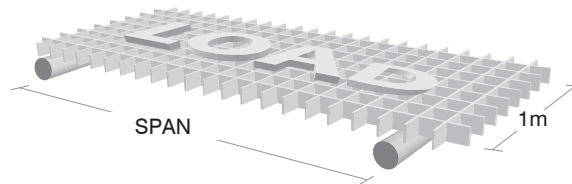
	H50 Mesh size 25*50	
	Bar Thickness (Top/Bottom)	12.2/9.0
	Open Area	48%
	Weight per Square Meter	41.0 kg/m²
	Distance Between Centers of Bearing Bars	25
Standard Panel Sizes: 1220*3660 Length direction		

Deflection	kg/m						Break Point
	SPAN	300	750	1500	3000	4500	
300	<.25	<.25	0.254	0.508	0.508	0.762	69732
450	<.25	0.254	0.508	1.016	1.524	2.032	48574
600	0.254	0.508	1.27	2.286	3.556	4.826	40528
750	0.508	1.27	2.286	4.572	7.112	9.398	32333
900	0.762	2.032	4.064	8.128	12.912	-	26969
1050	1.27	3.302	6.35	12.7	-	-	23095

	H38 Mesh size 25*152	
	Bar Thickness (Top/Bottom)	8.5/6.0
	Open Area	63%
	Weight per Square Meter	22.5 kg/m²
	Distance Between Centers of Bearing Bars	25
	Standard Panel Sizes: 1220*3660, 1220*2440, 915*3050 Length direction	

Deflection	kg/m						
	150	300	450	750	1000	1500	2500
300	0.33	0.6096	0.889	1.4224	1.9812	2.4638	3.2512
450	0.5588	0.9652	1.3208	1.9812	2.7178	3.3528	4.4704
600	0.7874	1.3208	1.8034	2.794	4.0132	5.1054	7.1882
750	1.0668	1.9558	2.8194	4.572	6.5532	8.4328	12.0904
900	2.0828	2.8956	4.6228	6.477	9.3218	12.0904	-
1050	2.4384	4.3434	6.477	10.7442	-	-	-
1200	2.9464	5.7658	8.5598	-	-	-	-

UNIFORM LOAD TABLE
DEFLECTION IN mm



Deflection	kg/m ²						Break Point
	1000	2000	2500	3000	3500	4000	
300	<.25	<.25	<.25	<.25	<.25	<.25	409920
450	<.25	0.254	0.508	0.508	0.508	0.762	212280
600	0.508	1.016	1.27	1.524	2.032	2.286	99552
750	1.27	2.794	3.302	4.064	4.572	5.334	63440
900	2.54	5.334	6.604	7.874	9.398	10.66	43920
1050	4.826	9.906	12.192	-	-	-	32208

Deflection	kg/m ²						Break Point
	1000	2000	2500	3000	3500	4000	
300	<.25	<.25	<.25	<.25	<.25	<.25	456768
450	<.25	0.254	0.254	0.254	0.254	0.208	212280
600	0.254	0.508	0.762	1.016	1.016	1.27	132736
750	0.762	1.524	1.778	2.286	2.54	2.794	84912
900	1.524	3.048	3.81	4.572	5.33	6.096	42944
1050	2.794	5.588	7.112	8.382	9.906	11.176	42944

Deflection	kg						
	250	350	500	750	1500	2500	5000
300	0.0762	0.127	0.1524	0.2286	0.4826	0.7874	1.5748
450	0.1778	0.254	0.33	0.508	0.9906	1.651	3.3274
600	0.33	0.508	0.6858	1.016	2.032	3.3782	7.239
750	0.685	1.016	1.3716	2.0574	4.0894	7.3406	-
900	1.2192	1.8288	2.4384	3.6322	7.2898	12.1412	-
1050	2.3622	3.556	4.9784	7.0612	-	-	-
1200	3.6068	5.4356	7.239	10.8458	-	-	-

