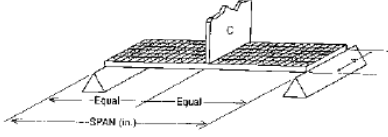


## RESIN SYSTEM

Resin Type	Resin Base	Description	Corrosion Resistance	Standard Color	Max Temp.
VEFR-25	Vinyl Ester	Superior Corrosion Resistance and Fire Retardant	Excellent	Orange	82°C
VEFR-10	Vinyl Ester	Superior Corrosion Resistance and Fire Retardant	Excellent	Dark Grey	82°C
IFR-25	Isophthalic Polyester	Industrial Grade Corrosion Resistance and Fire Retardant	Very Good	Green	65°C
IFR-10	Isophthalic Polyester	Industrial Grade Corrosion Resistance and High Fire Retardant	Very Good	Dark Grey	65°C
OFR-25	Orthophthalic Polyester	Moderate Corrosion Resistance and Fire Retardant	Moderate	Yellow, Dark Grey	65°C
OFR-10	Orthophthalic Polyester	Moderate Corrosion Resistance and Fire Retardant	Moderate	Yellow, Dark Grey	65°C
FG-30	Food Grade	Moderate Corrosion Resistance	Moderate	Light Grey	65°C
MP-5	Phenolic	Low Smoke and Superior Fire Retardant	Very good	Chocolate Brown	150°C

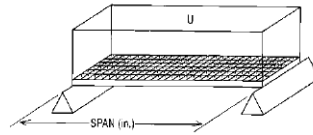
## MOLDED GRATING CONCENTRATED LINE LOAD TABLES

MOLDED GRATING CONCENTRATED LINE LOAD TABLES										
Span (mm)	Type		Load kg/m of width							Max Load (kg/m)
	Height (mm)	Mesh (mm)	75	150	300	450	600	750	1500	
300	60	38x38	/	/	/	0.35	0.49	0.65	1.34	25328
	50	25x25/50x50	/	< 0.25	0.28	0.43	0.58	0.66	1.33	23877
	25	25x100	< 0.25	0.25	0.63	0.86	1.13	1.46	2.76	10058
	50	25x50	/	/	/	/	/	< 0.25	0.27	69741
450	60	38x38	/	< 0.25	0.45	0.67	0.89	1.14	2.35	19445
	50	25x25/50x50	< 0.25	0.39	0.69	0.85	1.12	2.04	4.26	18103
	25	25x100	0.52	0.77	1.78	2.56	3.31	4.32	/	7265
	50	25x50	/	/	/	/	/	0.26	0.54	48574
600	60	38x38	< 0.25	0.31	0.63	0.92	1.2	1.49	3.01	13391
	50	25x25/50x50	0.32	0.53	0.98	1.62	2.02	2.38	4.93	12161
	25	25x100	0.76	1.62	3.17	5.02	6.71	/	/	5775
	50	25x50	/	/	0.27	0.39	0.48	0.55	1.29	40530
750	60	38x38	0.35	0.71	1.38	2.11	2.81	3.49	7.03	11331
	50	25x25/50x50	0.42	0.84	1.45	2.15	3.17	4.21	8.48	10131
	25	25x100	1.36	2.24	4.84	6.69	8.96	/	/	4844
	50	25x50	/	/	0.51	0.77	1.03	1.28	2.29	32346
900	60	38x38	0.47	0.97	1.89	2.87	3.82	4.74	9.51	9266
	50	25x25/50x50	0.47	1.54	3.13	4.01	4.84	5.71	11.64	8246
	25	25x100	2.29	4.14	7.67	/	/	/	/	4172
	50	25x50	/	/	0.75	1.18	1.63	2.05	4.13	26969

1200	60	38x38	1.08	2.18	4.42	6.62	8.79	11.02	22.15	6336
	50	25x25/50x50	1.54	3.14	6.39	8.03	9.68	12.21	/	6289
	25	25x100	3.49	5.48	/	/	/	/	/	3504
	50	25x50	/	/	1.46	2.09	2.74	3.35	6.37	23095

## MOLDED GRATING UNIFORM LOAD TABLES

Span (mm)		Type	Load kg/m <sup>2</sup>							Max Load (kg/m <sup>2</sup> )
Height (mm)	Mesh (mm)	150	350	500	750	1000	1500	2500		
300	60	38x38	/	/	/	/	/	/	/	
	50	25x25/50x50	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	0.37	
	25	25x100	/	/	/	0.26	0.53	0.79	1.32	
	50	25x50	/	/	/	/	/	/	/	
450	60	38x38	/	/	0.41	0.61	0.82	1.22	2.03	
	50	25x25/50x50	< 0.25	< 0.25	0.28	0.42	0.55	0.84	1.24	
	25	25x100	0.29	0.51	0.76	1.27	1.53	2.29	3.82	
	50	25x50	/	/	/	/	/	/	/	
600	60	38x38	0.33	0.41	0.62	0.92	1.12	2.86	7.14	
	50	25x25/50x50	0.45	0.56	0.84	1.24	1.52	4.42	5.78	
	25HD	25x100	0.89	1.27	2.03	3.30	4.32	6.35	/	
	50	25x50	/	/	0.31	0.51	0.62	0.77	0.95	
750	60	38x38	0.43	1.02	1.52	2.29	4.75	7.13	/	
	50	25x25/50x50	0.58	1.38	2.07	3.10	6.13	8.71	/	
	25	25x100	1.87	3.06	4.57	7.12	9.41	/	/	
	50	25x50	/	0.74	1.02	1.53	1.63	1.78	2.02	
900	60	38x38	0.68	1.83	2.84	4.27	6.41	9.62	/	
	50	25x25/50x50	1.16	2.49	3.86	5.79	7.69	9.46	/	
	25	25x100	3.87	5.84	8.89	/	/	/	/	
	50	25x50	0.76	1.52	2.28	3.06	3.63	3.81	4.17	
1200	60	38x38	2.37	3.30	4.71	7.07	9.43	14.15	/	
	50	25x25/50x50	3.21	4.48	6.40	8.64	11.39	/	/	
	25	25x100	7.62	12.71	/	/	/	/	/	
	50	25x50	2.79	3.02	4.86	5.61	6.34	7.13	8.12	








## MOLDED GRATING CONCENTRATED POINT LOAD TABLES

Span (mm)		Type	Center of Plate

Span (mm)	Type		Load kg							
	Height (mm)	Mesh (mm)	150	350	500	750	1000	1500	2500	3000
300	60	38x38	/	/	/	/	/	/	/	/
	50	25x25/50x50	/	0.34	0.45	0.70	1.00	1.36	2.22	2.67
	25	25x100	/	0.52	0.74	1.13	1.60	2.17	3.56	/
	50	25x50	/	/	/	0.38	0.54	0.73	1.20	1.45
450	60	38x38	/	/	/	0.37	0.49	0.64	1.01	1.25
	50	25x25/50x50	0.25	0.51	0.67	1.06	1.50	2.03	3.34	4.01
	25	25x100	0.35	0.82	1.07	1.69	2.40	3.25	4.39	/
	50	25x50	/	0.28	0.36	0.57	0.81	1.10	1.81	2.17
600	60	38x38	/	0.37	0.48	0.76	1.08	1.46	2.43	2.92
	50	25x25/50x50	0.36	0.76	0.99	1.57	2.22	3.01	4.94	5.93
	25	25x100	0.52	1.22	1.59	2.50	3.56	4.81	7.36	/
	50	25x50	/	0.41	0.54	0.85	1.20	1.63	2.68	3.21
750	60	38x38	0.30	0.70	0.90	1.43	2.09	2.84	4.73	5.68
	50	25x25/50x50	0.62	1.45	1.86	2.95	4.33	5.85	9.12	/
	25	25x100	0.99	2.31	2.97	4.71	6.92	9.34	/	/
	50	25x50	0.34	0.78	1.01	1.60	2.34	3.17	4.94	5.93
900	60	38x38	0.42	1.03	1.32	2.10	3.11	4.22	7.03	8.44
	50	25x25/50x50	0.88	2.13	2.72	4.34	6.43	9.34	/	/
	25	25x100	1.40	3.40	4.35	6.93	9.23	/	/	/
	50	25x50	0.47	1.15	1.47	2.35	3.48	5.06	6.83	8.21
1200	60	38x38	0.70	1.77	2.47	3.59	5.27	7.16	11.39	/
	50	25x25/50x50	1.45	3.65	5.11	7.41	9.89	14.34	/	/
	25	25x100	2.32	5.84	8.17	11.85	/	/	/	/
	50	25x50	0.79	1.98	2.77	4.01	5.35	7.77	10.49	12.59

## **A**llow Spans for Vehicular Loads

	Wheel Load(kg)(1/2 Axle Load +30% impact)	Load Distribution		Allowable Span (2,3)	
		Parallel To Axle ( 1 )	Perpendicular To Axle	38mm HD Molded Grating	50mm HD Molded Grating
 <b>AASHTO Standard Truck ( 4 )</b> 14528 kg Axle Load Dual Wheels (*formerly AASHTO H-20)	9443	508mm+102mm	203mm	356mm	432mm
 <b>Automobile Traffic</b> 2270 kg Vehicle 681 kg Load 55% Drive Axle Load	1008	203mm+102mm	203mm	660mm	813mm
 <b>5 Ton Capacity Forklift</b> 6538 kg Vehicle 11078 kg Total Load 85% Drive Axle Load	6120	279mm+102mm	279mm	330mm	432mm
 <b>3 Ton Capacity Forklift</b> 4,449 kg Vehicle 7,173 kg Total Load 85% Drive Axle Load	3963	178mm+102mm	178mm	305mm	406mm
 <b>1 Ton Capacity Forklift</b> 1,907 kg Vehicle 2,815 kg Total Load 85% Drive Axle Load	1555	102mm+102mm	102mm	483mm	635mm

**Notes:**

- (1) Load is carried by the grating load bars immediately under wheel + two additional load bars, one on each side of wheel.
- (2) Allowable span is based on a 6.4mm maximum deflection and a Factor of safety of 3.0. Other criteria may be required by certain construction codes. Check code requirements to determine design criteria.
- (3) Allowable span is strongly dependent on wheel width and vehicle weight/load capacity. If your application varies from the value given on this table, contact Strongworld engineering for application assistance.
- (4) Load based on the AASHTO standard truck load as defined in AASHTO LRFD bridge design specifications, 2nd Ed. This doesn't imply that the allowable span meet th deflection requirements of this specifications.