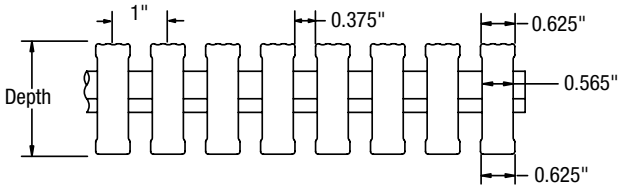
GRATING PACIFIC

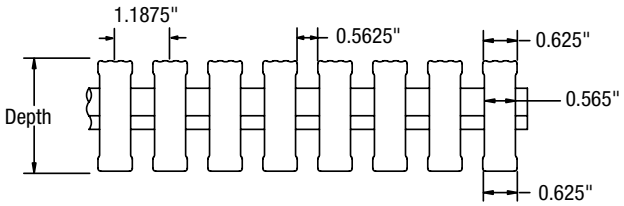
PULTRUDED HLC GRATING - SIZES & OPTIONS

HI37 Series



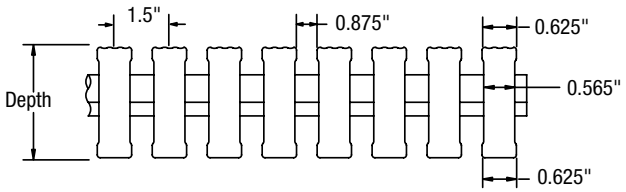
Load Bar Depth	Open Area	Load Bar Centers	Approx. Weight
1"	37%	1"	6.5 lb/ft²
1-1/2"	37%	1"	9.6 lb/ft²
2"	37%	1"	13 lb/ft²
2-1/2"	37%	1"	14.8 lb/ft²
3"	37%	1"	17.7 lb/ft²

HI47 Series

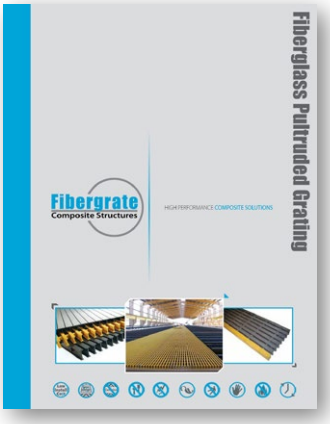


Load Bar Depth	Open Area	Load Bar Centers	Approx. Weight
1"	47%	1.1875"	5.5 lb/ft²
1-1/2"	47%	1.1875"	8 lb/ft²
2"	47%	1.1875"	10.9 lb/ft²
2-1/2"	47%	1.1875"	12.3 lb/ft²
3"	47%	1.1875"	14.7 lb/ft²

HI58 Series



Load Bar Depth	Open Area	Load Bar Centers	Approx. Weight
1"	58%	1.5"	4.3 lb/ft²
1-1/2"	58%	1.5"	6.5 lb/ft²
2"	58%	1.5"	8.7 lb/ft²
2-1/2"	58%	1.5"	10 lb/ft²
3"	58%	1.5"	12 lb/ft²



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High Load Capacity Grating Details

Allowable Spans for Vehicular Loads

	Wheel Load (lb) (1/2 Axle Load + 30% Impact)	Load Distribution		Allowable Span[2,3]					Load Distribution		Allowable Span[2,3]					Load Distribution		Allowable Span[2,3]				
		Parallel to Axle (1)	Perpendicular to Axle	HI3710	HI3715	HI3720	HI3725	HI3730	Parallel to Axle (1)	Perpendicular to Axle	HI4710	HI4715	HI4720	HI4725	HI4730	Parallel to Axle (1)	Perpendicular to Axle	HI5810	HI5815	HI5820	HI5825	HI5830
AASHTO H-25 Truck[4] 40,000 lb Axle Load Dual Wheels	26,000	25" + 2"	25"	1'-5"	2'-0"	2'-5"	2'-11"	3'-6"	25" + 2-3/8"	25"	1'-4"	1'-11"	1'-4"	2'-9"	3'-4"	25" + 3"	25"	1'-3"	1'-10"	2'-3"	2'-7"	3'-2"
AASHTO H-20 Truck[4] 32,000 lb Axle Load Dual Wheels	20,800	20" + 2"	20"	1'-4"	1'-11"	2'-5"	2'-10"	3'-5"	20" + 2-3/8"	20"	1'-3"	1'-10"	2'-3"	2'-9"	3'-3"	20" + 3"	20"	1'-2"	1'-9"	2'-2"	2'-7"	3'-1"
AASHTO H-15 Truck[4] 24,000 lb Axle Load Dual Wheels	15,600	15" + 2"	15"	1'-3"	1'-10"	2'-4"	2'-10"	3'-5"	15" + 2-3/8"	15"	1'-2"	1'-9"	2'-3"	2'-8"	3'-3"	15" + 3"	15"	1'-1"	1'-8"	2'-1"	2'-6"	3'-1"
AASHTO H-10 Truck[4] 16,000 lb Axle Load	10,400	10" + 2"	10"	1'-1"	1'-9"	2'-4"	2'-10"	3'-6"	10" + 2-3/8"	10"	1'-0"	1'-8"	2'-3"	2'-8"	3'-4"	10" + 3"	10"	0'-11"	1'-7"	2'-1"	2'-6"	3'-1"
AASHTO H-5 Truck[4] 8,000 lb Axle Load	5,200	5" + 2"	5"	1'-0"	1'-10"	2'-5"	2'-11"	3'-7"	5" + 2-3/8"	5"	0'-11"	1'-9"	2'-4"	2'-10"	3'-6"	5" + 3"	5"	0'-10"	1'-8"	2'-2"	2'-8"	3'-4"
Passenger Vehicles[5] **6,322 lb Vehicle** **3,578 lb Load** **60% Drive Axle Load**	3,861	9" + 2"	9"	1'-5"	2'-2"	2'-10"	3'-6"	4'-3"	9" + 2-3/8"	9"	1'-4"	2'-1"	2'-11"	1'-5"	4'-1"	9" + 3"	9"	1'-3"	2'-0"	2'-7"	3'-2"	3'-10"
5 Ton Capacity Forklift[5] 14,400 lb Vehicle 24,400 lb Total Load 85% Drive Axle Load	13,480	11" + 2"	11"	1'-0"	1'-8"	2'-2"	2'-8"	3'-3"	11" + 2-3/8"	11"	0'-11"	1'-7"	2'-1"	2'-7"	3'-1"	11" + 3"	11"	0'-10"	1'-5"	2'-0"	2'-5"	2'-11"
3 Ton Capacity Forklift[5] 9,800 lb Vehicle 15,800 lb Total Load 85% Drive Axle Load	8,730	7" + 2"	7"	0'-11"	1'-8"	2'-5"	2'-9"	3'-4"	7" + 2-3/8"	7"	0'-10"	1'-7"	2'-1"	2'-7"	3'-2"	7" + 3"	7"	0'-9"	1'-4"	2'-0"	2'-5"	3'-0"
1 Ton Capacity Forklift[5] 4,200 lb Vehicle 6,200 lb Total Load 85% Drive Axle Load	3,425	4" + 2"	4"	1'-2"	2'-0"	2'-8"	3'-3"	3'-11"	4" + 2-3/8"	4"	1'-1"	1'-11"	2'-6"	3'-1"	3'-10"	4" + 3"	4"	1'-0"	1'-10"	2'-5"	3'-0"	3'-8"

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 0.25" 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 critieria.
3. Allowable span is strongly dependent on wheel width and vehicle weight/load capacity. If your application varies from the values given in this table, contact Fibergrate Engineering for assistance.
4. Load based on Standard Truck Load as defined in AASHTO Standard Specifications for Highway Bridges, 17th Ed. This does not imply that the allowable span given meets the deflection requirements of this specification.
5. Loads based on load criteria from NAAMM Metal Bar Grating Engineering Design Manual MBG 534-12

- Long Span Walkways
- Ramps and Loading Docks
- Trench Covers
- Flooring/Platforms
- Storage Areas
- Assembly Lines