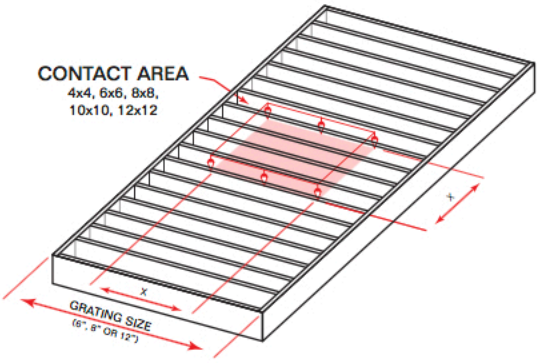
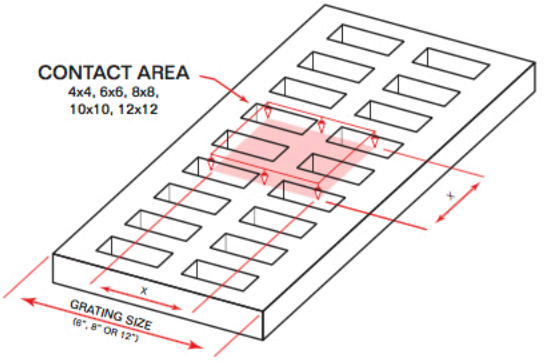
Trench Drain Load Capacities & Flow Rates



Welded Grating



Cast Grating

Grating Size	Maximum Allowable Load in pounds based on load contact area [1,2]									
	4-inch x 4-inch		6-inch x 6-inch		8-inch x 8-inch		10-inch x 10-inch		12-inch x 12-inch	
	Welded	Cast	Welded	Cast	Welded	Cast	Welded	Cast	Welded	Cast
6-inch	6,400	9,600	12,800	21,400	22,800	40,000	35,700	57,100	51,400	85,700
8-inch	4,200	12,800	7,700	21,500	12,800	34,600	20,000	48,000	28,900	69,200
12-inch	2,500	7,600	4,200	11,900	6,400	17,300	9,100	21,900	12,800	30,700

1. Load values indicated include a 30% impact factor.
2. Loads are assumed to be evenly distributed over contact area indicated.
3. Shaded values indicate load areas that are larger than the grating size. In these cases, loads values represent the total load carried by the grating and surrounding pavement.
4. In addition to load values noted above, all grating types and sizes are rated for:
   a. Standard AASHTO H20/HS20 truck loading.
   b. Pneumatic tires inflated to 70 pounds per square inch or less.
5. Trench drains must be continuously supported and encased on both sides and bottom with 4" of 3,000 psi concrete to achieve load ratings indicated.

Cast Iron Grating for HEAVY DUTY Applications

- Improved performance when subjected to hard wheel traffic such as pallet carts and forklifts.
- Improved performance in commercial and industrial applications.
- Lasts three times longer than welded grating when in similar environmental conditions.

Approximate Flow Rate (based on 1% slope)

- 6" trench – 6.5 gallons per second
- 8" trench – 15.7 gallons per second
- 12" trench – 32.4 gallons per second