



FRP Gratings

The Lighter, Stronger Choice in Gratings

**Premium
Solutions** *for*
Professionals

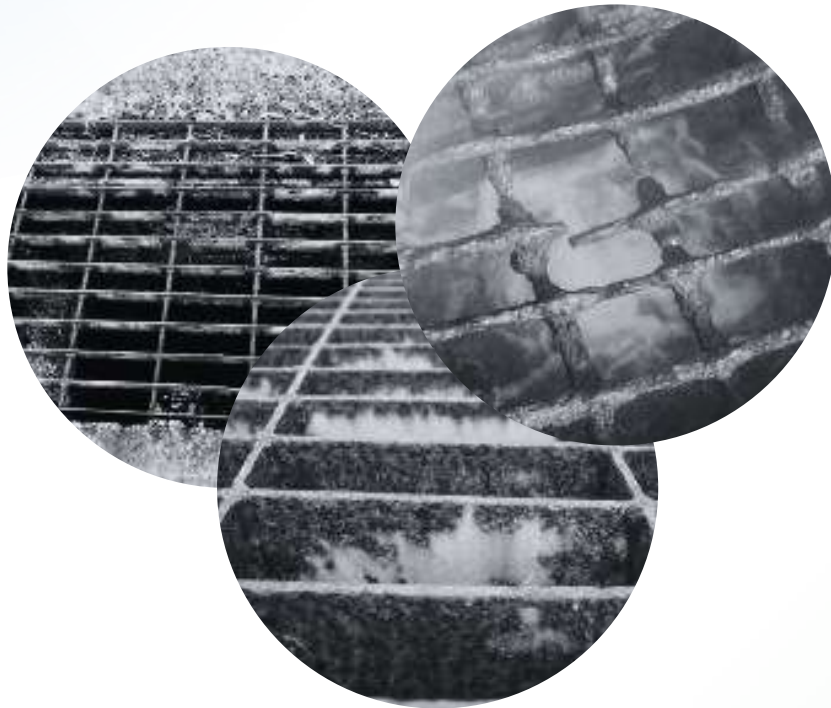


Commercial@pspgroup.org

+98 51 3603 1001

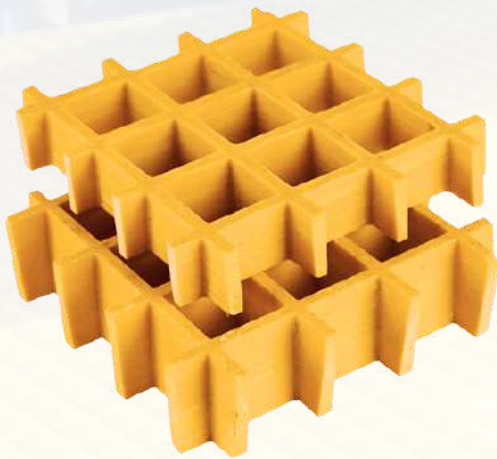
Yesterday's Solution

...and a Common Cause of Injury



The most common causes of workplace injuries are slips, falls, and back strain. Heavy steel grates are often slick when wet, and when exposed to elements or chemicals steel can warp and crack, making an uneven surface that contributes to trips and falls. The larger the steel grate structure, the heavier it is to move, and back strain injury is a frequent outcome.

The Lighter, Stronger Choice in Gratings



Fiber reinforced plastic (FRP) gratings provide an extremely **durable, lightweight, and corrosion-resistant** alternative to traditional metal gratings.

	FRP	CS	AI
Density(g/cm ³)	1.8	7.8	2.7
Strength (MPa)	500 L - 200 T	450	300
Impact Strength (KJ/m ²)	200	400	200
Thermal Expansion Coeff. (K ⁻¹)	11X10 ⁻⁶	12X10 ⁻⁶	23X10 ⁻⁶
Thermal Conductivity (W/mK)	0.3	40	170
Manufacturability	LOW	MED	MED
Lifecycle Cost	EXCELLENT	LOW	GOOD

And That's Not All..



Chemically Resistant

Caustic and acidic chemicals won't harm Fiberglass Grating.



Electrically Insulated

FRP is non-metallic and does NOT conduct electricity!



Rustproof

FRP Grating will never oxidize, corrode or rust like steel.



Pressure-resistant

FRP Grating can take tremendous loads. Check our FRP load-bearing tables.



Greaseproof

Oil and grease can't penetrate FRP Grating.



Waterproof

What makes steel rust? Water! Not a problem with FRP.



Dirtproof

FRP Grating resists stains and cleans easily. Your facility will always look clean!



Sunproof

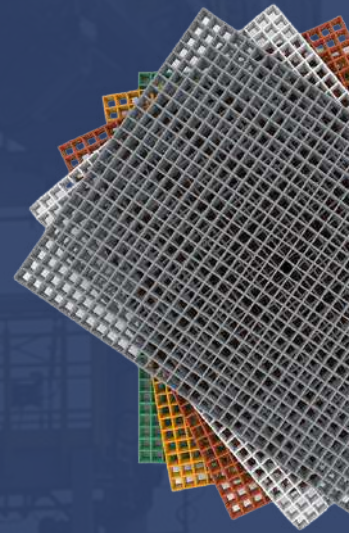
Our FRP grating holds up to UV exposure for year after year.

Types of Gratings

01

MOLDED GRATINGS

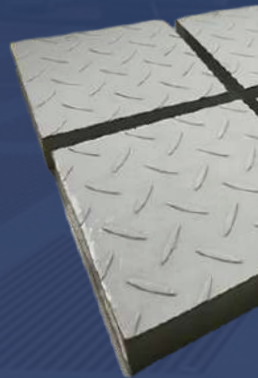
Fiberglass molded grating is a strong mesh grating panel used as floor grates and trench grates that are corrosive and chemical resistant, for many industrial applications.



02

RIBBED GRATINGS

Ribbed FRP plates bonded to molded grating providing extra strength, stiffness and slip resistance.



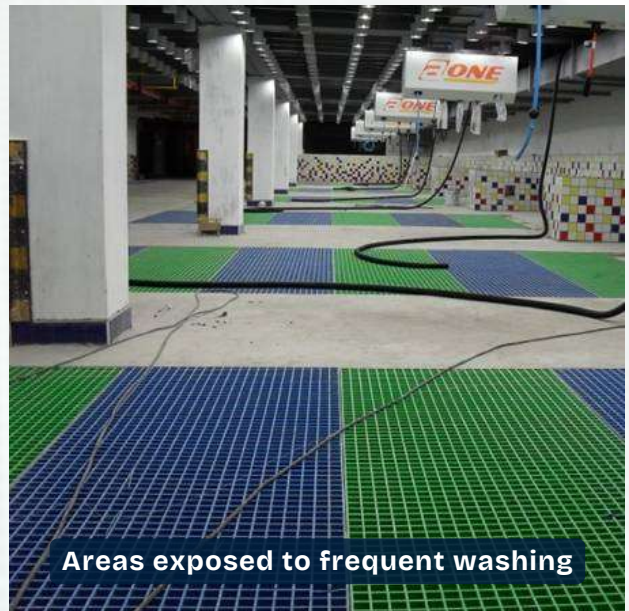
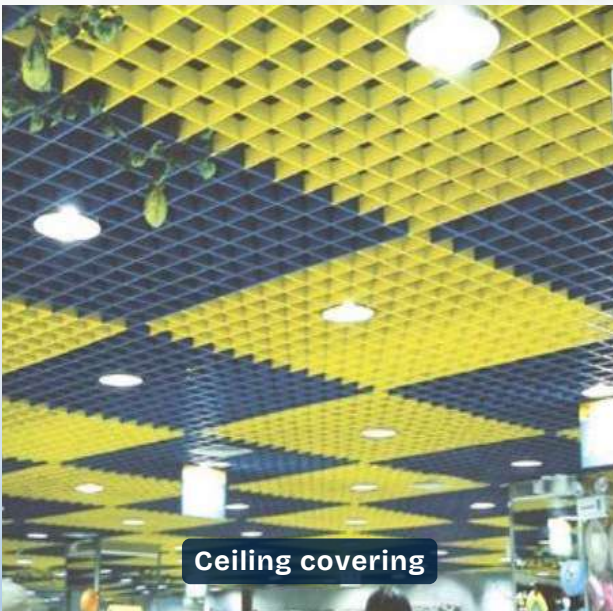
03

PULTRUDED GRATINGS

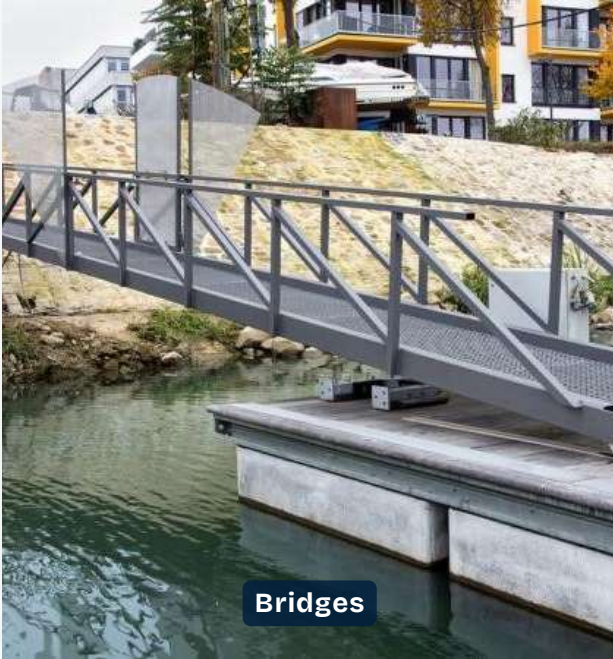
Pultruded Fiberglass Grating is excellent for use in heavy traffic areas, such as outdoor walkways. Pultruded Fiberglass Grating comes with anti-slip surfaces as an important safety feature in walkways where moisture is present.



Applications



Applications



Bridges



Covers for gutters



Manholes



Fences



LIGHTWEIGHT AND EASY TO HANDLE

FRP Grating weighs a fraction of steel grating for equal performance. It is much easier to transport, fabricate, handle, install and maintain. And it will not degrade and deform like rusty, corroded steel parts inevitably do in real-world conditions.



SAFER

Non-slip gritted surfaces prevent slips and falls. FRP reduces the risk of back and muscle strain so common when working with heavy steel grating.



STANDS UP TO HARSH CONDITIONS

FRP performs for years in the harshest of conditions, including extreme chemical environments. Properly installed, FRP is safe for agricultural and food processing environments, too.



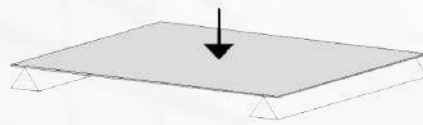
NEVER PAINT

Our FRP comes in several colors and will never need to be painted. Stripping and repainting of steel is a costly and messy job. Integrated color is another reason why FRP grating is the best alternative to steel grating.

Selection Guide

Load Capacity

The maximum load capacity which if applied would certainly cause the grating panel to fail/fracture.



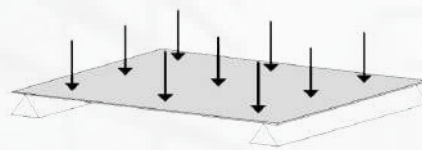
CONCENTRATED LOAD

Grating type	Dimensions (mm)	Distance between two supports (mm)					
		400	600	800	1000	1200	1400
Molded	38x38 Height: 25	3000	2000	1500	1200	1000	700
	38x38 Height: 30	4300	2800	2100	1700	1400	1200
	38x38 Height: 38	6900	4300	3400	2700	2200	1900
	50x50 Height: 50	9000	6400	4900	3500	3000	2600
Ribbed	38x38 Height: 28	3700	2300	1800	1400	1200	700
	38x38 Height: 33	5300	3400	2600	2100	1600	1500
	38x38 Height: 41	7800	5100	4000	3100	2600	2300
	50x50 Height: 53	11000	7500	5300	4200	3700	3000
Pultruded	25mm Height 15mm Open Width	4850	3800	2900	2450	2050	1390
	25mm Height 25mm Open Width	3600	3000	2350	1950	1600	1070
	38mm Height 10mm Open Width	9250	6900	5000	4230	3390	2250
	38mm Height 23mm Open Width	6100	4600	3500	2800	2300	1500
	50mm Height 10mm Open Width	16050	11650	8850	7210	5900	4000
	50mm Height 23mm Open Width	10700	7800	6050	4900	3950	2700

Selection Guide

Load Capacity

The maximum load capacity which if applied would certainly cause the grating panel to fail/fracture.



DISTRIBUTED LOAD

Grating type	Dimensions (mm)	Distance between two supports (mm)					
		400	600	800	1000	1200	1400
Molded	38x38 Height: 25	21000	9000	5000	3200	2300	1600
	38x38 Height: 30	27000	13000	7000	4500	3100	2300
	38x38 Height: 38	44000	19000	11500	7000	5000	3700
	50x50 Height: 50	60000	26000	15800	9800	6900	4900
Ribbed	38x38 Height: 28	26000	10500	6300	4000	2600	1900
	38x38 Height: 33	32000	15500	8400	5500	3900	2800
	38x38 Height: 41	52000	22000	13000	9000	5800	4400
	50x50 Height: 53	72000	32000	19000	11500	8000	6000
Pultruded	25mm Height 15mm Open Width	35400	21350	9950	8000	5050	4130
	25mm Height 25mm Open Width	29000	17000	8000	6470	4150	3240
	38mm Height 10mm Open Width	68000	38800	17400	13800	8400	6700
	38mm Height 23mm Open Width	49000	26000	12000	9500	6000	4600
	50mm Height 10mm Open Width	121000	58100	27600	19000	12430	8900
	50mm Height 23mm Open Width	81000	39000	18500	12800	8300	6200

Questions? Ready to Order?

For any questions about product **selection**, **design considerations**, **load calculations**, or **installation recommendations**, our technical experts are ready to help consult and ensure you get the optimal FRP gratings.



Commercial@PSPGROUP.org



+98 51 3603 1001



No. 257, Sheikh Mofid 2, Vakilabad 25,
Vakilabad Blvd., Mashhad, Khorasan Razavi,
Iran