

# FRP(GRP) GRATINGS

GRP Gratings, consists of glass fibers with thermosetting resin formulation. GRP gratings are manufactured as standard isophthalic polyester resin. Optionally can be produced according to the terms of use of different chemical properties (vinyl ester, and so advance the flame.)

### Application Areas

- Floors
- Platform
- Stairs
- Ramps
- Sidewalks
- Manholes
- Trench Covers
- Drainage Channels.



### Colour Alternatives

- Grey RAL 7035,7040
- Black
- Green RAL 6020
- Blue RAL 5012
- Yellow RAL1018



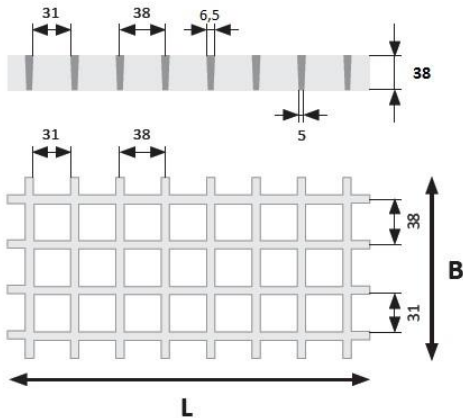
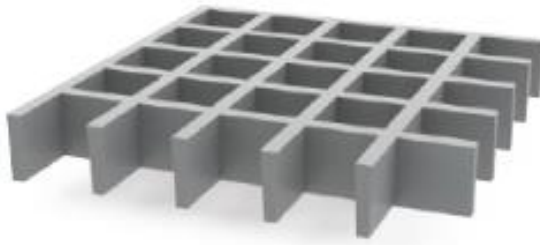
RESIN TYPE	RESIN'S NAME	FEATURES	CORROSION RESISTANCE	FLAME SPREAD RATE (ASTM E84)
VE	Vinylester	Superior Corrosion and Flame Resistance	Excellent	Good
ISO	Isophthalic Polyester	Industrial Level Corrosion and Flame Resistance	Very Good	Good
ORTHO	Orthophthalic Polyester	Medium Corrosion and Flame Resistance	Good	Good
VE FR	Vinylester - Fireproof	Superior Corrosion and Flame Resistance	Excellent	Very Good
ISO FR	Isophthalic Polyester - Fireproof	Industrial Level Corrosion and Flame Resistance	Very Good	Very Good

### Properties

 Chemical Resistance	 Flame Retardant	 Low Maintenance Cost
 UV Resistance	 Lightweight	 Non Magnetic
 Thermal Resistance	 Radar Transparent	 Dimensional Stability
 Corrosion Resistance	 High Strength	 Dielectric

**FRP GRATINGS**

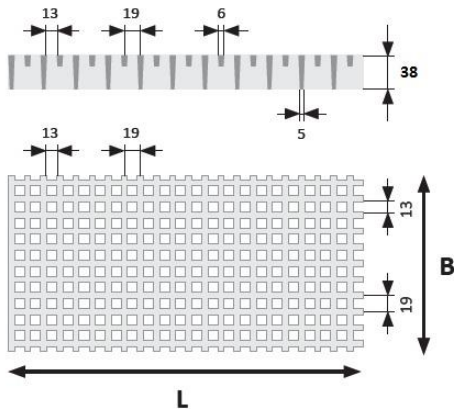
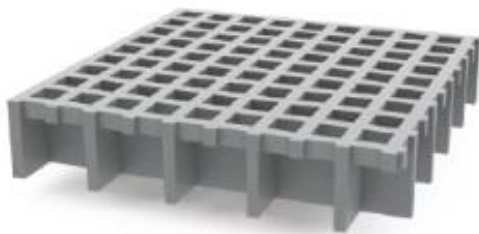
**KDI-M01 38x38x38**



300	3.500	2 x F	18.600	3 x q
450	1.550	3 x F	5.500	4 x q
600	870	4 x F	2.340	5 x q
750	560	5 x F	1.190	7 x q
900	387	6 x F	690	8 x q
1000	314	7 x F	503	9 x q
1200	218	8 x F	290	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.035	4.040	17,5
1.035	3.575	17,5
1.035	3.270	17,5
1.035	2.970	17,5
1.035	2.660	17,5

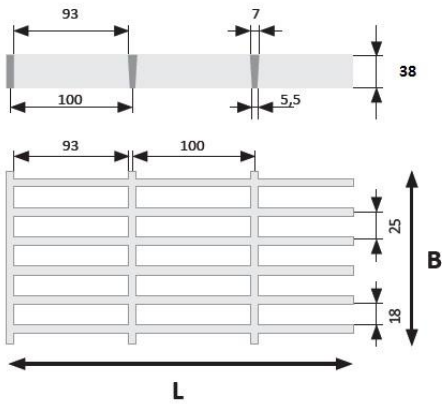
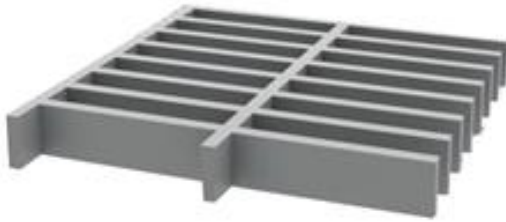
**KDI-M02 19x19x38**



300	3.570	2 x F	19.042	3 x q
450	1.570	3 x F	5.600	4 x q
600	880	4 x F	2.350	5 x q
750	564	5 x F	1.203	7 x q
900	391	6 x F	695	8 x q
1000	316	7 x F	506	9 x q
1200	219	8 x F	292	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.010	4.040	19,5
1.010	2.000	19,5

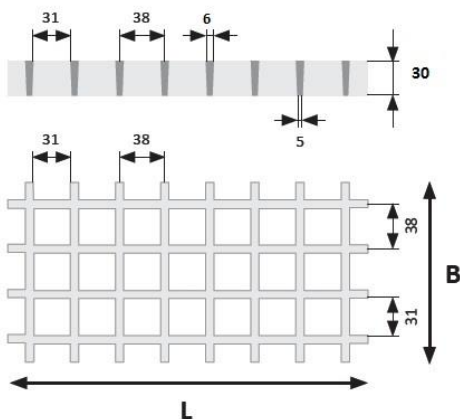
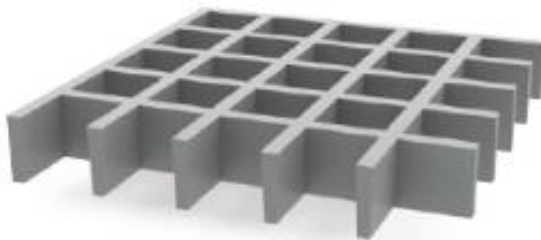
## KDI-M03 25x100x38



300	1.686	2 x F	8.996	3 x q
450	744	3 x F	2.647	4 x q
600	417	4 x F	1.113	5 x q
750	266	5 x F	568	7 x q
900	184	6 x F	328	8 x q
1000	149	7 x F	239	9 x q
1200	104	8 x F	138	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.010	4.010	19,25

## KDI-M04 38x38x30

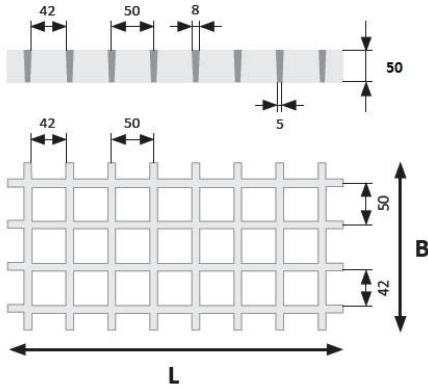


300	1.740	2 x F	9.300	3 x q
450	770	3 x F	2.730	4 x q
600	430	4 x F	1.150	5 x q
750	275	5 x F	585	7 x q
900	191	6 x F	340	8 x q
1000	154	7 x F	247	9 x q
1200	107	8 x F	143	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.000	4.035	14

**FRP GRATINGS**

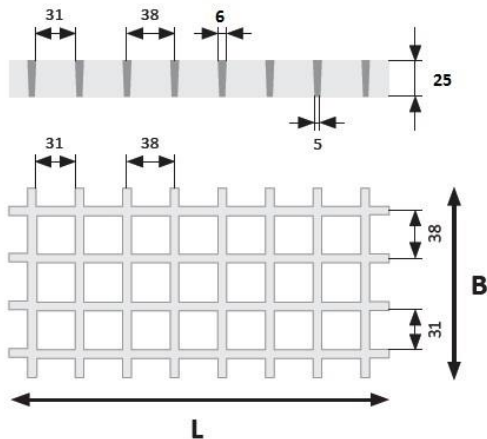
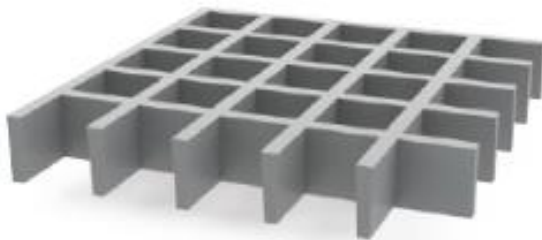
**KDI-M05 50x50x50**



300	6.812	2 x F	36.332	3 x q
450	3.007	3 x F	10.691	4 x q
600	585	4 x F	4.495	5 x q
750	1.076	5 x F	2.296	7 x q
900	746	6 x F	1.327	8 x q
1000	604	7 x F	966	9 x q
1200	419	8 x F	559	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.005	4.005	19,25

**KDI-M06 38x38x25**

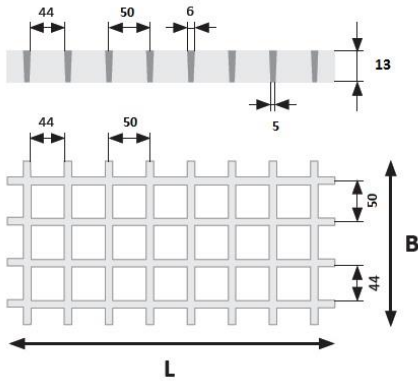


300	1.010	2 x F	5.280	3 x q
450	445	3 x F	1.570	4 x q
600	250	4 x F	660	5 x q
750	159	5 x F	340	7 x q
900	110	6 x F	96	8 x q
1000	90	7 x F	43	9 x q
1200	62	8 x F	83	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.035	4.040	11,8

**FRP GRATINGS**

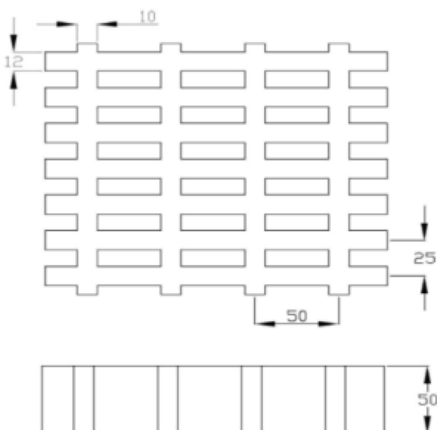
**KDI-M07 50x50x13**



(mm)	kg	Faktörü	kg/m <sup>2</sup>	Faktörü
300	176	2 x F	945	3 x q
450	78	3 x F	279	4 x q
600	44	4 x F	117	5 x q
750	28	5 x F	59	7 x q
900	19	6 x F	34	8 x q
1000	15	7 x F	25	9 x q
1200	10,8	8 x F	14	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.010	4.010	19,25
1.010	3.610	19,25

**KDI-M08 25x50x50**



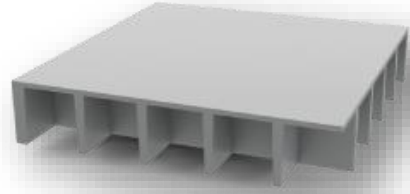
	F kg	Faktörü	kg/m <sup>2</sup>	Faktörü
300	6.812	2 x F	52.600	3 x q
450	3.007	3 x F	15.400	4 x q
600	2.585	4 x F	6.500	5 x q
750	1.076	5 x F	3.325	7 x q
900	746	6 x F	1.920	8 x q
1000	604	7 x F	1.290	9 x q
1200	419	8 x F	809	10 x q

B (mm)	L (mm)	kg/m <sup>2</sup>
1.210	1.835	46,5
1.210	1.580	46,5
960	1.740	46,5

## COVERED GRATINGS

### Application Areas

- Floors
- Platform
- Stairs
- Ramps
- Sidewalks
- Manholes
- Trench Covers
- Drainage Channels.





## CHEMICAL RESISTANCE

CHEMICAL	VINYLESTER		ISOPHTHALIC POLYESTER		ORTHOPHTHALIC POLYESTER	
	% Cons.	Max. Temp. C°	% Cons.	Max. Temp. C°	% Cons.	Max. Temp. C°
Acetic Acid	50	82	50	52	25	NR
Aluminum Hydroxide	100	82	100	71	All	
Ammonium Chloride	All	99	All	77	All	
Ammonium Bicarbonate	50	70	15	52	All	
Ammonium Hydroxide	28	38	28	N/R	All	NR
Ammonium Sulfate	ALL	99	ALL	77	All	
Copper Chloride	ALL	99	ALL	77	All	40
Copper Nitrate	ALL	99	ALL	77	All	
Benzene	All	N/R	All	N/R	All	NR
Benzoic Acid	100	82	100	27	100	25
Borax	SAT	99	SAT	66	All	25
Mercuric Chloride	SAT	99	SAT	77	All	
Zinc Nitrate	100	99	100	66	100	40
Zinc Sulfate	ALL	99	ALL	60	All	40
Copper Chloride	ALL	99	ALL	77	All	40
Ethanol	ALL	99	ALL	77	All	40
Ethylene Glycol	50	38	50	24	10	25
Ferric Chloride	100	93	100	32	100	40
Formaldehyde	ALL	99	ALL	77	All	40
Phosphoric Acid	ALL	65	50	24	25	
Glucose	100	99	100	49	80	NR
Glycerin	100	99	100	77	All	
Hydrobromic Acid	100	99	100	66	100	
Hydrochloric Acid	50	65	50	49	18	
Hydrogen Peroxide	37	65	37	24	10	30
Stannic Chloride	30	65	5	38	5	NR
Calcium Carbonate	ALL	99	ALL	71	All	40
Calcium Nitrate	ALL	82	ALL	77	All	
Carbon Tetrachloride	ALL	99	ALL	82	All	
Chlorine	100	65	100	N/R	100	NR
Chlorinated Water		99		60		NR
Chromic Acid	SAT	93	SAT	27	SAT	NR
Lactic Acid	10	65	5	21	5	NR
Lithium Chloride	ALL	99	ALL	77	All	25
Magnesium Chloride	SAT	99	SAT	66	All	
Magnesium Nitrate	ALL	99	ALL	77	All	40
Magnesium Sulfate	ALL	99	ALL	60	All	30
Nickel Chloride	ALL	99	ALL	77	All	40
Nickel Sulfate	ALL	99	ALL	77	All	40
Nitric Acid	ALL	99	ALL	77	All	40
Oxalic Acid	20	49	20	21	2	NR
Perchloric Acid	ALL	99	ALL	24	All	NR
Potassium Chloride	30	38	10	N/R	10	NR
Potassium Dichromate	ALL	99	ALL	77	All	40
Potassium Nitrate	ALL	99	ALL	77	All	25
Potassium Sulfate	ALL	99	ALL	77	All	40
Propylene Glycol	ALL	99	ALL	77	All	40
Citric Acid	ALL	99	ALL	77	All	40
Copper Cyanide	ALL	99	ALL	77	All	25
Vinegar	ALL	99	ALL	77	All	25
Distilled Water	100	99	100	77	All	
Sodium Acetate	100	82	100	77	All	30
Sodium Bisulfite	ALL	99	ALL	71	All	40
Sodium Bromide	ALL	99	ALL	77	All	
Sodium Cyanide	ALL	99	ALL	77	5	
Sodium Hydroxide	ALL	99	ALL	77	5	NR
Sodium Nitrate	25	82	N/R	N/R	1	NR
Sodium Sulfate	ALL	99	ALL	77	All	40
Sulfuric Acid	ALL	99	ALL	77	All	40
Sodyum Sülfat	75	38	25	24	10	
Sulfurik Asit	ALL	99	ALL	77	All	

NOT :

1. ALL: Means all of the concentrations.  
SAT: Means saturated solutions.  
N/R: Means "Not Recommended"  
- : Means "There is no information"

