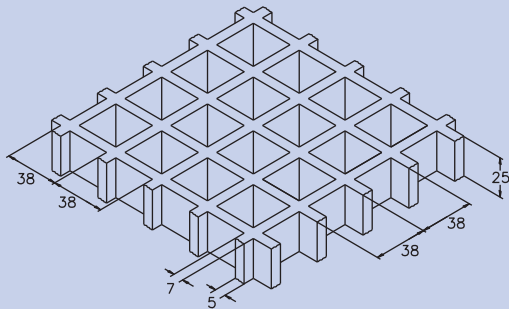
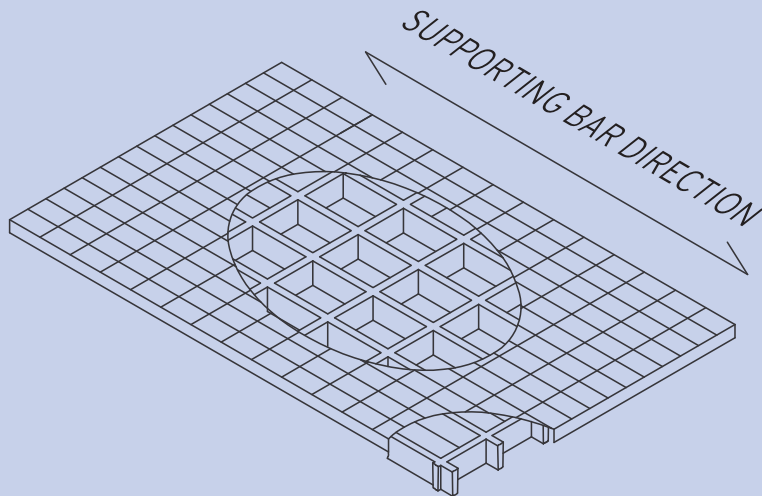


Mesh width	mm 38 x 38	
Inside diameter	mm 31 x 31	
Height	mm 25	
Bar thickness	mm 7 surface mm 5 underside	
Colour	Grey RAL 7004 RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

Standard plates	
mm 1000 x 3000	
mm 1000 x 4038	
mm 1220 x 3660	
Weight kg/m² 11	
Tolerance	± mm 5 plate dimension
	± mm 2 height

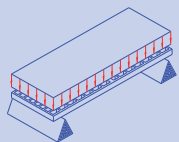
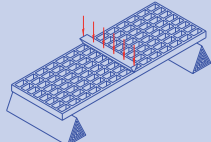


Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Ageing resistance	<b>Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects</b> (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)		
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects		

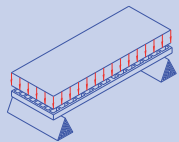
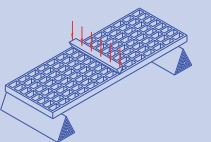
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m <sup>2</sup> ]		[cm]	[kg/m <sup>2</sup> ]	
30	4250	8550	30	800	1600
50	900	1850	50	250	550
70	300	650	70	100	250
90	150	300	90	50	150

All lower loads are permissible.

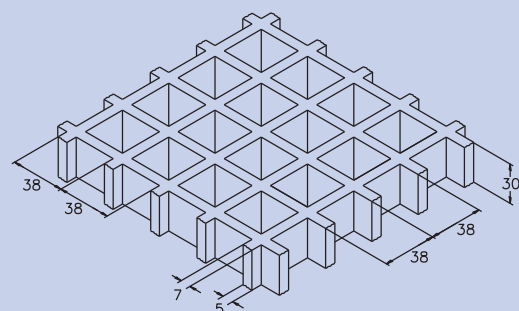
Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 of the breakdown tension (safety number: 0.20 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]	Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]
30	8800	30	1300
50	3150	50	750
70	1600	70	550
90	950	90	400

All lower loads are permissible.

- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.

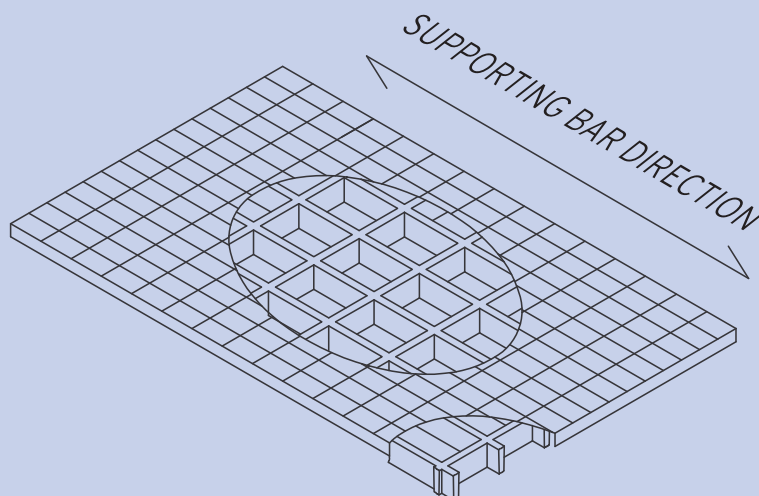
Mesh width	mm 38 x 38
Inside diameter	mm 31 x 31
Height	mm 30
Bar thickness	mm 7 surface mm 5 underside
Colour	Grey RAL 7004 RAL-specification



Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

Standard plates	
mm 1000 x 2000	
mm 1000 x 3000	
mm 1000 x 4038	
mm 1220 x 3660	
Weight kg/m² 15	
Tolerance	± mm 5 plate dimension
	± mm 2 height

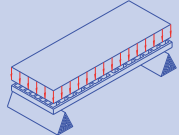
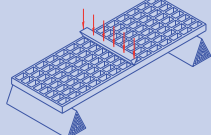


Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)		
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects		

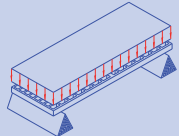
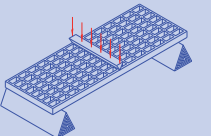
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]		[cm]	[kg/m²]	
50	1600	3200	50	500	1000
70	550	1150	70	250	500
90	250	500	90	150	300
110	150	300	110	100	200

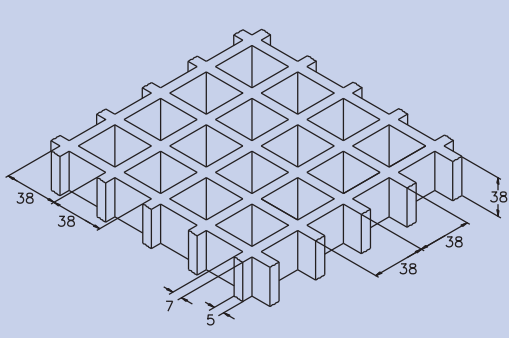
All lower loads are permissible.

Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 the breakdown tension (safety number: 5 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m²]	Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	4700	50	1150
70	2400	70	800
90	1450	90	650
110	950	110	500

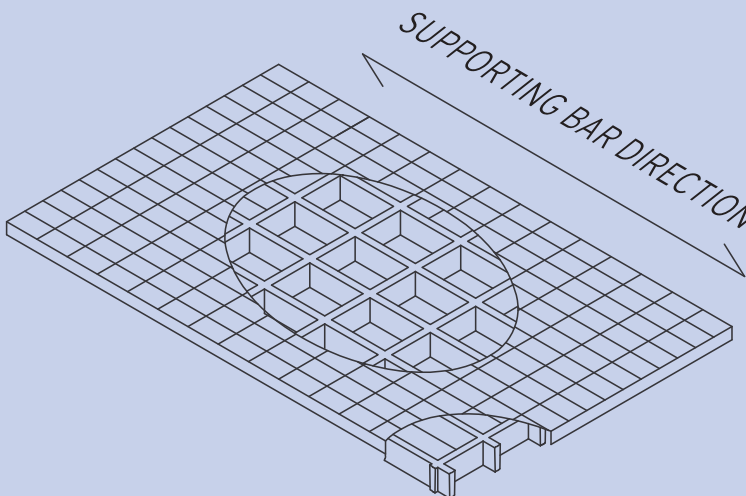
All lower loads are permissible.

- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.

Mesh width	mm 38 x 38	
Inside diameter	mm 31 x 31	
Height	mm 38	
Bar thickness	mm 7 surface mm 5 underside	
Colour	Grey RAL 7004 RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

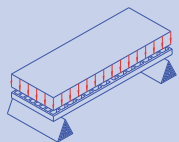
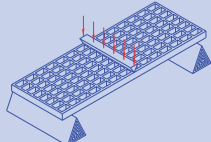
Standard plates		
mm 1500 x 2000		
mm 1000 x 3000		
mm 1000 x 4038		
mm 1220 x 3660		
mm 1220 x 4038		
Weight kg/m² 18		
Tolerance	± mm 5 plate dimension	
	± mm 2 height	

Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Ageing resistance	<b>Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects</b> (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)		
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects		

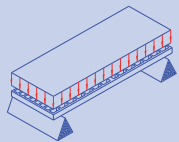
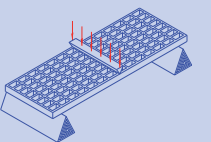
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m <sup>2</sup> ]		[cm]	[kg/m <sup>2</sup> ]	
50	3250	6500	50	1000	2000
70	1150	2350	70	500	1000
90	550	1100	90	300	600
110	300	600	110	200	400

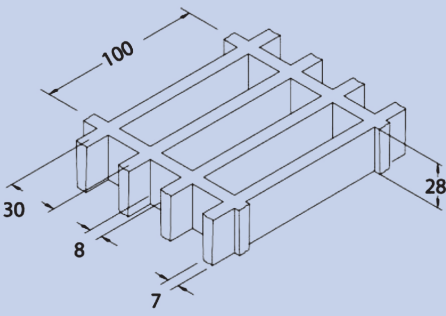
All lower loads are permissible.

Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 the breakdown tension (safety number: 5 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]	Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]
50	7300	50	1800
70	3700	70	1300
90	2250	90	1000
110	1500	110	800

All lower loads are permissible.

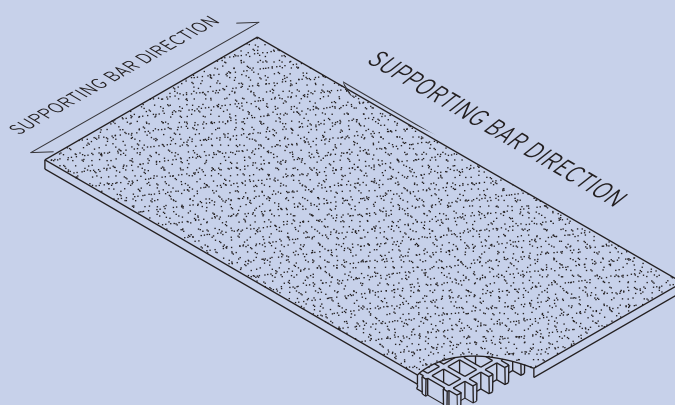
- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.

Mesh width	mm 100 x 30	
Inside diameter	mm 92 x 22	
Height	mm 28	
Bar thickness	mm 8 surface mm 7 underside	
Colour	Opal green	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

Standard plates	
mm 1000 x <u>2000</u>	
mm 1500 x <u>2000</u>	
Weight kg/m² 13	
Tolerance	± mm 5 plate dimension
	± mm 2 height



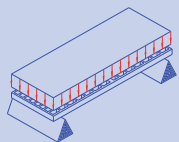
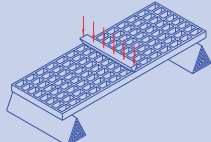
Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Level Bfl-S1 standard EN 13501-1

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m <sup>2</sup> )
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects

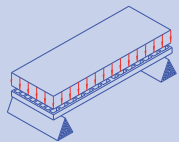
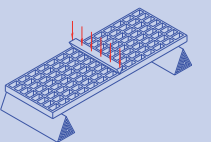
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]		[cm]	[kg/m²]	
50	1750	3500	50	500	1050
70	600	1250	70	250	550
90	300	600	90	150	300
110	150	300	110	100	200

All lower loads are permissible.

Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 the breakdown tension (safety number: 5 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m²]	Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	6400	50	1600
70	3250	70	1150
90	1950	90	850
110	1300	110	700

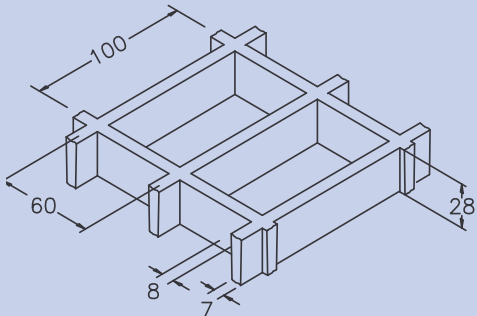
All lower loads are permissible.

- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.

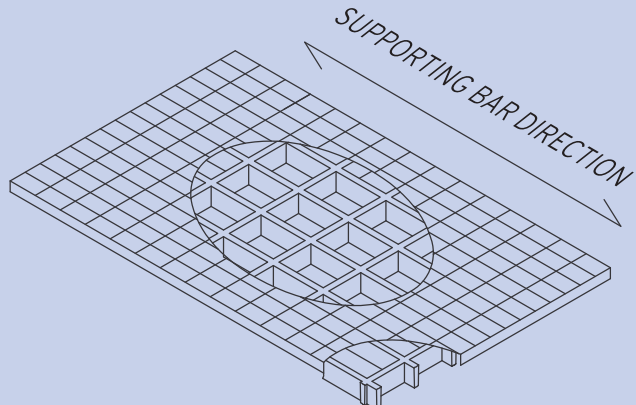


## Open gratings – rectangular mesh

The GRP gratings with rectangular mesh are suitable for fences in industrial and civilian environments where the GRP's typical characteristics really come into their own (corrosion-resistant, electric insulator, diamagnetic, heat-resistant, resistant to UV-rays, light, maintenance-free, high mechanical resistance, easy to process).

Mesh width	mm 100 x 60	
Inside diameter	mm 92 x 52	
Height	mm 28	
Bar thickness	mm 8 surface	
	mm 7 underside	
Colour	Grey RAL 7004 * RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

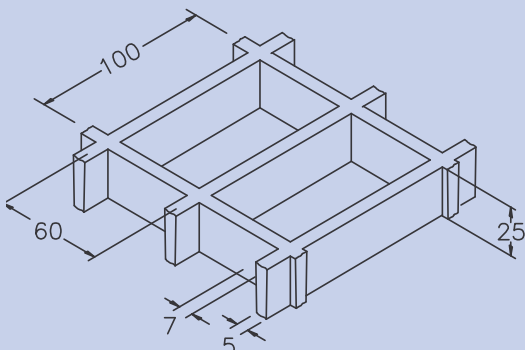
Standard plates		
mm 1500 x <u>2000</u>		
Weight kg/m <sup>2</sup> 9		
Tolerance	± mm 5 plate dimension	
	± mm 2 height	

Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
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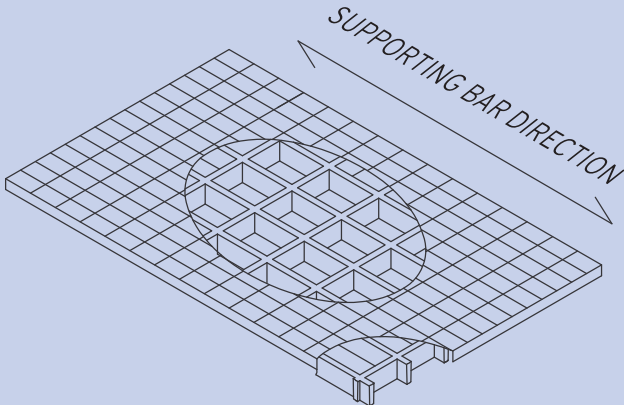
Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Grade V-0 standard UL94 Vertical Burning Test

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m <sup>2</sup> )
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects

\* Upon request also available in other colours

Mesh width	mm 100 x 60	
Inside diameter	mm 93 x 53	
Height	mm 25	
Bar thickness	mm 7 surface	
	mm 5 underside	
Colour	Grey RAL 7004 * RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

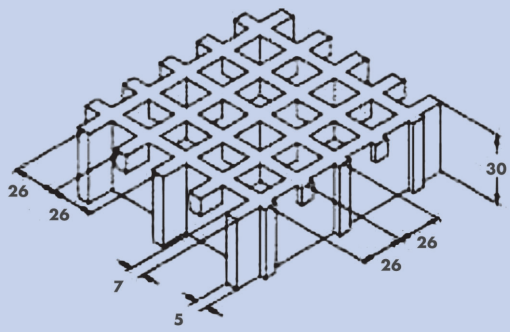
Standard plates		
mm 1500 x <u>2000</u>		
Weight kg/m² 7		
Tolerance	± mm 5 plate dimension	
	± mm 2 height	

Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
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Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Grade V-0 standard UL94 Vertical Burning Test

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects

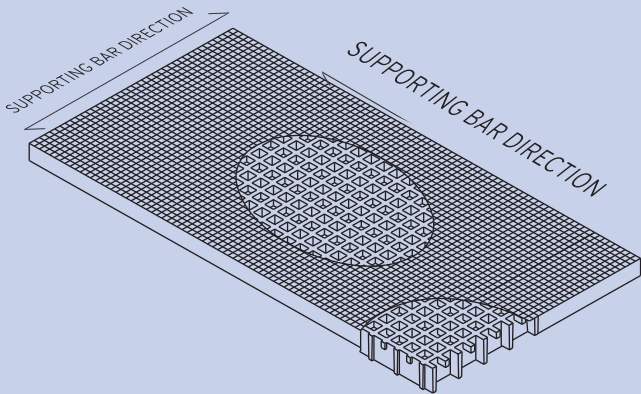
\* Upon request also available in other colours

Mesh width	mm 52 x 52 main mesh mm 26 x 26 side mesh	
Inside diameter	mm 19 x 19	
Height	mm 30	
Bar thickness	mm 7 surface mm 5 underside	
Colour	Grey RAL 7004 RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR (Grey)	15000 MPa	325 MPa

Standard plates	
mm 1000 x 2000	
mm 1000 x 3000	
mm 1220 x 4050	
Weight kg/m² 15	
Tolerance	± mm 5 plate dimension
	± mm 2 height

An isometric line drawing of a rectangular grating plate. The plate has a grid of square openings. A circular hole is cut out from the center of the plate. Two arrows, one pointing towards the top-left and one pointing towards the top-right, are labeled "SUPPORTING BAR DIRECTION". The plate is shown with a slight 3D perspective, revealing its thickness and the raised edges of the grid pattern.

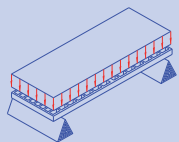
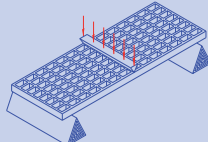
Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Level Bfl-S1 standard EN 13501-1

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects

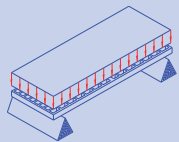
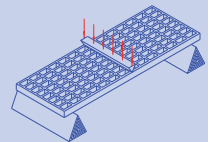
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m <sup>2</sup> ]		[cm]	[kg/m <sup>2</sup> ]	
50	1700	3400	50	500	1050
70	600	1200	70	250	500
90	250	550	90	150	300
110	150	300	110	100	200

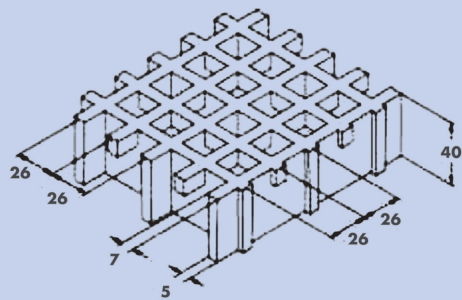
All lower loads are permissible.

Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 the breakdown tension (safety number: 5 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]	Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]
50	4350	50	1050
70	2200	70	750
90	1350	90	600
110	800	110	450

All lower loads are permissible.

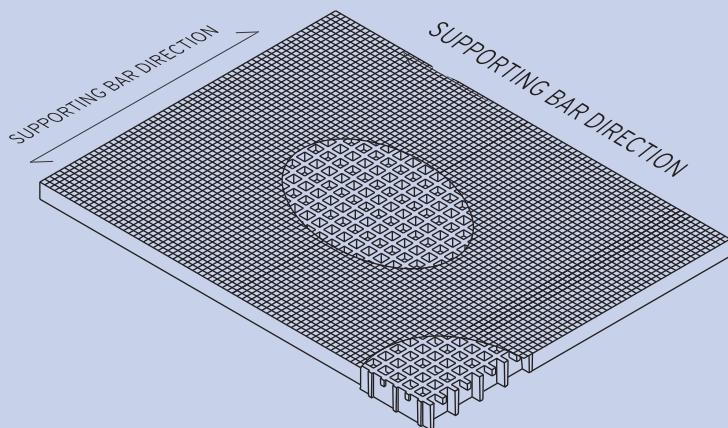
- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.

Mesh width	mm 52 x 52 main mesh mm 26 x 26 side mesh	
Inside diameter	mm 19 x 19	
Height	mm 40	
Bar thickness	mm 7 surface mm 5 underside	
Colour	Grey RAL 7004 RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

Standard plates	
mm 1000 x 2000	
mm 1000 x 3000	
mm 1220 x 4050	
Weight kg/m² 21	
Tolerance	± mm 5 plate dimension
	± mm 2 height

A 3D perspective illustration of a rectangular grating plate. The plate has a grid of square openings. A circular section in the center is shaded with a different pattern, representing a cutout. Two arrows, one pointing left and one pointing right, are positioned above the plate, both labeled "SUPPORTING BAR DIRECTION". The plate is shown from an isometric perspective, revealing its thickness and the raised edges of the grid.

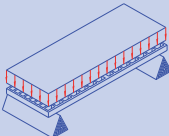
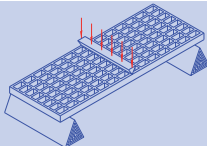
Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Level Bfl-S1 standard EN 13501-1

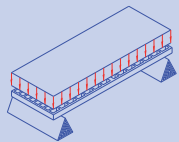
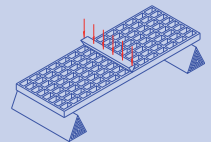
Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects

## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

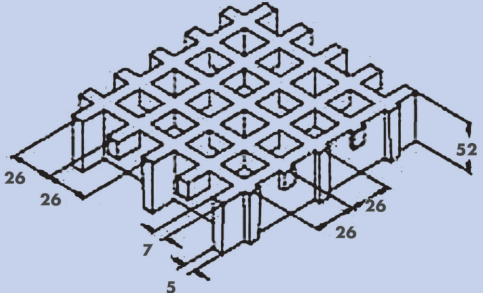
DISTRIBUTED LOAD			CONCENTRATED LOAD		
Distance between the carriers			Distance between the carriers		
	Load with deflection = 1/200	Load with deflection = 1/100		Load with deflection = 1/200	Load with deflection = 1/100
	[kg/m²]			[kg/m²]	
50	3950	7950	50	1200	2450
70	1450	2900	70	600	1250
90	650	1350	90	350	750
110	350	700	110	250	500

All lower loads are permissible.  
Limits depend on the permissible tensions (depending on the load). The **maximum permissible deflection** is 1/100 of the difference between the carriers.

DISTRIBUTED LOAD		CONCENTRATED LOAD	
Distance between the carriers [cm]		Distance between the carriers [cm]	
	maximum permissible load		maximum permissible load
	[kg/m²]		[kg/m²]
50	7800	50	1950
70	4000	70	1400
90	2400	90	1050
110	1600	110	850

All lower loads are permissible.

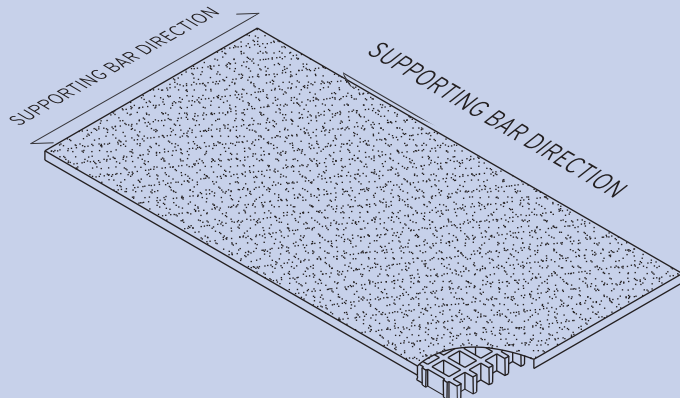
- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.

Mesh width	mm 52 x 52 main mesh mm 26 x 26 side mesh	
Inside diameter	mm 19 x 19	
Height	mm 52	
Bar thickness	mm 7 surface mm 5 underside	
Colour	Grey RAL 7004 RAL-specification	

Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

Standard plates	
mm 1000 x 2000	
mm 1000 x 3000	
mm 1000 x 4050	
Weight kg/m² 26	
Tolerance	± mm 5 plate dimension
	± mm 2 height



Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

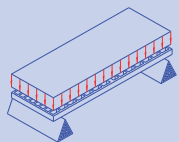
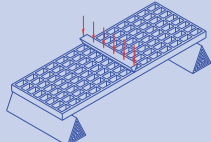
Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Level Bfl-S1 standard EN 13501-1

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects



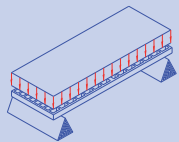
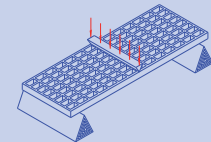
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m <sup>2</sup> ]		[cm]	[kg/m <sup>2</sup> ]	
70	3900	7800	70	1700	3400
90	1800	3650	90	1000	2050
110	1000	2000	110	650	1350
130	600	1200	130	450	950

All lower loads are permissible.

Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 the breakdown tension (safety number: 5 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]	Distance between the carriers [cm]	maximum permissible load [kg/m <sup>2</sup> ]
70	8350	70	2900
90	5050	90	2250
110	3350	110	1850
130	2400	130	1550

All lower loads are permissible.

- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.



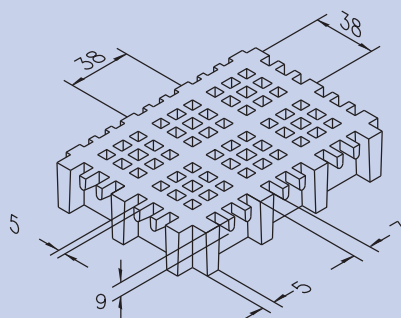
## Open gratings – micro mesh

The GRP gratings with micro mesh are suitable for implementing raised treads, in accordance with the strictest EU-standards. The heel-proof format is particularly suitable for applications in the civilian sector.

### Appliances:

- Water cycle
- Plants for treatment of backflow water
- Plants for waste treatment
- Chemical industry
- Galvanic industry
- Raw material industry
- Transports
- Ship building
- Energy
- Telecommunication
- Food industry
- Urban facilities
- Outdoor and marinas

Mesh width	mm 38 x 38 main mesh mm 12 x 12 side mesh
Inside diameter	mm 8 x 8
Height	mm 30
Bar thickness	mm 7 surface
	mm 5 underside
Colour	Grey RAL 7004 RAL-specification (approximate)



Raw material	Polyester resin
	Glass fibre Direct Roving + Panel Type "E"
	Halogen-free inorganic fillers

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	325 MPa

Standard plates	
mm 1220 x 3660	
mm 1000 x 4038	
Weight kg/m² 16	
Tolerance	± mm 5 plate dimension
	± mm 2 height

A 3D perspective view of a rectangular grating plate. The plate has a main rectangular area with a grid of square openings, and a smaller, circular area in the center with a different grid pattern. Two arrows point from the text 'SUPPORTING BAR DIRECTION' to the edges of the plate, indicating the orientation of the supporting bars. A small label '38x38' is visible on the main grid.

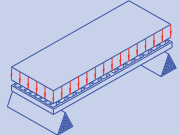
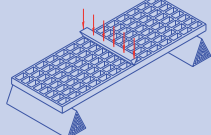
Surface	S	smooth	Slip-resistant grade R10 V10 standard DIN E51130
	M	concave "Meniscus"	Slip-resistant grade R13 V10 standard DIN E51130
	A	with quartz	Slip-resistant grade R13 V10 standard DIN E51130

Fire behaviour	Self-extinguishing	Spread ≤ 25 standard ASTM E84-98
		Level Bfl-S1 standard EN 13501-1

Ageing resistance	Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 313 nm, irradiation 0.71 W/m²)
	After passing through the cycles heat, cold and moisture in accordance with the standard UNI EN ISO 9142/04 standard (21 cycles type D3) they do not show any remaining defects

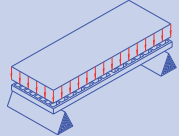
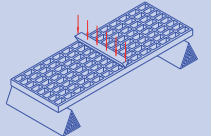
## SUGGESTED MAXIMUM LOADS

Carrier	Linear at both ends of the plate
Limits depend on	Deflection (downward expansion under load)
the <b>maximum permissible deflection</b> is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD			CONCENTRATED LOAD		
					
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100	Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]		[cm]	[kg/m²]	
50	2100	4250	50	650	1300
70	750	1550	70	300	650
90	350	700	90	200	400
110	200	400	110	100	250

All lower loads are permissible.

Limits depend on the permissible tensions (depending on the load). The **maximum permissible tension** is 1/5 the breakdown tension (safety number: 0.20 – the breaking load is 5 times the specified loading).

DISTRIBUTED LOAD		CONCENTRATED LOAD	
			
Distance between the carriers [cm]	maximum permissible load [kg/m²]	Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	5150	50	1250
70	2600	70	900
90	1550	90	700
110	1050	110	550

All lower loads are permissible.

- The data provided in the table should be considered reference values for the standard materials at the surrounding temperature. Even though they are not to be considered guaranteed characteristics, they are based on our experience and are provided to the best of our knowledge.
- In conformity with standard DIN 25437-3 the following associated reduction factors must be considered: 0.75 for interior areas, 0.65 for outdoor areas and 0.50 for media exposure.
- Irrespective of environmental influences, the chemical stability must be checked by establishing contact with ProMetall's technical department.
- At higher loads the pressure resistance must be checked.