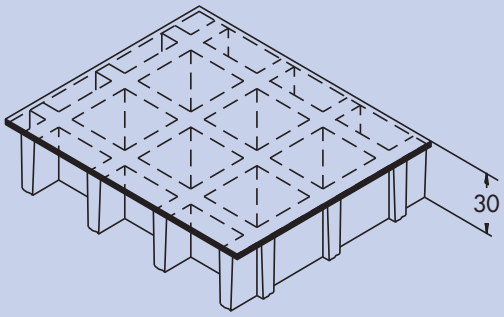
GRP – plastic gratings

GRATING TYPE SCH 38/25DC_IFR

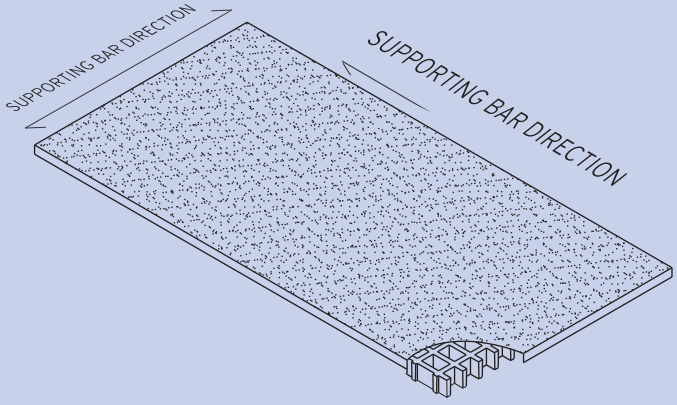
Mesh width	mm 38 x 38
Height	mm 30
Cover thickness	mm 3 top cover mm 3 bottom cover
Bar thickness	mm 7 surface mm 5 underside
Colour	Grey RAL 7004 RAL-specification (approximate)



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

Resin	Elastic module	Breakdown tension
IFR	15000 MPa	130 MPa

Standard plates	
mm 1000 x 2000	
mm 1000 x 4038	
mm 1220 x 3660	
Weight kg/m² 25	
Toleranz	± mm 5 plate dimension
	± mm 2 height



Surface	A	with quartz	Slip-resistant grade R13 V4 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

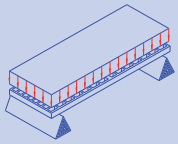
GRP – plastic gratings

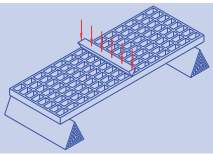
GRATING TYPE SCH 38/25DC_IFR

SUGGESTED MAXIMUM LOADS

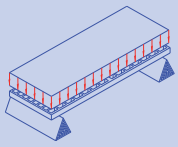
Carrier type	**Linear at both ends of the plate**

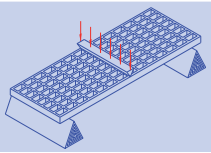
Limits depend on	Deflection (downward expansion under load)
the **maximum permitted deflection** is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering at exposure to the agreed load must not exceed 1/200 of the span, whilst the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

DISTRIBUTED LOAD		
Distance between the carriers [cm]	Load with deflection = 1/200 [kg/m²]	Load with deflection = 1/100 [kg/m²]
50	6450	12950
70	2350	4700
90	1100	2200
110	600	1200

CONCENTRATED LOAD		
Distance between the carriers [cm]	Load with deflection = 1/200 [kg/m²]	Load with deflection = 1/100 [kg/m²]
50	2000	4050
70	1000	2050
90	600	1250
110	400	800

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 specific landing).

DISTRIBUTED LOAD	
Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	7550
70	3850
90	2300
110	1550

CONCENTRATED LOAD	
Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	1850
70	1300
90	1000
110	850

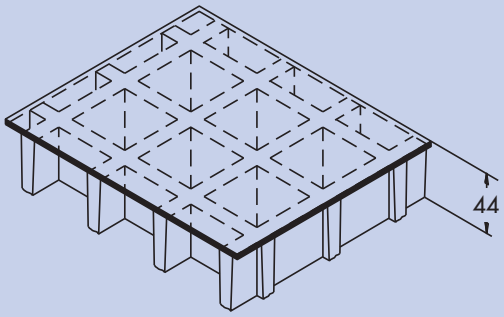
All lower loads are permissible.

- 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.

GRP – plastic gratings

GRATING TYPE SCH 38/38DC_IFR

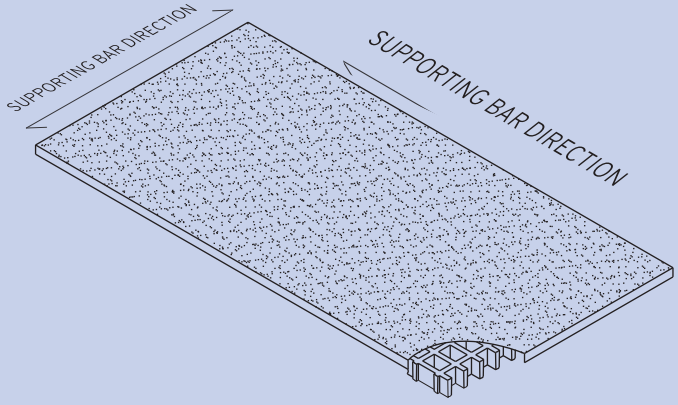
Mesh width	mm 38 x 38
Height	mm 44
Cover thickness	mm 3 main mesh mm 3 side mesh
Bar thickness	mm 7 surface mm 5 underside
Colour	Gray RAL 7004 RAL-specification



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

Resin	Elastic module	Breakdown voltage
IFR	15000 MPa	130 MPa

Standard plates	
mm 1220 x 3660	
mm 1000 x 3660	
Weight kg/m² 30	
Tolerance	± mm 5 plate dimension
	± mm 2 height



Surface	A	with quartz	Slip-resistant grade R13 V4 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

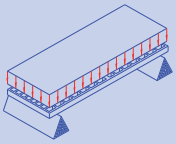
GRP – plastic gratings

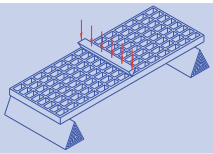
GRATING TYPE SCH 38/38DC_IFR

SUGGESTED MAXIMUM LOADS

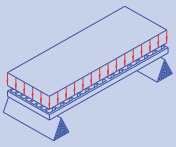
Carrier type	**Linear at both ends of the plate**

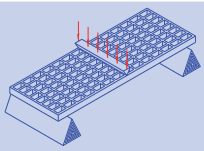
Limits depend on	Deflection (downward expansion under load)
the **maximum permitted deflection** is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed load must not exceed 1/200 of the span, whilst the height difference to the neighbouring joint must not exceed 4 mm.	

DISTRIBUTED LOAD		
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]	
50	15100	30200
70	5500	11000
90	2550	5150
110	1400	2800

CONCENTRATED LOAD		
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]	
50	4700	9450
70	2400	4800
90	1450	2900
110	950	1950

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: 5 – the breaking load is 5 times the specified landing).

DISTRIBUTED LOAD	
Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	12400
70	6300
90	3800
110	2550

CONCENTRATED LOAD	
Distance between the carriers [cm]	maximum permissible load [kg/m²]
50	3100
70	2200
90	1700
110	1400

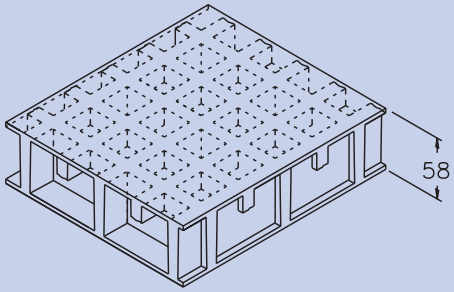
All lower loads are permissible.

- 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.

GRP – plastic gratings

GRATING TYPE SCH 52/52DC_IFR

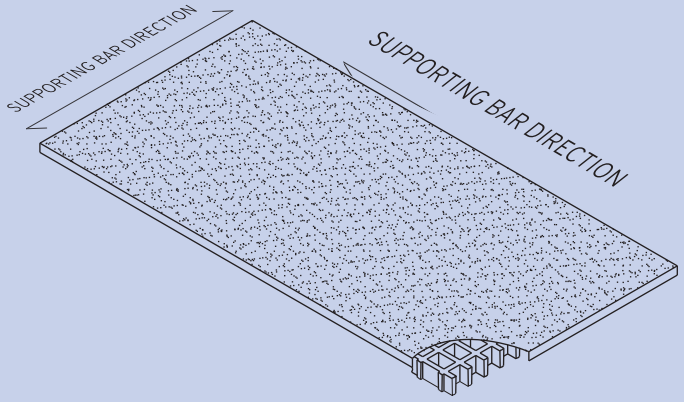
Mesh width	mm 52 x 52 main mesh mm 26 x 26 side mesh
Height	mm 58
Cover thickness	mm 3 top cover mm 3 bottom cover
Bar thickness	mm 7 surface mm 5 underside
Colour	Grey RAL 7004 RAL-specification



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

Resin	Elastic module	Breakdown voltage
IFR	15000 MPa	130 MPa

Standard plates	
mm 1000 x 3000	
mm 1000 x 4050	
Weight kg/m² 40	
Tolerance	± mm 5 plate dimension
	± mm 2 height



Surface	A	with quartz	Slip-resistant grade R13 V4 standard DIN E51130

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

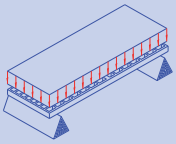
Ageing resistance	**Accelerated ageing test with UV-lamp in accordance with ASTM G154-06 passed with 5 points on the grey scale and without any obvious defects** (1500 hours exposure with alternating cycles of 4 hours UV temperature 60°C and 4 hours condensation temperature 50°C, irradiated by UVB-lamps 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.

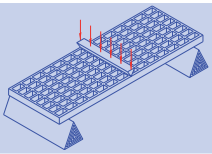
GRP – plastic gratings

GRATING TYPE SCH 52/52DC_IFR

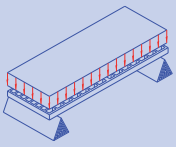
SUGGESTED MAXIMUM LOADS

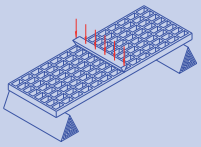
Carrier	**Linear at both ends of the plate**
Limits depend on	Deflection (downward expansion under load)
the **maximum permitted deflection** is 1/100 of the difference between the carriers	
In accordance with the standard DIN 25437-3 the deflection of the floor covering under exposure to the agreed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

DISTRIBUTED LOAD		
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]	
70	10100	20250
90	4750	9500
110	2600	5200
130	1550	3150

CONCENTRATED LOAD		
Distance between the carriers	Load with deflection = 1/200	Load with deflection = 1/100
[cm]	[kg/m²]	
70	4400	8850
90	2650	5350
110	1750	3550
130	1250	2550

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: 5 – the breaking load is 5 times the specified landing).

DISTRIBUTED LOAD	
Distance between the carriers [cm]	maximum permissible load [kg/m²]
70	8800
90	5300
110	3550
130	2550

CONCENTRATED LOAD	
Distance between the carriers [cm]	maximum permissible load [kg/m²]
70	3050
90	2400
110	1950
130	1650

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.