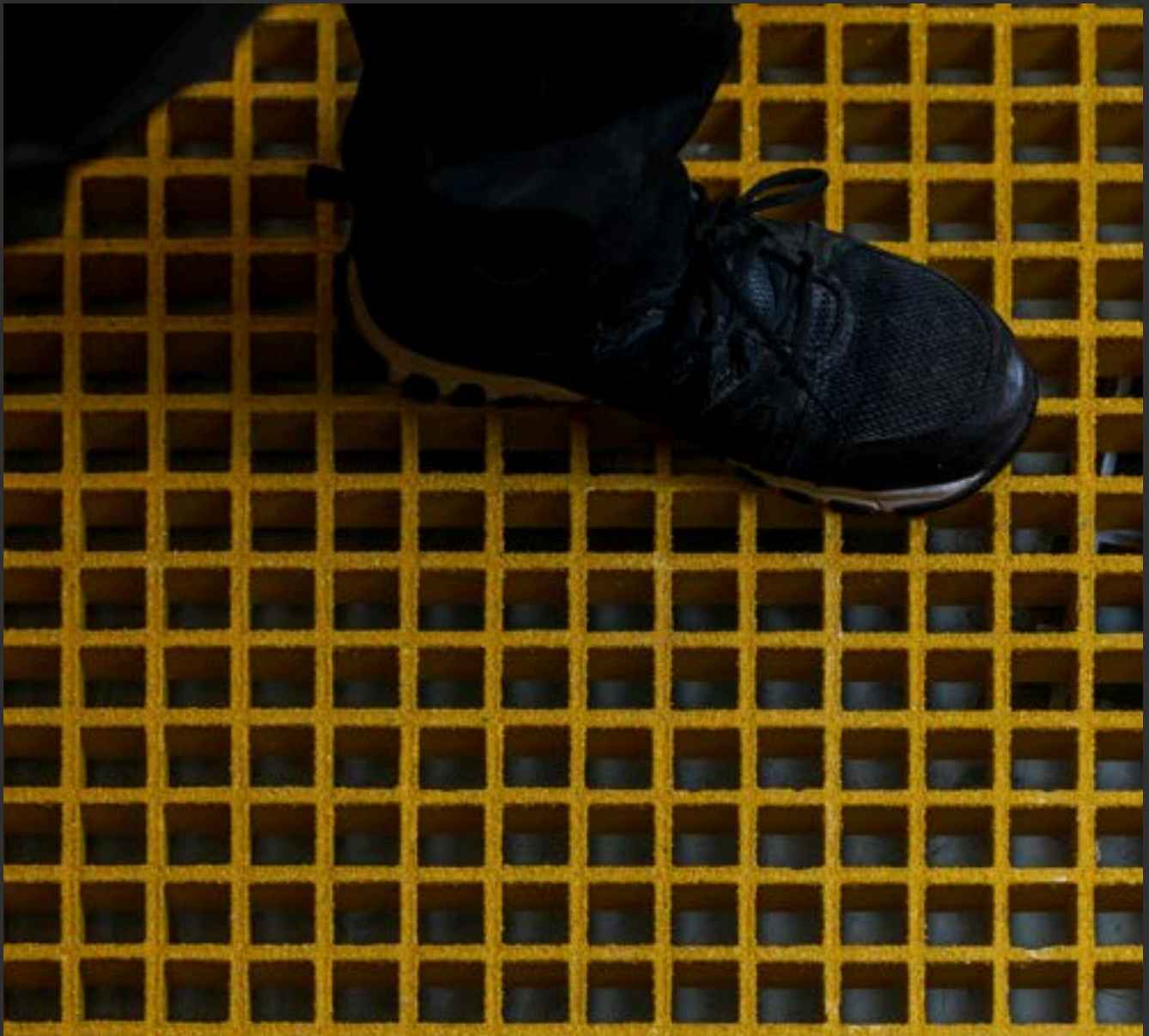




LEAD THE WAY TO A FUTURE WITHOUT CORROSION.

FULL-RANGE SUPPLIER OF FIBERGLASS GRATINGS, PROFILES, AND
STRUCTURAL CONSTRUCTIONS.



FULL-RANGE SUPPLIER.

Safestep is a full-range supplier of anti-slip solutions, fiberglass gratings, profiles, and fiberglass constructions. We deliver customized solutions to a wide range of industries — from manufacturing and mining to offshore, chemical processing, and water treatment facilities.

 **LKAB**

ahlsell

VATTENFALL 

NCC 

uponor

SKANSKA

LINJETT

SVEVIA

FIBERGLASS AS A CONSTRUCTION MATERIAL.

At its core, fiberglass is like any other building material. Just like steel, entire structures can be built from fiberglass — but in a far more cost-effective and sustainable way.

In operations with a high risk of corrosion, fiberglass is, or should be, the obvious choice. It saves you both time, money, and resources — while creating a safer workplace for both employees and visitors.



Corrosion-free.

Fiberglass is completely corrosion-free, making it the ideal material for environments that handle acid, gas, salt, or strong chemicals.



Low weight.

Fiberglass weighs roughly one-third of steel, resulting in easier handling, installation, and dismantling.



High strength.

Fiberglass has excellent strength, allowing you to build everything from stairs and ladders to walkways, bridges, and ramps.



Load-bearing in both directions.

The fibers run in both directions, allowing the grating to maintain its load-bearing capacity even with open mesh.



Chemical-resistant.

Fiberglass withstands most chemicals, and the resin can be adjusted to tailor both gratings and profiles to specific requirements.



Maintenance-free.

Fiberglass has an extremely long service life and requires no blasting, painting, or other maintenance to retain its strength.



Non-conductive.

Fiberglass is an electrical insulator and requires no grounding. In addition, no sparks are generated during processing.



Temperature-resistant.

GRP is highly temperature-resistant, making it suitable even for low-temperature environments.



Good fire-retardant properties.

The material is self-extinguishing by nature, and EX-rated fiberglass grating is also available.



Easy to work with.

GRP can be compared to hard wood, meaning both gratings and structures can be cut, drilled, and adjusted directly on site.



Cost-effective.

Fiberglass offers long-lasting durability and requires minimal maintenance, ultimately saving both time and money.

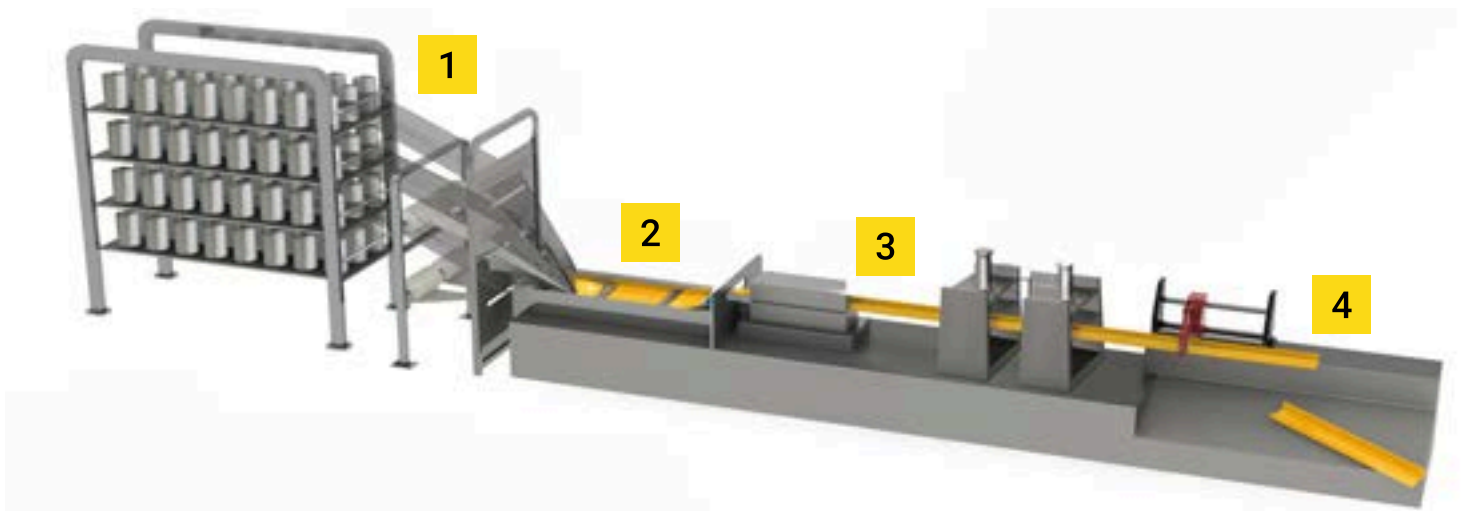


Excellent anti-slip properties.

We offer both sanded and concave fiberglass gratings, each with slip-resistance rating R13.

FROM FIBER TO PROFILE.

Our fiberglass profiles are produced in modern, energy-efficient facilities using the pultrusion process — a highly efficient method for manufacturing large volumes of composite profiles. This technique also allows us to customize and optimize the material's properties in several ways.



1

Fiberglass strands are drawn and woven together into the correct fiber composition.

2

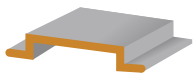
The fibers are then pulled through a resin bath, where key characteristics such as chemical resistance, color, and fire retardancy can be adjusted.

3

The composite is fed into pre-formed molds, where it is heated and cured into a solid profile.

4

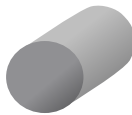
The finished profile is then cut to the desired length — ready for use.



Service beams



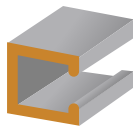
Z profiles



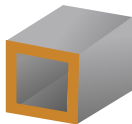
Rods



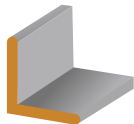
T profiles



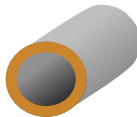
C profiles



Rectangular profiles



L profiles



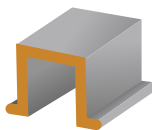
Tubes



H profiles



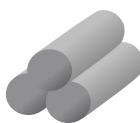
Flat profiles



Hat profiles



U profiles



Reinforcement bars



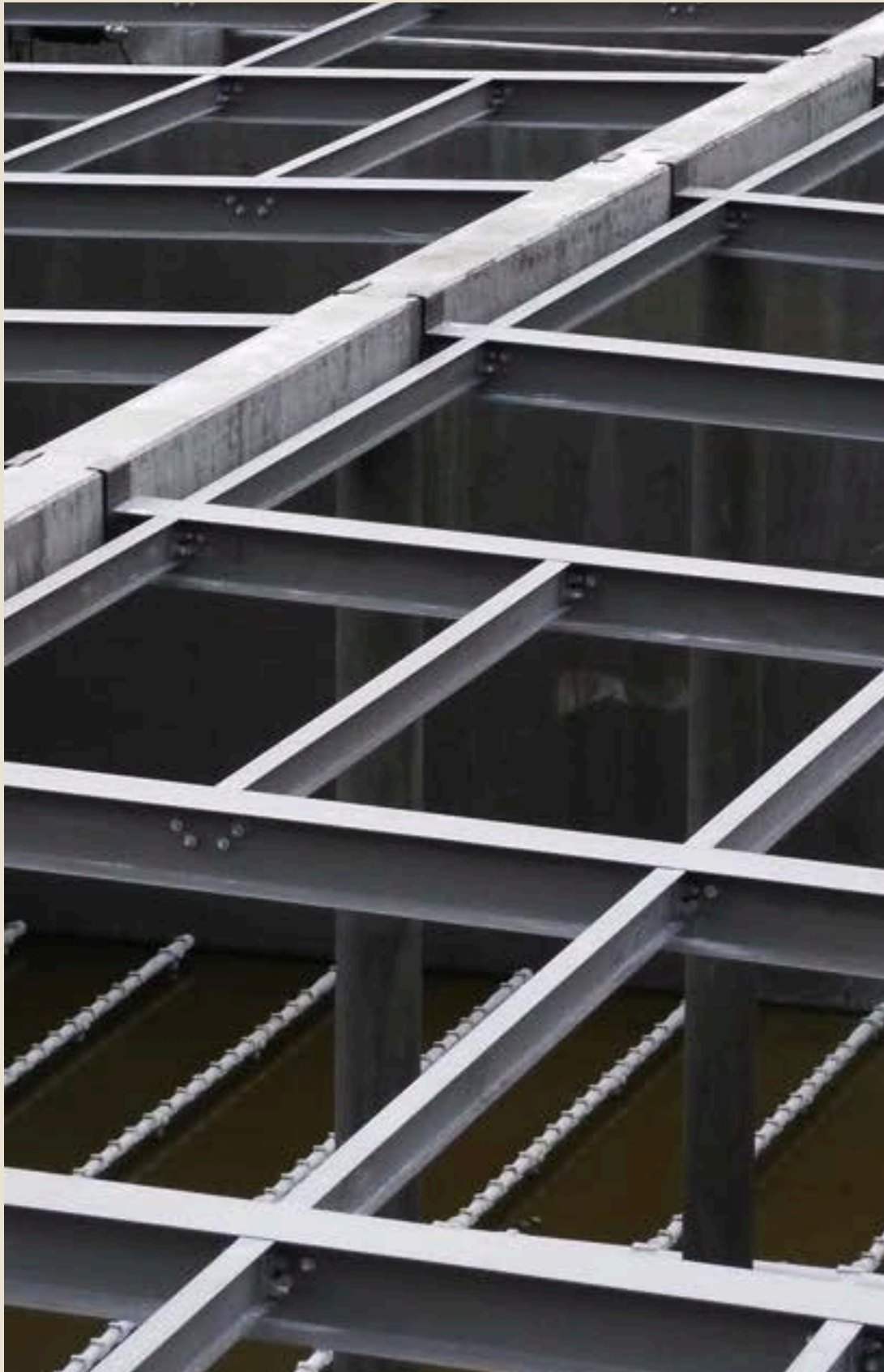
Custom profiles



Kick plate for fiberglass railing systems.

FIRE PROPERTIES

STANDARD	METHOD / REMARKS	COUNTRY	RESULT
ÖNORM B 3800	B1-Test / Phenol	A	B1 Tr1 Q1
UNIFER E 10.02.977	UNI 9177	CH, I	2A
UNIFER E 10.02.977	UNI 9174 FT	CH, I	2A
UNIFER E 10.02.977	UNI 8457 KI FT	CH, I	2A
UNIFER E 10.02.977	SO 5660-1	CH, I	www.grp.safestep.se
UNIFER E 10.02.977	EN ISO 1716	CH, I	7639 J/g
DIN 53 438, Teil 2	5 mm	D	K 1/5 mm
DIN 54837	DIN 55 10 T2	D	S4 SR2 ST2
DIN 5510-2 2009	DIN 5510-2 2009	D	FED < 115 + 30 min
DIN EN 13501 -1	DIN EN ISO 9239 -1	D	9,9 kW/m2 / 195%
DIN EN 13501 -1	DIN EN ISO 11925 -2	D	min
DIN EN 13501 -1	(≈DIN 4102-B1)	D	Bfl - s1
DIN 4102	Teil 1, 6mm	D	B1
NFF16 -101	NFX 70 -100	F	F1/I.T.C.-Wert: 2,3
NFF16 -101	NFX 10 -702	F	F1
NFF16 -101	NFP 92-501	F	M2
BS 476: Part 7: 1997	8 mm	GB	class 2
BS 476: Part 7: 1997	3 mm	GB	class 2
UIC 564-2	Anlage 4	H	⬆ C ⬆ A
NFPA 130	ASTME 662	USA	www.grp.safestep.se
NFPA 130	ASTME 162	USA	Is = 9,7
NFPA 255	ASTME- 84-98	USA	< 25, class A
95/28/EG: 1995	95/28/EG: 1995	EU	✓
EN ISO 11925-2: 2002	CEN/TS 45545-2: 2009	EU	✓
ISO 5660-1: 2002	CEN/TS 45545-2: 2009	EU	MAHRE 50,7 kW/
ISO 5658-2	CEN/TS 45545-2: 2009	EU	CFE > 24 kW/m2 Qsb 13,4 MJ/m2
ISO 5659-2	CEN/TS 45545-2: 2009	EU	Ds(4) 89, VOF4 95 CIT 4 min 0,01/8min 0,02
ISO 4589-2	O2	EU	LOI 36,2%
DIN EN 60695-11-10	UL94 V	EU	V 0
UNIFER E 10.02.977	UNI 9174 FT	CH, I	2A
UNIFER E 10.02.977	UNI 9174 FT	CH, I	2A



Fiberglass profile roof structure.

CHEMICAL RESISTANCE

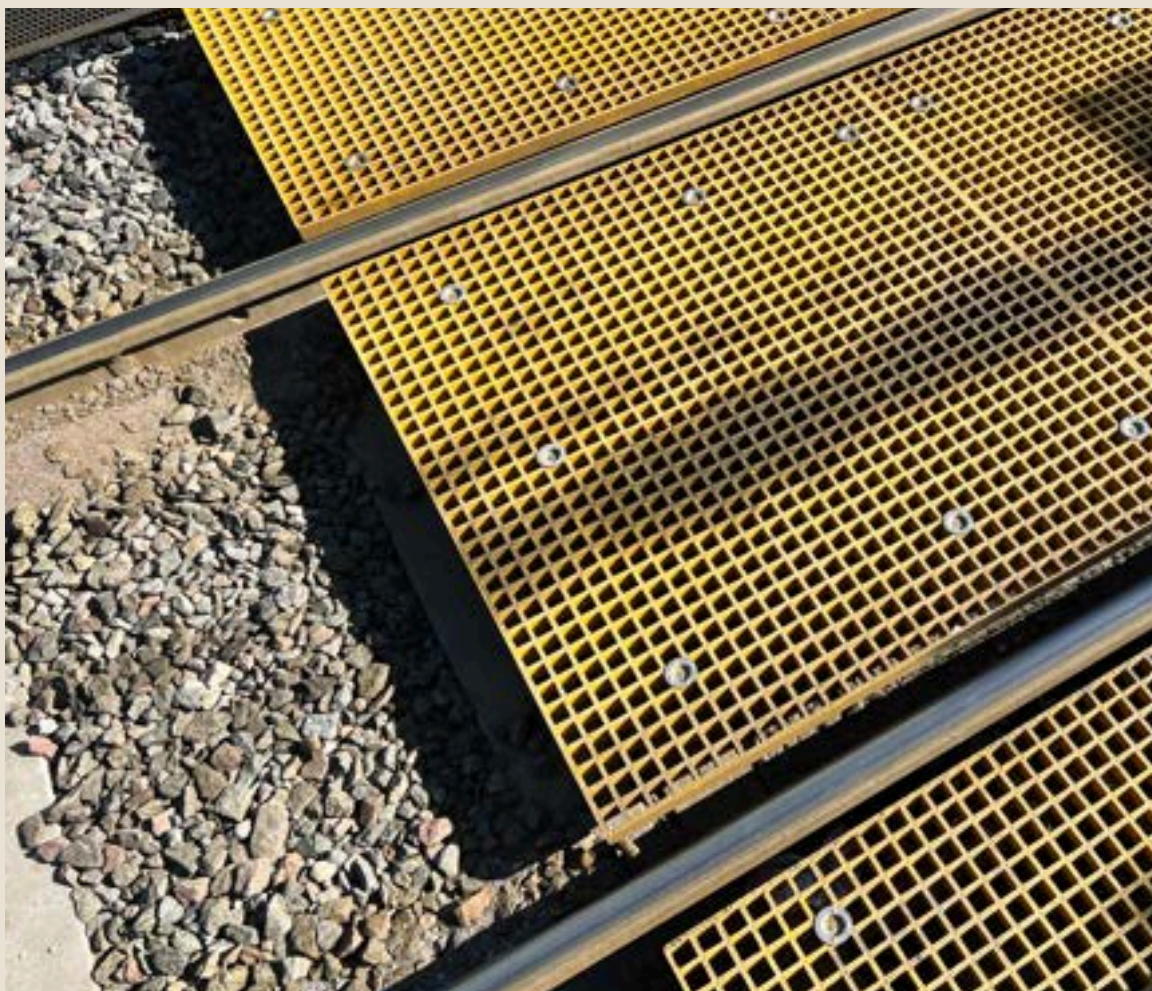
CHEMICAL		ISO		VINYLESTER D 411	
		20°C	50°C	20°C	50°C
AgNO3	Silver nitrate	+	o	+	+
AlCl3	Aluminium chloride	+	+	+	+
Al(NO3)3	Aluminium nitrate	+	+	+	+
Al2(SO4)3	Aluminium sulfate	+	+	+	+
BaCl2	Barium chloride	+	+	+	+
BaCO3	Barium carbonate	+	-	+	+
Ba(OH)2	Barium hydroxide	+	-	+	+
Ba(NO3)2	Barium nitrate	+	+	+	+
BaS	Barium sulfide	+	o	+	+
BaSO4	Barium sulfate	+	+	+	+
CaCl2	Calcium chloride	+	+	+	+
Ca(ClO)2, 15%	Calcium hypochlorite	+	-	+	+
Ca(OH)2, 20%	Calcium hydroxide	+	o	+	+
Ca(NO3)2	Calcium nitrate	+	+	+	+
CCl4, 100%	Carbon tetrachloride	+	-	+	+
CH3-COOH, 5%	Acetic acid	+	+	+	+
CH3-COOH, 50%	Acetic acid	+	o	+	+
CH3-COOH, 75%	Acetic acid	o	-	+	+
C4H8O MEK, 100%	Methyl ethyl ketone	-	-	-	-
CHOOH, 10%	Formic acid	+	-	+	+
C2H5OH, 10%	Ethanol	+	+	+	+
CH3OH, 100%	Methanol	+	-	+	o
CO2	Carbon dioxide	+	+	+	+
CuCl, CuCl2	Copper (I, II) chloride	+	+	+	+
CuSO4	Copper(II) sulfate	+	+	+	+
CS2, 100%	Carbon disulfid	-	-	-	-
FeCl2	Iron(III) nitrate	+	+	+	+
Fe(NO3)3	Iron(III) nitrate	+	+	+	+
FeSO4	Iron(II) sulfate	+	+	+	+
HBr, 10%	Hydrobromic acid	+	o	+	+
HCN, 10%	Hydrogen cyanide	+	o	+	+
HCl, 5%	Hydrogen chloride	+	+	+	+
HCl 20%	Hydrogen chloride	+	+	+	+
H2CrO4, 5%	Chromic acid	+	o	+	+
H2CrO4, 10%	Chromic acid	+	-	+	+
HNO3, 5%	Nitric acid	+	o	+	+
H2O2, 3%	Hydrogen peroxide	+	o	+	+
H3PO4, 10%	Phosphoric acid	+	+	+	+
H2SO4, 10%	Sulfuric acid	+	+	+	+
H2SO4, 30%	Sulfuric acid	+	o	+	+
KCl	Potassium chloride	+	+	+	+

CHEMICAL		ISO		VINYLESTER D 411	
		20°C	50°C	20°C	50°C
KOH, 5%	Potassium hydroxide	+	-	+	+
KOH, 10%	Potassium hydroxide	o	-	+	+
KOH, 25%	Potassium hydroxide	o	-	+	+
KOH, 50%	Potassium hydroxide	-	-	+	+
K2CO3, 10%	Potassium carbonate	+	-	+	+
KNO3	Potassium nitrate	+	+	+	+
KMnO4	Potassium permanganate	o	-	+	+
K2SO4	Potassium sulfate	+	+	+	+
MgCl2	Magnesium chloride	+	+	+	+
MgCO3	Magnesium carbonate	+	+	+	+
Mg(NO3)2	Magnesium nitrate	+	+	+	+
MgSO4	Magnesium sulfate	+	+	+	+
NaBr	Sodium bromide	+	+	+	+
NaCl	Sodium chloride	+	+	+	+
NaCN	Sodium cyanide	+	+	+	+
Na2CO3, 10%	Sodium carbonate	+	-	+	+
NaHCO3, 10%	Sodium bicarbonate	+	+	+	+
NaHSO3	Sodium bisulfite	+	+	+	+
NaNO3	Sodium nitrate	+	+	+	+
NaNO2	Sodium nitrite	+	+	+	+
NaOH, 5%	Sodium hydroxide	+	-	+	+
NaOH, 10%	Sodium hydroxide	o	-	+	+
NaOH, 25%	Sodium hydroxide	o	-	+	+
NaOCl, 20%	Sodium hypochlorite	+	o	+	+
Na2SO4	Sodium sulfate	+	+	+	+
Na2SO3	Sodium sulfite	+	+	+	+
Na2S2O3	Sodium thiosulfate	+	+	+	+
NH3, 1%	Ammonia	+	-	+	+
NH4Br	Ammonium bromide	+	+	+	+
NH4Cl	Ammonium chloride	+	+	+	+
NH4F	Ammonium fluoride	+	+	+	+
(NH4)2CO3	Ammonium carbonate	+	-	+	+
NH4NO3	Ammonium nitrate	+	+	+	+
(NH4)3PO4	Ammonium phosphate	+	+	+	+
(NH4)2SO4	Ammonium sulfate	+	+	+	+
NiCl2	Nickel(II) chloride	+	+	+	+
Ni(NO3)2	Nickel nitrate	+	+	+	+
NiSO4	Nickel(II) sulfate	+	+	+	+
ZnCl2	Zinc chloride	+	+	+	+
ZnSO4	Zinc sulfate	+	+	+	+

+ Good resistance within the specified temperature range.
 o After a while, discoloration or slight surface attack may occur.
 - Not suitable. The resin is attacked and will eventually be destroyed.

CORROSION-FREE FIBERGLASS GRATINGS.

Our fiberglass gratings combine low weight with high strength and excellent chemical resistance. The result is a durable and cost-effective alternative, ideal for aggressive environments exposed to high stress.



Yellow ISO 38, sanded. Solna station.

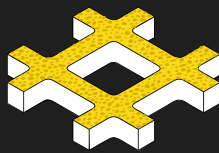
Fiberglass gratings can handle very high loads, and it is easy to calculate which type of grating should be used to meet specific load requirements. Unlike steel grating, fiberglass will flex under excessive weight — but it will never break. At most, small cracks may occur, and the affected section can easily be replaced.

We supply a wide range of fiberglass gratings. The standard surface is either concave or sanded, but we also offer safety flooring with a closed sanded surface as well as tread plate options. All gratings feature a high safety factor and slip-resistance rating R13 according to BGR 181.

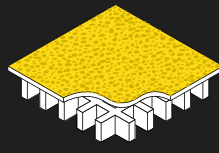
Our GRP gratings are based on a polyester resin matrix, which can be divided into three main groups: isophthalic polyester, vinyl ester, and orthophthalic polyester. The glass content is approximately 35%. Standard colors are yellow and gray, but other RAL colors are available upon request.



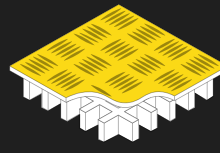
Concave surface



Sanded surface



Safety flooring
sanded surface

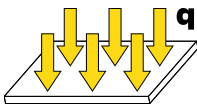


Safety flooring
tread plate



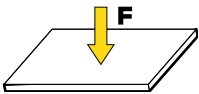
Grey ISO 38, concave surface. Industrial walkway.

DISTRIBUTED LOAD KG/M^2



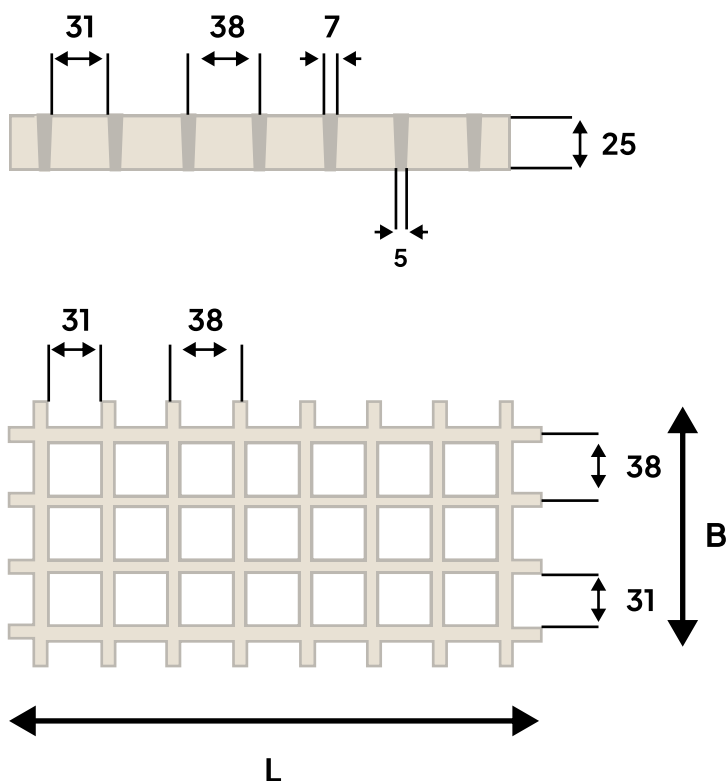
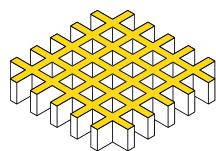
	MM	300	450	600	750	900	1000	1200
	ISO 14 13x13	1.021	300	126	65	38	28	16
	ISO 15	1.050	310	130	66	38	28	16
	ISO 25	5.280	1.570	660	340	196	143	83
	ISO 25 13x13	5.400	1.610	680	346	200	146	85
	ISO 25 93x18	2.560	753	316	161	93	68	39
	ISO 25 76x76	2.595	763	321	154	95	69	40
	ISO 30	9.300	2.730	1.150	585	340	274	143
	ISO 30 14x14	9.420	2.774	1.166	595	344	250	145
	ISO 30 8x8	10.610	3.120	1.310	670	386	282	163
	ISO 30 93x18	3.952	1.163	489	249	144	105	61
	ISO 30 SWL	15.135	4.453	1.872	956	552	402	232
	ISO 35 SWL	24.034	7.072	2.973	1.519	878	639	369
	ISO 38	18.600	5.500	2.340	1.190	690	503	290
	ISO 38 13x13	19.042	5.600	2.350	1.203	695	506	292
	ISO 38 88x17	8.996	2.647	1.113	568	328	239	138
	ISO 38 144x30	5.725	1.684	708	361	209	152	88
	ISO 40 76x76	10.629	3.128	1.310	671	388	282	163
	ISO 50	36.332	10.691	4.495	2.296	1.327	966	559
	ISO 50 17x17	52206	15363	6459	3300	1907	1389	803
	ISO 50 SWL	71.866	21.148	8.891	4.543	2.625	1.912	1.105
	ISO 60 SWL	124.185	36.545	15.364	7.850	4.536	3.305	1.910
	P 15	1.155	341	143	72	72	30	17
	P 25	5.808	1.727	726	374	215	157	51
	P 30	10.230	3.003	1.265	643	374	271	157
	P 38	20.460	6.050	2.574	1.309	759	553	319
	P 50	39.965	11.760	4.944	2.525	1.459	1.062	614
	P 50 SWL	78.980	23.242	9.771	4.993	2.885	2.101	1.214
	P 60 SWL	136.479	40.163	16.885	8.627	4.985	3.632	2.099

POINT LOAD KG



	MM	300	450	600	750	900	1000	1200
	ISO 14 13x13	191	84	47	31	21	17	12
	ISO 15	195	87	49	31	21	17	12
	ISO 25	1.010	445	250	159	110	90	62
	ISO 25 13x13	1.030	450	255	163	113	91	64
	ISO 25 93x18	480	212	118	76	53	43	30
	ISO 25 76x76	486	214	120	77	53	43	30
	ISO 30	1.740	770	430	275	191	154	107
	ISO 30 14x14	1.760	780	437	279	193	156	108
	ISO 30 8x8	1.989	878	492	314	218	176	122
	ISO 30 93x18	741	327	183	117	81	66	46
	ISO 30 SWL	2.837	1.252	702	448	311	251	174
	ISO 35 SWL	4.506	1.989	1.115	712	493	399	276
	ISO 38	3.500	1.550	870	560	387	314	218
	ISO 38 13x13	3.570	1.570	880	564	391	316	219
	ISO 38 88x17	1.686	744	417	266	184	149	104
	ISO 38 144x30	1.073	473	265	169	117	95	66
	ISO 40 76x76	1.993	879	493	314	218	176	123
	ISO 50	6.812	3.007	1.685	1.076	746	604	419
	ISO 50 17x17	9.788	4.320	2.422	1.547	1.072	868	602
	ISO 50 SWL	13.474	5.948	3.334	2.129	1.476	1.195	829
	ISO 60 SWL	23.284	10.278	5.761	3.679	2.551	2.065	1.433
	P 15	214	95	53	34	23	18	13
	P 25	1.111	489	275	174	121	99	68
	P 30	1.914	847	473	302	210	169	117
	P 38	3.850	1.705	957	616	425	345	239
	P 50	7.493	3.307	1.853	1.183	820	664	460
	P 50 SWL	14.808	6.537	3.664	2.340	1.622	1.313	911
	P 60 SWL	25.589	11.296	6.331	4.043	2.804	2.269	1.575

ISO 25 (31 X 31)

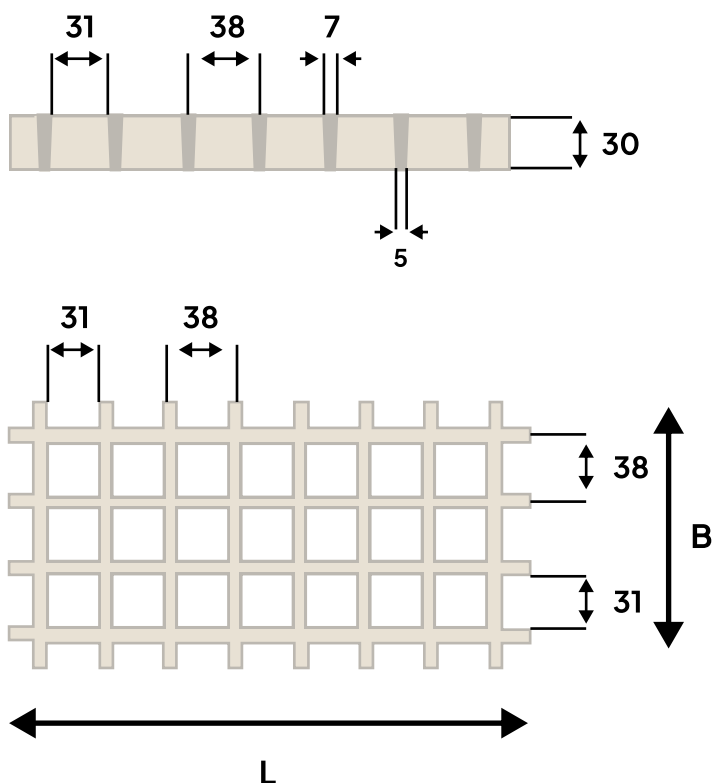
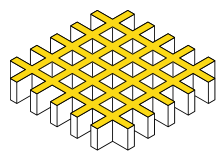


L (MM)	B (MM)	KG/M ²
4.002	998	12,3
4.000	1.220	12,3
3.660	1.220	12,3
3.016	998	12,3
1.988	998	12,3
998	998	12,3

SPAN WIDTH (MM)	CONC. LOAD (KG)	SAFETY FACTOR	DIST. LOAD (KG/M ²)	SAFETY FACTOR
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	196	8 x q
1.000	90	7 x F	143	9 x q
1.200	62	8 x F	83	10 x q

The loads were determined at a bending of L/125. The bending L/125 corresponds to 0.75% bending of the span width.

ISO 30 (31 X 31)

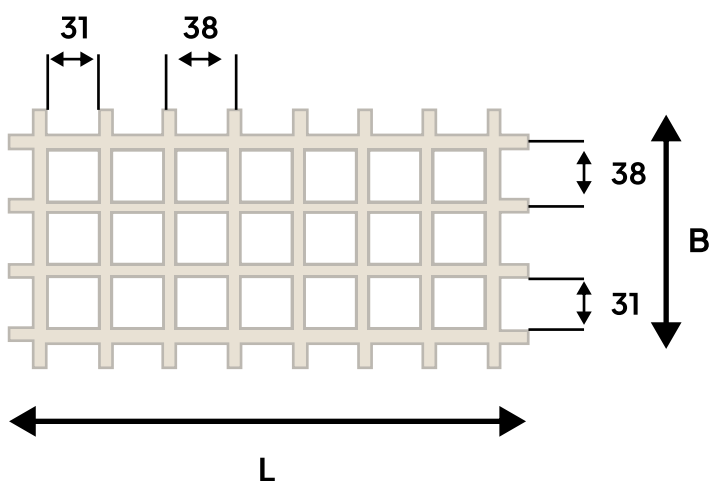
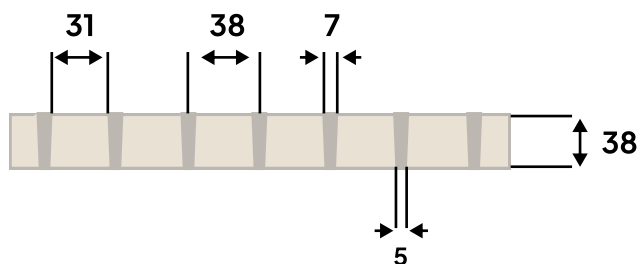
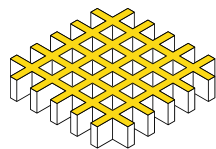


L (MM)	B (MM)	KG/M ²
4.002	998	14,6
4.000	1.524	14,6
3.660	1.220	14,6
3.050	1.524	14,6
3.016	998	14,6
2.440	1.220	14,6
1.988	998	14,6
998	998	14,6

SPAN WIDTH (MM)	CONC. LOAD (KG)	SAFETY FACTOR	DIST. LOAD (KG/M ²)	SAFETY FACTOR
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
1.000	154	7 x F	247	9 x q
1.200	107	8 x F	143	10 x q

The loads were determined at a bending of L/125. The bending L/125 corresponds to 0.75% bending of the span width.

ISO 38 (31 X 31)

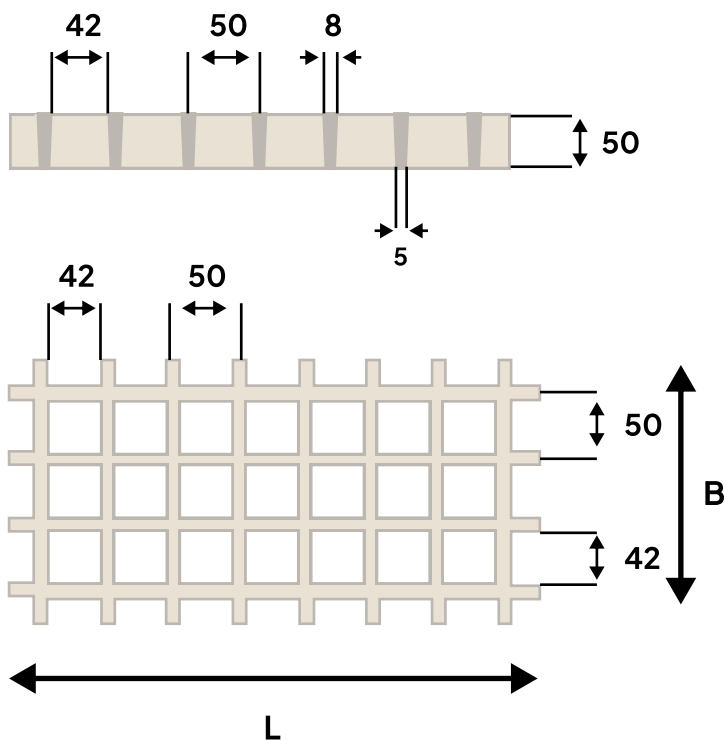
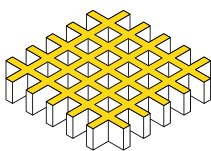


L (MM)	B (MM)	KG/M ²
4.002	998	19,5
4.000	1.524	19,5
3.660	1.220	19,5
3.050	1.524	19,5
3.016	998	19,5
2.440	1.220	19,5
1.988	998	19,5
998	998	19,5

SPAN WIDTH (MM)	CONC. LOAD (KG)	SAFETY FACTOR	DIST. LOAD (KG/M ²)	SAFETY FACTOR
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
1.000	314	7 x F	503	9 x q
1.200	218	8 x F	290	10 x q

The loads were determined at a bending of L/125. The bending L/125 corresponds to 0.75% bending of the span width.

ISO 50 (42 X 42)

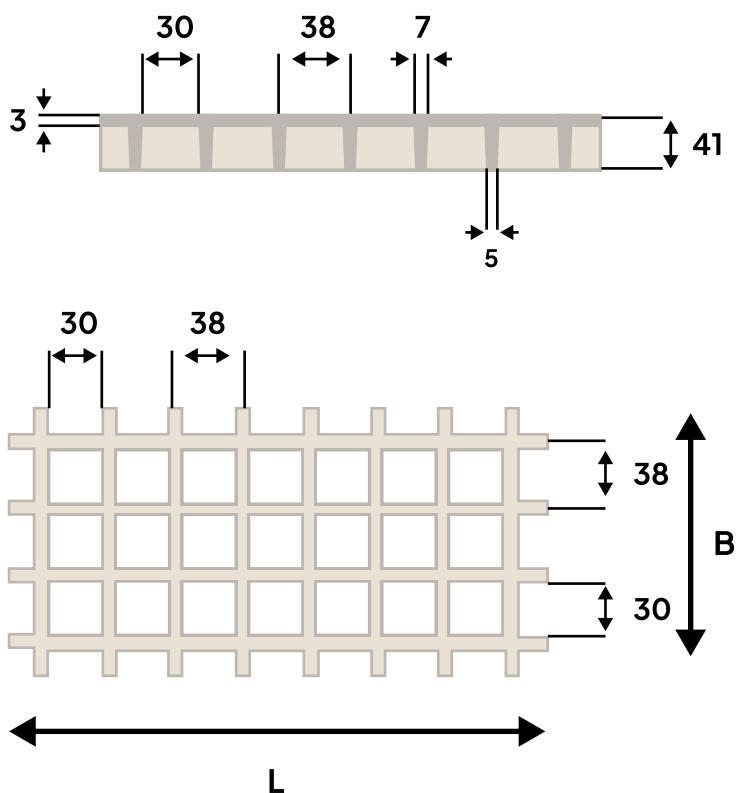
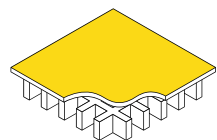


L (MM)	B (MM)	KG/M ²
4.000	1.800	23,7
3.660	1.220	23,7
1.990	1.020	23,7

SPAN WIDTH (MM)	CONC. LOAD (KG)	SAFETY FACTOR	DIST. LOAD (KG/M ²)	SAFETY FACTOR
300	6.812	2 x F	36.332	3 x q
450	3.007	3 x F	10.691	4 x q
600	1.685	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
1.000	604	7 x F	966	9 x q
1.200	419	8 x F	559	10 x q
1.300	356	7 x F	439	10 x q
1.400	307	8 x F	351	10 x q
1.500	268	7 x F	285	10 x q

The loads were determined at a bending of L/125. The bending L/125 corresponds to 0.75% bending of the span width.

SAFETY FLOOR P38

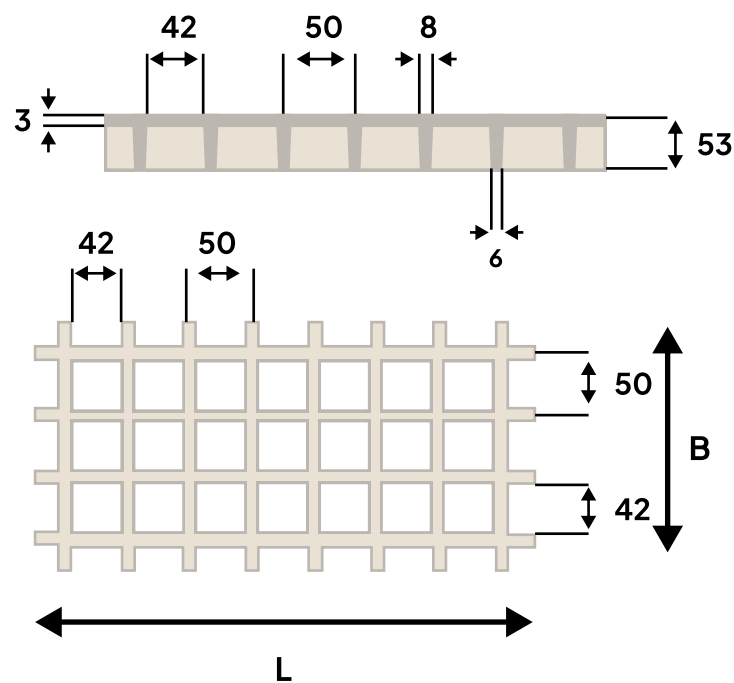
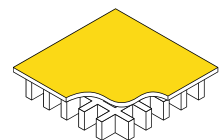


L (MM)	B (MM)	KG/M ²
4.000	1.524	25
3.660	1.220	25
1.998	998	25

SPAN WIDTH (MM)	CONC. LOAD (KG)	SAFETY FACTOR	DIST. LOAD (KG/M ²)	SAFETY FACTOR
300	3.850	2 x F	20.460	3 x q
450	1.705	3 x F	6.050	4 x q
600	957	4 x F	2.574	5 x q
750	616	5 x F	1.309	7 x q
900	425	6 x F	759	8 x q
1.000	345	7 x F	553	9 x q
1.200	239	8 x F	319	10 x q

The loads were determined at a bending of L/125. The bending L/125 corresponds to 0.75% bending of the span width.

SAFETY FLOOR P50



L (MM)	B (MM)	KG/M ²
4.000	1.800	28,5
3.660	1.220	28,5
1.990	1.020	28,5

SPAN WIDTH (MM)	CONC. LOAD (KG)	SAFETY FACTOR	DIST. LOAD (KG/M ²)	SAFETY FACTOR
300	7.493	2 x F	39.965	3 x q
450	3.307	3 x F	11.760	4 x q
600	1.853	4 x F	4.944	5 x q
750	1.183	5 x F	2.525	7 x q
900	820	6 x F	1.459	8 x q
1.000	664	7 x F	1.062	9 x q
1.200	460	8 x F	614	10 x q
1.300	391	7 x F	482	10 x q
1.400	337	8 x F	386	10 x q
1.500	294	7 x F	313	10 x q

The loads were determined at a bending of L/125. The bending L/125 corresponds to 0.75% bending of the span width.



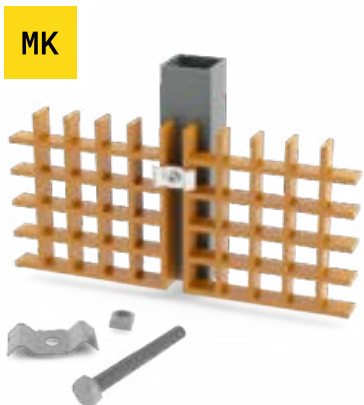
ISO 38, sanded surface. Clips TL, stainless steel A2



Safety floor P38, sanded surface.

FASTENERS.

We offer a range of accessories and fastening components that simplify the installation— all without the need for special tools. The fasteners are suitable for all standard GRP gratings and conventional substructures. All clips are stocked in stainless steel.



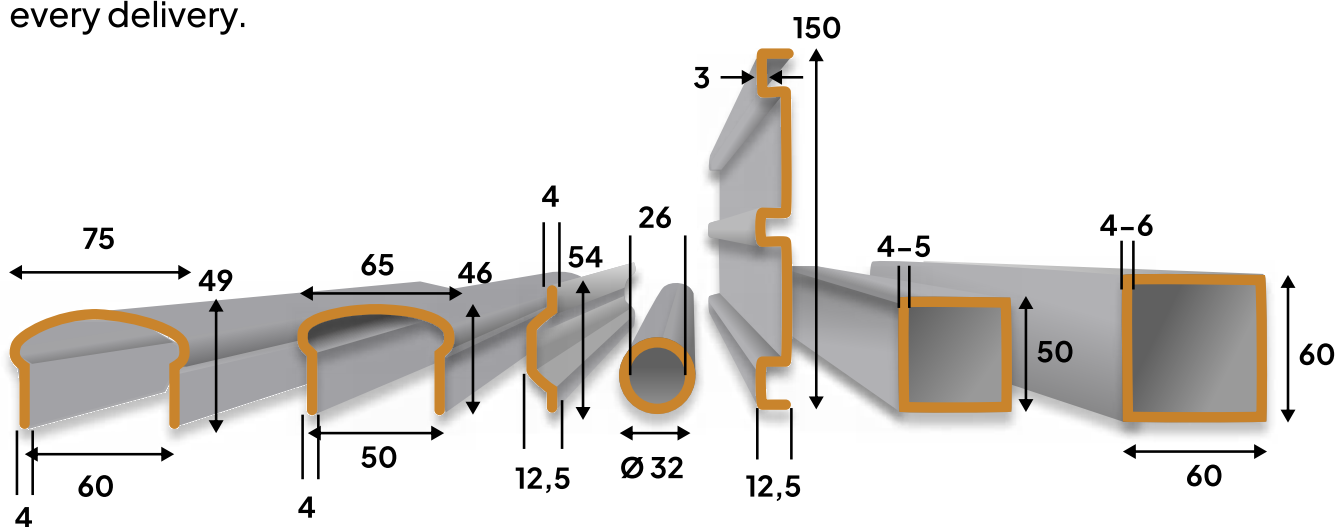


ISO 30, sanded. MK-clips, stainless steel.

RAILING SYSTEMS.

Fiberglass railings are highly suitable for platforms and walkways in corrosive environments with high concentrations of strong chemicals.

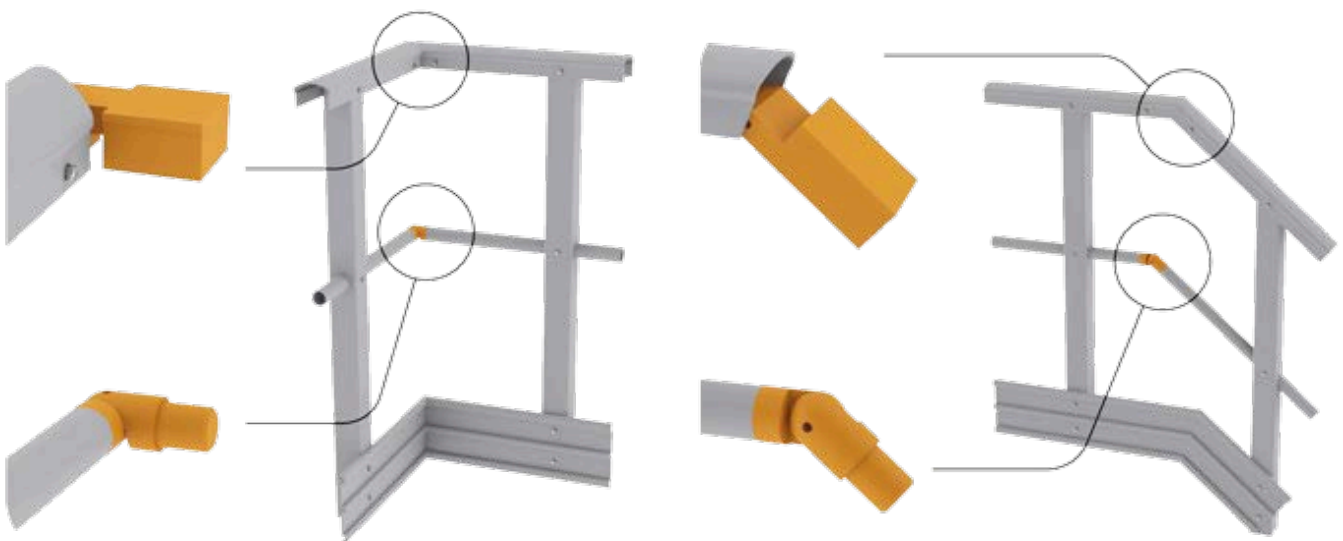
Our GRP railing systems provide complete, customized solutions tailored to individual needs and requirements. All components are fully compatible and easy to assemble. A complete drawing and all necessary fittings are included with every delivery.



Handrail supplied complete with drawings, profiles, and fastenings.



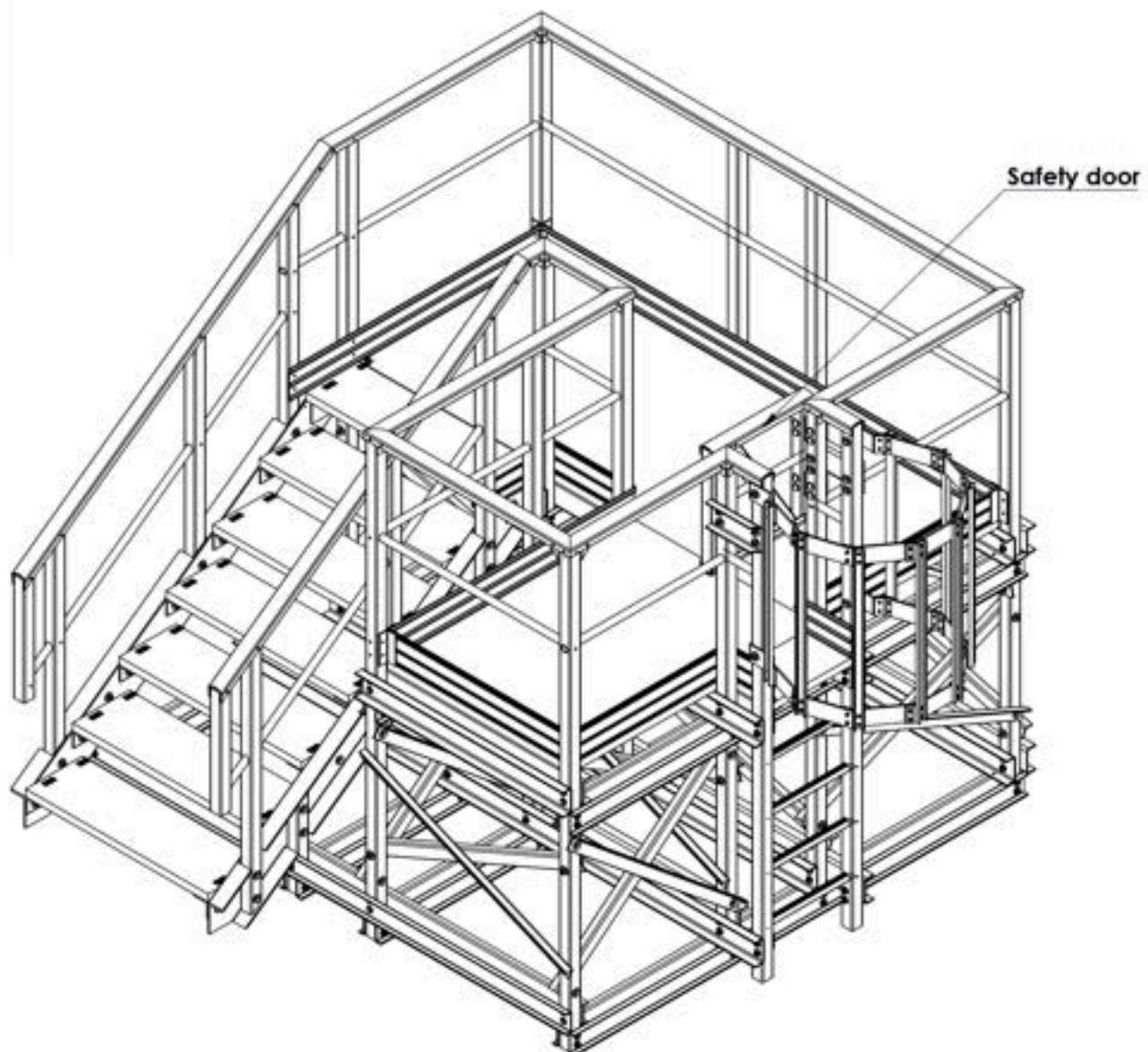
GRP handrail with adjustable and customizable inner profiles.



STAIRS, LADDERS AND PLATFORMS.

Like all GRP products, our stair systems, platforms, and ladders offer long service life and excellent UV resistance. All ladders comply with the requirements of DIN EN 131 — the international standard for ladders.

The low weight allows for easy installation without the need for cranes or other lifting equipment. Prefabricated GRP stairs and ladders are commonly used in chemical plants, cooling towers, water treatment facilities, and oil and gas installations.



TAILOR-MADE SOLUTIONS.

We have delivered tailor-made solutions to industries such as manufacturing, mining, offshore, chemical processing, and water treatment facilities. We specialize in fiberglass and support you through every stage of the project — from concept to completion.

DESIGN AND DRAFTING.

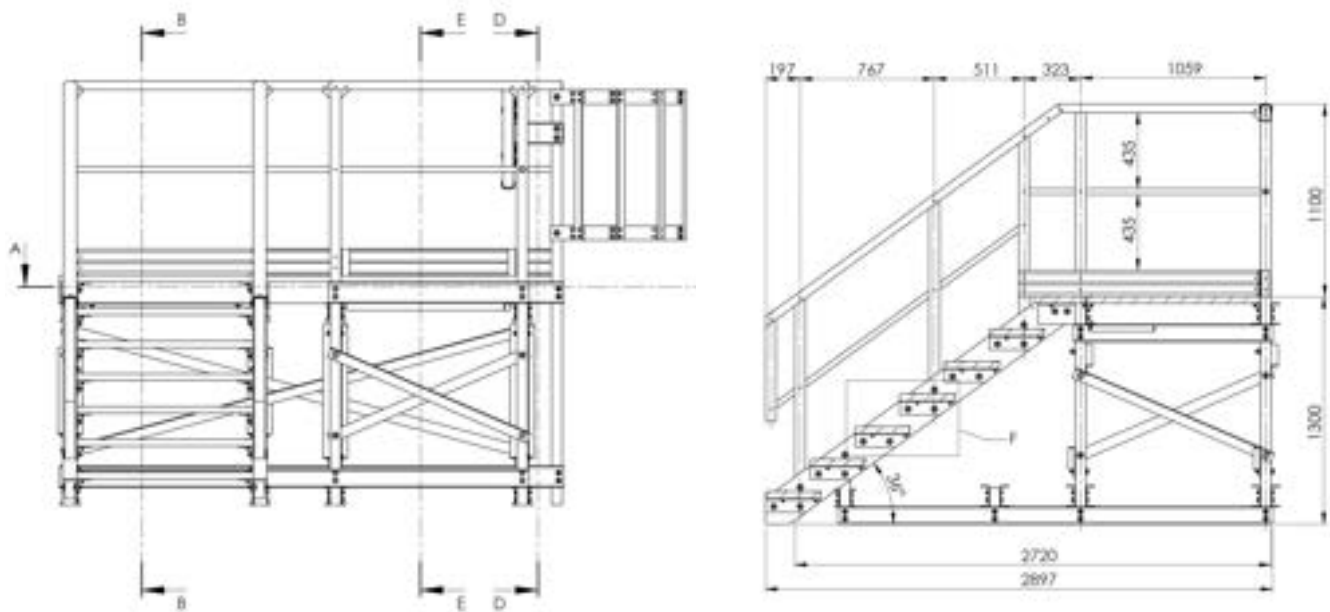
Tell us about your project and requirements, and we will prepare a complete engineering drawing ready for production.

CONVERSION OF DRAWINGS.

Provide your existing drawings and specify the loads your structure needs to withstand — and we will convert your design into fiberglass.

3D-FILES.

We provide complete 3D models of finished constructions that can easily be downloaded and integrated into ongoing or future projects.





LEAD THE WAY

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