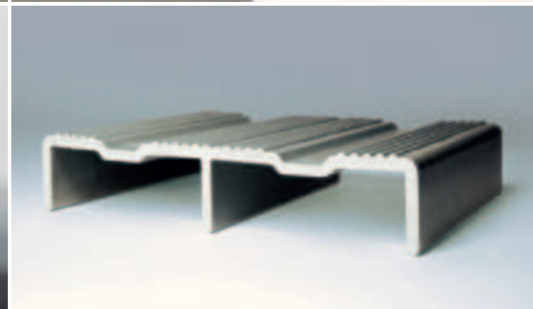
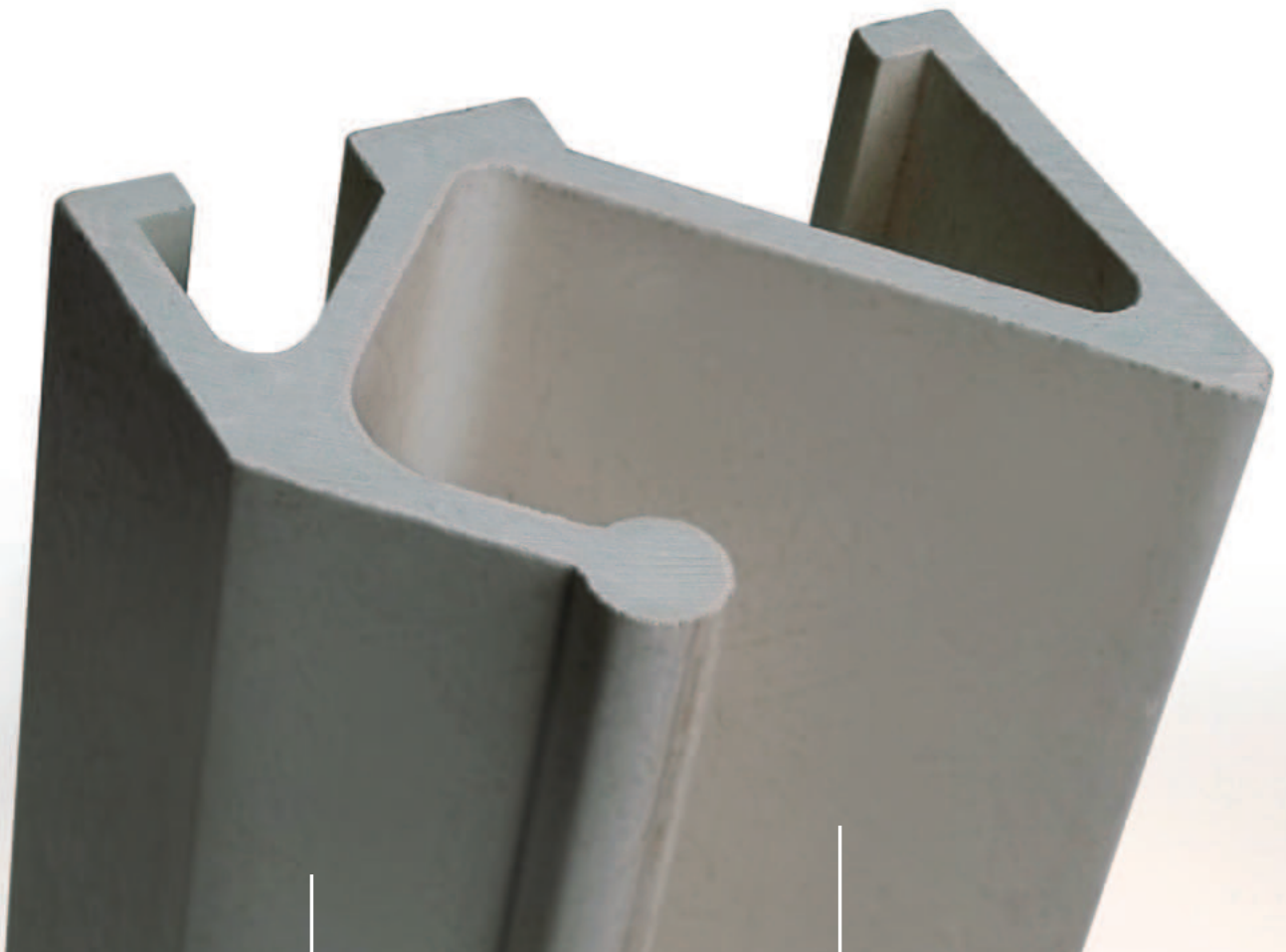


FIBROLUX

GFK-PROFILE UND GITTERROSTE GRP-PROFILES AND GRATINGS



U GRP I GFK O TWS J PRFV Ω GVK □ PRV T PAFS

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06
07

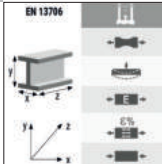


	ISO	ISO	ISO
	200 °C	500 °C	800 °C
AgBr ₂	●	●	●
AlCl ₃	●	●	●
Al(NO ₃) ₃	●	●	●
Al ₂ (SO ₄) ₃	●	●	●
BaCl ₂	●	●	●
BaCO ₃	●	●	●
Ba(OH) ₂	●	●	●
Ba(NO ₃) ₂	●	●	●
BaSO ₄	●	●	●

10
11



04
05



08
09



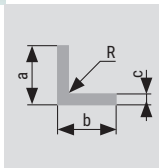
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29



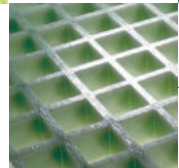
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43



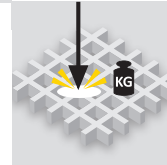
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23



32
39



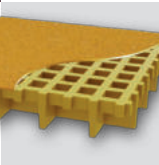
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59



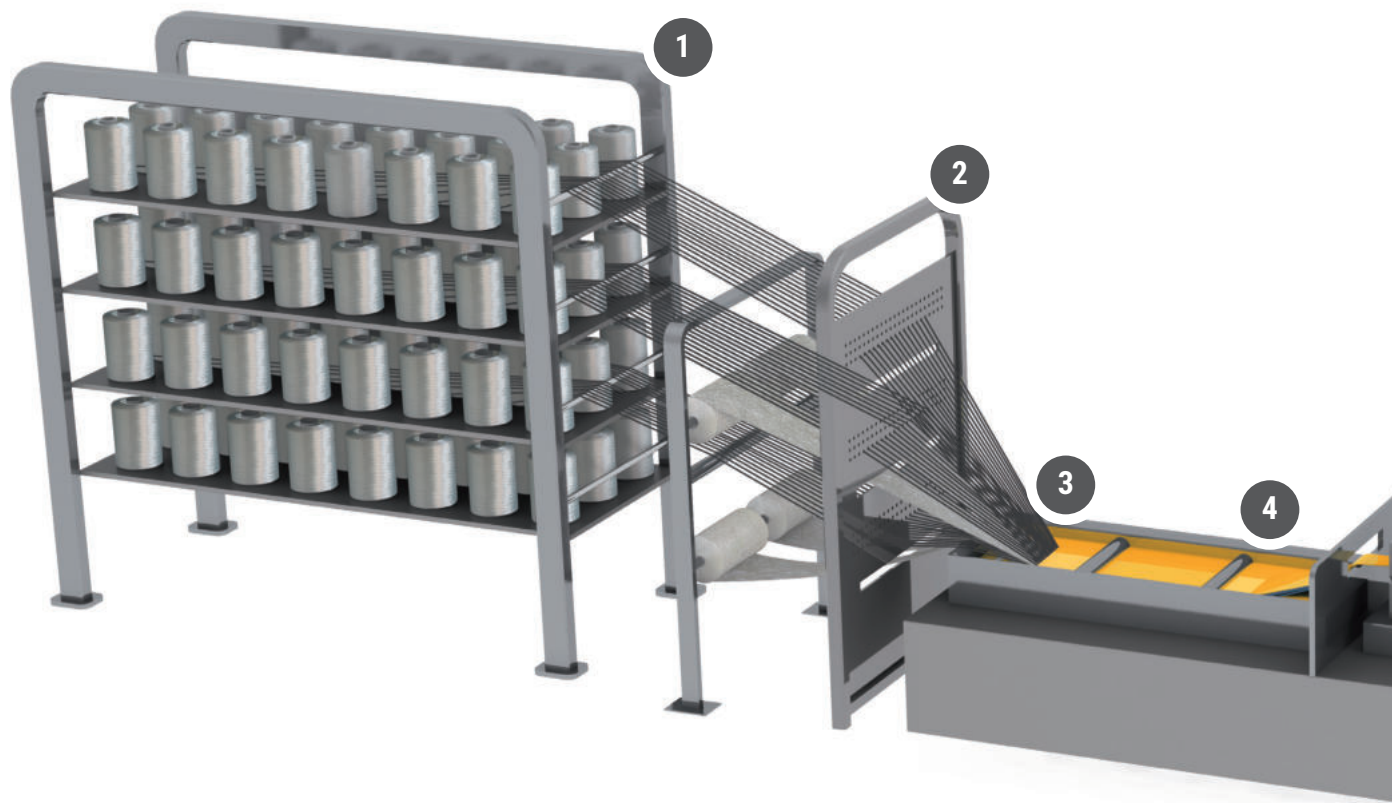
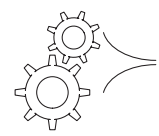
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45



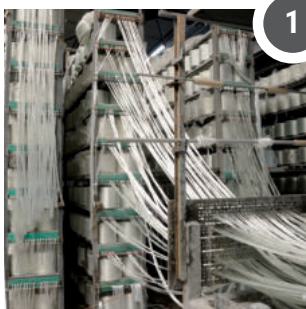
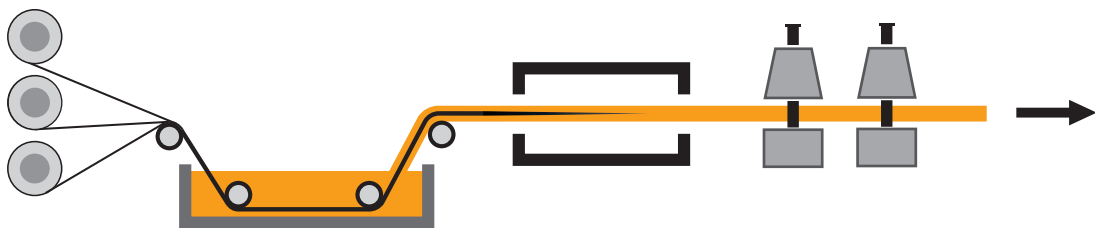
60



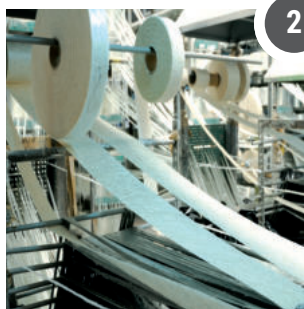




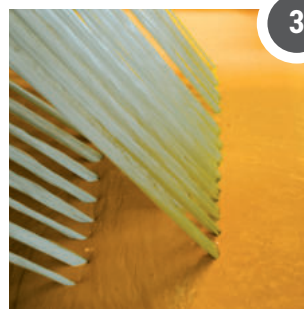
4



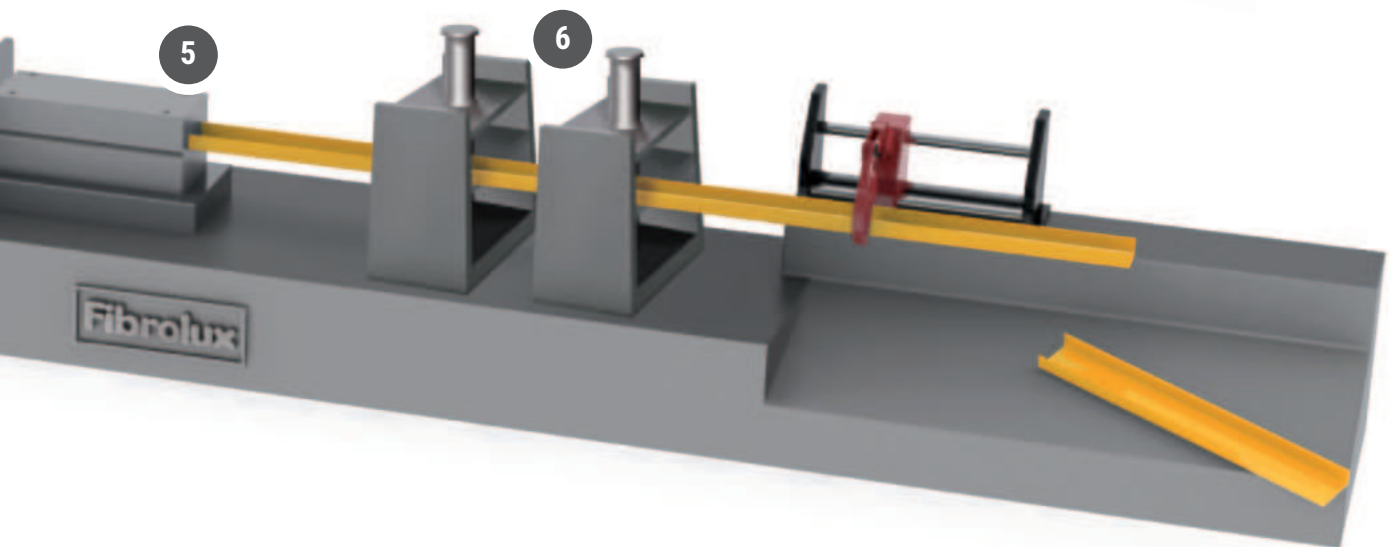
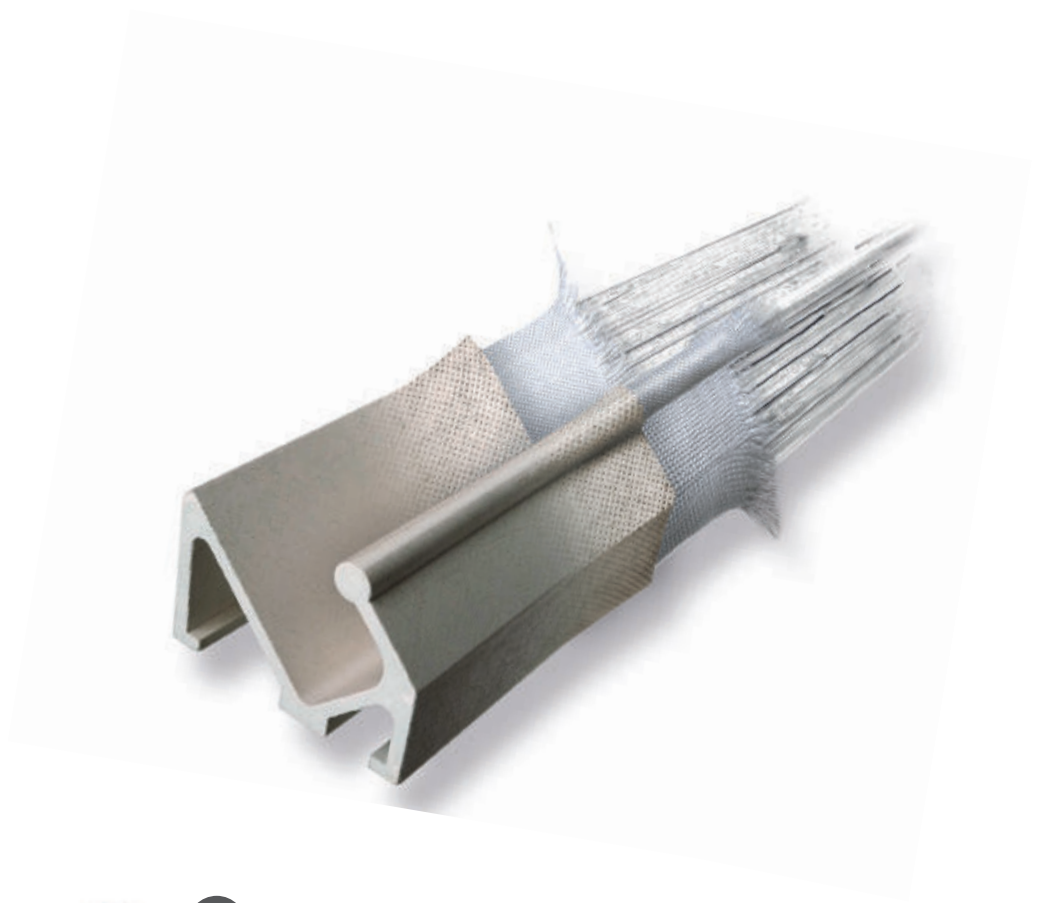
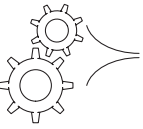
1



2



3



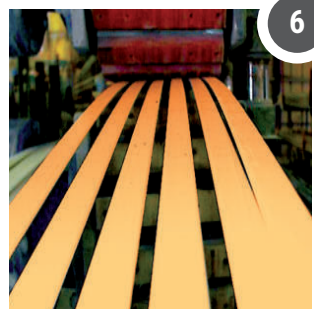
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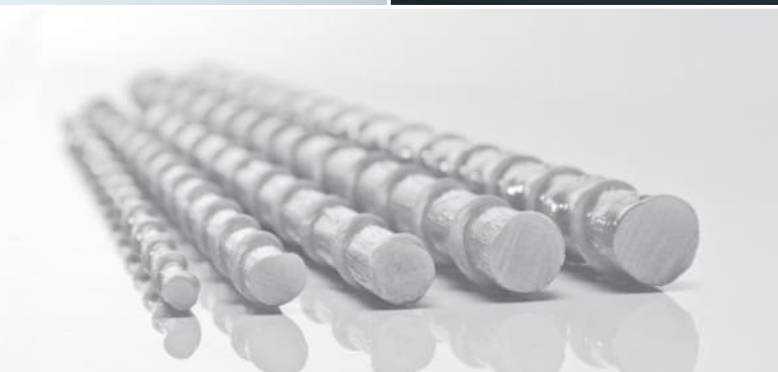
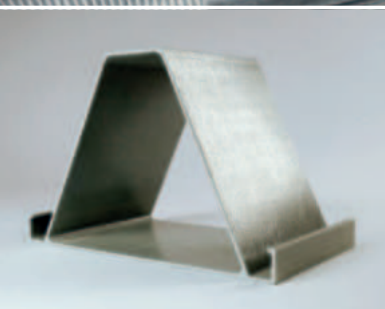
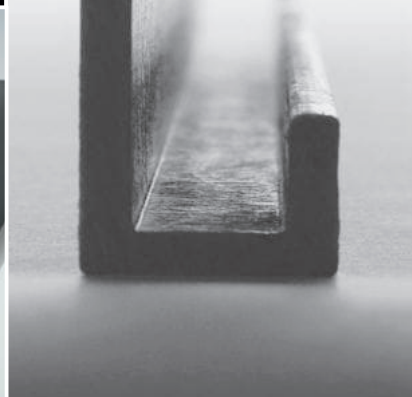
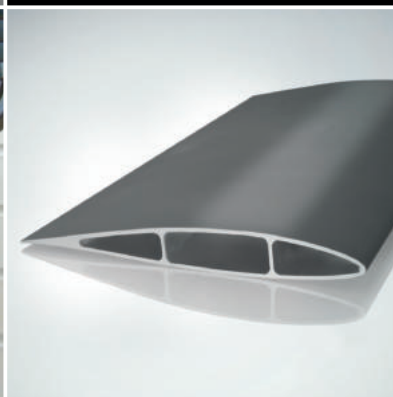
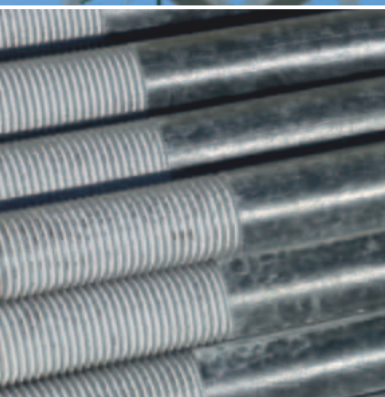
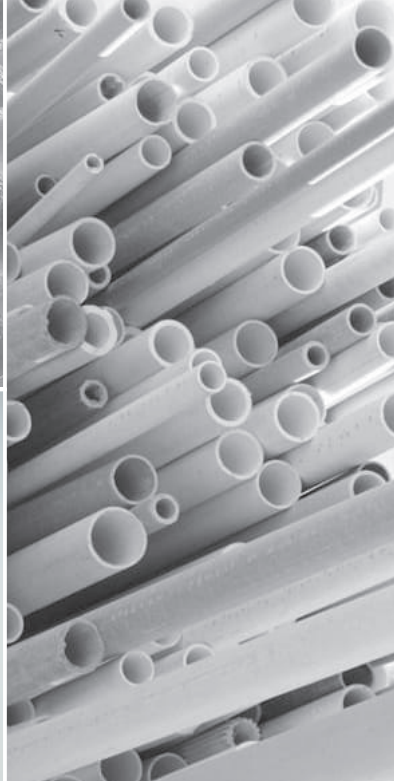
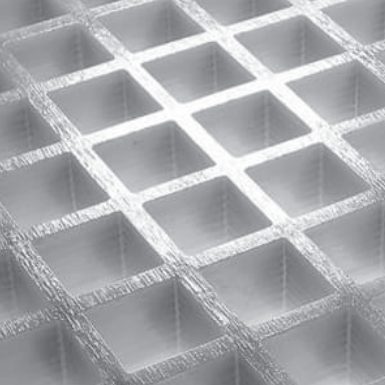
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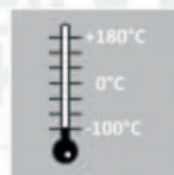


5



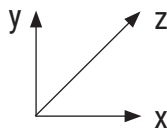
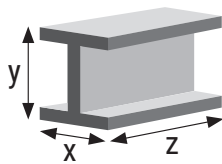
6





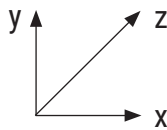
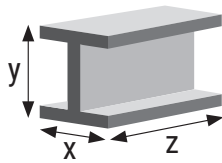


EN 13706



	TYP MR		TYP UD
	Z	X	Z
	250 - 450 MPa	20 - 60 MPa	900 MPa
	250 - 450 MPa	20 - 60 MPa	900 MPa
	25.000 MPa	9.000 MPa	40.000 MPa
	1,0 - 1,8 %		2 %
	150 - 300 MPa	30 - 60 MPa	450 MPa
	10.000 MPa	4.000 MPa	30.000 MPa
	2,0 kg / dm ³		2,1 kg / dm ³
	90 - 120 kJ / m ²		120 kJ / m ²
	> 40 Barcol		> 50 Barcol

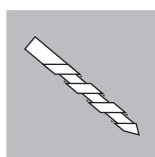
	25 - 35 MPa
	5 - 10 kV/mm
CTI	KC 600
	12 x 10 ⁻⁶ 1/k
	-100°C - +155°C (180 °C)
	< 0,15%



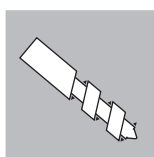
	TYP MR		TYP UD	
	Z	X	Z	X
	135 MPa	20 MPa	70 MPa	15 MPa
	135 MPa	20 MPa	70 MPa	15 MPa
	135 MPa	25 MPa	70 MPa	20 MPa
	17 MPa		8 MPa	

	B, H (mm)	ΔH	ΔB
	0 - 50	$\pm 0,20$	$\pm 0,20$
	50 - 100	$\pm 0,30$	$\pm 0,30$
	100 - 300	$\pm 0,35$	$\pm 0,35$
	300 -	$\pm 0,40$	$\pm 0,40$
	D, d (mm)	ΔD	Δd
	0 - 10	$\pm 0,20$	$\pm 0,20$
	10 - 20	$\pm 0,30$	$\pm 0,30$
	20 - 50	$\pm 0,35$	$\pm 0,35$
	50 - 100	$\pm 0,40$	$\pm 0,40$
	100 -	$\pm 0,45$	$\pm 0,45$
	T ₁ , T ₂ (mm)	ΔT_1	ΔT_2
	0 - 2	$\pm 0,15$	$\pm 0,30$
	2 - 5	$\pm 0,20$	$\pm 0,35$
	5 - 10	$\pm 0,35$	$\pm 0,45$
	10 -	$\pm 0,45$	$\pm 0,50$

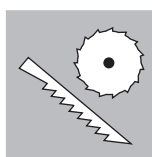
	$F < 0,008 \times B \text{ mm}$		$\leq 1,5^\circ / \text{m}$
	$Y \pm 1,5^\circ$		$L + 20 / - 0 \text{ mm}$
	$\leq 2 \text{ mm} / \text{m}$		$V \pm 1,5^\circ$



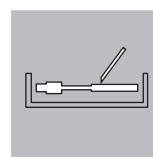
60-80 m/min



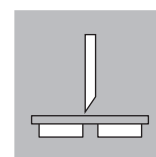
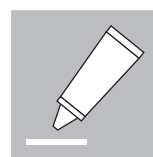
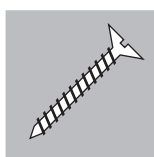
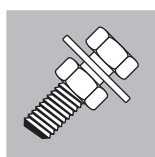
100-400 m/min



1.800-3.600 m/min



100-400 m/min


 $\leq 10 \text{ mm}$




	ISO		VE D411	
	20° C	50° C	20° C	50° C
AgNO ₃	●	●	●	●
AlCl ₃	●	●	●	●
Al(NO ₃) ₃	●	●	●	●
Al ₂ (SO ₄) ₃	●	●	●	●
BaCl ₂	●	●	●	●
BaCO ₃	●	●	●	●
Ba(OH) ₂	●	●	●	●
Ba(NO ₃) ₂	●	●	●	●
BaS	●	●	●	●
BaSO ₄	●	●	●	●
CaCl ₂	●	●	●	●
Ca(ClO) ₂ , 15%	●	●	●	●
Ca(OH) ₂ , 20%	●	●	●	●
Ca(NO ₃) ₂	●	●	●	●
CCl ₄ , 100%	●	●	●	●
CH ₃ -COOH, 5%	●	●	●	●
CH ₃ -COOH, 50%	●	●	●	●
CH ₃ -COOH, 75%	●	●	●	●
C ₄ H ₈ O MEK, 100%	●	●	●	●
CHOOH, 10%	●	●	●	●
C ₂ H ₅ OH, 10%	●	●	●	●
CH ₃ OH, 100%	●	●	●	●
CO ₂	●	●	●	●
CuCl, CuCl ₂	●	●	●	●
CuSO ₄	●	●	●	●
CS ₂ , 100%	●	●	●	●
FeCl ₂	●	●	●	●
Fe(NO ₃) ₃	●	●	●	●
FeSO ₄	●	●	●	●
HBr, 10%	●	●	●	●
HCN, 10%	●	●	●	●
HCl, 5%	●	●	●	●
HCl 20%	●	●	●	●
H ₂ CrO ₄ , 5%	●	●	●	●
H ₂ CrO ₄ , 10%	●	●	●	●
HNO ₃ , 5%	●	●	●	●
H ₂ O ₂ , 3%	●	●	●	●
H ₂ O+Cl ₂	●	●	●	●
H ₃ PO ₄ , 10%	●	●	●	●
H ₂ SO ₄ , 10%	●	●	●	●
H ₂ SO ₄ , 30%	●	●	●	●

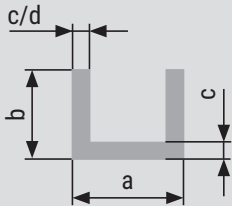
	ISO		VE D411	
	20° C	50° C	20° C	50° C
KCl	●	●	●	●
KOH, 5%	●	●	●	●
KOH, 10%	●	●	●	●
KOH, 25%	●	●	●	●
KOH, 50%	●	●	●	●
K ₂ CO ₃ , 10%	●	●	●	●
KNO ₃	●	●	●	●
KMnO ₄	●	●	●	●
K ₂ SO ₄	●	●	●	●
MgCl ₂	●	●	●	●
MgCO ₃	●	●	●	●
Mg(NO ₃) ₂	●	●	●	●
MgSO ₄	●	●	●	●
NaBr	●	●	●	●
NaCl	●	●	●	●
NaCN	●	●	●	●
Na ₂ CO ₃ , 10%	●	●	●	●
NaHCO ₃ , 10%	●	●	●	●
NaHSO ₃	●	●	●	●
NaNO ₃	●	●	●	●
NaNO ₂	●	●	●	●
NaOH, 5%	●	●	●	●
NaOH, 10%	●	●	●	●
NaOH, 25%	●	●	●	●
NaOCl, 20%	●	●	●	●
Na ₂ SO ₄	●	●	●	●
Na ₂ SO ₃	●	●	●	●
Na ₂ S ₂ O ₃	●	●	●	●
NH ₃ , 10%	●	●	●	●
NH ₄ Br	●	●	●	●
NH ₄ Cl	●	●	●	●
NH ₄ F	●	●	●	●
(NH ₄) ₂ CO ₃	●	●	●	●
NH ₄ NO ₃	●	●	●	●
(NH ₄) ₃ PO ₄	●	●	●	●
(NH ₄) ₂ SO ₄	●	●	●	●
NiCl ₂	●	●	●	●
Ni(NO ₃) ₂	●	●	●	●
NiSO ₄	●	●	●	●
ZnCl ₂	●	●	●	●
ZnSO ₄	●	●	●	●



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	ISO 5660-1	CH, I	
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 < 1 15 + 30 min
DIN EN 13501 – 1	DIN EN ISO 9239 -1	D	9,9 kW/m² / 195% min
DIN EN 13501 – 1	DIN EN ISO 11925-2	D	
DIN EN 13501 – 1	(≈DIN 4102-B1)	D	Bfl – s1
DIN 4102	Teil 1, 6mm	D	B1
NFF16 -101	NF X 70 -100	F	F1/I.T.C.-Wert: 2,3
NFF16 -101	NF X 10 -702	F	F1
NFF16 -101	NF P 92-501	F	M 2
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	ASTM E 662	USA	
NFPA 130	ASTM E 162	USA	Is = 9,7
NFPA 255	ASTM E-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	
EN 45545	EN 45545-2: 2013	EU	R22/R23 HL 1-3
EN ISO 5659-2: 2012	EN 45545-2: 2013	EU	25kW/m², Ds max 109
NF X 70-100-1: 2006	EN 45545-2: 2013	EU	T12, CIT _{NLP} 0,03
DW EN ISO 4589-2: 2006	EN 45545-2: 2013	EU	LOI 36%
ISO 5660-1: 2002	CEN/TS 45545-2: 2009	EU	MAHRE 50,7 kW/m²
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	O ₂	EU	LOI 36,2%
DIN EN 60695-11-10	UL94 V	EU	V 0
DIN EN ISO 11925-2: 2011	DIN EN 13501-1: 2010	EU	30s, E, d Ø
DIN EN 13823: 2010	DIN EN 13501-1: 2010	EU	B, s1, d Ø

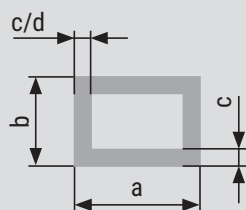




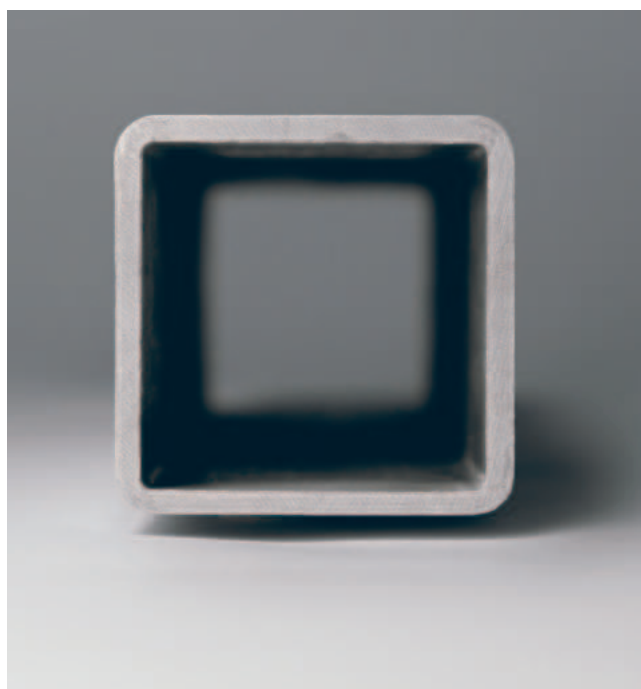


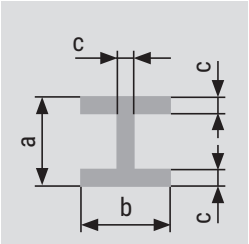
a	b	c	d	a	b	c
6	6	3,5	2	21	13	2,5
12	7,5	2,5		38	7,5	2,5
14	11	3,5		89	40	4
18	7,5	2,5		100	30	6
20	21	4		100	50	6
22,5	7,5	2,5		100	60	6
25	20	3		100	80	2,5
28	7,5	2,5		105	10,5	2,5
30	22	3		114	42	6
30	30	3		120	50	6
30	30	5		120	60	6
32	15	3		150	40	6
32,5	28,3	16	3	152	14	10
38	25	5	4	160	48	8
38,1	24	3		180	70	8
40	20	4		190	82	5
43	43	4		200	50	6
45	20	4		200	50	9
46	40	3		200	80	2,5
48	40	4		200	80	8
50	22	8	3	205	10,5	2,5
50	30	4		250	70	12
50	34	4	3	300	80	4
50	35	3,5		300	100	10
58	23	3		306	11	3
60	50	4		314	72	8x4
70	30	5		400	80	4
72	57	3		406	11	3
82	28	3	2,7			
83	30	5				
87	30	3				
87	30	5	3			
87	40	6				



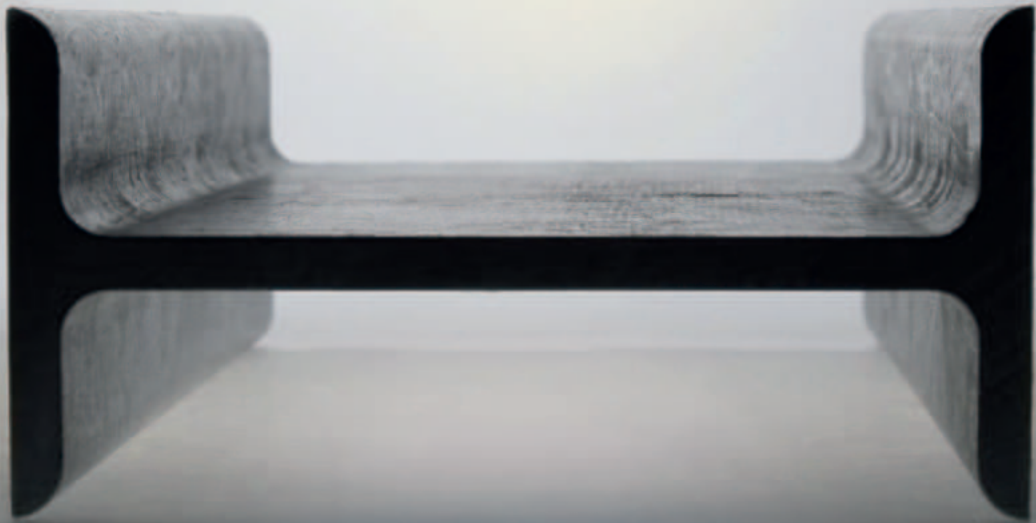


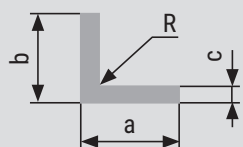
a	b	c	d	a	b	c	d
15	15	2,5		100	100	5	
25	18	2,5		100	100	6	
25	25	2,5		100	100	8	
25,5	25,5	3		107	18	3	
30	10	2,5		114	114	6	
30	15	2,5		114	114	8	
30	30	2,5		120	60	3	
30	30	5	3	120	60	5	
35,5	35,5	5		125	125	6	
36,5	27	3		127	18	3	
38	24	2,5		130	130	6	
38	38	3		130	130	7	
38	38	4		130	130	9	
40	32	3		150	50	3	
40	40	5		160	70	3,5	
42	40	3		160	70	5	8
44	44	6		172	40	4	
50	30	3		177	38	4	
50	50	3		188	44	4	
50	50	4		200	100	8	
50	50	5					
50	50	6					
51	32	4					
58	25	3					
60	20	3					
60	22	3,5					
60	25	3					
60	30	2,5					
60	60	4					
60	60	5					
60	60	8	4				
64	27	2					
70	26	3					
73	25	3					
75	40	3					
75	75	6					
75	75	9					
80	33	3					
80	40	3					
80	60	5					
83	28	3					
98	25	3,5					
100	40	3					
100	70	5	7				





a	b	c
6,7	40	1,8
30	10	4
31,5	17	3
39	25	4
40	10	4 x 5
40	40	5
45	40	2,5
50	40	2,5
60	20	5
100	50	5
100	100	8
120	60	6
120	80	8
150	75	6
150	75	8
150	75	10
150	150	10
200	100	6
200	100	10
200	200	15
300	150	12
300	300	13
500	200	15





a	b	c	d
10	10	2,5	
15	15	2,5	
15	15	5	
19	16	2	
20	20	3	
25	15	4	
25,4	16	3	
25	25	3	
30	20	4	
30	25	8	
30	30	3	
30	30	5	
30	30	6	
34	29,5	4	
35	35	5	
40	20	2	
40	20	4	
40	26	6	
40	40	3	
40	40	4	
40	40	5	
40	40	8	
43	35	5	
50	20	3	
50	35	3	
50	50	3	
50	50	5	
50	50	6	
60	40	6	
60	60	3	
60	60	6	
63	25	3	
75	75	6	
75	75	8	
80	45	6	
80	80	8	
90	90	3	R=40
95	25	2	R=10
100	50	8	
100	65	10	
100	80	8	
100	100	5	
100	100	6	
100	100	8	
100	100	10	
150	150	12	
250	30	3	





18

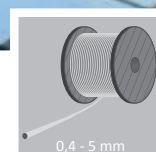
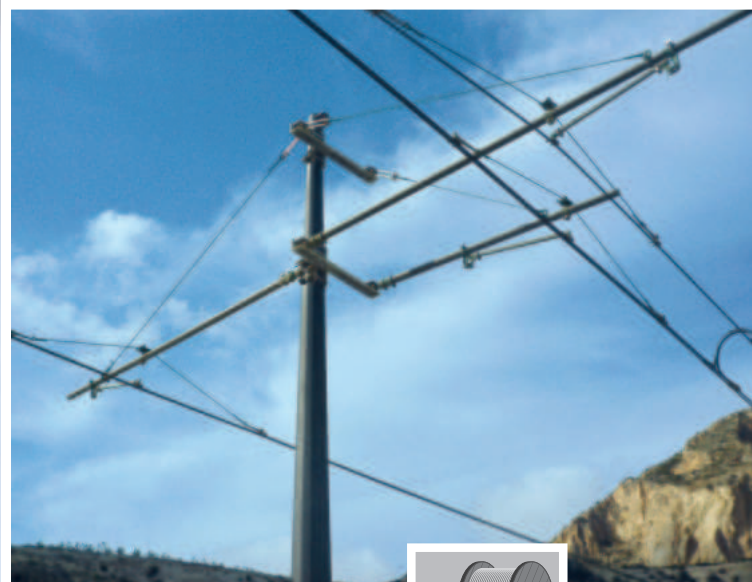


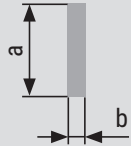
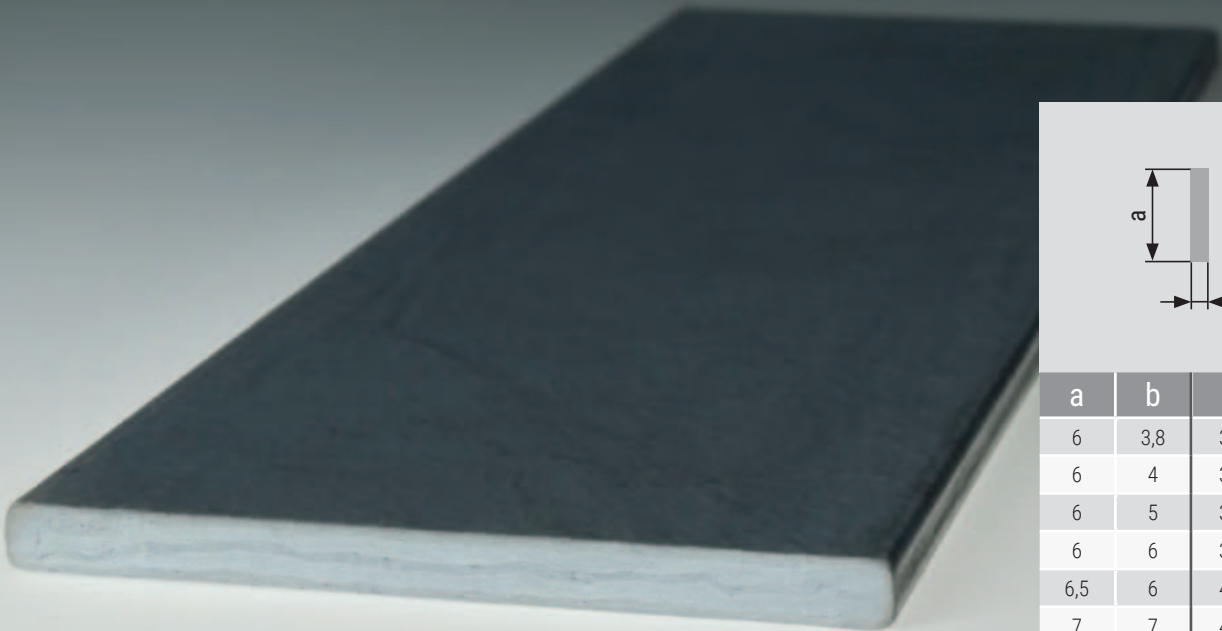
a	b	a	b
6	4	30	25
8	6	30	26
10	5	30	27
10	6	32	26
12	6	32	27
12	8	35	25
12	10	35	29
13	8	38	33
14	8	40	32
14	12	43	37
16	10	48	38
16	10,2	48	40
16	12	48	42
20	10,5	50	34
20	14	50	38
20	15	50	42
20	16,1	60	40
20	17	60	53
22	16,5	70	62
22	17	75	65
25	16	75	68
25	20	90	62
26	16,5	90	75
28	21	110	100
28	22	114	96
29,3	23,5	114	105
30	20	120	110
30	24		



a

1,2
1,4
1,8
2
2,6
3
3,5
3,6
4
5
6
7
8
9
10
11,7
12
13
14
15
16
18
20
22
25
26
28
30
32
35
36
38
40
48
50
55





a	b	a	b
6	3,8	30	15
6	4	30	20
6	5	30	30
6	6	38	2
6,5	6	40	3
7	7	40	4
8	4	40	5
8	6	40	6
9	2,5	40	10
9	3	40	30
10	3	40	40
10	5	43	5
10	8	46	3
10	10	50	4
11	2	50	6
11	8	50	10
12	8	50	24
12	10	50	40
14	5	60	2,5
14	14	63	63
15	3	75	6
15	3,5	75	9
15	4,5	75	12
15	6	80	8
16	3	100	2,3
20	3	100	4
20	6	100	8
20	20	105	6
21	9,5	115	3
25	2	150	10
25	8	200	12
25	9,5	219	4
25	25	300	3
26	26	350	6
30	3	350	8
30	4	350	10
30	5	350	12
30	6	635	3,5 x 5
30	10		

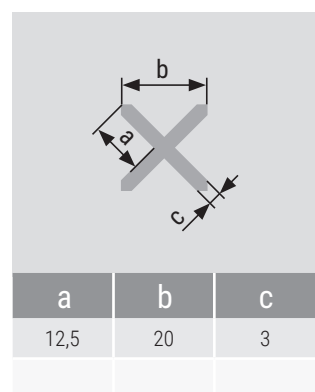
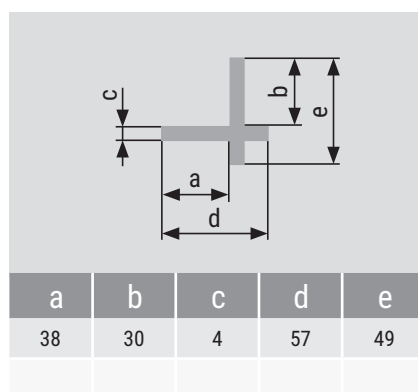
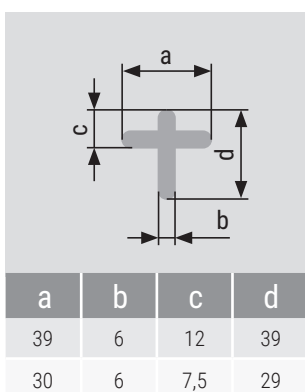
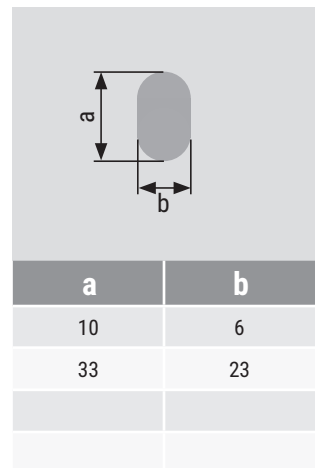
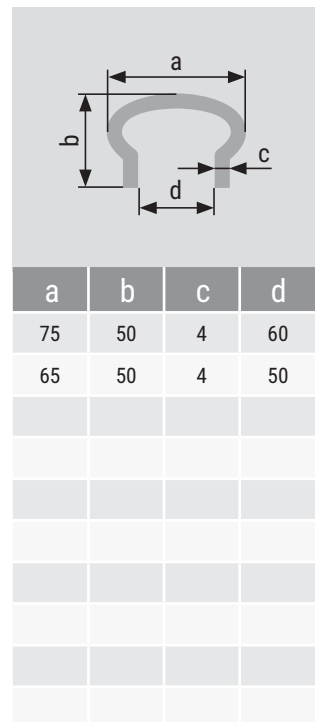
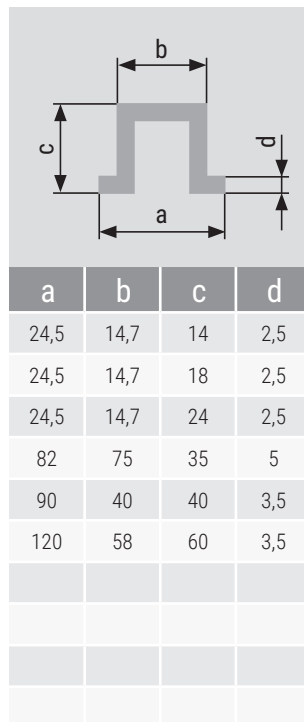
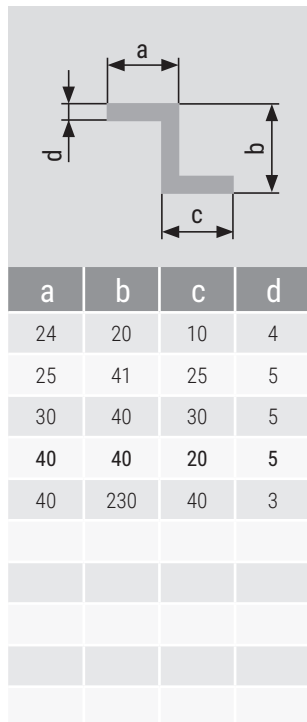


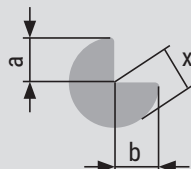
a	b	c	d
25	15	11	3
40	20	10	5
43	43	22	4
45	20	15	4
45	20	15	5
46	32	12	5
114	67	75	8
360	150	260	6



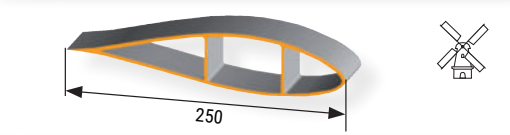
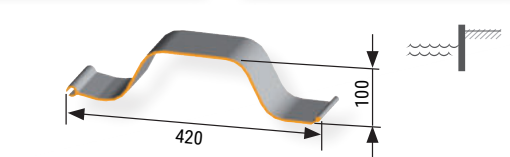
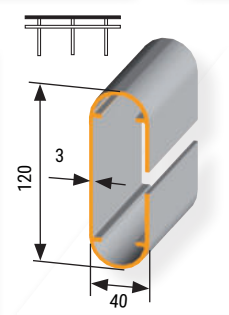
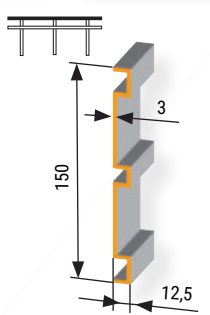
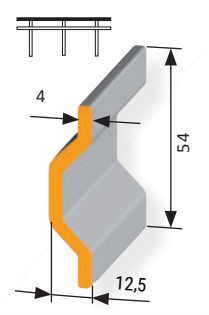
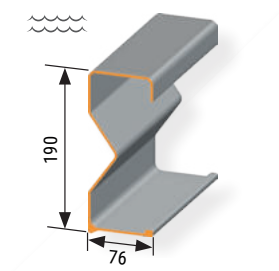
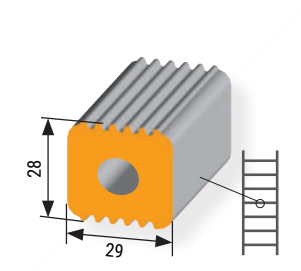
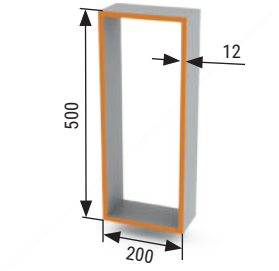
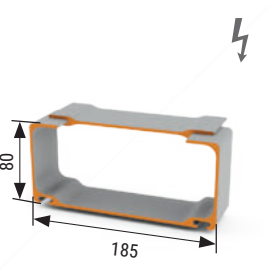
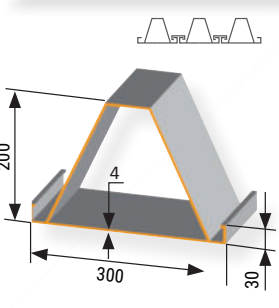
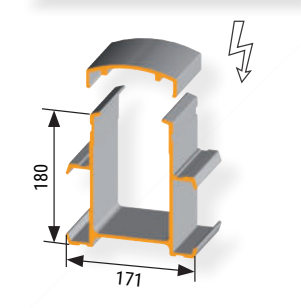
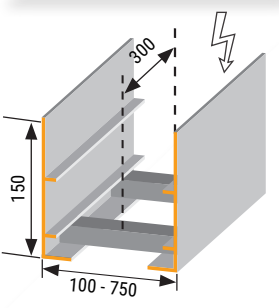
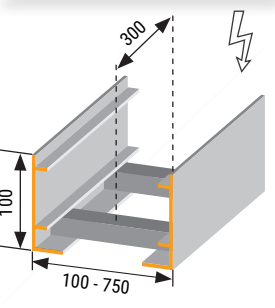
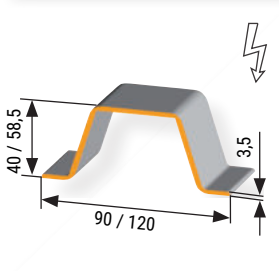
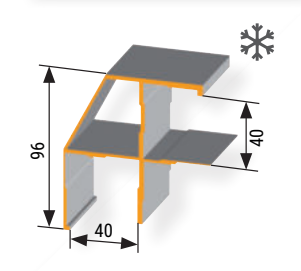
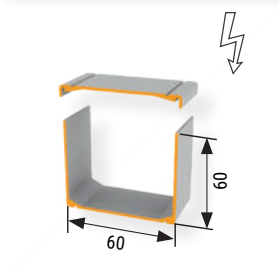
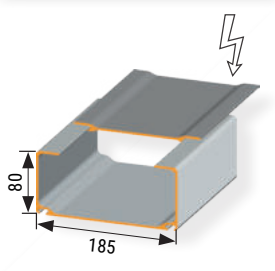
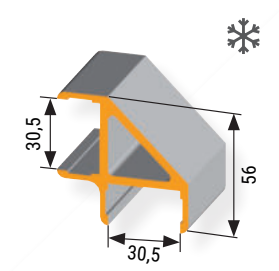
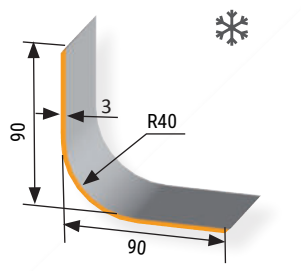
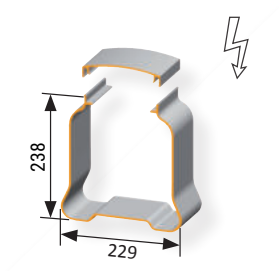
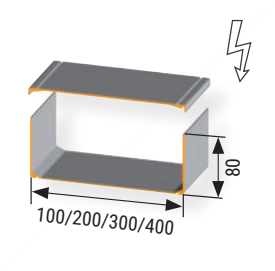
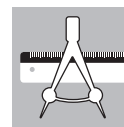
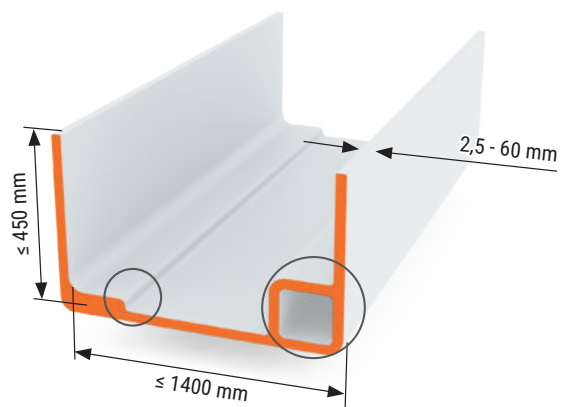
a	b	c
40	40	3
40	40	5
60	60	6
80	80	3
80	80	5
100	100	8

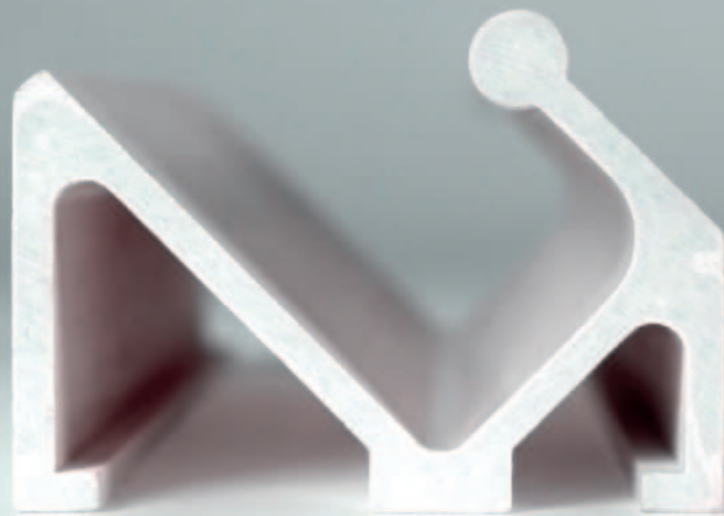
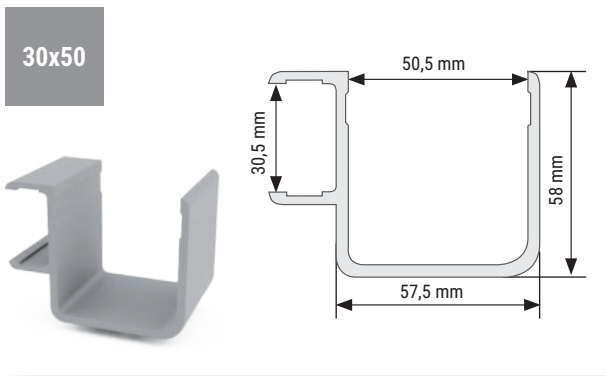
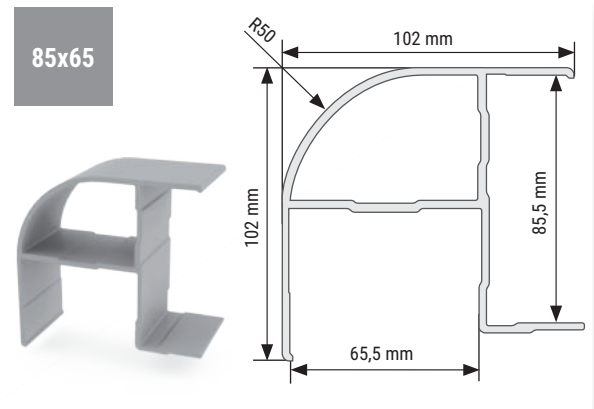
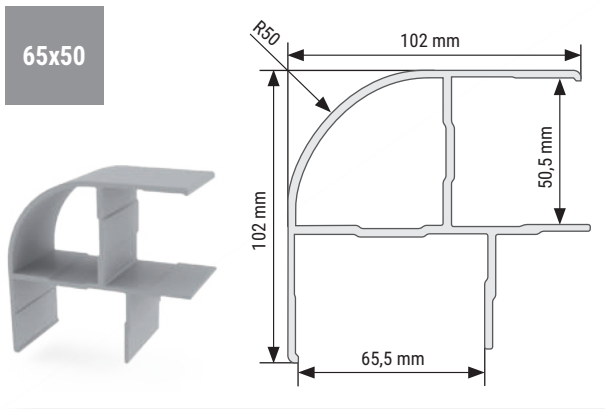
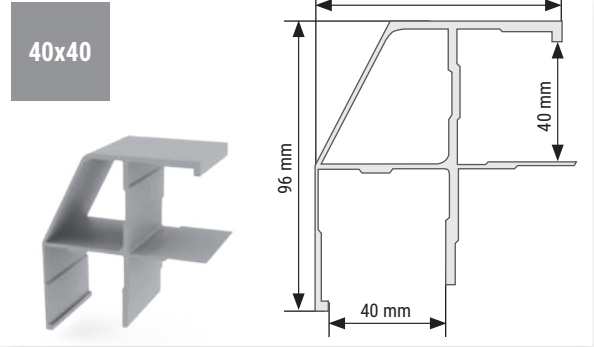
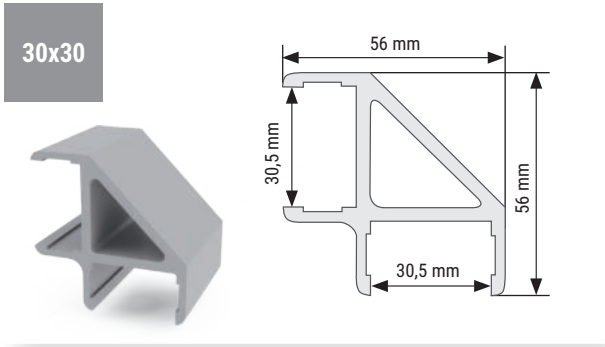




[illegible]

	$12 \times 10^{-6} \text{ mm/m}^{\circ}\text{K}$
	V0
ROHS, ELV, REACH	
	





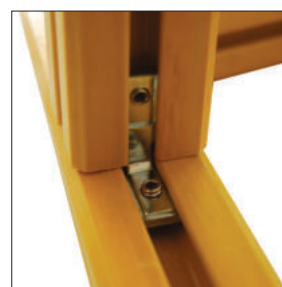
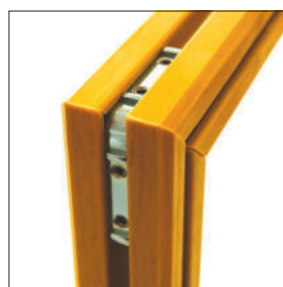
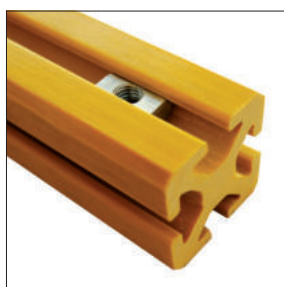
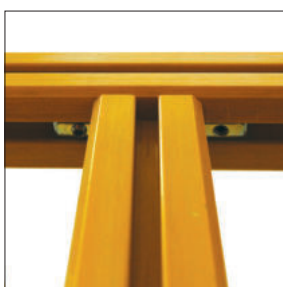
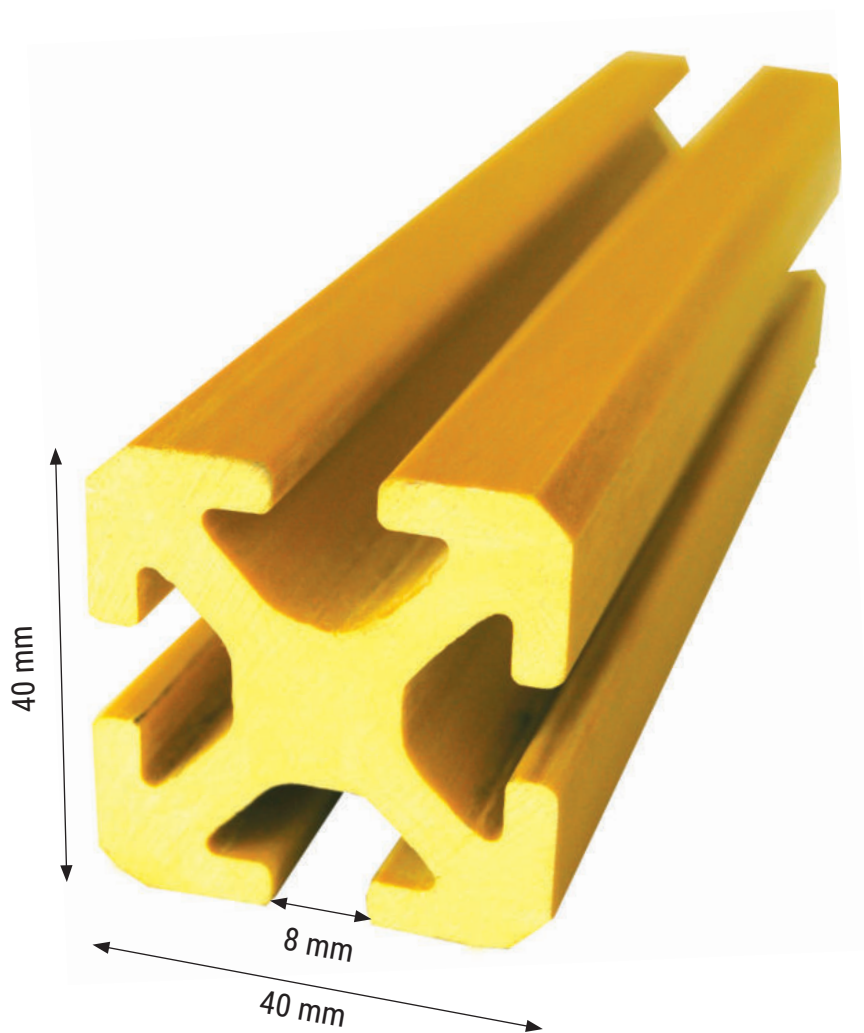


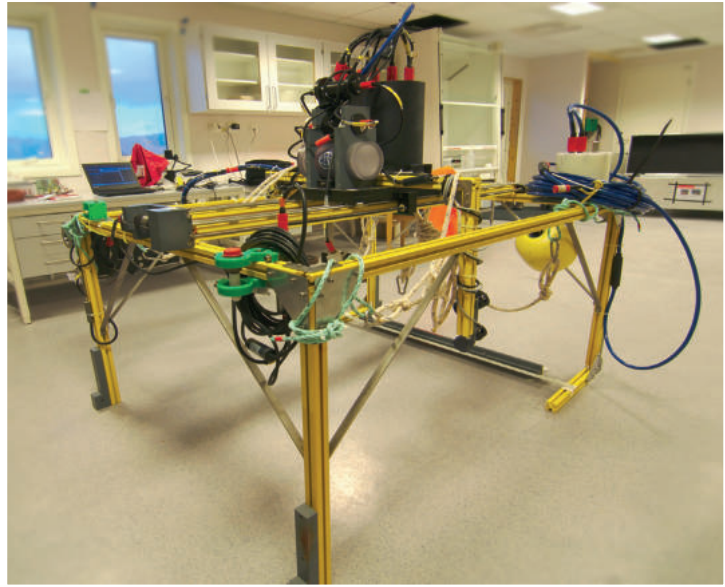
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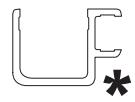
kg/m

1,9

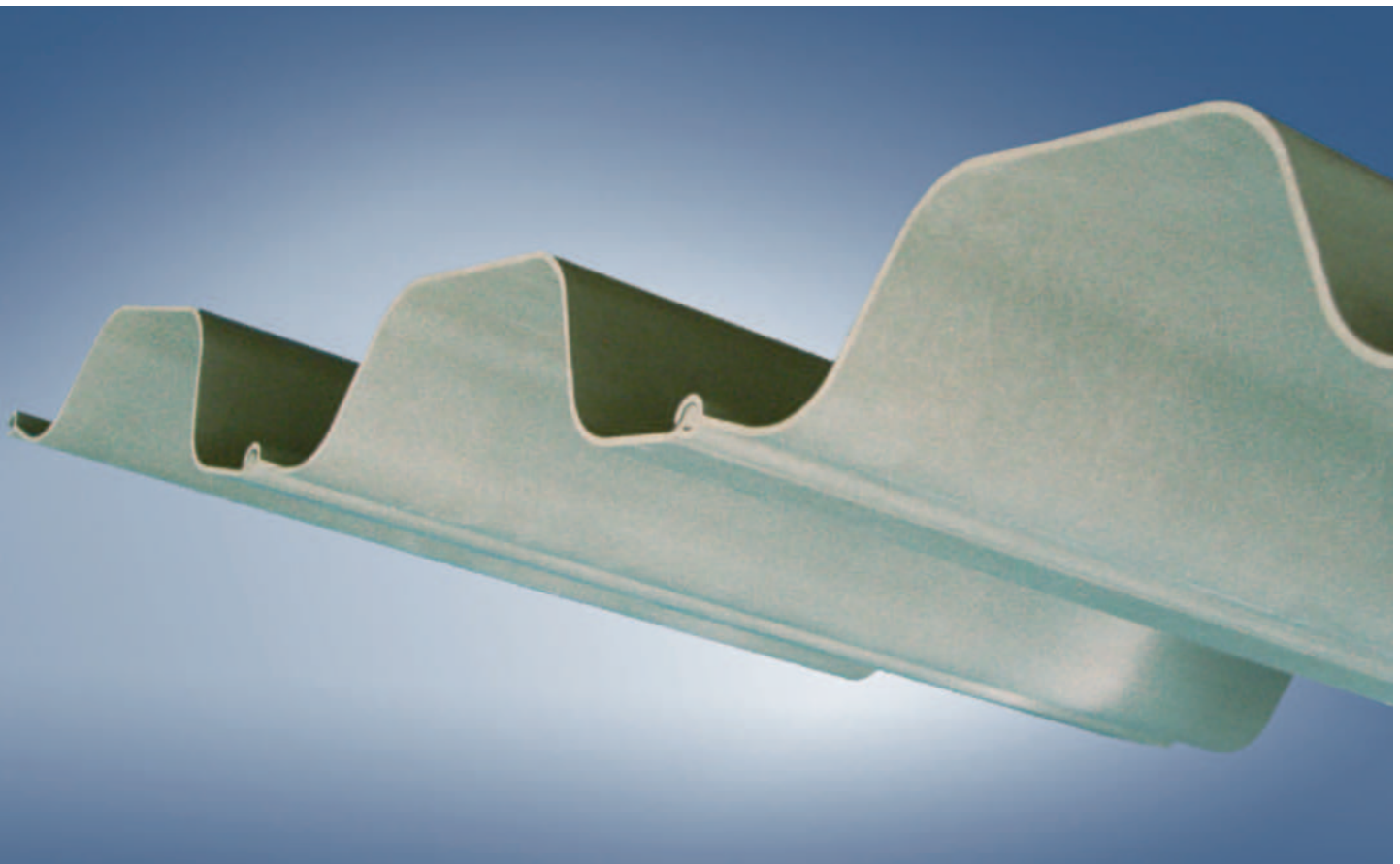
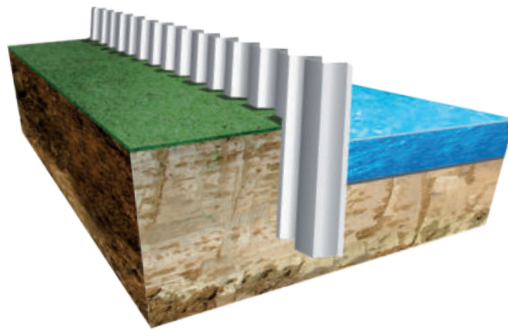
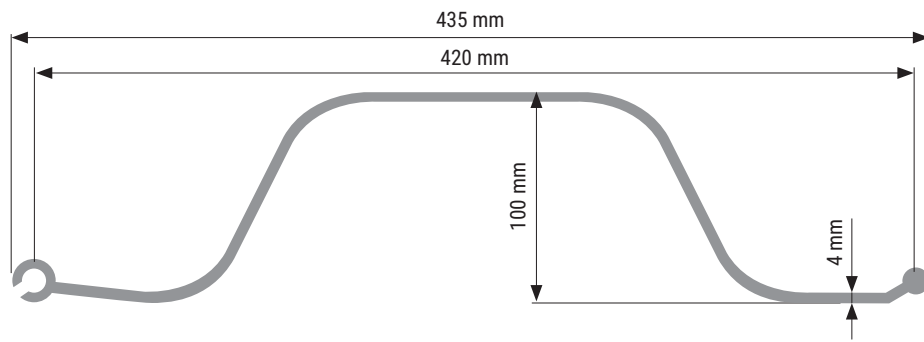
26





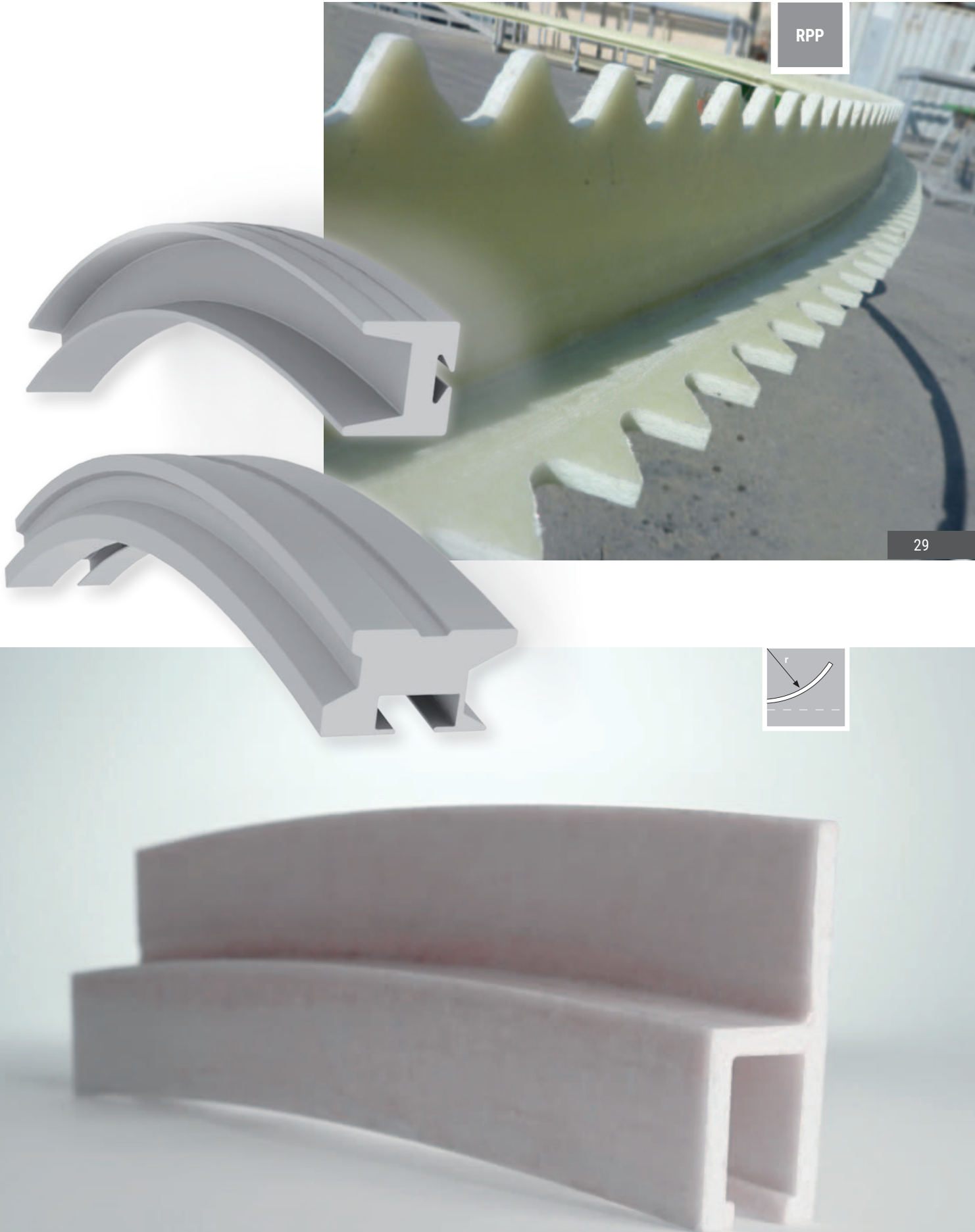
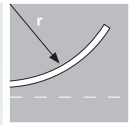


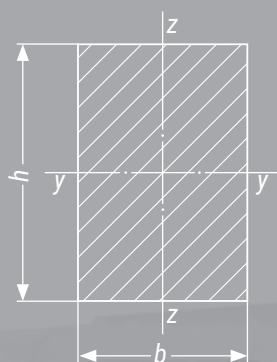
SHP



RPP

29



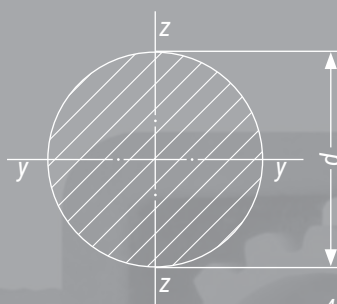


$$I_y = \frac{bh^3}{12}$$

$$I_z = \frac{hb^3}{12}$$

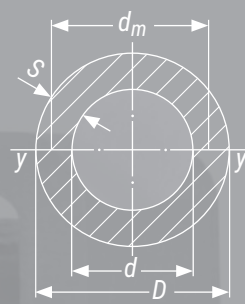
$$W_y = \frac{bh^2}{6}$$

$$W_z = \frac{hb^2}{6}$$



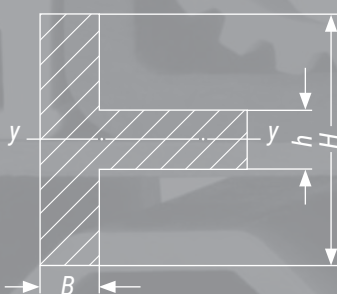
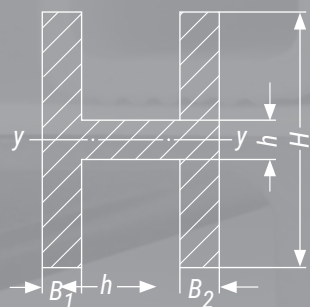
$$I_y = I_z = \frac{\pi d^4}{64}$$

$$W_y = W_z = \frac{\pi d^3}{32}$$



$$I_y = I_z = \frac{\pi (D^4 - d^4)}{64}$$

$$W_y = W_z = \frac{\pi (D^4 - d^4)}{32D}$$

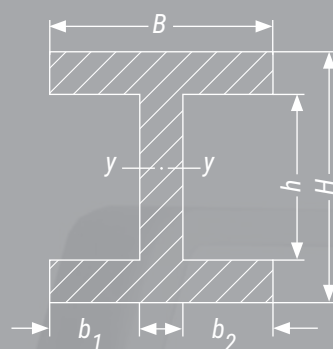
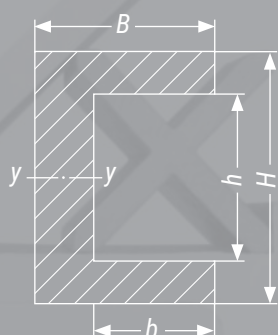
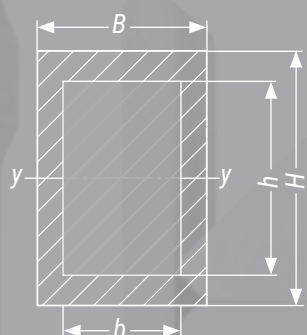


$$I_y = \frac{BH^3 + bh^3}{12}$$

$$W_y = \frac{BH^3 + bh^3}{6H}$$

$$B = B_1 + B_2$$

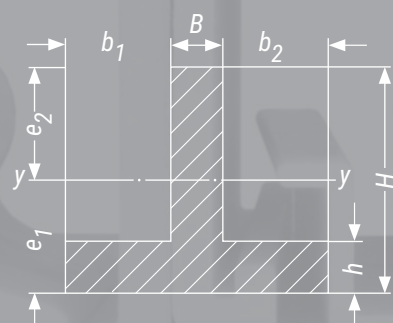
$$b = b_1 + b_2$$



$$I_y = \frac{BH^3 - bh^3}{12}$$

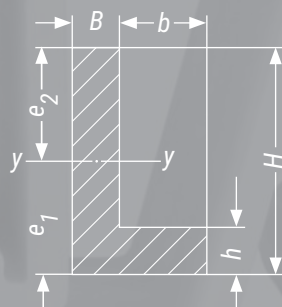
$$W_y = \frac{BH^3 - bh^3}{6H}$$

$$b = b_1 + b_2$$

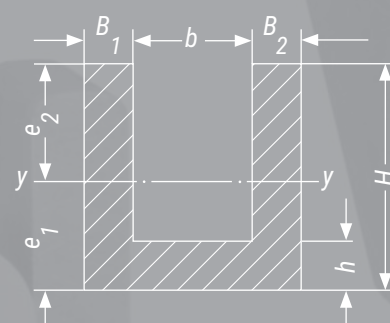


$$I_y = \frac{BH^3 - bh^3}{3} - (BH + bh)e_1^2$$

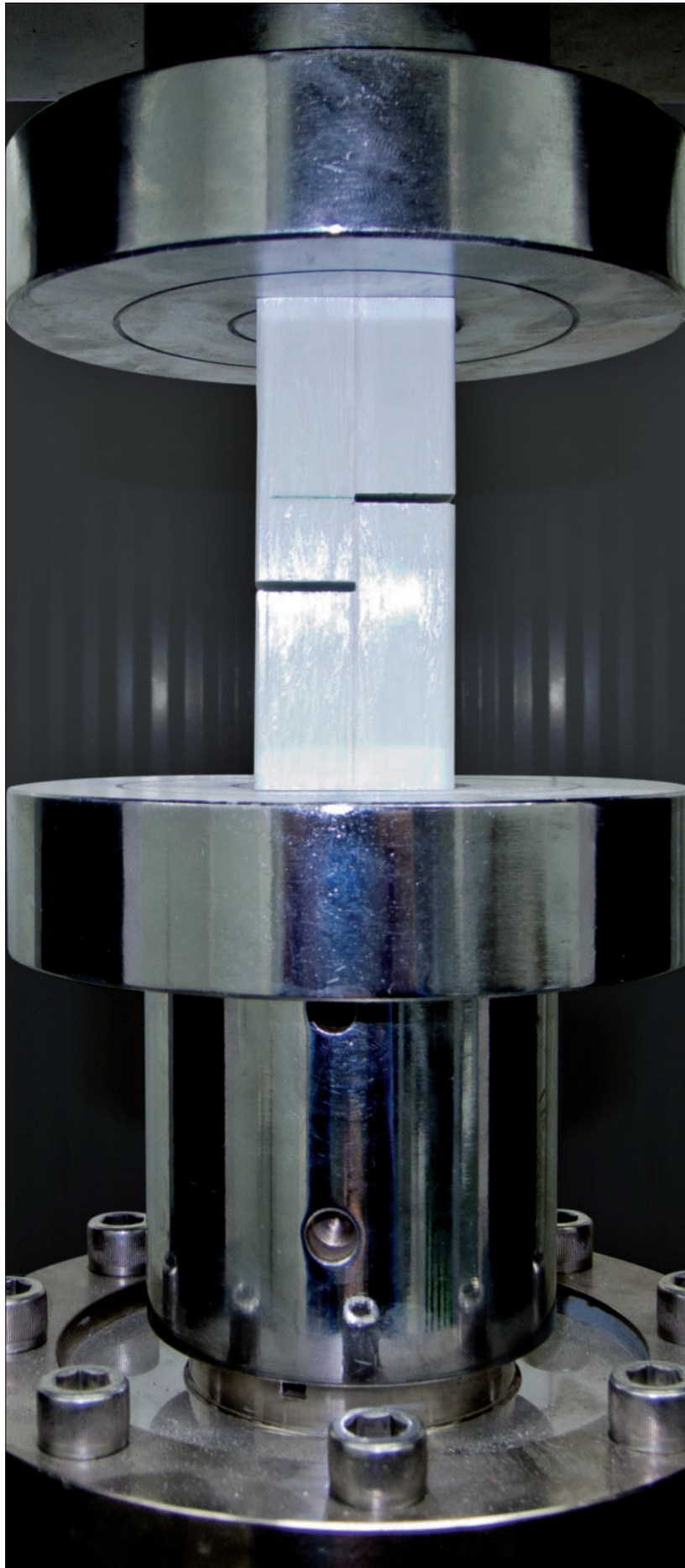
$$B = B_1 + B_2, b = b_1 + b_2$$

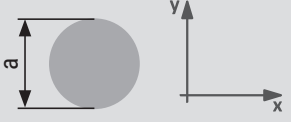


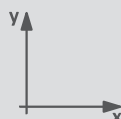
$$W_{y1,2} = I_y / e_{1,2}$$



$$e_1 = \frac{BH^2 - bh^2}{BH + bh} \quad / \quad e_2 = H - e_1$$

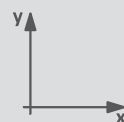
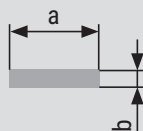


		
a	I_x	W_x
1,2	0	0
1,4	0	0
1,8	1	1
2	1	1
2,2	1	1
2,6	2	2
2,7	3	2
3	4	3
3,6	8	5
4	13	6
5	31	12
6	64	21
6,35	80	25
7	118	34
8	201	50
9	322	72
10	491	98
11,7	920	157
12	1.018	170
12,7	1.277	201
13	1.402	216
14	1.886	269
15	2.485	331
16	3.217	402
17,8	4.928	554
18	5.153	573
20	7.854	785
22	11.499	1.045
24	16.286	1.357
25	19.175	1.534
26	22.432	1.726
27	26.087	1.932
28	30.172	2.155
30	39.761	2.651
32	51.472	3.217
35	73.662	4.209
36	82.448	4.580
38	102.354	5.387
40	125.664	6.283
44	183.984	8.363
48	260.576	10.857
50	306.796	12.272
55	449.180	16.334
80	2.010.619	50.265

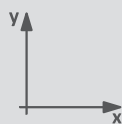
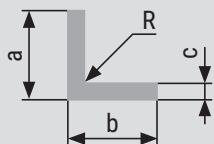


a	b	I _x	W _x	a	b	I _x	W _x
6	3	60	20	28	21	20.625	1.473
8	4	188	47	28	22	18.673	1.334
8	5	170	43	28	23	16.435	1.174
8	6	137	34	29,3	23,5	21.207	1.448
9	6	258	57	30	20	31.907	2.127
9,9	8,2	250	50	30	24	23.475	1.565
10	5	460	92	30	25	20.586	1.372
10	6	427	85	30	26	17.329	1.155
11	7	601	109	32	26	29.040	1.815
12	6	954	159	32	27	25.385	1.587
12	8	817	136	35	29	38.943	2.225
12	10	527	88	37	26	69.566	3.760
13	8	1.201	185	37	28	61.826	3.342
13	8,5	1.146	176	38	27	76.267	4.014
14	5,6	1.837	262	38	33	44.140	2.323
14	8	1.685	241	40	32	74.192	3.710
14	12	868	124	43	37	75.822	3.527
16	5	3.186	398	48	38	158.222	6.593
16	10	2.726	341	48	42	107.831	4.493
16	10,2	2.686	336	50	34	241.199	9.648
16	12	2.199	275	50	38	204.442	8.178
16	13	1.815	227	50	41	168.087	6.723
17,8	12,5	3.729	419	50	42	154.051	6.162
18	12,7	3.876	431	60	52	277.264	9.242
18	12,8	3.835	426	60	53	248.849	8.295
19,9	13,9	5.866	590	70	62	453.256	12.950
20	10,5	7.257	726	75	65	676.915	18.051
20	14	5.968	597	76	65	761.421	20.037
20	15	5.369	537	80	50	1.703.823	42.596
20	15,5	5.021	502	90	75	1.667.468	37.055
20	16,1	4.556	456	90	76	1.582.961	35.177
20	17	3.754	375	90	78	1.403.651	31.192
22	15	9.014	819	110	100	2.278.146	41.421
22	16,5	7.861	715	114	96	4.121.444	72.306
22	17	7.399	673	114	105	2.324.061	40.773
25	20	11.321	906	120	110	2.991.876	49.865
26	16	19.215	1.478	169	149	15.847.682	187.547
27	21	16.540	1.225	170	150	16.147.786	189.974
28	9	29.850	2.132				

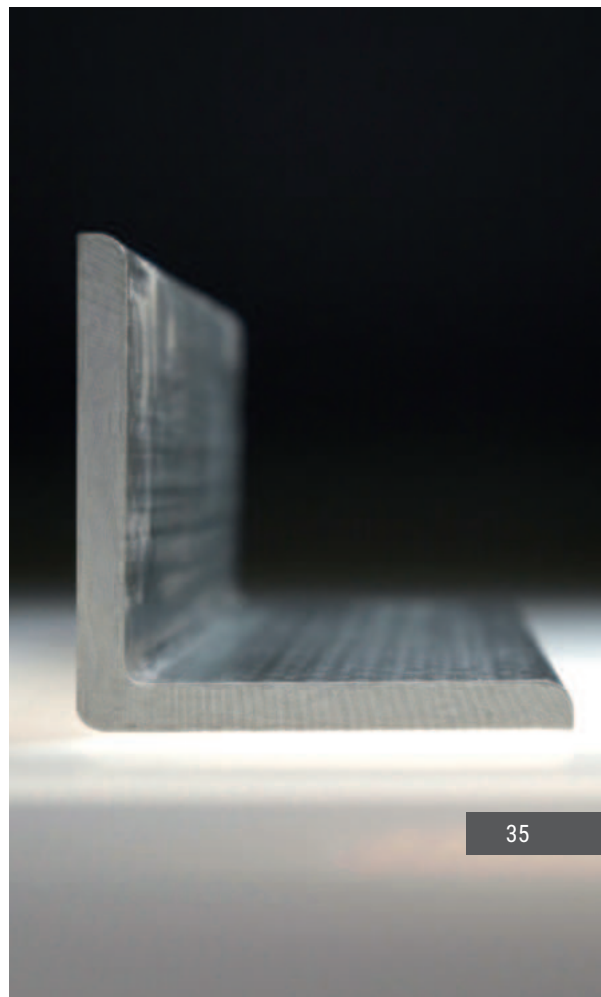


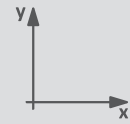
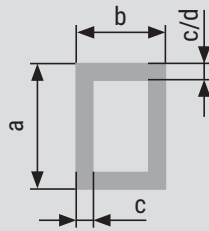


a	b	I _x	W _x	I _y	W _y	a	b	I _x	W _x	I _y	W _y
6	5	63	25	90	30	30	10	2.500	500	22.500	1.500
6	6	108	36	108	36	30	20	20.000	2.000	45.000	3.000
6,5	6	117	39	137	42	30	30	67.500	4.500	67.500	4.500
7	4	37	19	114	33	38	2	25	25	9.145	481
8	4	42	21	171	43	40	3	90	60	16.000	800
8	6	144	48	256	64	40	4	213	106	21.333	1.067
9	2,5	12	9	152	34	40	5	417	167	26.667	1.333
9	3	20	14	182	41	40	6	720	240	32.000	1.600
10	3	23	15	250	50	40	10	3.333	667	53.333	2.667
10	4	53	27	333	67	40	40	21.3333	10.667	213.333	10.667
10	5	104	42	417	83	42	4	224	112	24.696	1.176
10	10	833	167	833	167	43	5	448	179	33.128	1.541
11	2	7	7	222	40	45	33	134.764	8.168	25.060	11.138
11	8	469	117	887	161	46	3	104	69	24.334	1.058
12	8	512	128	1.152	192	46	44	326.539	14.843	356.899	15.517
12	10	1.000	200	1.440	240	49	45	372.094	16.538	441.184	18.008
12,6	3,8	58	30	634	101	50	4	267	133	41.667	1.667
14	5	146	58	1.143	163	50	10	4.167	833	104.167	4.167
14	14	3.201	457	3.201	457	50	24	57.600	4.800	250.000	10.000
15	3	34	23	844	113	50	40	266.667	13.333	416.667	16.667
15	3,5	54	31	984	131	60	2,5	78	63	45.000	1.500
15	4,5	114	51	1.266	169	63	60	1.134.000	37.800	1.250.235	39.690
15	6	270	90	1.688	225	63	63	1.312.747	41.674	1.312.747	41.675
16	3	36	24	1.024	128	68	6	1.224	408	157.216	4.624
16,5	7	472	135	26.204	318	75	6	1.350	450	210.938	5.625
18	2	12	12	972	108	75	9	4.556	1.013	316.406	8.438
19,5	8	832	208	4.943	507	75	12	10.800	1.800	421.875	11.250
20	3	45	30	2.000	200	80	8	3.413	853	341.333	8.533
20	6	360	120	4.000	400	100	2,3	101	88	191.667	3.833
20	20	13.333	1.333	13.333	1.333	100	4	533	267	333.333	6.667
22,5	8	960	240	7.594	675	100	8	4.267	1.067	666.667	13.333
23	6	414	138	6.084	529	100	10	8.333	1.667	833.333	16.667
24	2,5	31	25	2.880	240	105	6	1.890	630	578.813	11.025
25	2	17	17	2.604	208	115	3	259	173	380.219	66.113
25	8	1.067	267	10.417	833	130	6	2.340	780	1.098.500	16.900
25	9,5	1.786	376	12.370	990	150	10	12.500	2.500	2.812.500	37.500
25	25	32.552	2.604	32.552	2.604	180	6	3.240	1.080	2.916.000	32.400
26	26	38.081	2.929	38.081	2.929	200	12	28.800	4.800	8.000.000	80.000
27,5	7,5	967	258	12.998	945	219	4	1.168	584	3.501.153	31.974
30	3	68	45	6.750	450	300	3	675	450	6.750.000	45.000
30	4	160	80	9.000	600	300	10	25.000	5.000	22.500.000	150.000
30	5	313	125	11.250	750	315	2,5	410	328	6.511.641	41.343
30	6	540	180	13.500	900	320	6	5.760	1.920	16.384.000	102.400

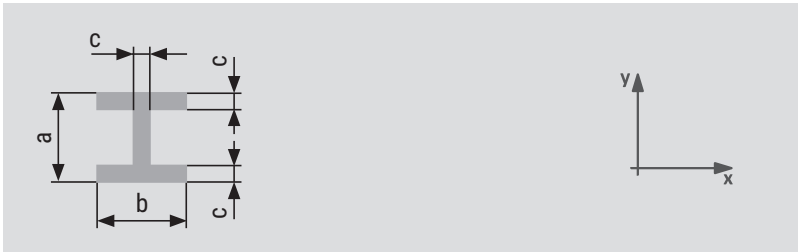


a	b	c	R	I _x	W _x	I _y	W _y
10	10	2,5		599	240	599	240
15	15	2,5		2.448	979	2.448	979
15	15	5		2.917	583	2.917	583
19	16	2		2.512	1.256	4.346	2.173
20	20	3		7.154	2.385	7.154	2.385
25	15	4		2.644	661	18.764	4.691
25,4	16	3		3.261	1.087	15.467	5.156
25	25	3		14.554	4.851	14.554	4.851
30	20	4		8.277	2.069	33.397	8.349
30	25	8		21.357	2.670	50.837	6.355
30	30	3		25.704	8.568	25.704	8.568
30	30	5		39.167	7.833	39.167	7.833
30	30	6		44.064	7.344	44.064	7.344
34	29,5	4		31.062	7.765	49.141	12.285
35	35	5		64.583	12.917	64.583	12.917
40	20	2		4.971	2.485	42.251	21.125
40	20	4		7.851	1.963	82.091	20.523
40	26	6		24.640	4.107	116.480	19.413
40	40	3		62.254	20.751	62.254	20.751
40	40	4		81.237	20.309	81.237	20.309
40	40	5		98.750	19.750	98.750	19.750
40	40	8		139.264	17.408	139.264	17.408
43	35	5		63.917	12.783	124.637	24.927
50	20	3		6.614	2.205	123.344	41.115
50	35	3		41.084	13.695	123.074	41.025
50	50	3		122.804	40.935	122.804	40.935
50	50	5		198.333	39.667	198.333	39.667
50	50	6		232.864	38.811	232.864	38.811
55	5	5		69.323	2.521	573	229
60	40	6		111.584	18.597	414.144	69.024
60	60	3		213.354	71.118	213.354	71.118
60	60	6		411.264	68.544	411.264	68.544
75	75	6		817.614	136.269	817.614	136.269
75	75	8		1.063.731	132.966	1.063.731	132.966
80	45	6		161.874	26.979	1.001.104	166.851
80	80	8		1.299.797	162.475	1.299.797	162.475
90	90	3	40	725.004	241.668	725.004	241.668
95	25	2	25	9.721	4.860	570.701	285.350
100	50	8		276.331	34.541	2.601.131	325.141
100	65	10		790.417	79.042	3.196.667	319.667
100	80	8		1.292.971	161.621	2.590.891	323.861
100	100	5		1.646.250	329.250	1.646.250	329.250
100	100	6		1.964.864	327.477	1.964.864	327.477
100	100	8		2.584.064	323.008	2.584.064	323.008
100	100	10		3.173.333	317.333	3.173.333	317.333
150	150	12		13.081.824	1.090.152	13.081.824	1.090.152
250	30	3		21.744	7.248	15.617.764	5.205.921
300	30	3		20.844	6.948	26.991.414	8.997.138



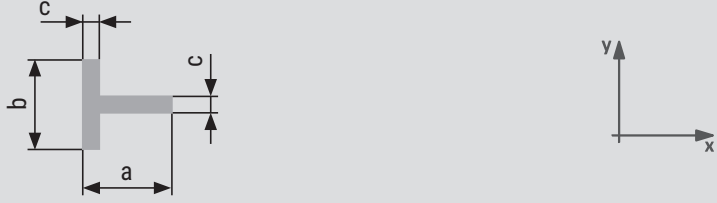


a	b	c/d	I _x	W _x	I _y	W _y	a	b	c/d	I _x	W _x	I _y	W _y
15	15	2,4	3.317	442	3.317	442	100	40	3	980.012	19.600	225.452	11.273
15	15	2,5	3.385	451	3.385	451	100	100	5	2.865.833	57.317	2.865.833	57.317
25	20	4	21.129	1.690	14.219	1.422	100	100	6	3.335.872	66.717	3.335.872	66.717
25	25	2,5	19.219	1.538	19.219	1.538	100	100	8	4.184.405	83.688	4.184.405	83.688
25,5	25,5	3	23.186	1.819	23.186	1.819	107	18	3	807.264	15.089	37.458	4.162
30	10	2,5	15.990	1.066	2.240	448	114	114	6	5.054.400	88.674	5.054.400	88.674
30	15	2,5	20.729	1.382	6.354	847	114	114	8	6.388.267	112.075	6.388.267	112.075
30	25	3	34.362	2.291	25.345	2.028	114	114	10	7.568.427	132.779	7.568.427	132.779
30	30	2,5	34.948	2.330	34.948	2.330	120	60	5	3.094.167	51.569	1.014.167	33.806
30	30	5	54.167	3.611	54.167	3.611	125	125	6	6.757.772	108.124	6.757.772	108.124
36,5	27	3	59.759	3.274	36.331	2.691	130	130	6	7.644.352	117.605	7.644.352	117.605
38	24	2,5	52.844	2.781	24.914	2.076	130	130	7	8.712.172	134.033	8.712.172	134.033
38	38	3	86.380	4.546	86.380	4.546	130	130	9	10.688.172	164.433	10.688.172	164.433
38	38	4	106.261	5.593	106.261	5.593	160	70	3,5	5.090.054	63.626	1.385.234	39.578
40	32	3	85.508	4.275	59.428	3.714	177	38	4	5.492.882	62.066	429.112	22.585
40	36,5	3	94.769	4.738	81.701	4.477	188	44	4	6.867.797	73.062	634.709	28.850
40	40	5	145.833	7.292	145.833	7.292	200	100	8	23.060.139	230.601	7.578.539	151.571
42	40	3	114.768	5.465	106.088	5.304	500	200	12	501.530.752	2.006.123	117.079.552	1.170.796
44	44	6	224.960	10.225	224.960	10.225							
50	30	3	142.132	5.685	61.812	4.121							
50	50	3	208.492	8.340	208.492	8.340							
50	50	4	261.525	10.461	261.525	10.461							
50	50	5	307.500	12.300	307.500	12.300							
50	50	6	347.072	13.883	347.072	13.883							
51	32	4	194.722	7.636	89.728	5.608							
58	25	3	183.854	6.340	45.799	3.664							
60	20	3	176.292	5.876	27.652	2.765							
60	22	3,5	209.904	6.997	38.334	3.485							
60	25	3	200.682	6.689	47.260	3.781							
60	30	2,5	193.385	6.446	63.385	4.226							
60	60	4	470.699	15.690	470.699	15.690							
60	60	5	559.167	18.639	559.167	18.639							
60	60	9	820.692	27.356	820.692	27.356							
70	26	3	306.260	8.750	59.860	4.605							
73	25	3	334.244	9.157	56.756	4.540							
75	40	3	475.475	12.679	174.002	8.700							
75	75	6	1.323.972	35.306	1.323.972	35.306							
75	75	9	1.757.052	46.855	1.757.052	46.855							
80	33	3	496.246	12.406	118.202	7.164							
80	40	3	558.532	13.963	184.292	9.215							
83	28	3	497.193	11.981	83.510	5.965							
98	25	3	727.894	14.855	75.019	6.001							
98	25	3,5	830.460	16.948	83.378	6.670							



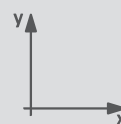
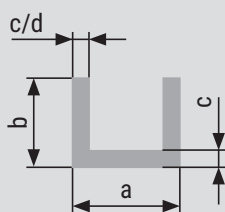
a	b	c	I _x	W _x	I _y	W _y
6,7	40	1,8	908	271	16.040	802
30	10	4	17.176	1.145	2.483	497
38	25	4	67.067	3.530	35.559	2.845
39	25	4	71.447	3.664	36.452	2.916
40	16	4	52.565	2.628	12.117	1.515
40	40	2,5	79.349	3.967	79.349	3.967
40	40	5	134.583	6.729	134.583	6.729
43	82	4	264.610	12.307	658.757	16.067
45	40	2,5	103.750	4.611	88.151	4.408
50	40	2,5	131.901	5.276	96.953	4.848
100	50	5	1.432.917	28.658	535.000	21.400
120	60	6	2.971.296	49.522	1.109.376	36.979
150	75	6	5.982.336	79.764	2.272.874	60.610
150	75	8	7.659.669	102.129	2.843.119	75.817
150	75	10	9.193.333	122.578	3.332.396	88.864
150	150	10	16.555.833	220.744	16.555.833	220.744
200	100	6	14.616.736	146.167	5.649.536	112.991
200	100	10	22.926.667	229.267	8.560.000	171.200
200	200	15	57.591.250	575.913	57.591.250	575.913
300	150	12	95.717.376	638.116	36.365.976	484.880
300	300	13	183.014.459	1.220.096	183.014.459	1.220.096
500	200	15	482.728.750	1.930.915	134.766.250	1.347.663



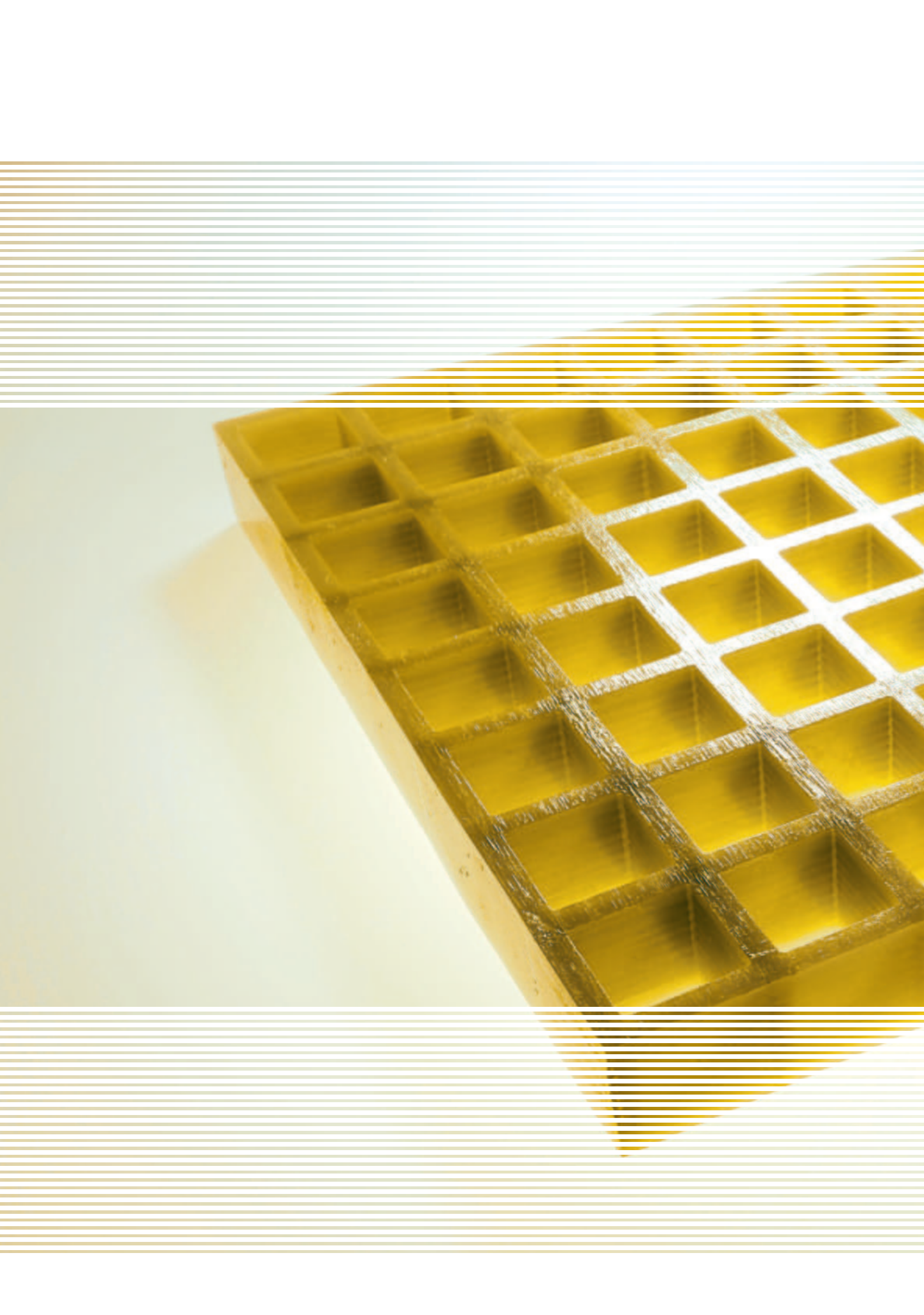


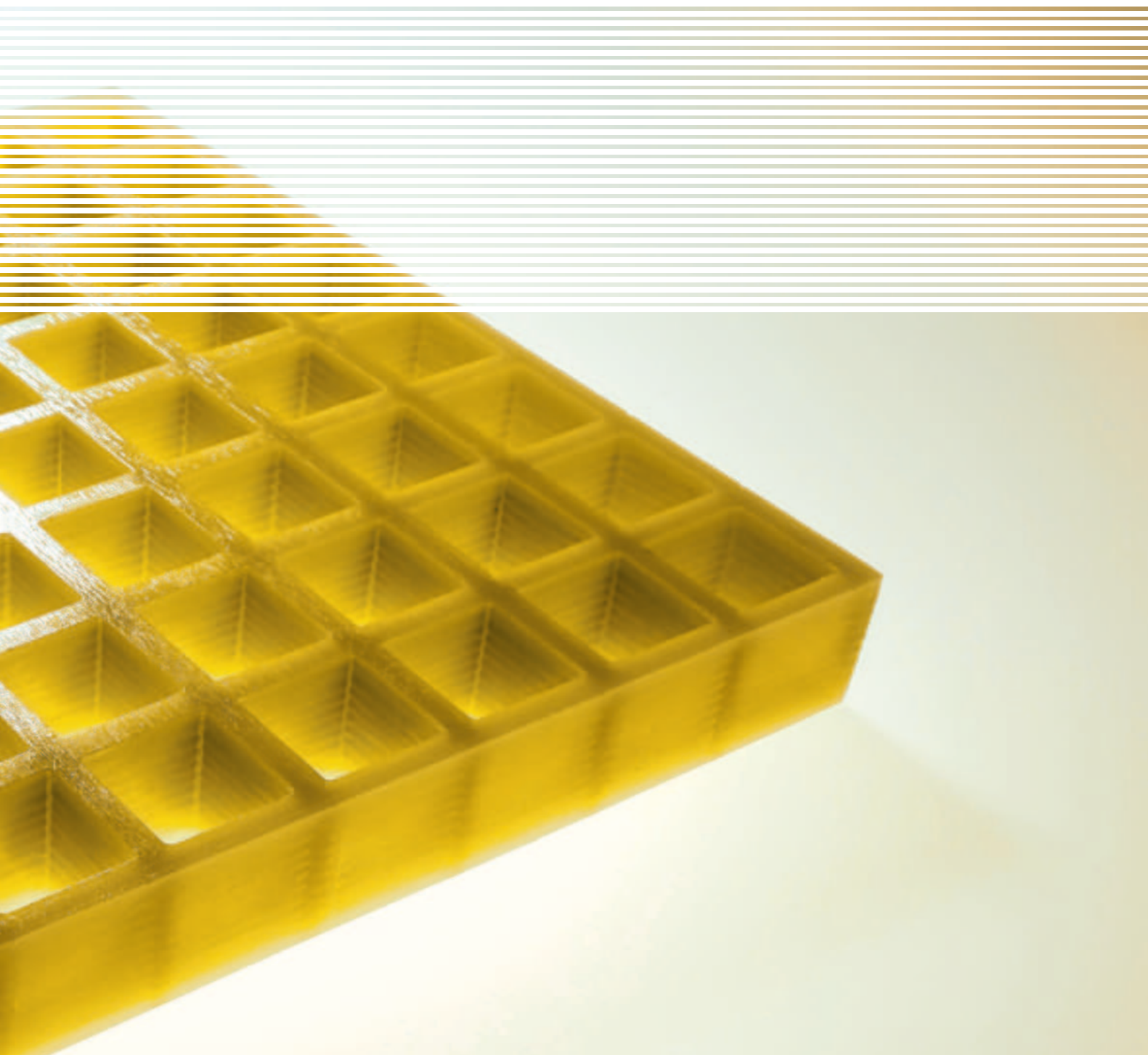
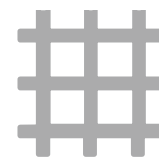
a	b	c	I_x	W_x	I_y	W_y
15	12	5	3.167	633	1.479	197
20	60	5	6.250	1.250	3.906	391
40	40	3	62.254	20.751	16.083	804
40	40	5	98.750	19.750	27.031	1.352
60	60	6	411.264	68.544	108.972	3.632
80	80	3	508.454	169.485	128.173	3.204
80	80	5	837.083	167.417	214.115	5.353
100	100	8	2.584.064	323.008	670.592	13.412
100	100	10	3.173.333	317.333	840.833	16.817



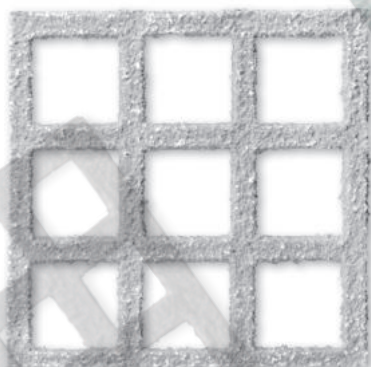
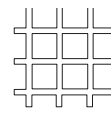


a	b	c/d	I _x	W _x	I _y	W _y	a	b	c	I _x	W _x	I _y	W _y
12	7,5	2,5	259	57	937	156	95	15	2,5	3.721	305	312.344	6.576
14	11	3,5	1.063	166	2.301	329	100	30	6	59.408	2.684	1.137.056	22.741
14	17	3	3.427	348	3.290	470	100	45	5	166.875	5.135	1.320.000	26.400
15	7,5	2,5	283	59	1.693	226	100	50	6	262.516	7.437	1.667.936	33.359
18	7,5	2	302	61	2.730	303	100	60	6	439.649	10.614	1.933.376	38.668
20	21	4	8.935	721	11.552	1.155	100	80	2,5	437.219	8.032	1.129.453	22.589
22,5	7,5	2,5	325	64	4.886	434	105	10,5	2,5	1.307	153	346.255	6.595
25	20	3	6.835	537	16.325	1.306	110	53	3	173.101	4.452	1.191.650	21.666
28	7,5	2,5	348	66	8.650	618	114	42	6	165.473	5.360	2.001.780	35.119
30	22	3	9.583	668	27.612	1.841	120	50	6	277.729	7.625	2.581.056	43.018
30	30	3	22.927	1.216	36.396	2.426	120	60	6	466.571	10.904	2.971.296	49.522
30	30	5	34.427	1.899	50.833	3.389	128	65	3	319.033	6.715	1.977.692	30.901
32	15	3	3.250	316	23.384	1.462	130	108	5	2.074.021	28.650	4.941.000	76.015
36,3	20	3/4,5	10.128	800	50.896	2.804	138	100	4	1.393.469	20.222	4.324.600	62.675
36,6	20	4,5/3	8.084	572	44.704	2.443	150	40	6	154.298	5.016	3.803.796	50.717
38	25	4	18.845	1.146	67.067	3.530	160	20	3	11.229	670	1.652.626	20.658
38	25	5	22.287	1.385	77.730	4.091	160	48	8	337.920	9.387	6.430.720	80.384
38	34	5	53.895	2.539	102.420	5.391	180	70	8	1.044.977	20.203	11.230.123	124.779
38,1	24	3	13.347	823	52.729	2.768	190	82	5	1.097.337	17.946	9.447.833	99.451
40	20	4	10.055	742	62.976	3.149	200	50	6	317.951	8.078	8.969.536	89.695
43	43	4	91.028	3.354	145.556	6.770	200	50	9	442.659	11.579	12.735.726	127.357
45	7,5	2,5	398	72	30.286	1.346	200	80	2,5	543.508	8.869	5.445.599	54.456
45	20	4	10.451	755	84.338	3.748	200	80	8	1.577.825	26.627	15.956.309	159.563
45	28	3	21.840	1.142	89.044	3.958	250	70	12	1.590.978	30.071	35.353.816	282.831
46	40	3	59.470	2.273	127.120	5.527	300	80	4	939.914	14.561	22.318.443	148.790
48	40	4	60.372	2.290	140.202	5.842	300	100	10	4.052.500	53.148	60.360.000	402.400
50	22	8	23.166	1.649	183.312	7.332	400	80	4	999.712	14.924	45.170.176	225.851
50	30	4	34.925	1.716	151.976	6.079							
50	34	4	49.794	2.191	168.947	6.758							
50	35	3,5	48.291	2.056	155.877	6.235							
58	23	3	13.523	805	139.618	4.814							
60	50	4	156.000	4.746	361.003	12.033							
70	30	5	46.563	2.191	407.500	11.643							
72	57	3	184.162	4.796	479.196	13.311							
80	30	5	48.470	2.230	565.417	14.135							
82	28	3	26.261	1.239	371.992	9.073							
83	30	5	48.989	2.241	619.015	14.916							
85	30	5	49.323	2.248	656.406	15.445							
87	30	3	32.528	1.429	450.515	10.357							
87	30	5	49.648	2.254	695.147	15.980							
87	40	6	132.473	4.693	999.698	22.982							
89	40	4	95.261	3.279	755.574	16.979							
89	44,5	3,5	114.472	3.568	730.419	16.414							

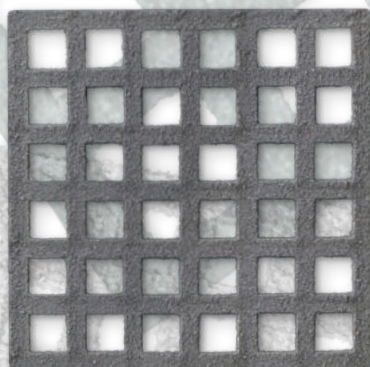




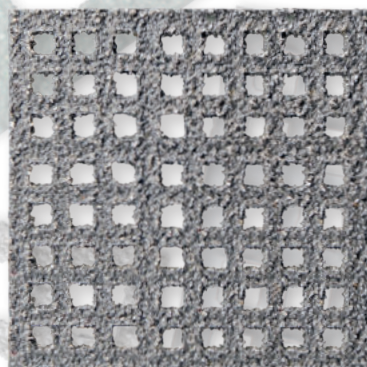




31 x 31 mm



14 x 14 mm

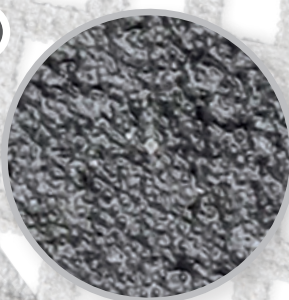


8 x 8 mm

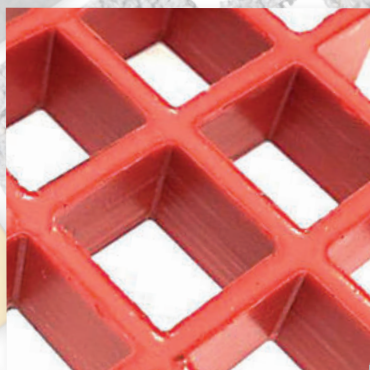
KV



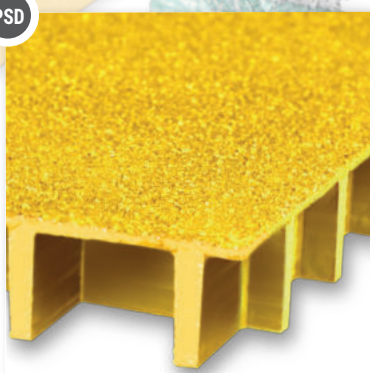
FS



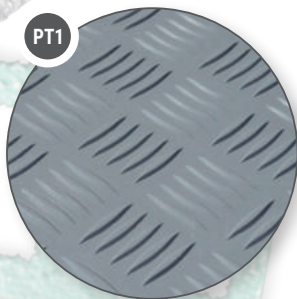
GS



PSD



PT1

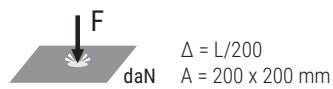


PT2



R 13

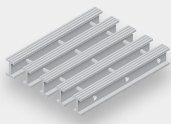
RAL



1 daN $\triangleq$ 1 kg



	mm					
Typ	400	600	800	1000	1200	1400
ISO 14 13 x 13	53	24	13	9	6	4
ISO 15	46	20	11	7	5	4
ISO 25	281	125	70	45	31	23
ISO 25 13 x 13	315	140	78	50	35	26
ISO 25 76 x 76	141	63	35	23	16	11
ISO 30	486	216	122	78	54	40
ISO 30 14x14	517	230	129	83	57	43
ISO 30 8x8	544	242	137	87	60	45
ISO 30 93 x 18	753	335	188	121	84	61
ISO 30 SWL	810	360	203	130	90	66
ISO 35 SWL	1.286	572	322	206	143	105
ISO 38	988	439	247	158	110	81
ISO 38 13x13	1.107	492	277	177	123	91
ISO 38 88 x 17	1.531	680	383	245	170	125
ISO 40 76 x 76	576	256	144	92	64	47
ISO 50	1.800	800	450	288	200	147
ISO 50 17 x 17	2.016	896	504	323	224	165
ISO 50 SWL	3.750	1.667	938	600	417	306
ISO 60 SWL	6.480	2.880	1.620	1.037	720	529
P 15	58	25	14	9	6	5
P 25	351	156	88	56	39	29
P 30	608	270	153	98	68	50
P 38	1.235	549	309	198	138	101
P 50	2.250	1.000	563	360	250	184
P 50 SWL	4.688	2.084	1.173	750	521	383
P 60 SWL	8.100	3.600	2.025	1.296	900	661
RP 30 x 10 x20	365	162	91	58	41	30
RP 30 x 10 x 30	162	139	78	50	35	26
RP 38 x 15 x 23	856	380	214	137	95	70
RP 38 x 15 x 10	3.600	571	321	205	143	105
RP 50 x 25,4 x 12,7	1.856	825	464	297	206	152
RP 50 x 15 x 10	4.414	1.962	1.103	706	490	360
RP 64 SWL	6.434	2.859	1.608	1.029	715	525

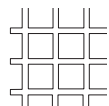




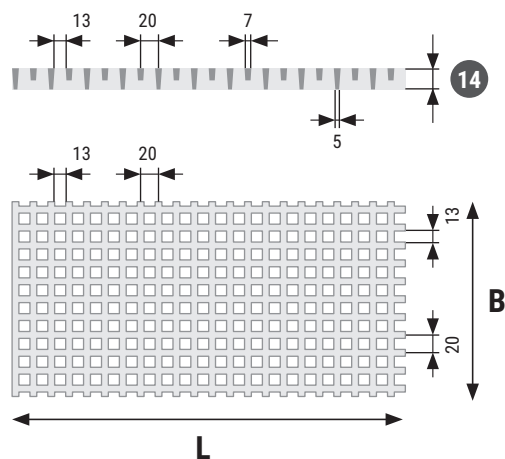
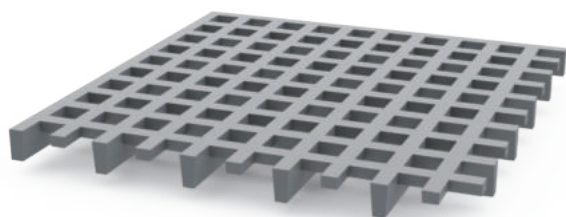
1 daN $\triangleq$ 1 kg



Typ	mm					
	400	600	800	1000	1200	1400
ISO 14 13 x 13	305	91	38	19	11	7
ISO 15	257	76	32	16	10	6
ISO 25	1.607	476	201	103	60	37
ISO 25 13 x 13	1.800	533	225	115	67	41
ISO 25 76 x 76	833	247	104	53	31	19
ISO 30	2.777	823	347	178	103	65
ISO 30 14 x 14	2.996	887	374	192	111	69
ISO 30 8 x 8	3.110	922	389	199	115	73
ISO 30 93 x 18	4.218	1.250	527	270	156	98
ISO 30 SWL	4.629	1.372	579	296	171	108
ISO 35 SWL	7.351	2.178	919	470	272	171
ISO 38	5.645	1.672	706	361	209	132
ISO 38 13 x 13	6.322	1.873	791	404	234	148
ISO 38 88 x 17	8.572	2.540	1.071	549	317	200
ISO 40 76 x 76	3.170	939	396	203	117	74
ISO 50	10.001	2.963	1.250	640	370	233
ISO 50 17 x 17	11.201	3.319	1.400	717	414	261
ISO 50 SWL	21.431	6.350	2.679	1.372	794	500
ISO 60 SWL	37.033	10.973	4.629	2.370	1.372	864
P 15	321	95	40	20	13	8
P 25	2.009	595	251	129	75	46
P 30	3.471	1.029	434	223	129	81
P 38	7.056	2.090	883	451	261	165
P 50	12.501	3.704	1.563	800	463	291
P 50 SWL	26.789	7.938	3.349	1.715	993	625
P 60 SWL	46.291	13.716	5.786	2.963	1.715	1.080
RP 30 x 10 x 20	7.094	2.102	887	454	263	165
RP 30 x 10 x 30	5.425	1.607	678	347	201	127
RP 38 x 15 x 23	15.410	4.566	1.926	986	571	359
RP 38 x 15 x 10	23.400	6.933	2925	1.498	867	546
RP 50 x 25,4 x 12,7	33.407	9998	4.176	2.138	1.237	779
RP 50 x 15 x 10	80.428	23.831	10.054	5.147	2.979	1.876
RP 64 SWL	115.804	34.312	14.476	7.411	4.289	2.701



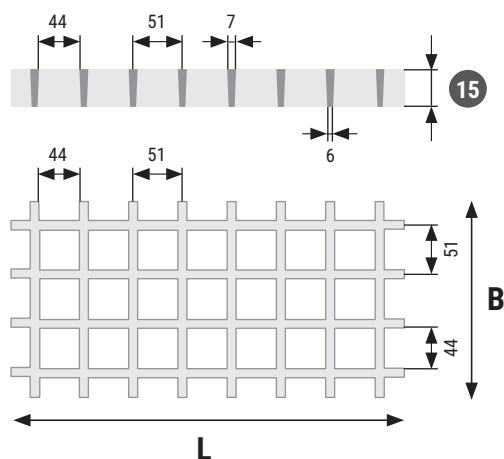
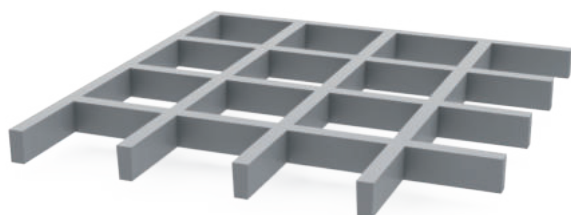
ISO 14
13x13



400 mm	53 kg	18 x F	305 kg/m ²	21 x q
600 mm	24 kg	27 x F	91 kg/m ²	32 x q
800 mm	13 kg	37 x F	38 kg/m ²	43 x q
1.000 mm	9 kg	46 x F	19 kg/m ²	54 x q
1.200 mm	6 kg	55 x F	11 kg/m ²	65 x q
1.400 mm	4 kg	64 x F	7 kg/m ²	76 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
4.047	1.247	10,5
2.007	1.007	10,5
B x L = ? →		

ISO 15

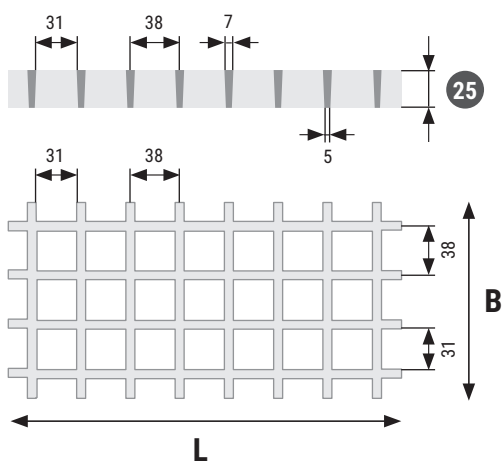
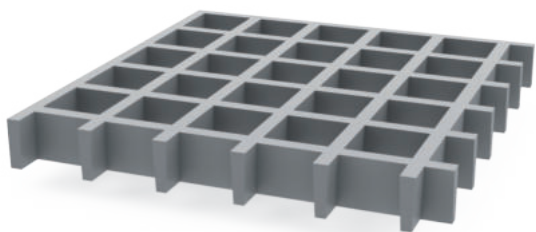


400 mm	46 kg	18 x F	257 kg/m ²	21 x q
600 mm	20 kg	27 x F	76 kg/m ²	32 x q
800 mm	11 kg	37 x F	32 kg/m ²	43 x q
1.000 mm	7 kg	56 x F	16 kg/m ²	54 x q
1.200 mm	5 kg	55 x F	10 kg/m ²	65 x q
1.400 mm	4 kg	64 x F	6 kg/m ²	76 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1990	1.020	5,8
3.660	1.220	5,8
B x L = ? →		



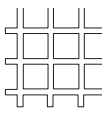
ISO 25



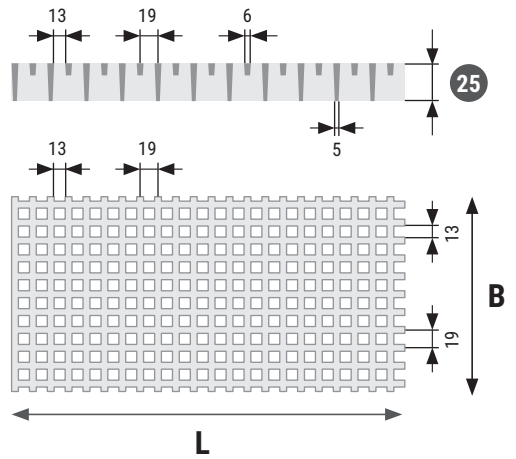
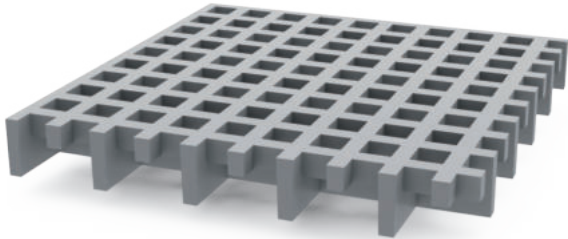
400 mm	281 kg	11 x F	1.607 kg/m ²	13 x q
600 mm	125 kg	16 x F	476 kg/m ²	19 x q
800 mm	70 kg	22 x F	201 kg/m ²	26 x q
1.000 mm	45 kg	27 x F	103 kg/m ²	32 x q
1.200 mm	31 kg	33 x F	60 kg/m ²	39 x q
1.400 mm	23 kg	38 x F	37 kg/m ²	45 x q

L/200 = 0,5%

L (mm)	B (mm)	kg/m ²
998	998	12,3
1.988	998	12,3
3.016	998	12,3
3.660	1.220	12,3
B x L = ? →		

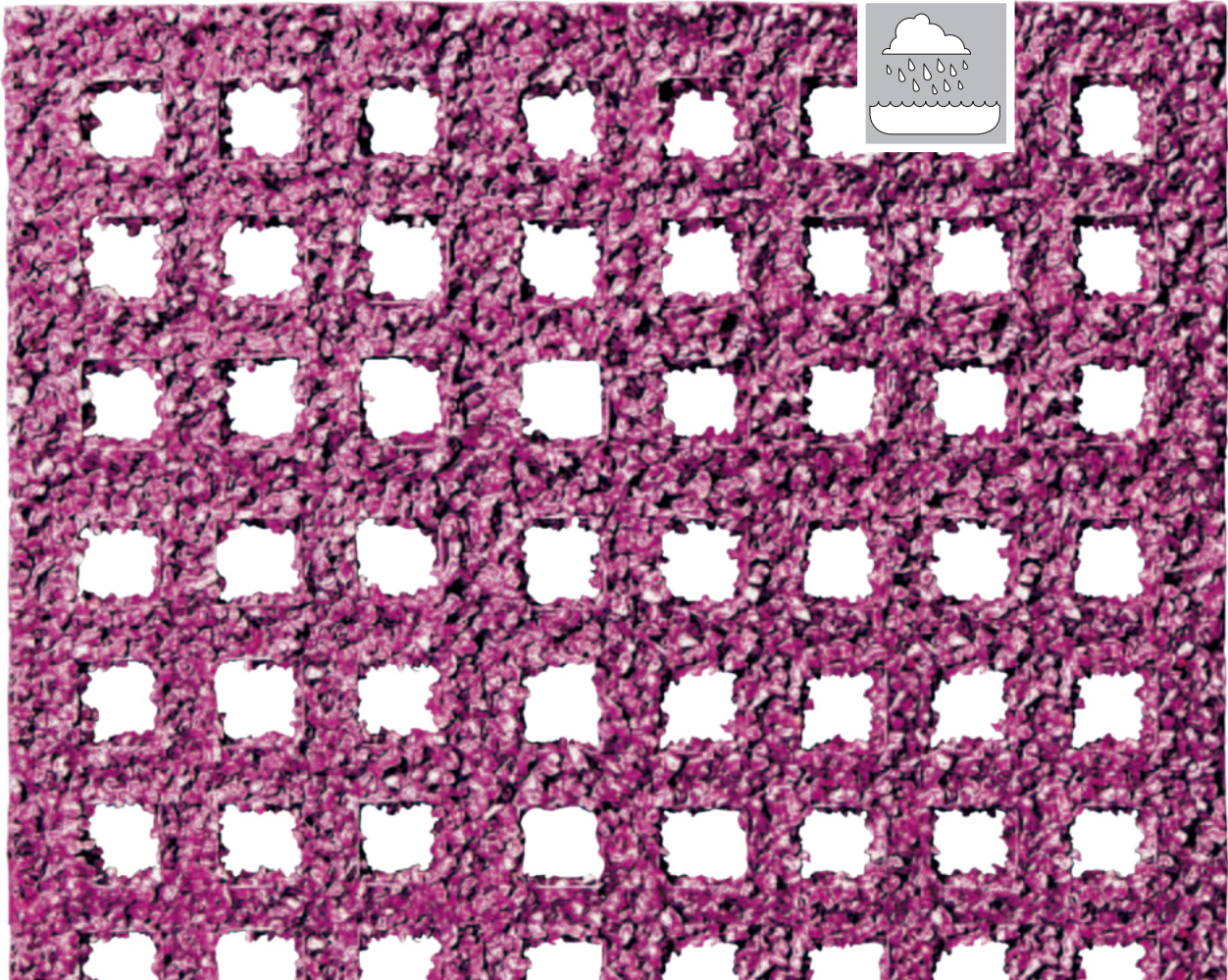


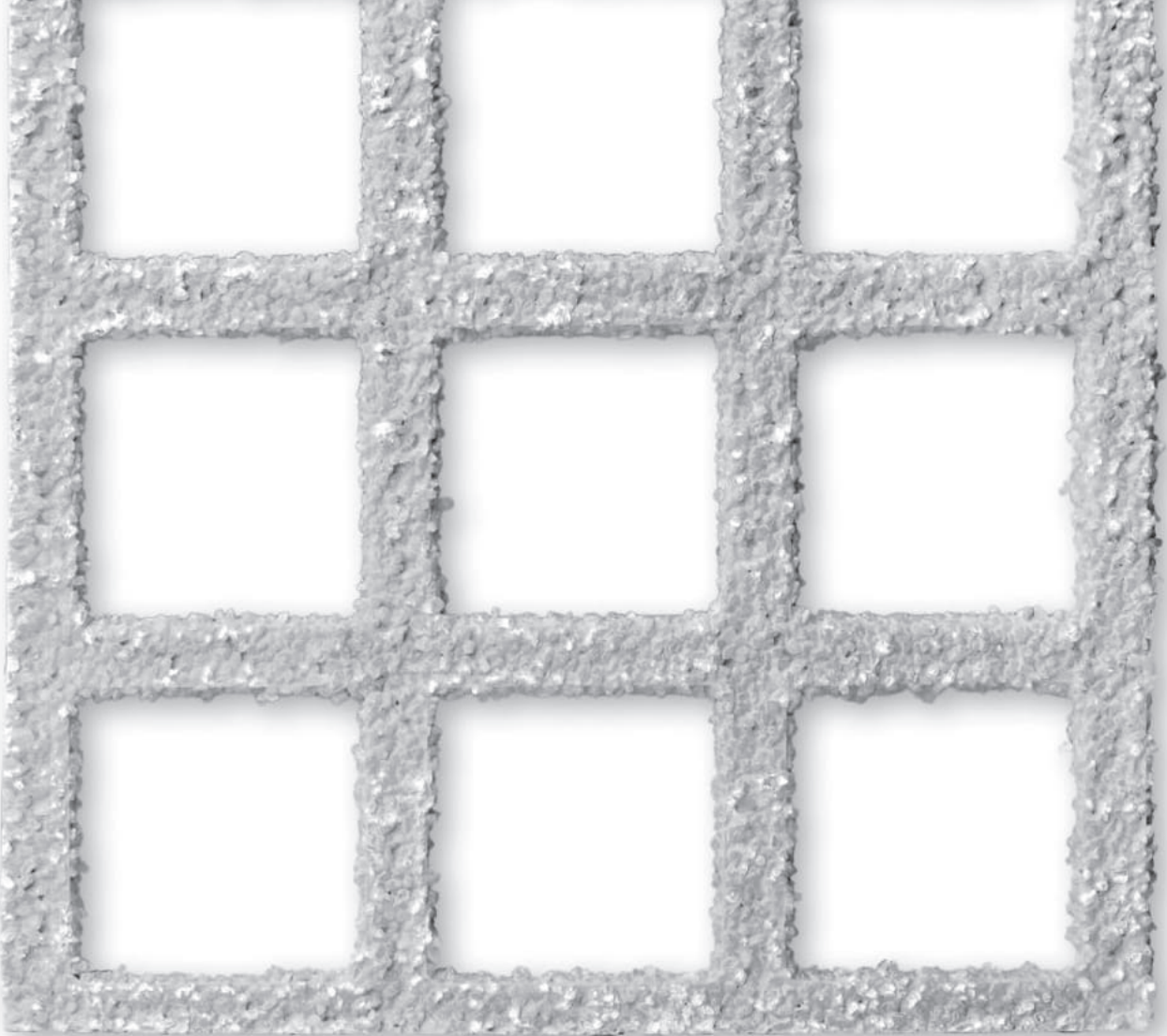
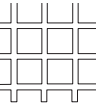
ISO 25
13 x 13



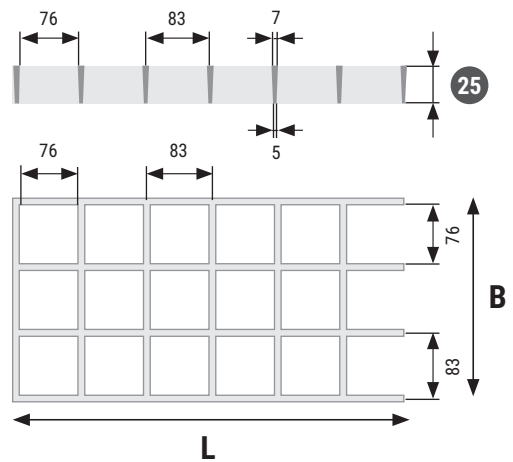
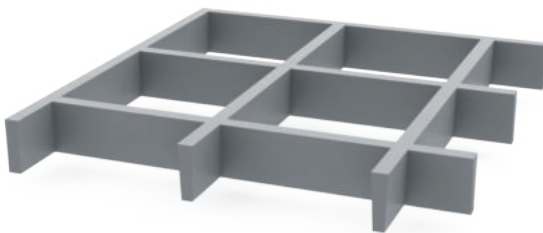
400 mm	315 kg	11 x F	1.800 kg/m ²	13 x q
600 mm	140 kg	16 x F	533 kg/m ²	19 x q
800 mm	78 kg	22 x F	225 kg/m ²	26 x q
1.000 mm	50 kg	27 x F	115 kg/m ²	32 x q
1.200 mm	35 kg	33 x F	67 kg/m ²	39 x q
1.400 mm	26 kg	38 x F	41 kg/m ²	45 x q
L / 200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	16,8
B x L = ? →		



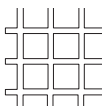


ISO 25
76x76

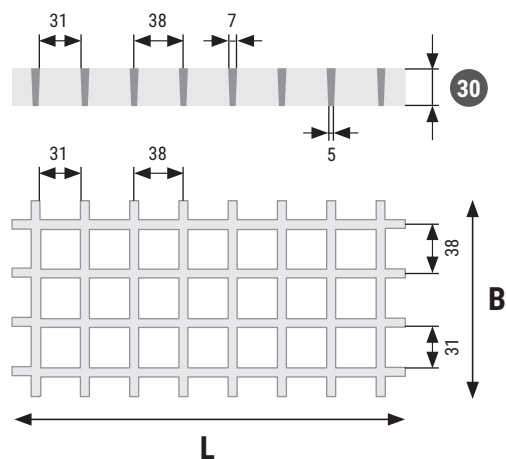
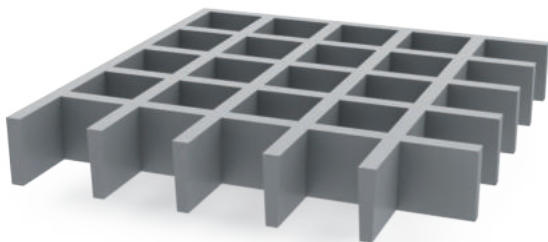


400 mm	141 kg	11 x F	823 kg/m ²	13 x q
600 mm	63 kg	16 x F	247 kg/m ²	19 x q
800 mm	35 kg	22 x F	104 kg/m ²	26 x q
1.000 mm	23 kg	27 x F	53 kg/m ²	32 x q
1.200 mm	16 kg	33 x F	31 kg/m ²	39 x q
1.400 mm	11 kg	738 x F	19 kg/m ²	45 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
4.007	1.007	5,8
B x L = ? →		



ISO 30

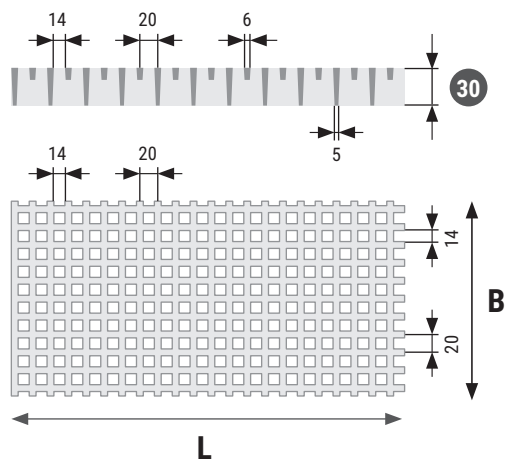
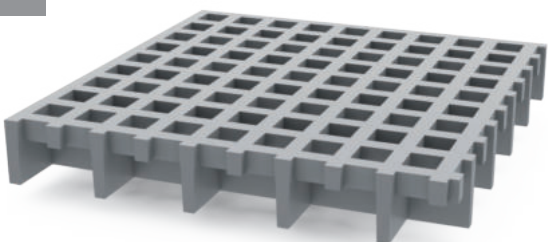


400 mm	486 kg	9 x F	2.777 kg/m ²	10 x q
600 mm	216 kg	13 x F	823 kg/m ²	16 x q
800 mm	122 kg	18 x F	347 kg/m ²	21 x q
1.000 mm	78 kg	23 x F	178 kg/m ²	27 x q
1.200 mm	54 kg	27 x F	103 kg/m ²	32 x q
1.400 mm	40 kg	32 x F	65 kg/m ²	38 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
998	998	14,6
1.988	998	14,6
2.440	1.220	14,6
3.007	1.007	14,6
3.016	998	14,6
3.050	1.524	14,6
3.660	1.220	14,6
4.002	998	14,6
4.007	1.007	14,6
B x L = ? →		

50

ISO 30 14 x 14

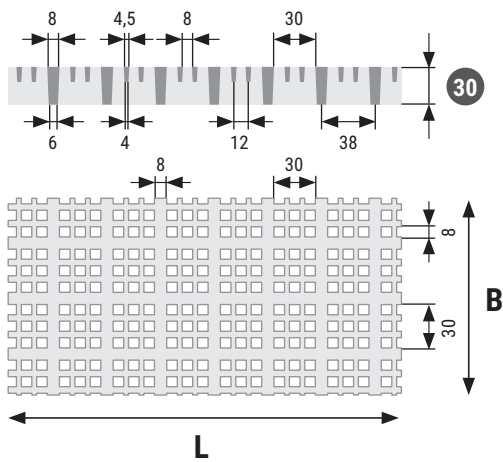
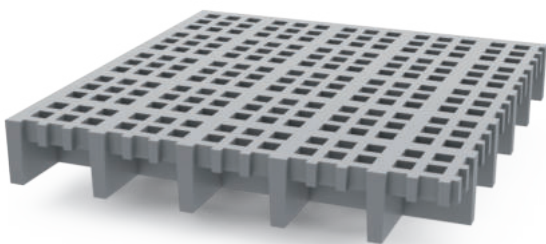


400 mm	517 kg	9 x F	2.996 kg/m ²	10 x q
600 mm	230 kg	13 x F	887 kg/m ²	16 x q
800 mm	129 kg	18 x F	374 kg/m ²	21 x q
1.000 mm	83 kg	23 x F	192 kg/m ²	27 x q
1.200 mm	57 kg	27 x F	111 kg/m ²	32 x q
1.400 mm	43 kg	732 x F	69 kg/m ²	38 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
2.007	1.007	18
3.007	1.007	18
3.687	1.247	18
B x L = ? →		

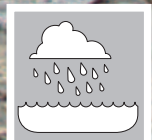
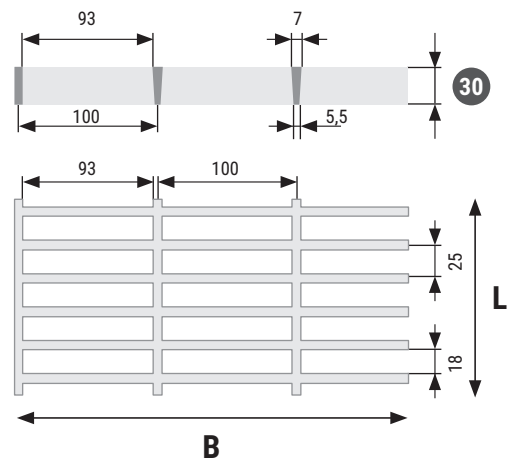
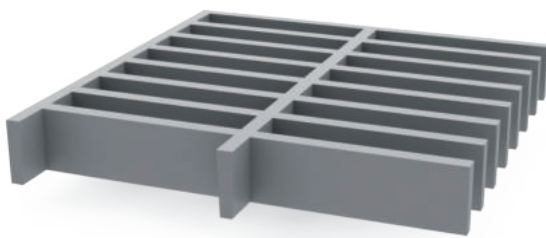


ISO 30
8 x 8



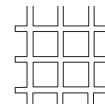
400 mm	544 kg	9 x F	3.110 kg/m ²	10 x q
600 mm	242 kg	13 x F	922 kg/m ²	16 x q
800 mm	137 kg	18 x F	389 kg/m ²	21 x q
1.000 mm	87 kg	23 x F	199 kg/m ²	27 x q
1.200 mm	60 kg	27 x F	115 kg/m ²	32 x q
1.400 mm	45 kg	32 x F	73 kg/m ²	38 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	22
3.660	1.220	22
B x L = ? →		

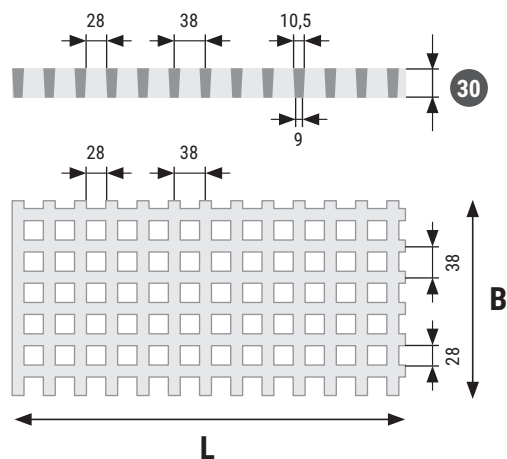
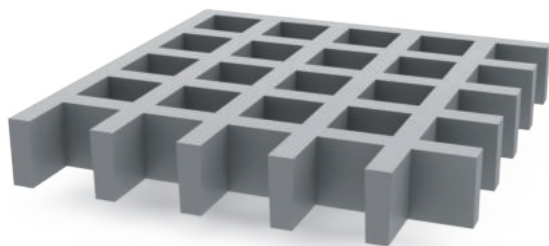
**ISO 30
93x18**

400 mm	753 kg	9 x F	4.218 kg/m ²	10 x q
600 mm	335 kg	13 x F	1.250 kg/m ²	16 x q
800 mm	188 kg	18 x F	527 kg/m ²	21 x q
1.000 mm	121 kg	23 x F	270 kg/m ²	27 x q
1.200 mm	84 kg	27 x F	156 kg/m ²	32 x q
1.400 mm	61 kg	32 x F	98 kg/m ²	38 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
3.007	1.007	15,6
B x L = ? →		



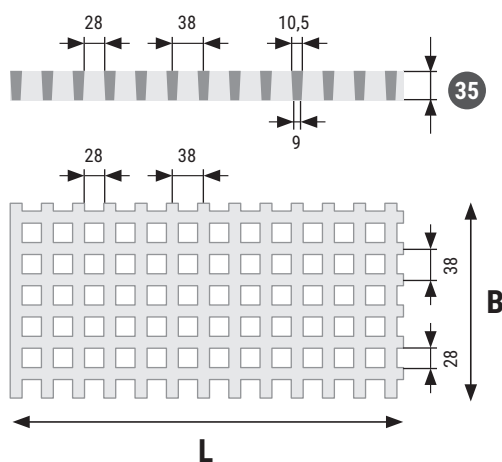
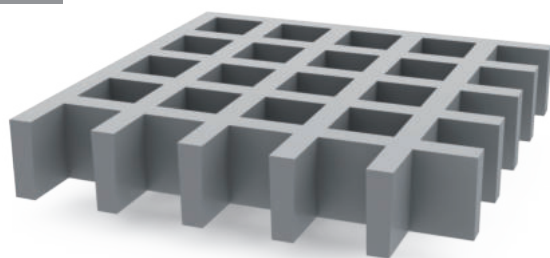
ISO 30
SWL



400 mm	810 kg	9 x F	4.629 kg/m ²	10 x q
600 mm	360 kg	13 x F	1.372 kg/m ²	16 x q
800 mm	203 kg	18 x F	579 kg/m ²	21 x q
1.000 mm	130 kg	23 x F	296 kg/m ²	27 x q
1.200 mm	90 kg	27 x F	171 kg/m ²	32 x q
1.400 mm	66 kg	32 x F	108 kg/m ²	38 x q
L/125 = 0,75%				

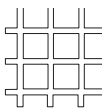
L (mm)	B (mm)	kg/m ²
3.660	1.220	25
B x L = ? →		

ISO 35
SWL

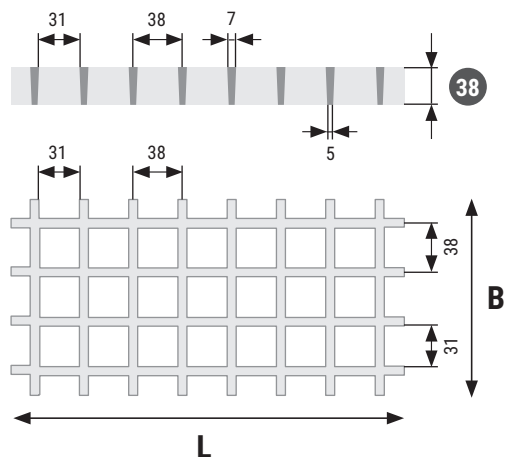
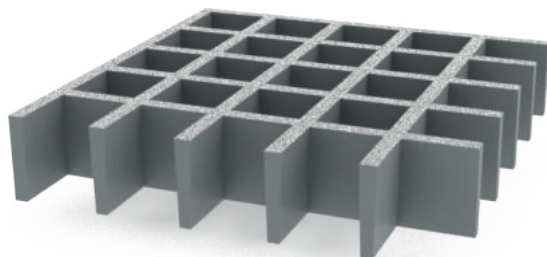


400 mm	1.286 kg	7 x F	7.351 kg/m ²	9 x q
600 mm	572 kg	11 x F	2.178 kg/m ²	14 x q
800 mm	322 kg	15 x F	919 kg/m ²	18 x q
1.000 mm	206 kg	19 x F	470 kg/m ²	23 x q
1.200 mm	143 kg	23 x F	272 kg/m ²	28 x q
1.400 mm	105 kg	27 x F	171 kg/m ²	32 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
3.660	1.220	25
B x L = ? →		



ISO 38

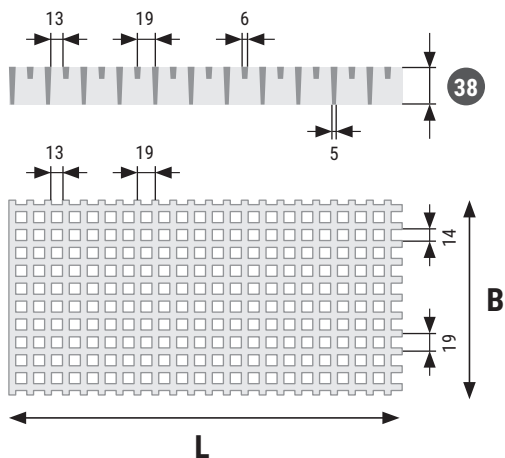
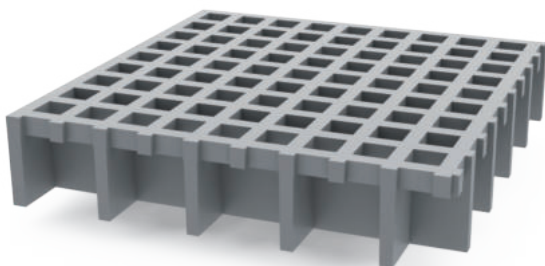


400 mm	988 kg	7 x F	5.645 kg/m ²	8 x q
600 mm	439 kg	10 x F	1.672 kg/m ²	12 x q
800 mm	247 kg	14 x F	706 kg/m ²	17 x q
1.000 mm	158 kg	18 x F	361 kg/m ²	21 x q
1.200 mm	110 kg	21 x F	209 kg/m ²	25 x q
1.400 mm	81 kg	25 x F	132 kg/m ²	30 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
998	998	19,5
1.988	998	19,5
2.440	1.220	19,5
3.007	1.007	19,5
3.016	998	19,5
3.050	1.524	19,5
3.660	1.220	19,5
4.002	998	19,5
4.007	1.007	19,5
4.000	1.524	19,5
B x L = ? → ☎		

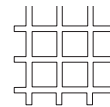
54

ISO 38 13 x 13

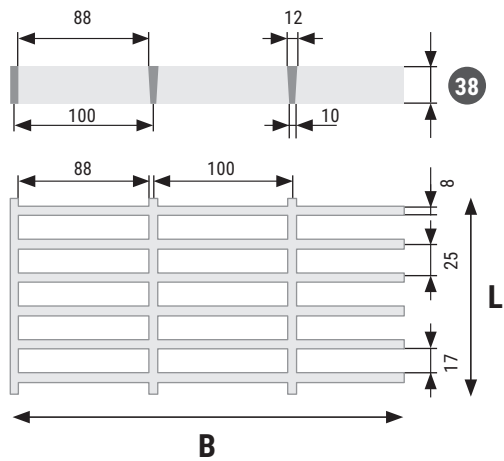
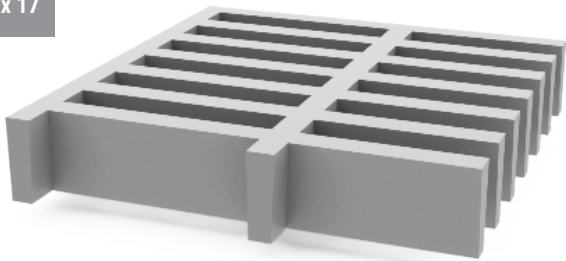


400 mm	1.107kg	7 x F	6.322 kg/m ²	8 x q
600 mm	492 kg	10 x F	1.873 kg/m ²	12 x q
800 mm	277 kg	14 x F	791 kg/m ²	17 x q
1.000 mm	177 kg	18 x F	404 kg/m ²	21 x q
1.200 mm	123 kg	21 x F	234 kg/m ²	25 x q
1.400 mm	91 kg	25 x F	148 kg/m ²	30 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	23,5
3.016	998	23,5
3.050	1.524	23,5
3.660	1.220	23,5
4.002	998	23,5
B x L = ? → ☎		



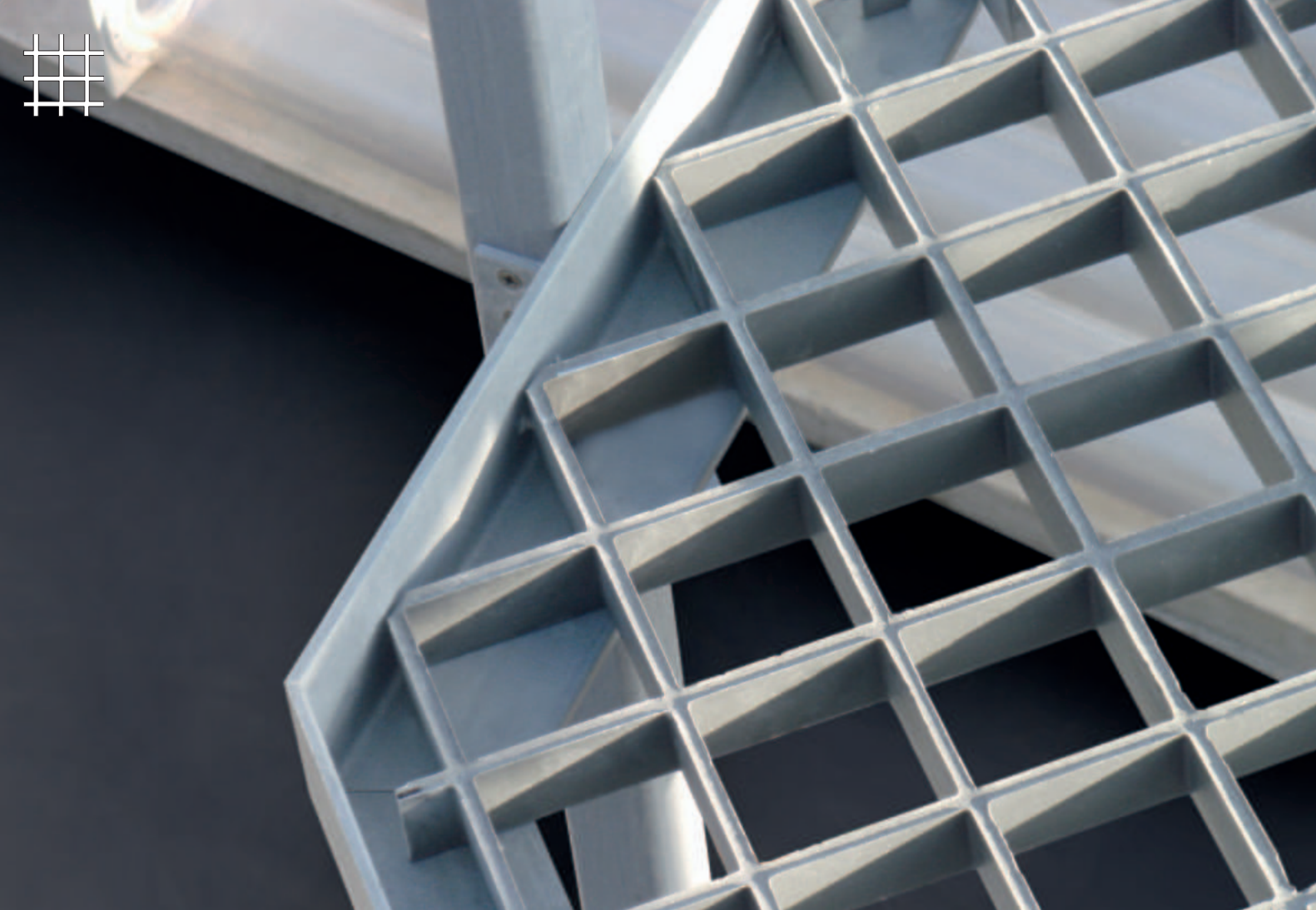
ISO 38
88 x 17

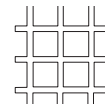


400 mm	1.531 kg	7 x F	8.572 kg/m ²	8 x q
600 mm	680 kg	10 x F	2.540 kg/m ²	12 x q
800 mm	383 kg	14 x F	1.071 kg/m ²	17 x q
1.000 mm	245 kg	18 x F	549 kg/m ²	21 x q
1.200 mm	170 kg	21 x F	317 kg/m ²	25 x q
1.400 mm	125 kg	25 x F	200 kg/m ²	30 x q
L/200 = 0,5%				

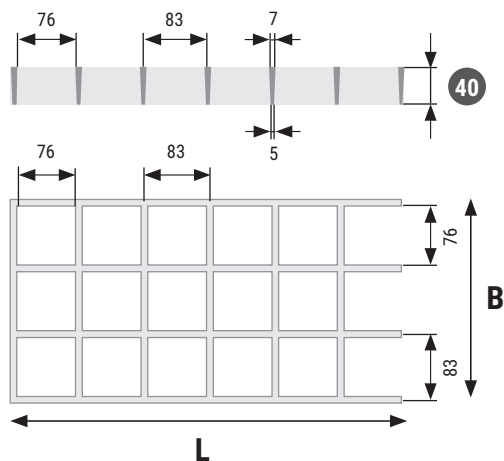
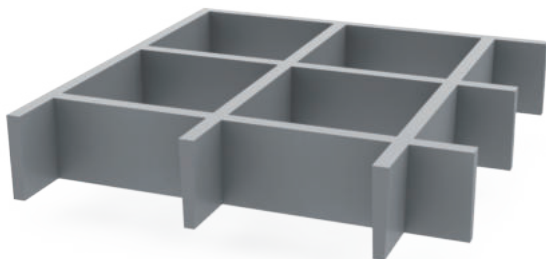
L (mm)	B (mm)	kg/m ²
3.660	1.220	22,5
B x L = ? →		







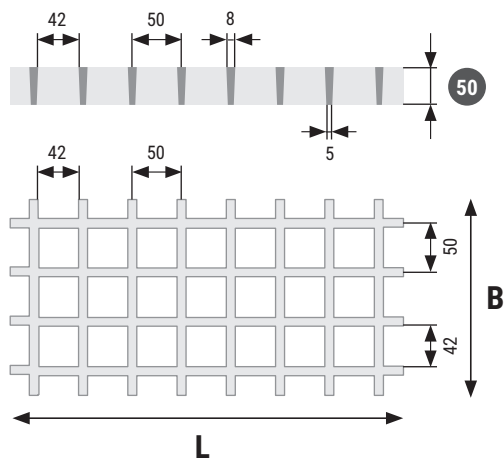
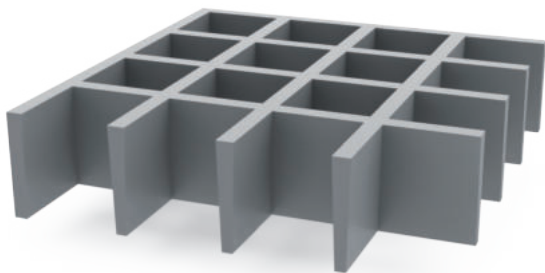
ISO 40
76 x 76



400 mm	576 kg	7 x F	3.170 kg/m ²	8 x q
600 mm	256 kg	10 x F	939 kg/m ²	12 x q
800 mm	144 kg	14 x F	396 kg/m ²	17 x q
1.000 mm	92 kg	18 x F	203 kg/m ²	21 x q
1.200 mm	64 kg	21 x F	117 kg/m ²	25 x q
1.400 mm	47 kg	25 x F	74 kg/m ²	30 x q
L/200 = 0,5%				

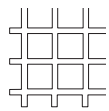
L (mm)	B (mm)	kg/m ²
4.088	1.507	9,5
2.007	1.007	9,5
B x L = ? →		

ISO 50

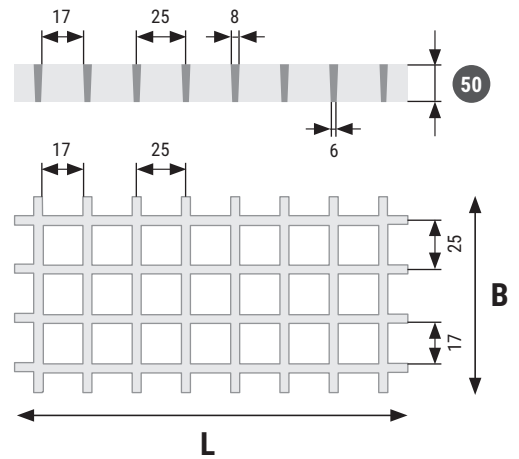
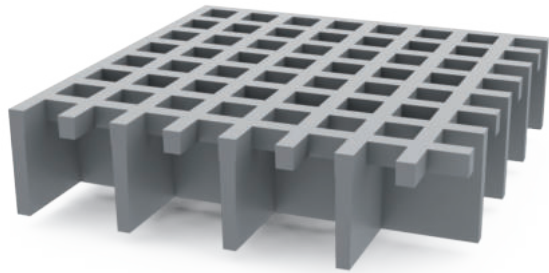


400 mm	1.800 kg	5 x F	10.001 kg/m ²	6 x q
600 mm	800 kg	8 x F	2.963 kg/m ²	9 x q
800 mm	450 kg	11 x F	1.250 kg/m ²	13 x q
1.000 mm	288 kg	13 x F	640 kg/m ²	16 x q
1.200 mm	200 kg	16 x F	370 kg/m ²	19 x q
1.400 mm	147 kg	19 x F	233 kg/m ²	22 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.990	1.220	23,7
3.660	1.220	23,7
B x L = ? →		



ISO 50
17 x 17

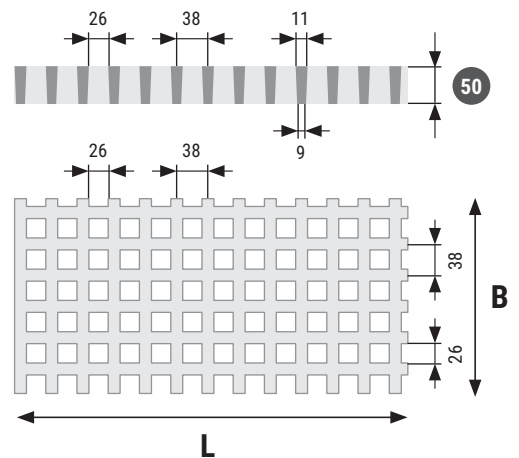
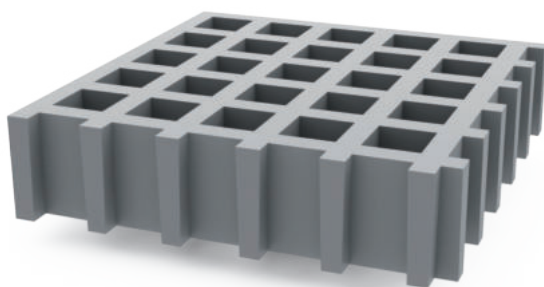


400 mm	2.016 kg	5 x F	11.201 kg/m ²	6 x q
600 mm	896 kg	38 x F	3.319 kg/m ²	9 x q
800 mm	504 kg	11 x F	1.400 kg/m ²	13 x q
1.000 mm	323 kg	13 x F	717 kg/m ²	16 x q
1.200 mm	224 kg	16 x F	414 kg/m ²	19 x q
1.400 mm	165 kg	19 x F	261 kg/m ²	22 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
4.022	1.532	28,5
B x L = ? →		

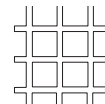
58

ISO 50
SWL

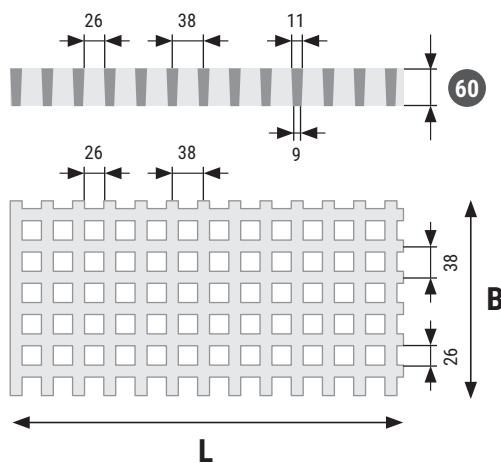
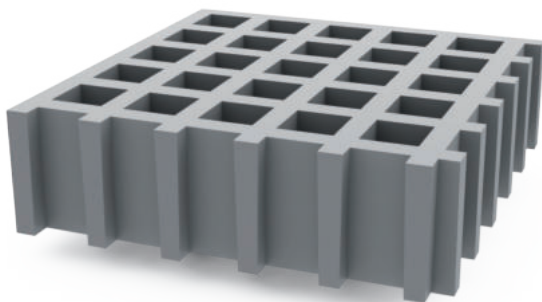


400 mm	3.750 kg	5 x F	21.431 kg/m ²	6 x q
600 mm	1.667 kg	8 x F	6.350 kg/m ²	9 x q
800 mm	938 kg	11 x F	2.679 kg/m ²	13 x q
1.000 mm	600 kg	13 x F	1.372 kg/m ²	16 x q
1.200 mm	417 kg	16 x F	794 kg/m ²	19 x q
1.400 mm	306 kg	19 x F	500 kg/m ²	22 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	42
B x L = ? →		

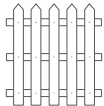


ISO 60
SWL

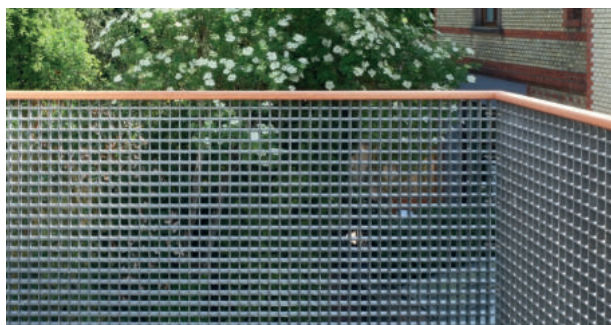
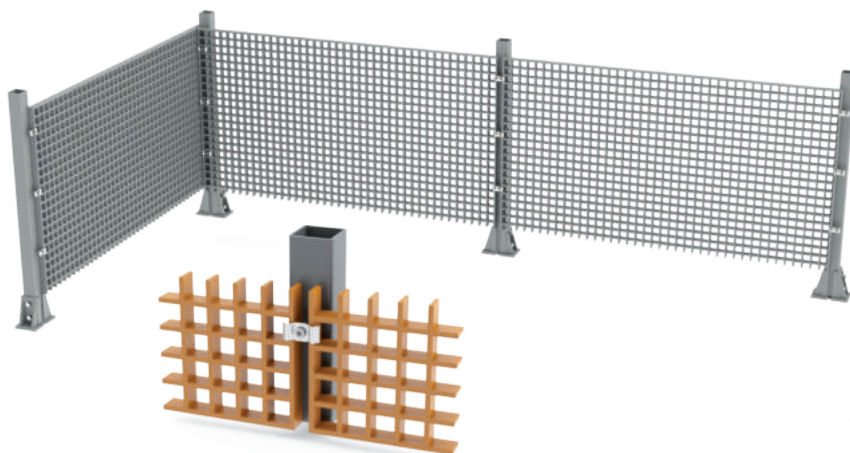


				
400 mm	6.480 kg	4 x F	37.033 kg/m ²	5 x q
600 mm	2.880 kg	6 x F	10.973 kg/m ²	8 x q
800 mm	1.620 kg	9 x F	4.629 kg/m ²	10 x q
1.000 mm	1.037 kg	11 x F	2.370 kg/m ²	13 x q
1.200 mm	720 kg	13 x F	1.372 kg/m ²	16 x q
1.400 mm	529 kg	16 x F	864 kg/m ²	19 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	50,4
B x L = ? → 		

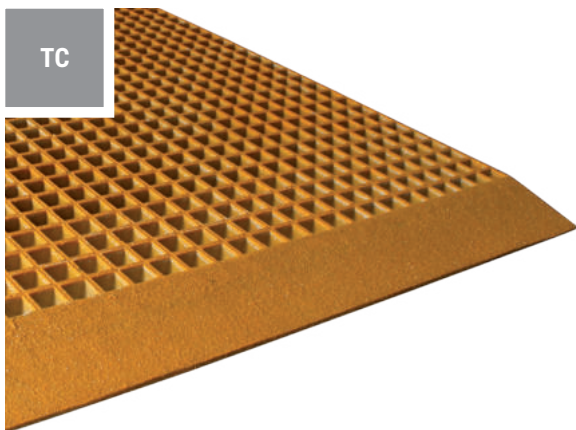


FC

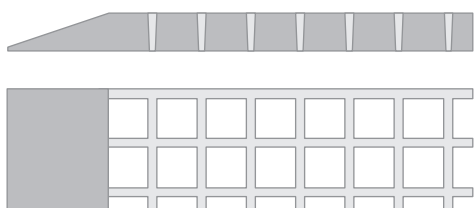




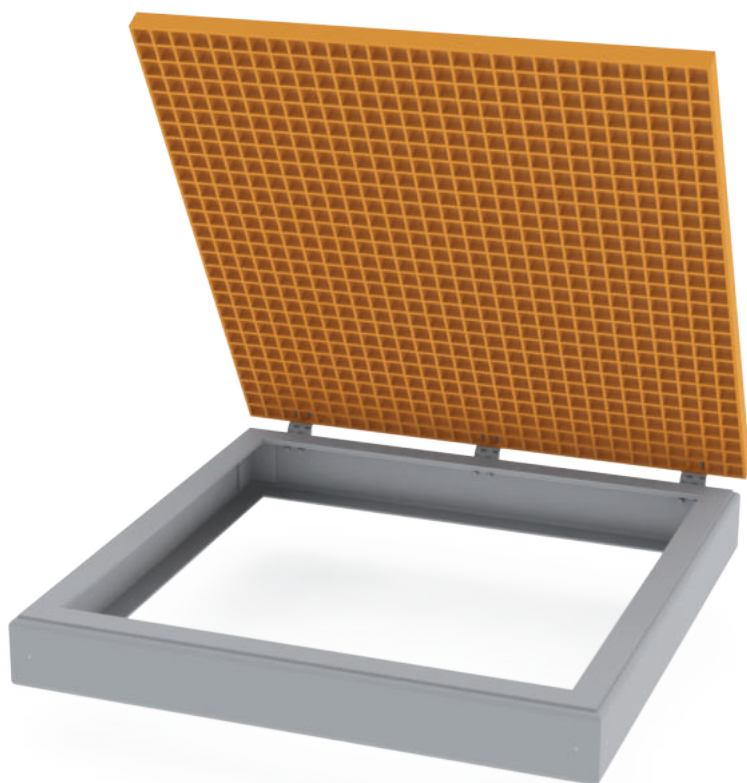
TC

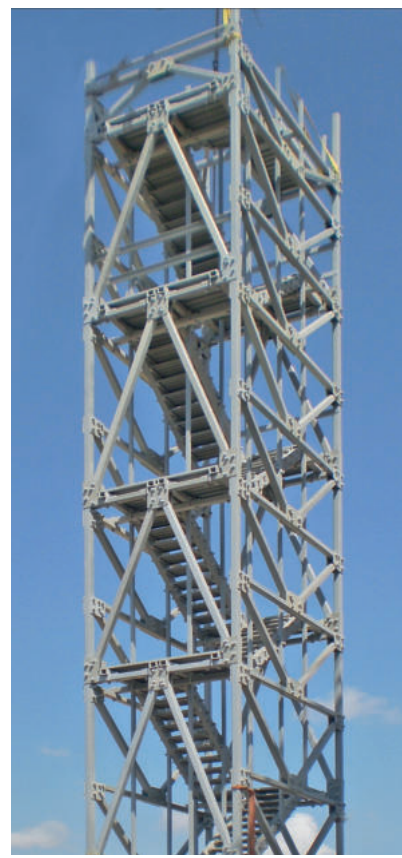
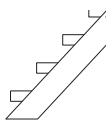


RG



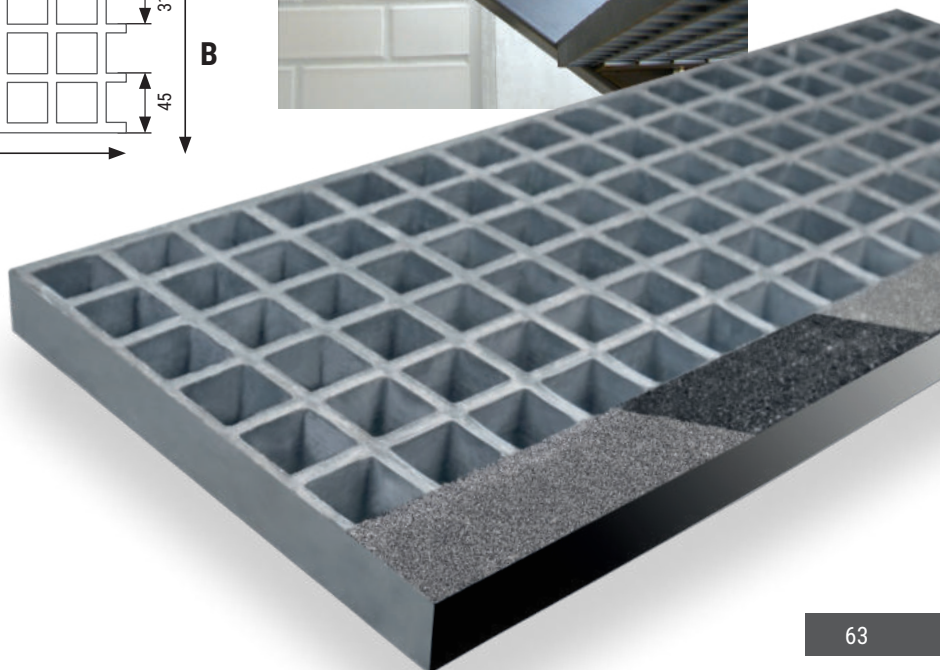
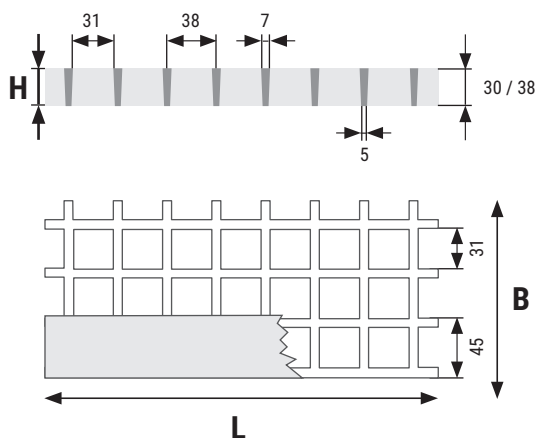
HC-G







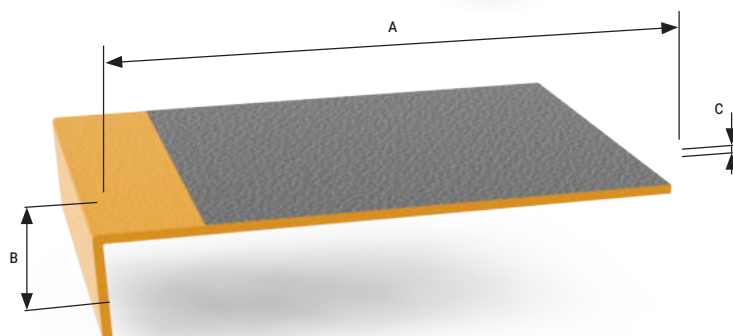
SG



	L (mm)	B (mm)	H (mm)	kg
SG 30	995	273	30	3,8
SG 30	995	311	30	4,3
SG 38	995	273	38	5,2
SG 38	995	311	38	5,9

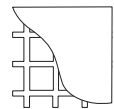
63

STC

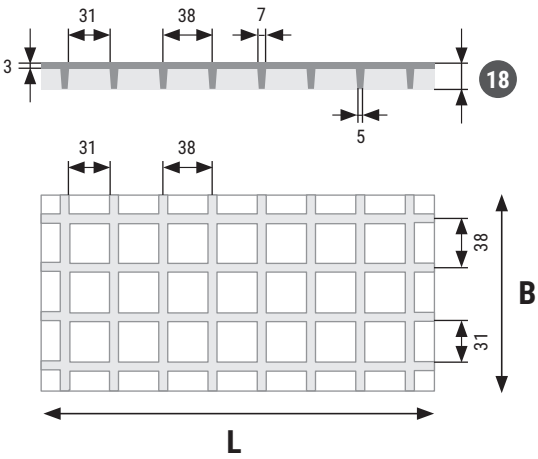
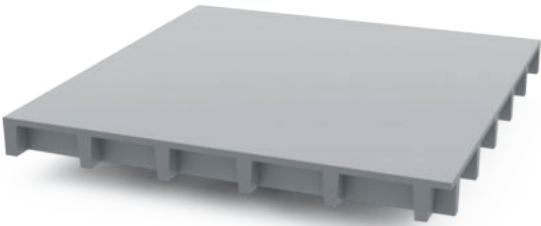


	A (mm)	B (mm)	C (mm)	kg/m
STC 70	70	30	4	0,63
STC 55	55	55	4	0,74
STC 345	345	55	4	3,85
STC 800	800	55	4	8,0





P 15

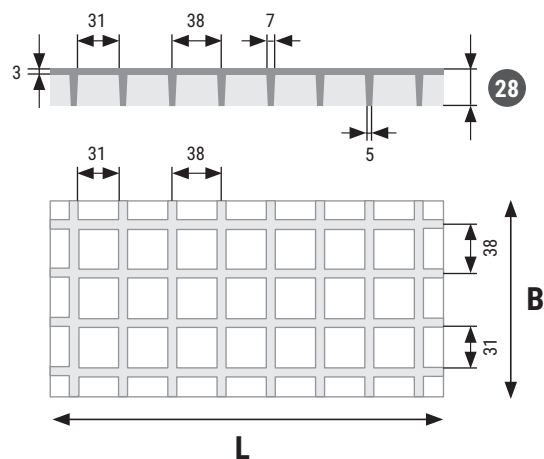
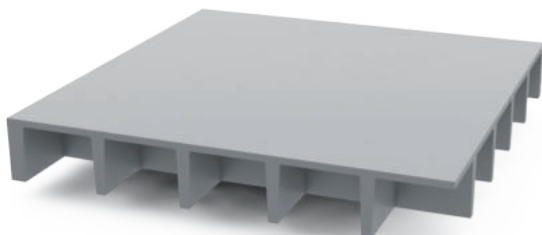


400 mm	58 kg	18 x F	321 kg/m ²	21 x q
600 mm	25 kg	27 x F	95 kg/m ²	32 x q
800 mm	14 kg	37 x F	40 kg/m ²	43 x q
1.000 mm	9 kg	46 x F	20 kg/m ²	54 x q
1.200 mm	6 kg	55 x F	13 kg/m ²	65 x q
1.400 mm	5 kg	64 x F	8 kg/m ²	76 x q
L / 200 = 0,5%				

L (mm)	B (mm)	kg/m ²
4.000	1.220	11,5
B x L = ? →		



P 25

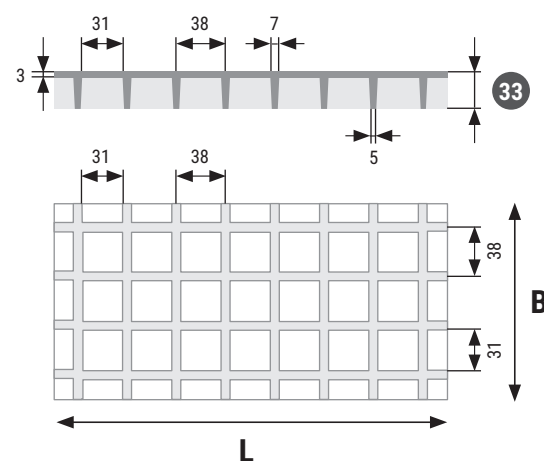
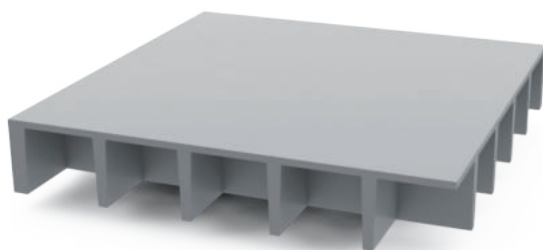


400 mm	351 kg	11 x F	2.009 kg/m ²	13 x q
600 mm	156 kg	16 x F	595 kg/m ²	19 x q
800 mm	88 kg	22 x F	251 kg/m ²	26 x q
1.000 mm	56 kg	27 x F	129 kg/m ²	32 x q
1.200 mm	39 kg	33 x F	75 kg/m ²	39 x q
1.400 mm	29 kg	38 x F	46 kg/m ²	45 x q
L/125 = 0,75%				

L (mm)	B (mm)	kg/m ²
1.988	998	15
3.660	1.220	15
B x L = ? → ☎		

65

P 30

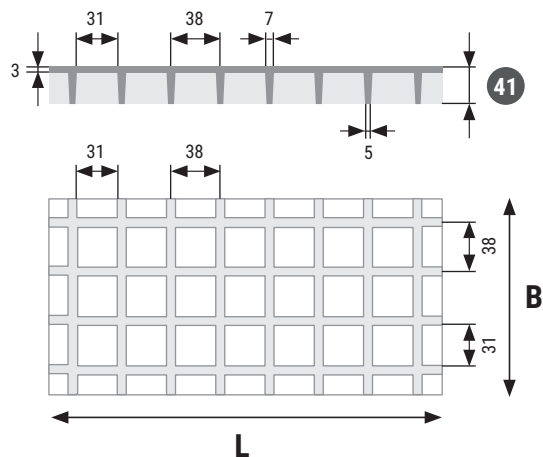
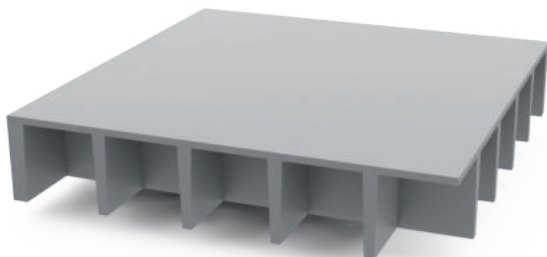


400 mm	608 kg	9 x F	3.471 kg/m ²	10 x q
600 mm	270 kg	13 x F	1.029 kg/m ²	16 x q
800 mm	153 kg	18 x F	434 kg/m ²	21 x q
1.000 mm	98 kg	23 x F	223 kg/m ²	27 x q
1.200 mm	68 kg	27 x F	129 kg/m ²	32 x q
1.400 mm	50 kg	32 x F	81 kg/m ²	38 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	17
3.660	1.220	17
B x L = ? → ☎		



P 38

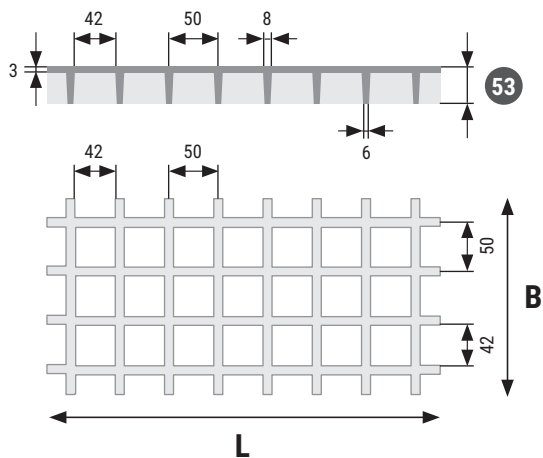
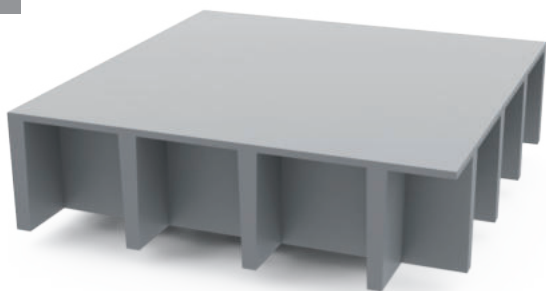


400 mm	1.235 kg	7 x F	7.056 kg/m ²	8 x q
600 mm	549 kg	10 x F	2.090 kg/m ²	12 x q
800 mm	309 kg	14 x F	883 kg/m ²	17 x q
1.000 mm	198 kg	18 x F	451 kg/m ²	21 x q
1.200 mm	138 kg	21 x F	261 kg/m ²	25 x q
1.400 mm	101 kg	25 x F	165 kg/m ²	30 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.988	998	25
3.660	1.220	25
4.000	1.524	25
B x L = ? →		

66

P 50

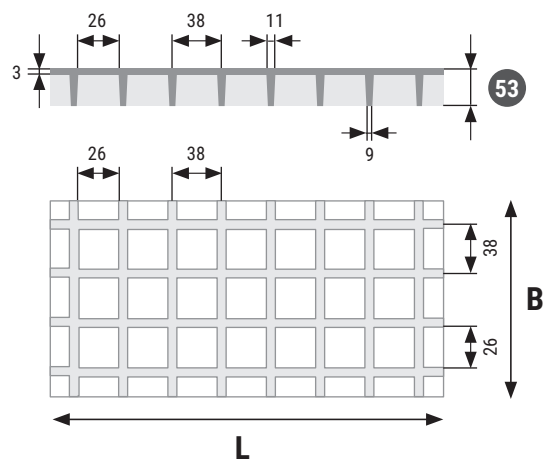
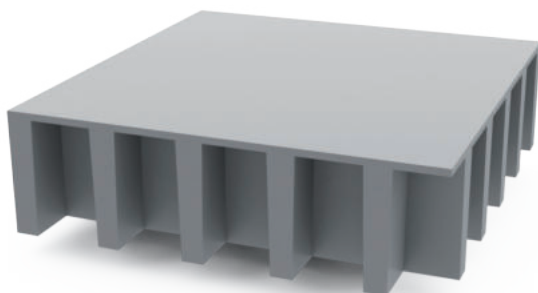


400 mm	2.250 kg	5 x F	12.501 kg/m ²	6 x q
600 mm	1.000 kg	8 x F	3.704 kg/m ²	9 x q
800 mm	563 kg	11 x F	1.563 kg/m ²	13 x q
1.000 mm	360 kg	13 x F	800 kg/m ²	16 x q
1.200 mm	250 kg	16 x F	463 kg/m ²	19 x q
1.400 mm	184 kg	19 x F	291 kg/m ²	22 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
1.990	1.020	28,5
3.660	1.220	28,5
B x L = ? →		



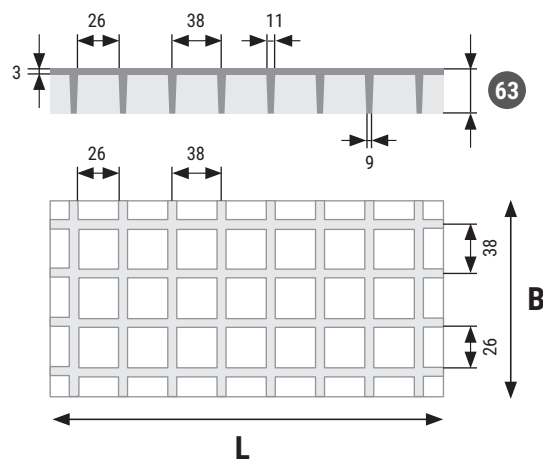
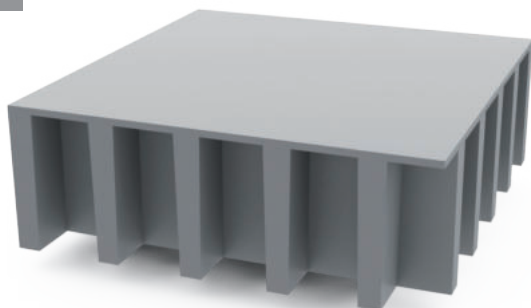
P 50 SWL



400 mm	4.688 kg	5 x F	26.789 kg/m ²	6 x q
600 mm	2.084 kg	8 x F	7.938 kg/m ²	9 x q
800 mm	1.173 kg	11 x F	3.349 kg/m ²	13 x q
1.000 mm	750 kg	13 x F	1.715 kg/m ²	16 x q
1.200 mm	521kg	16 x F	993 kg/m ²	19 x q
1.400 mm	383 kg	19 x F	625 kg/m ²	22 x q
L/200 = 0,5%				

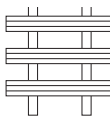
L (mm)	B (mm)	kg/m ²
4.000	1.220	47,5
B x L = ? →		

P 60 SWL

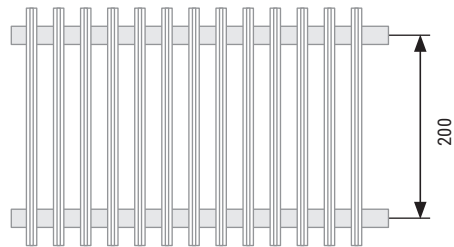
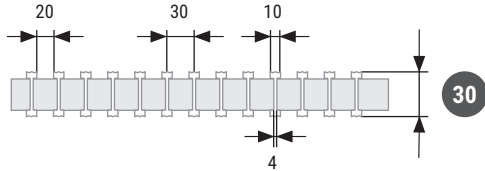


400 mm	8.100 kg	4 x F	46.291 kg/m ²	5 x q
600 mm	3.600 kg	6 x F	13.716 kg/m ²	8 x q
800 mm	2.025 kg	9 x F	5.786 kg/m ²	10 x q
1.000 mm	1.296 kg	11 x F	2.963 kg/m ²	13 x q
1.200 mm	900 kg	13 x F	1.715 kg/m ²	16 x q
1.400 mm	661 kg	16 x F	1.080 kg/m ²	19 x q
L/200 = 0,5%				

L (mm)	B (mm)	kg/m ²
4.000	1.220	55,9
B x L = ? →		

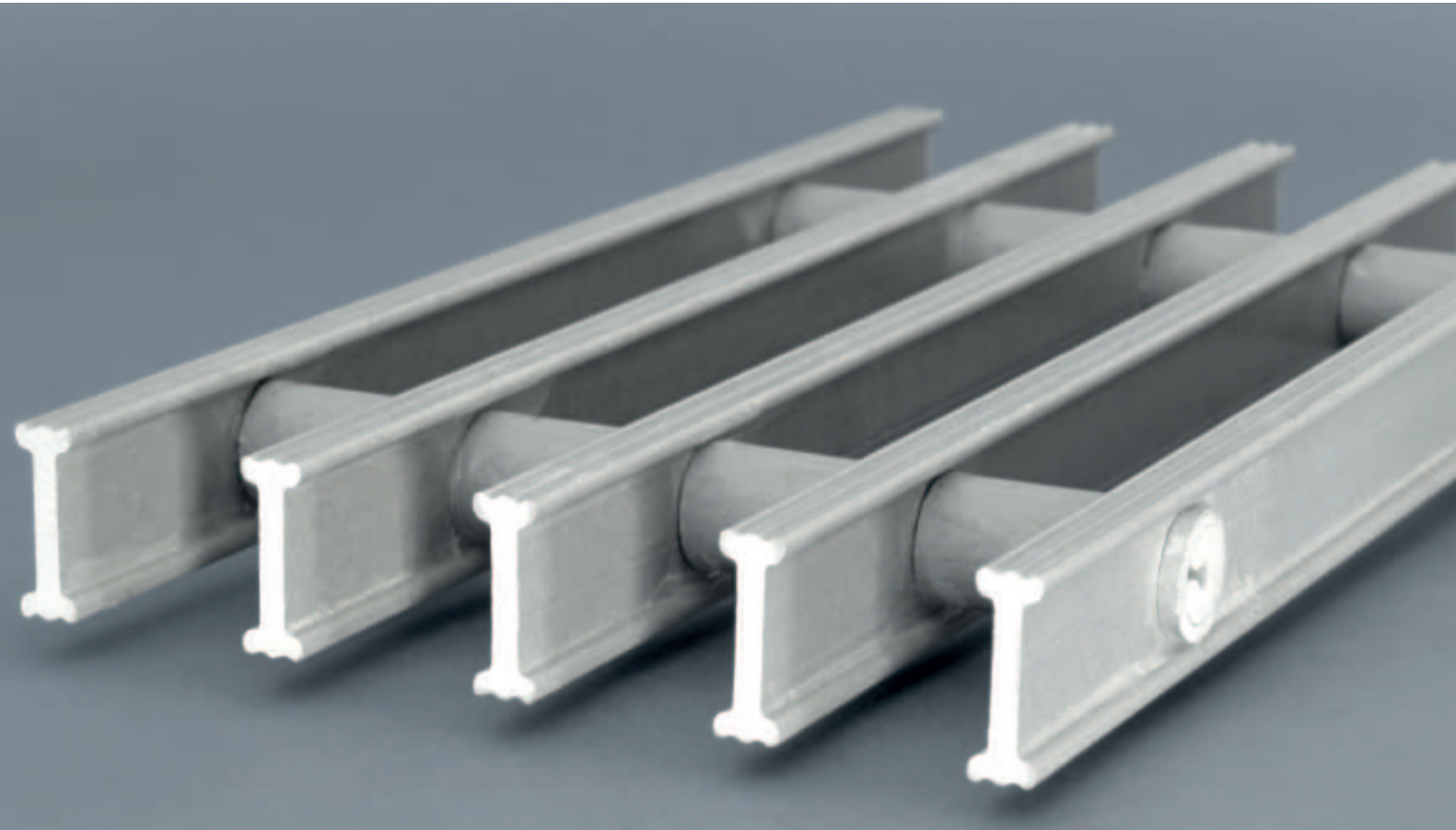


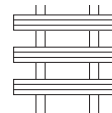
RP
30x10x20



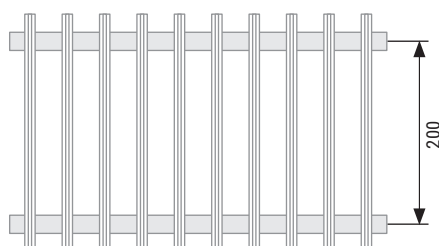
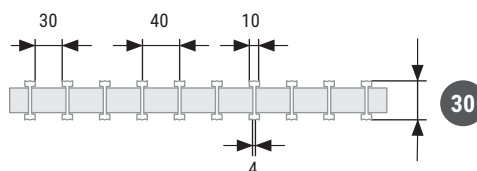
400 mm	365 kg	5 x F	7.094 kg/m ²	6 x q
600 mm	162 kg	7 x F	2.102 kg/m ²	9 x q
800 mm	91 kg	10 x F	887 kg/m ²	12 x q
1.000 mm	58 kg	12 x F	454 kg/m ²	15 x q
1.200 mm	41 kg	14 x F	263 kg/m ²	18 x q
1.400 mm	30 kg	17 x F	165 kg/m ²	21 x q
L / 200 = 0,5%				

kg/m ²
13





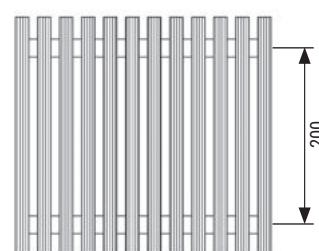
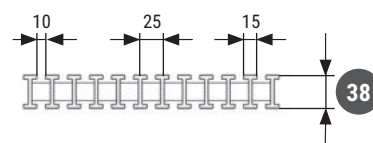
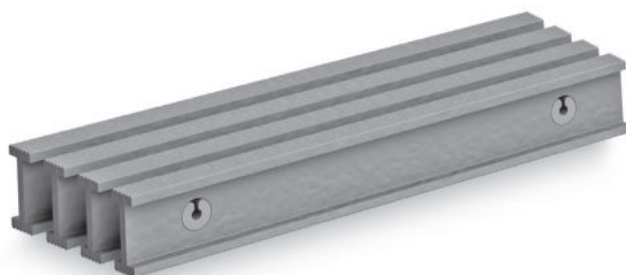
RP
30x10x30



400 mm	1.035 kg	5 x F	17.180 kg/m ²	6 x q
600 mm	523 kg	7 x F	5.758 kg/m ²	9 x q
800 mm	319 kg	10 x F	2.628 kg/m ²	12 x q
1.000 mm	209 kg	12 x F	1.369 kg/m ²	15 x q
1.200 mm	146 kg	14 x F	815 kg/m ²	18 x q
1.400 mm	120 kg	17 x F	601 kg/m ²	21 x q
L/200 = 0,5%				

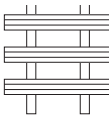
kg/m ²
11,5

RP
38x15x10

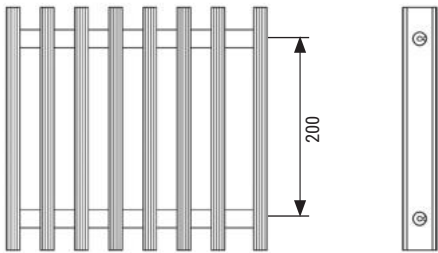
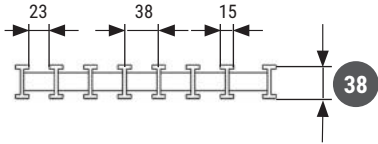


400 mm	1.284 kg	4x F	23.400 kg/m ²	5 x q
600 mm	571 kg	6 x F	6.933 kg/m ²	7 x q
800 mm	321 kg	7 x F	2.925 kg/m ²	10 x q
1.000 mm	205 kg	10 x F	1.498 kg/m ²	12 x q
1.200 mm	143 kg	11 x F	867 kg/m ²	14 x q
1.400 mm	105 kg	13 x F	546 kg/m ²	17 x q
L/200 = 0,5%				

kg/m ²
11,5



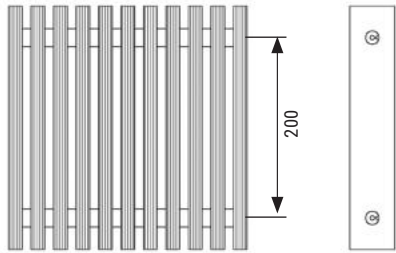
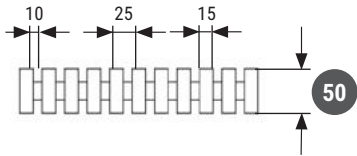
RP
38x15x23



				
400 mm	856 kg	4 x F	15.410 kg/m ²	5 x q
600 mm	380 kg	6 x F	4.566 kg/m ²	7 x q
800 mm	214 kg	8 x F	1.926 kg/m ²	10 x q
1.000 mm	209 kg	10 x F	986 kg/m ²	12 x q
1.200 mm	146 kg	11 x F	571 kg/m ²	14 x q
1.400 mm	120 kg	13 x F	359 kg/m ²	17 x q
L/200 = 0,5%				

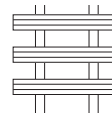
kg/m ²
11,5

RP
50x15x10

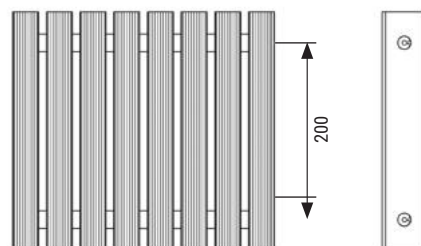
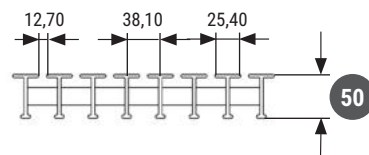


				
400 mm	4.414 kg	3 x F	80.428 kg/m ²	4 x q
600 mm	1.962 kg	4 x F	23.831 kg/m ²	5 x q
800 mm	1.103 kg	6 x F	10.054 kg/m ²	7 x q
1.000 mm	706 kg	7 x F	5.147 kg/m ²	9 x q
1.200 mm	490 kg	9 x F	2.979 kg/m ²	11 x q
1.400 mm	360 kg	10 x F	1.876 kg/m ²	13 x q
L/200 = 0,5%				

kg/m ²
11,5



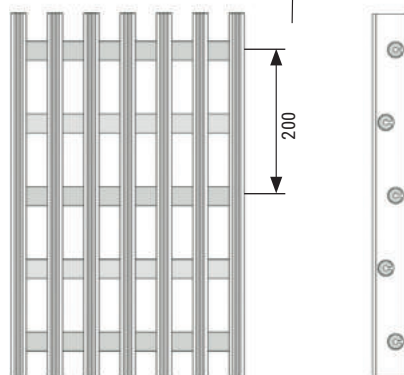
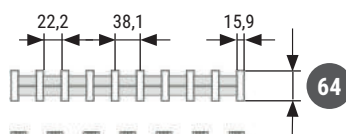
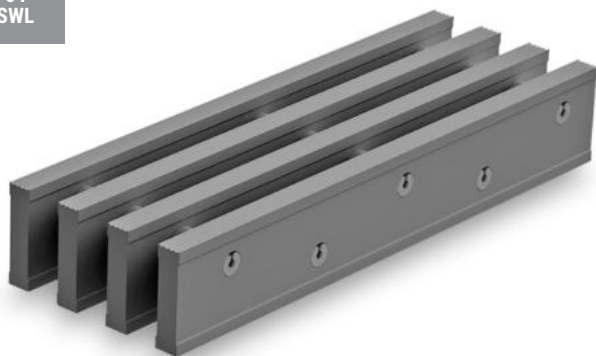
RP
50x25,4x12,7



400 mm	1.856 kg	2 x F	33.407 kg/m ²	3 x q
600 mm	825 kg	4 x F	9.898 kg/m ²	5 x q
800 mm	464 kg	5 x F	4.176 kg/m ²	6 x q
1.000 mm	297 kg	6 x F	2.138 kg/m ²	8 x q
1.200 mm	206 kg	7 x F	1.237 kg/m ²	9 x q
1.400 mm	152 kg	8 x F	779 kg/m ²	11 x q
L/200 = 0,5%				

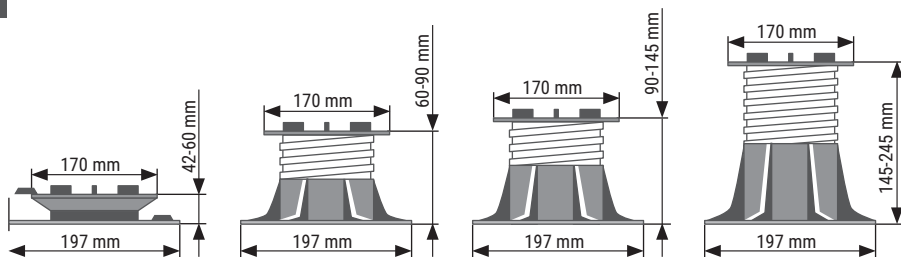
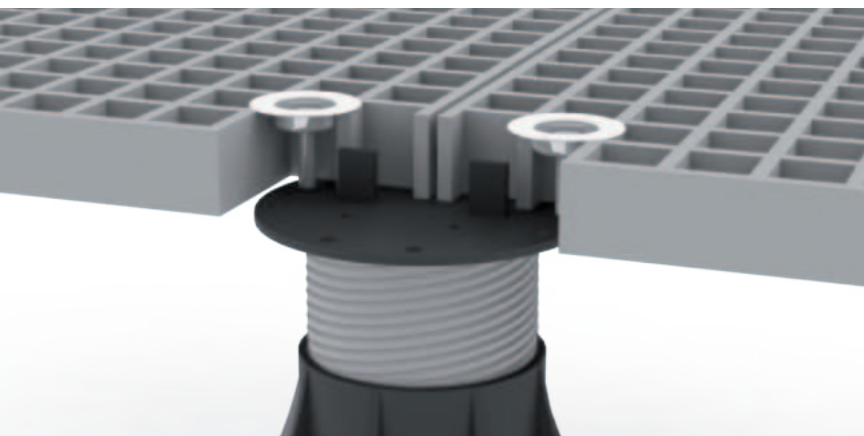
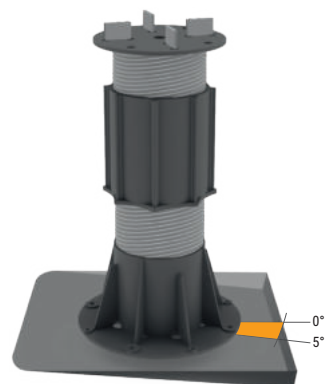
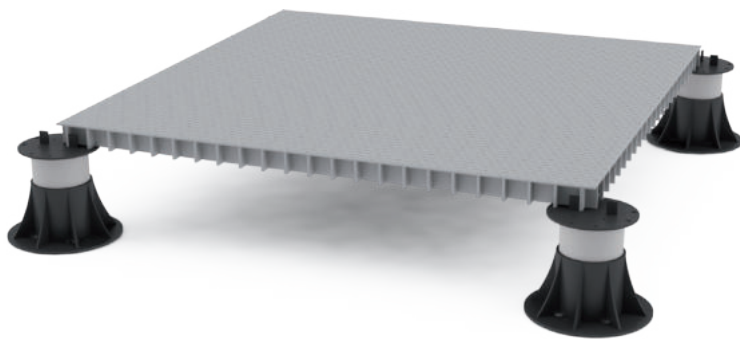
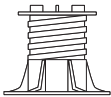
kg/m ²
11,5

RP
64
SWL



400 mm	6.434 kg	2 x F	115.804 kg/m ²	3 x q
600 mm	2.859 kg	3 x F	34.312 kg/m ²	4 x q
800 mm	1.608 kg	5 x F	14.476 kg/m ²	6 x q
1.000 mm	1.029 kg	6 x F	7.411 kg/m ²	7 x q
1.200 mm	715 kg	7 x F	4.289 kg/m ²	9 x q
1.400 mm	525 kg	8 x F	2.701 kg/m ²	10 x q
L/200 = 0,5%				

kg/m ²
11,5

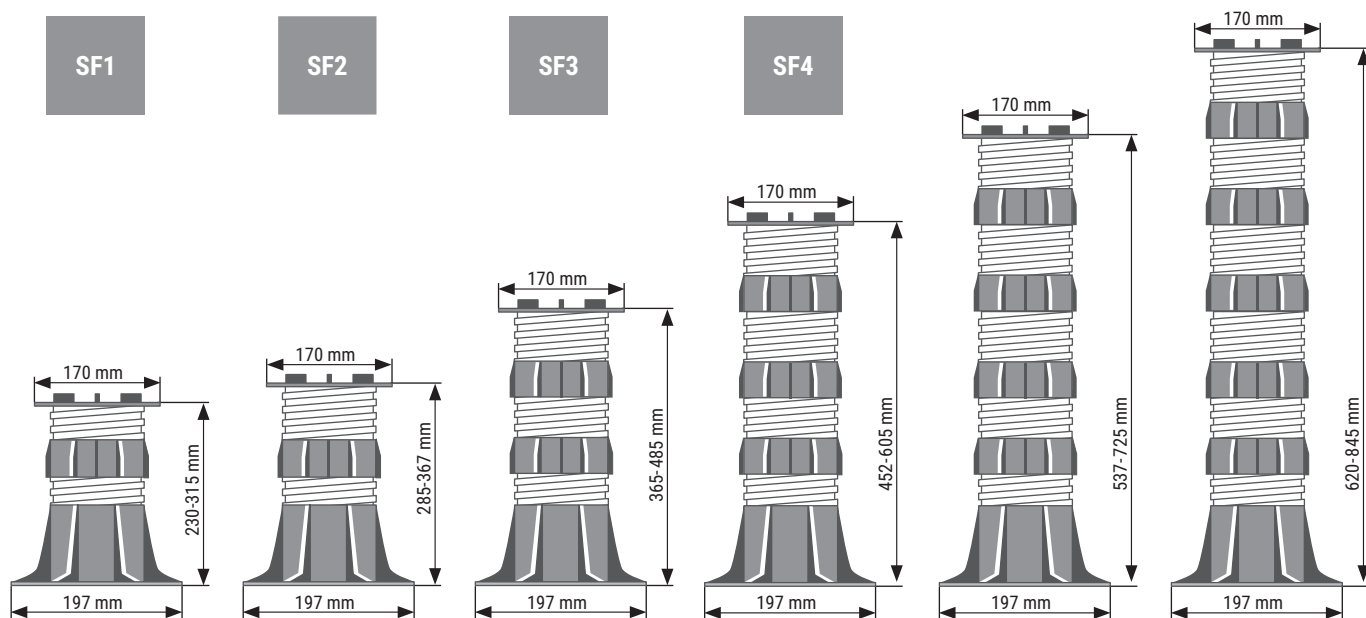


SF1

SF2

SF3

SF4



SF5

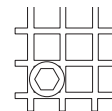
SF6

SF7

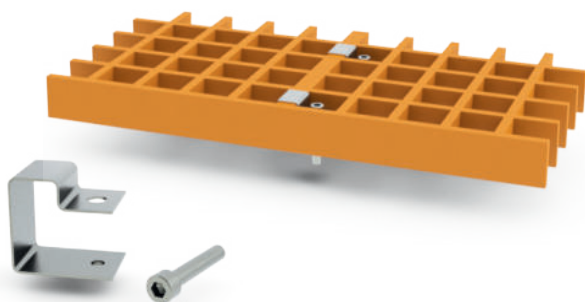
SF8

SF9

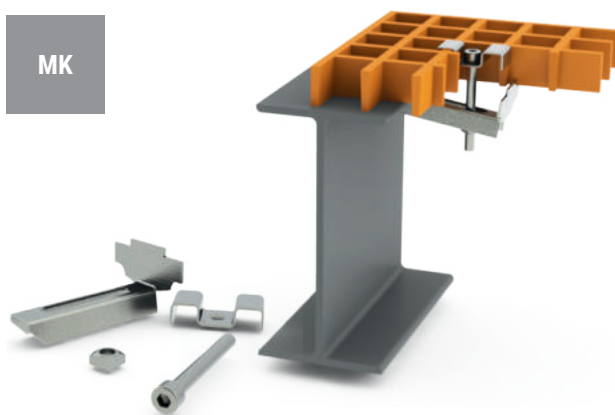
SF10



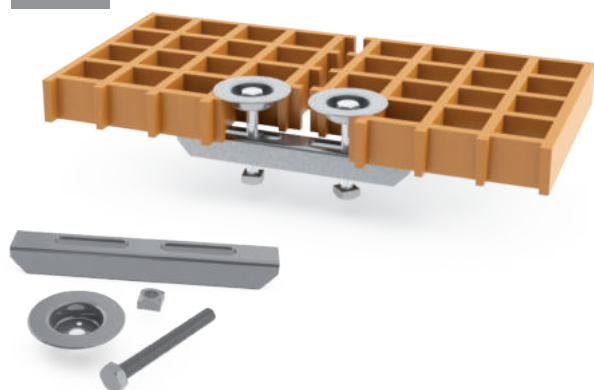
SV



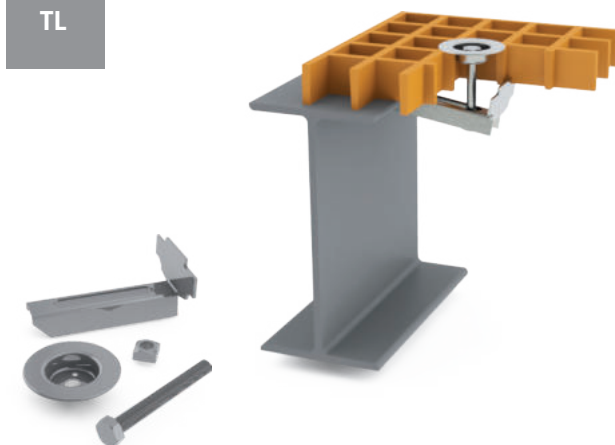
MK



DK

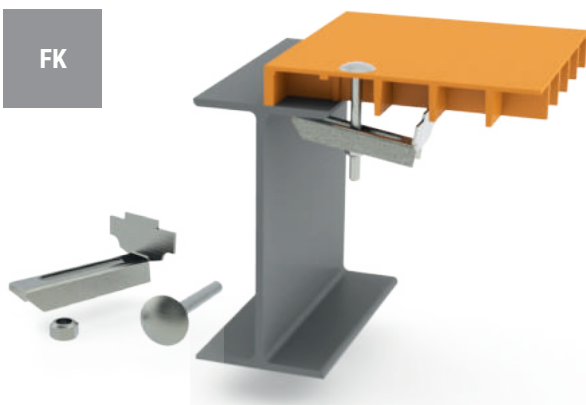


TL

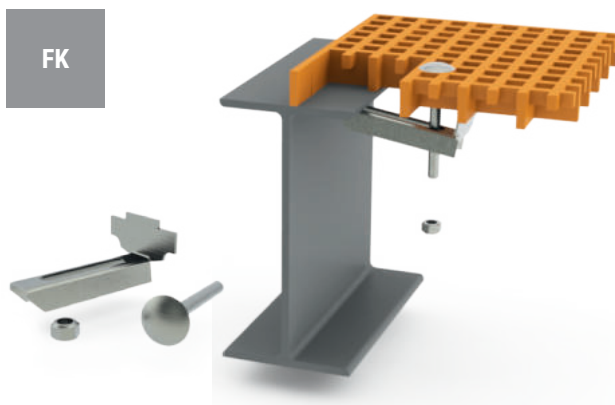


73

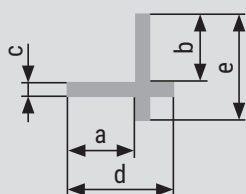
FK



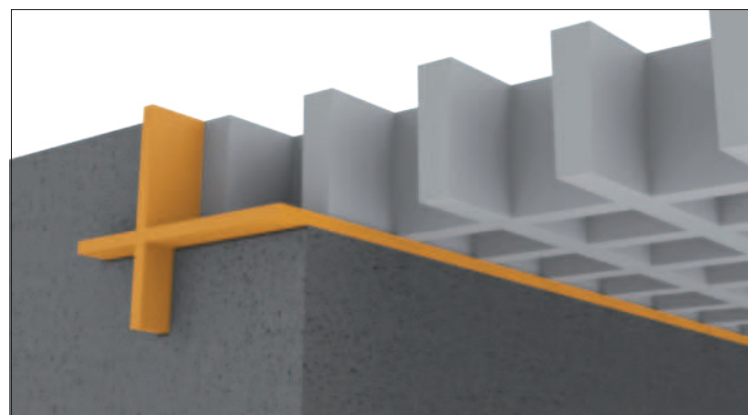
FK



CA

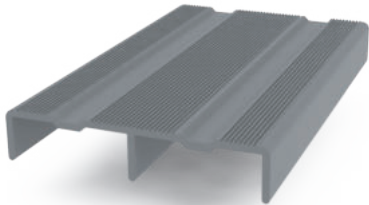


a	b	c	d	e
38	30	4	57	49
50	38	4	79	67

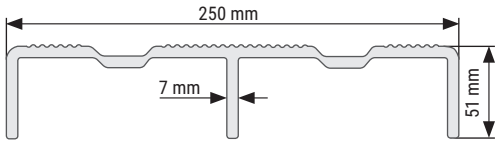




PA 50

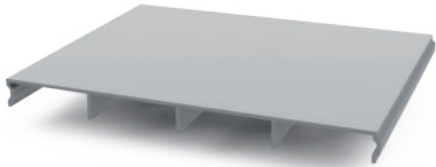


kg/m ²
21,2

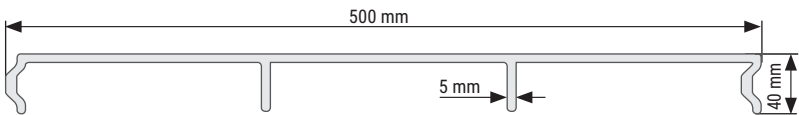


750 mm	850 kg	3 x F	7.200 kg/m ²	3 x q
900 mm	580 kg	3 x F	4.160 kg/m ²	4 x q
1.000 mm	470 kg	3 x F	3.000 kg/m ²	5 x q
1.200 mm	320 kg	4 x F	1.760 kg/m ²	5 x q
1.500 mm	210 kg	5 x F	880 kg/m ²	7 x q
2.000 mm	115 kg	8 x F	380 kg/m ²	10 x q
3.000 mm	50 kg	11 x F	108 kg/m ²	13 x q
L/125 = 0,75%				

PA 40
Ax

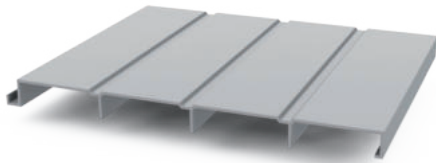


kg/m ²
12,6

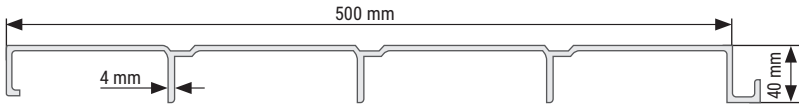


300 mm	3.405 kg	2 x F	7.203 kg/m ²	3 x q
450 mm	1.545 kg	3 x F	5.543 kg/m ²	4 x q
600 mm	853 kg	4 x F	2.303 kg/m ²	5 x q
750 mm	565 kg	5 x F	1.205 kg/m ²	7 x q
900 mm	390 kg	6 x F	690 kg/m ²	8 x q
1.000 mm	312 kg	7 x F	510 kg/m ²	9 x q
1.200 mm	220 kg	8 x F	294 kg/m ²	10 x q
L/125 = 0,75%				

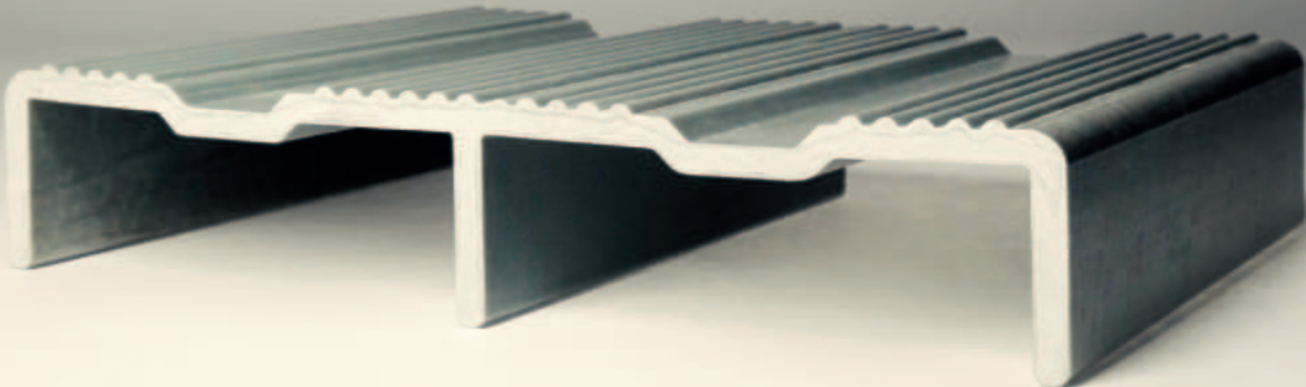
PA 40
B

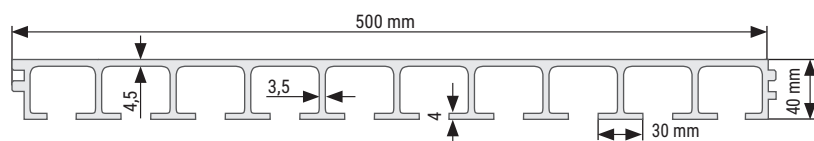
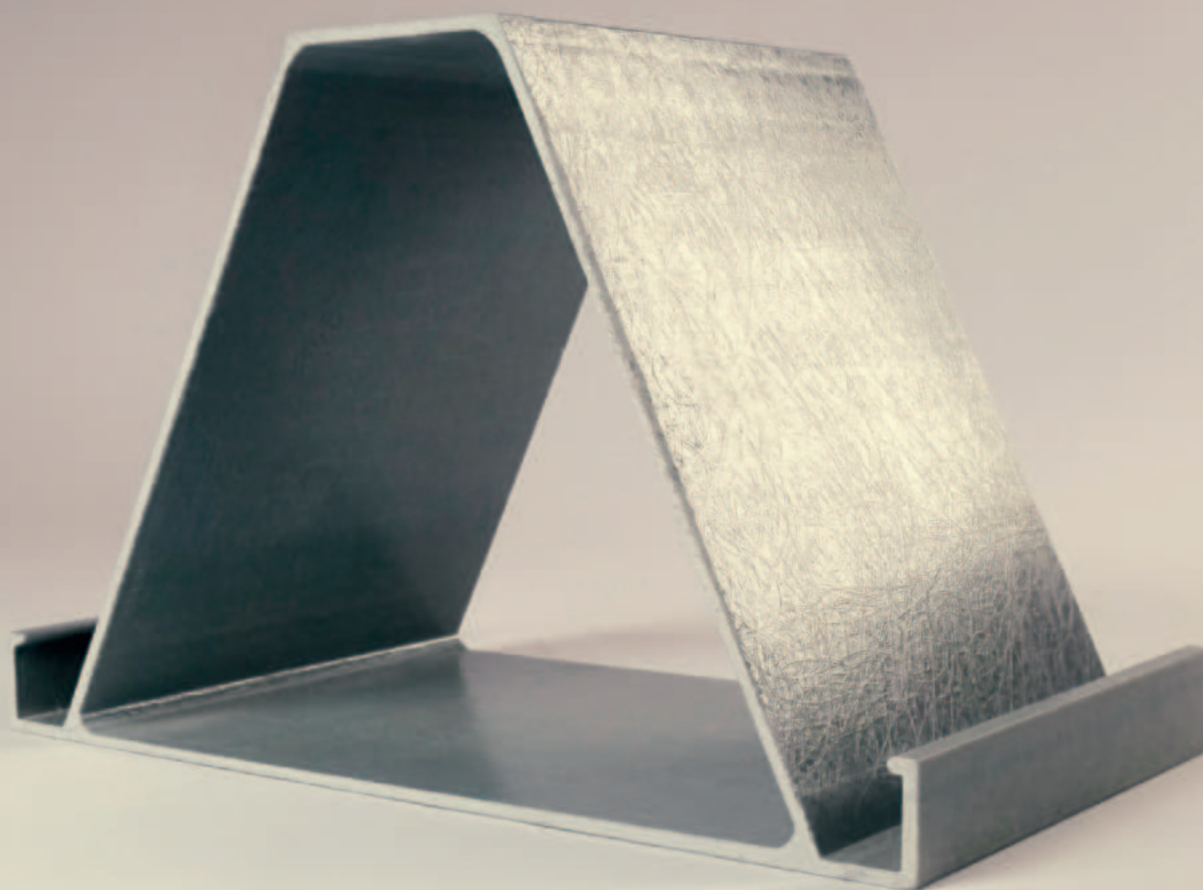


kg/m ²
11,4



300 mm	2.894 kg	2 x F	6.122 kg/m ²	3 x q
450 mm	1.313 kg	3 x F	4.711 kg/m ²	4 x q
600 mm	725 kg	4 x F	1.957 kg/m ²	5 x q
750 mm	480 kg	5 x F	1.024 kg/m ²	7 x q
900 mm	331 kg	6 x F	586 kg/m ²	8 x q
1.000 mm	265 kg	7 x F	433 kg/m ²	9 x q
1.200 mm	187 kg	8 x F	249 kg/m ²	10 x q
L/125 = 0,75%				

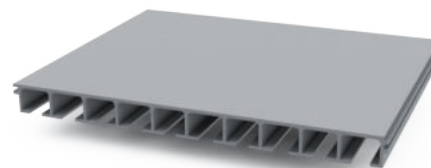




PA 500
XL 9

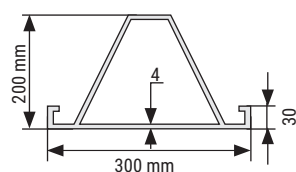
1.000 mm	850 kg	2 x F	1.000 kg/m ²	3 x q
1.200 mm	500 kg	3 x F	1.000 kg/m ²	4 x q
1.500 mm	250 kg	4 x F	1.000 kg/m ²	5 x q
1.800 mm	150 kg	5 x F	1.000 kg/m ²	7 x q
2.000 mm	100 kg	6 x F	600 kg/m ²	8 x q
2.200 mm	80 kg	7 x F	350 kg/m ²	9 x q
2.500 mm	55 kg	8 x F	220 kg/m ²	10 x q

L/125 = 0,75%



kg/m²

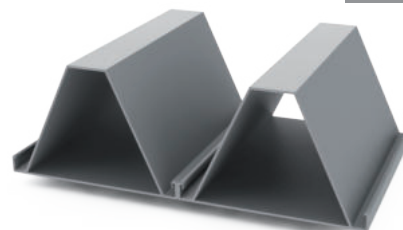
19,8



PA 200

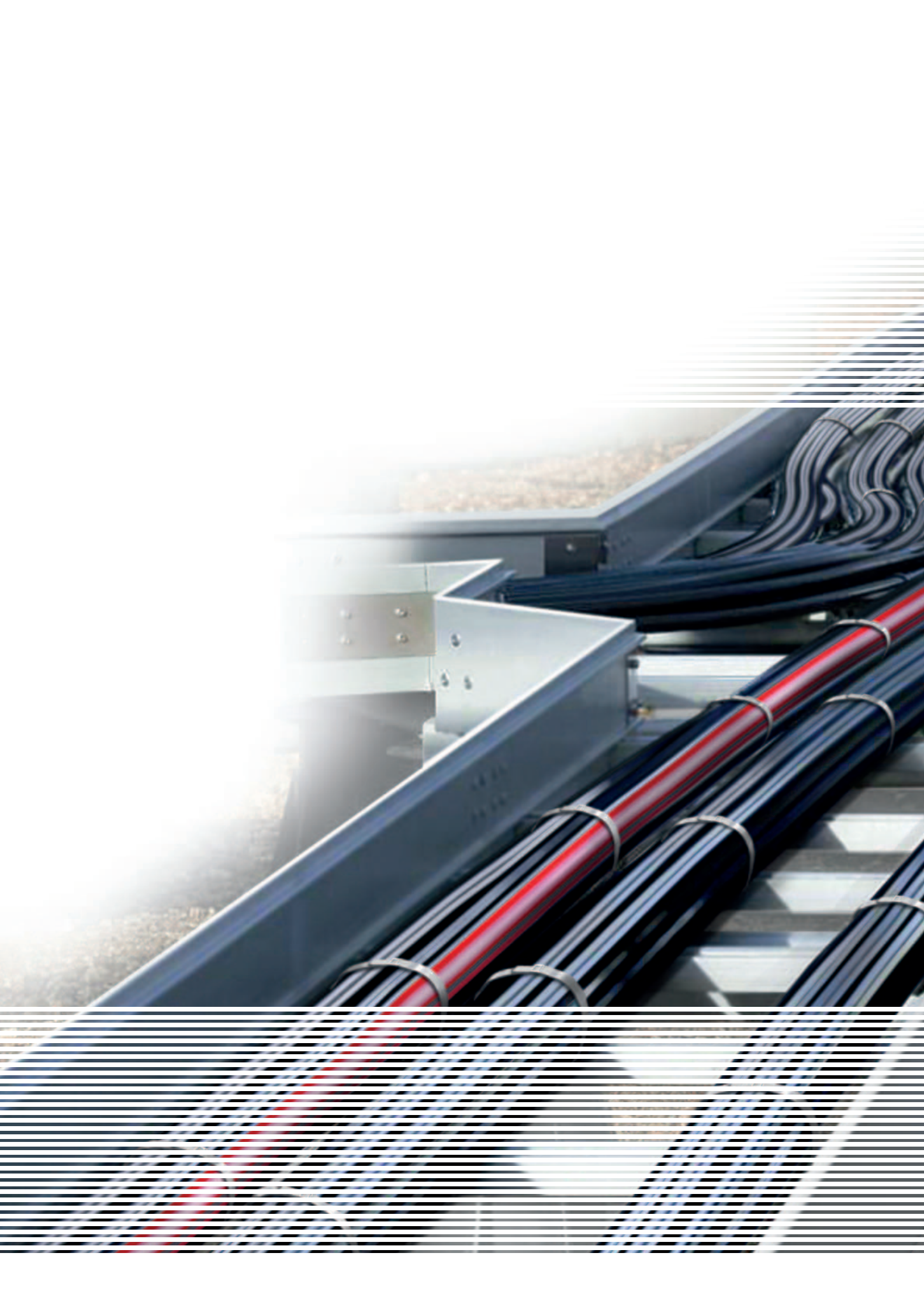
3.000 mm	600 kg	2 x F	900 kg/m ²	3 x q
5.000 mm	579 kg	3 x F	600 kg/m ²	4 x q
6.000 mm	398 kg	4 x F	340 kg/m ²	5 x q
7.000 mm	275 kg	5 x F	210 kg/m ²	7 x q
9.000 mm	151 kg	6 x F	60 kg/m ²	8 x q
12.000 mm	56 kg	7 x F	45 kg/m ²	9 x q

L/125 = 0,75%

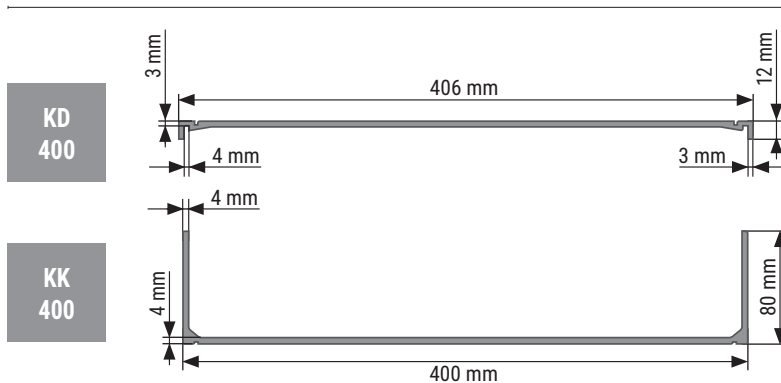
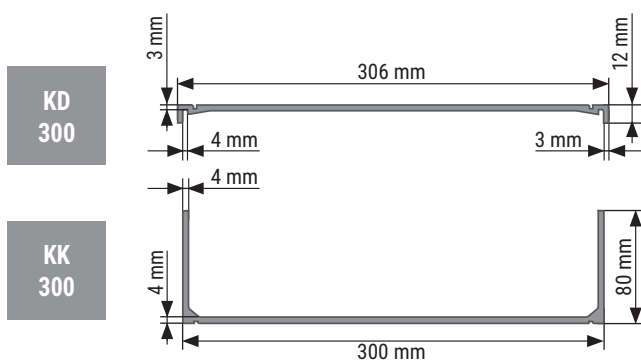
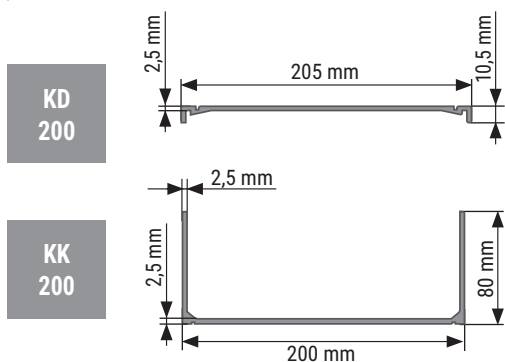
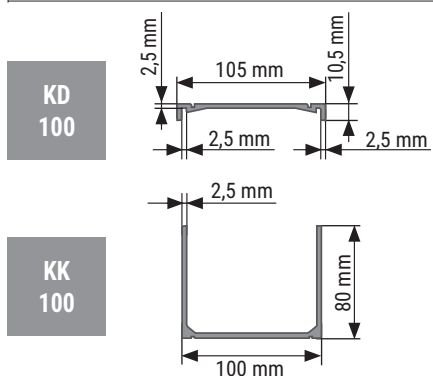
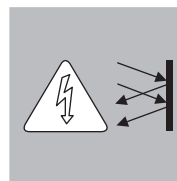
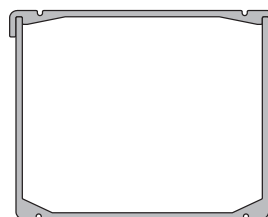
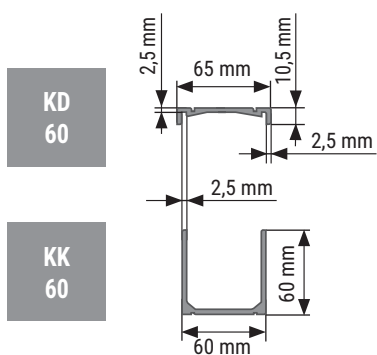
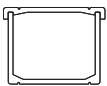


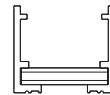
kg/m²

22,7

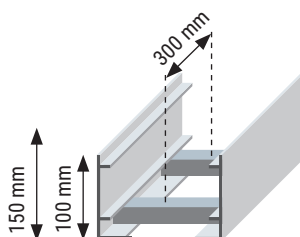




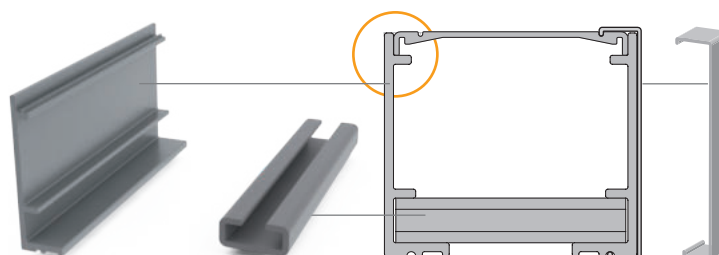




↔	↔↔↔		
	1.000 mm	2.000 mm	3.000 mm
100 mm	600 kg/m	450 kg/m	170 kg/m
200 mm	600 kg/m	400 kg/m	160 kg/m
300 mm	600 kg/m	350 kg/m	145 kg/m
400 mm	350 kg/m	280 kg/m	130 kg/m
500 mm	320 kg/m	260 kg/m	120 kg/m
750 mm	300 kg/m	240 kg/m	110 kg/m
L/150 = 0,75%			



↔	↓ ↓ kg ↓ ↓
100 mm	22,4 kg/m
200 mm	44,8 kg/m
300 mm	67,2 kg/m
400 mm	89,6 kg/m
500 mm	112 kg/m



KD	↔	kg
	105 mm	0,7 kg/m
	205 mm	1,2 kg/m
	306 mm	2,1 kg/m
	406 mm	2,7 kg/m



KL	↔	kg
	100 mm	2,8 kg/m
	200 mm	3,0 kg/m
	300 mm	3,3 kg/m
	400 mm	3,5 kg/m
	500 mm	3,8 kg/m

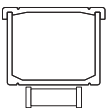


KH

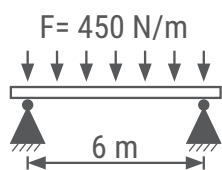
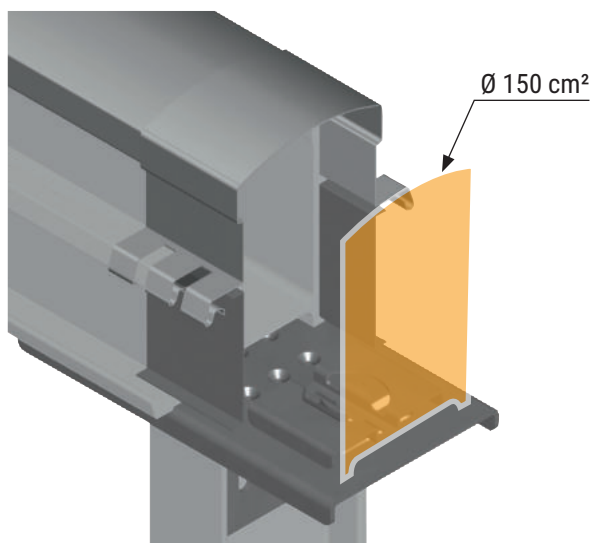


BH90

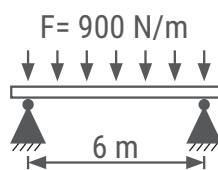
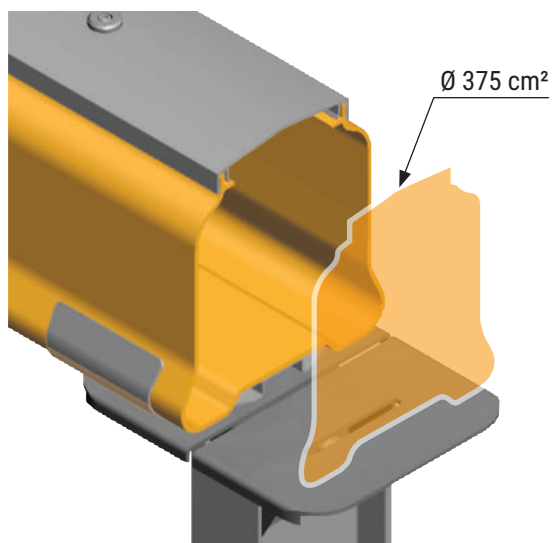


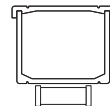


FT1

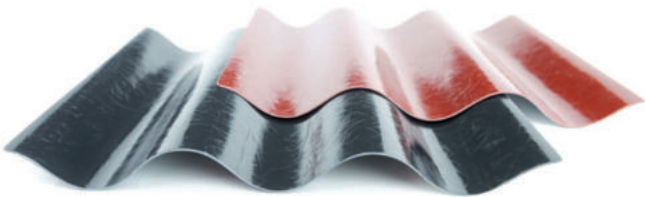
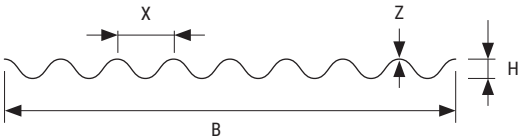


FT2





WP



	B (mm)	X (mm)	H (mm)	Z (mm)	kg/m ²
WP 76/18	1660 mm	76mm	18mm	0,9	1,40
WP 76/18	1660 mm	76mm	18mm	1,2	1,90
WP 76/18	1660 mm	76mm	18mm	1,6	2,55
WP 177/51	1096 mm	177mm	51mm	0,9	1,50
WP 177/51	1096 mm	177mm	51mm	1,2	2,00
WP 177/51	1096 mm	177mm	51mm	1,6	2,70

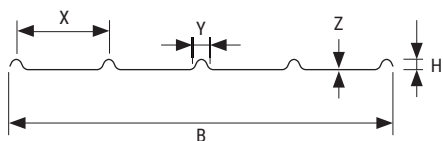


	1,4 kg/dm ³
	-40°C + 120°
	0,22 W/mK
U	220 W/m ² K (1mm)
	55 - 60 MPa
	5500 - 6500 MPa
	55 - 60 barcol
	<1,0%





TP

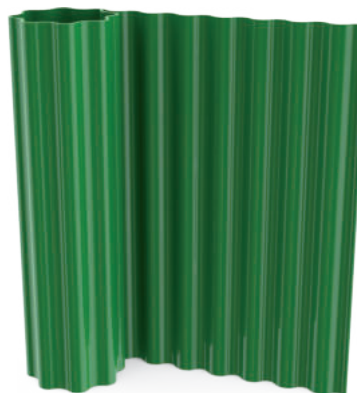


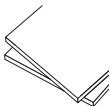
	B (mm)	X (mm)	H (mm)	Y (mm)	Z (mm)	kg/m ²
TP 200/45	1060 mm	200mm	45mm	80mm	0,9	1,60
TP 200/45	1060 mm	200mm	45mm	80mm	1,2	2,15
TP 200/45	1060 mm	200mm	45mm	80mm	1,6	2,90
TP 250/40	1040 mm	250mm	40mm	63mm	0,9	1,50
TP 250/40	1040 mm	250mm	40mm	63mm	1,2	2,05
TP 250/40	1040 mm	250mm	40mm	63mm	1,6	2,75
TP 179/40	1040 mm	179mm	40mm	53mm	0,9	1,50
TP 179/40	1040 mm	179mm	40mm	53mm	1,2	2,05
TP 179/40	1040 mm	179mm	40mm	53mm	1,6	2,80
TP 137/18	1135 mm	137mm	18mm		0,9	1,35
TP 137/18	1135 mm	137mm	18mm		1,2	1,85
TP 137/18	1135 mm	137mm	18mm		1,6	2,50

R-FP

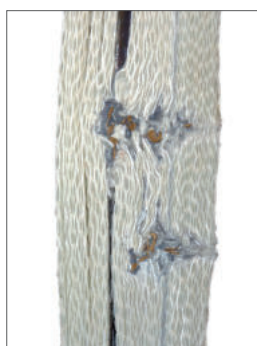
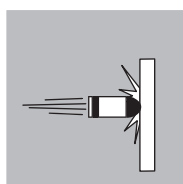
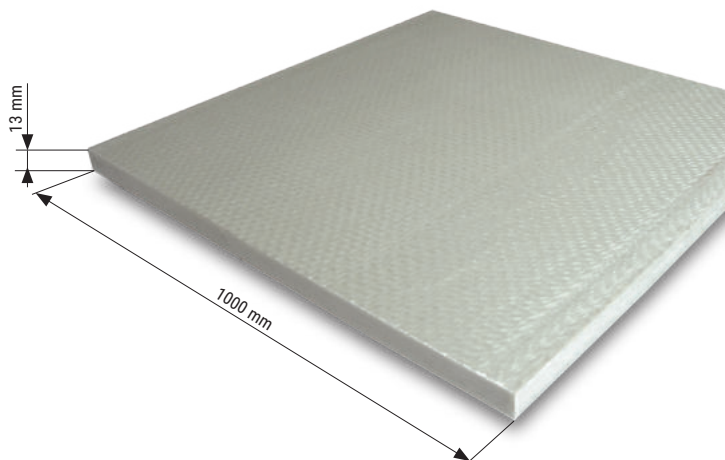


R-WP





BCP

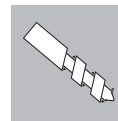
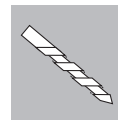
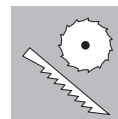
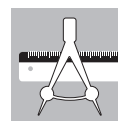
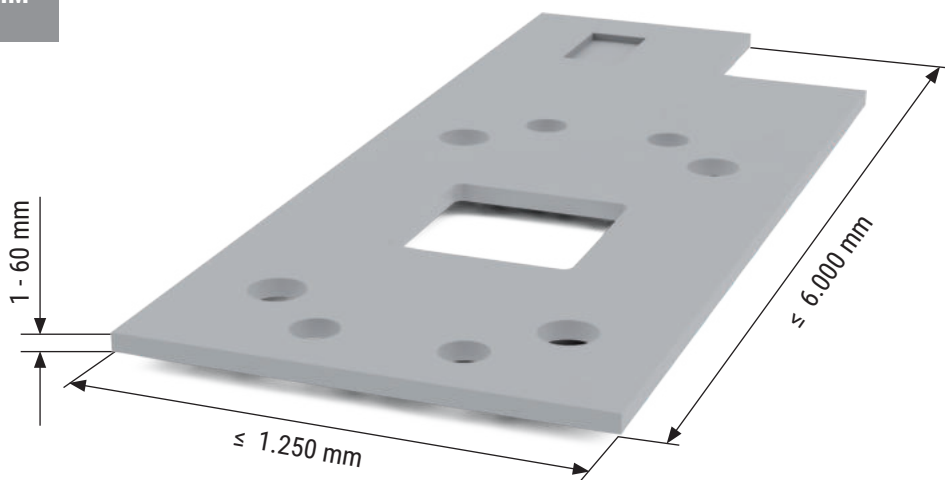


VPAM PM 2007	4 NS
2000 mm	25,5 kg/m ²
2500 mm	
3000 mm	
6000 mm	

	320 MPa
	300 MPa
	420 MPa
	30.000
	180 kJ/m ²
	< 0,15 %

84

HM



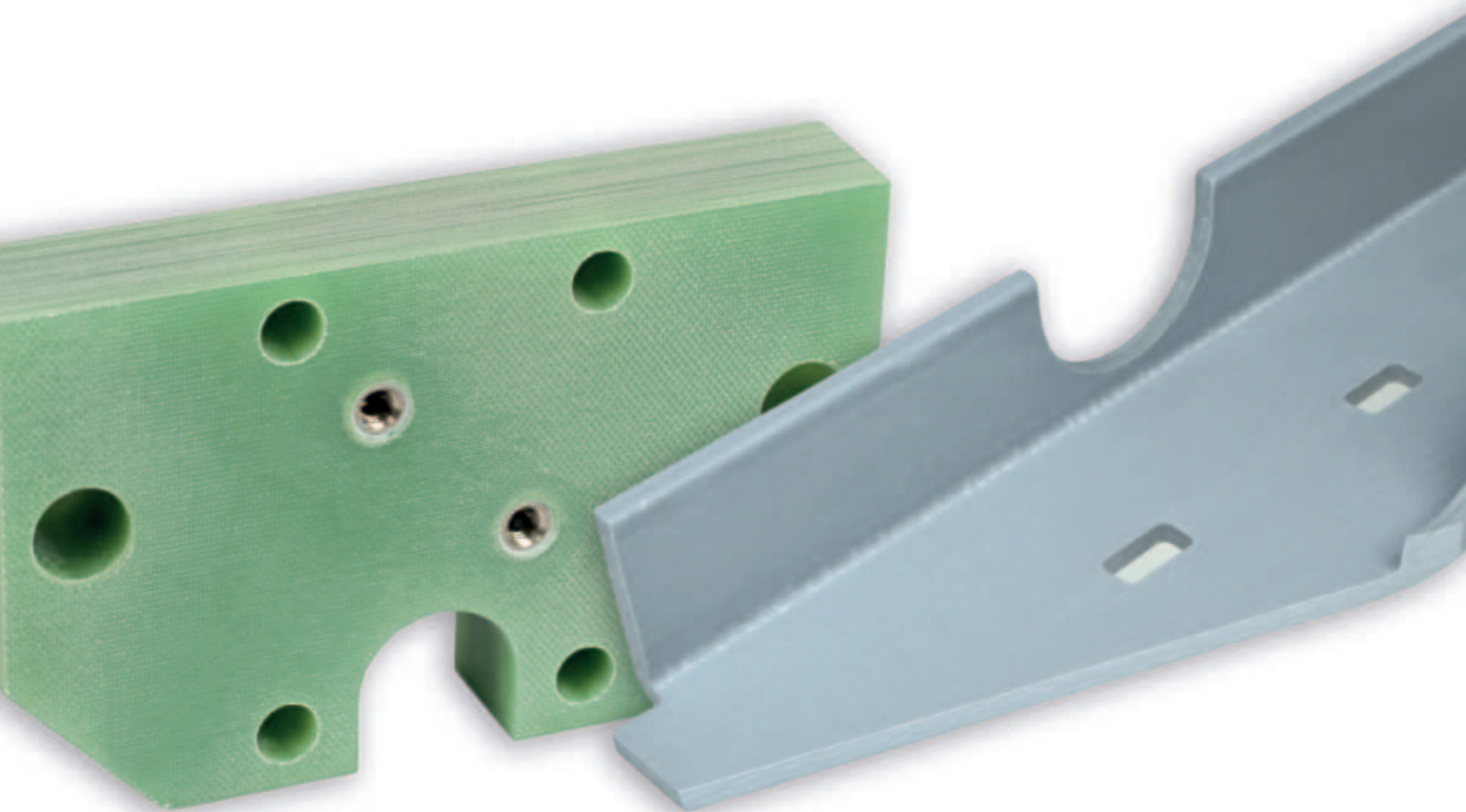
DIN	Hm 2471
ISO	UPGM 201-3
NEMA	GPO 3

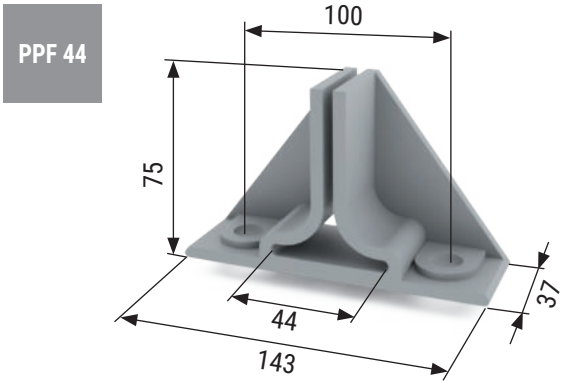
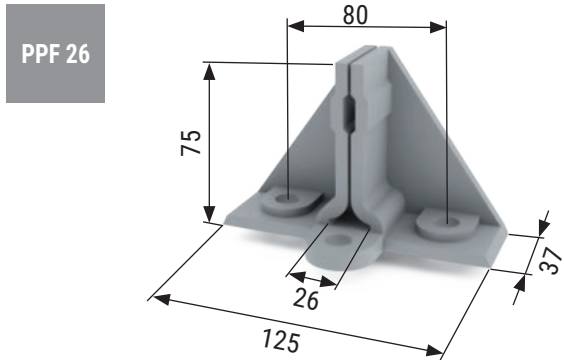
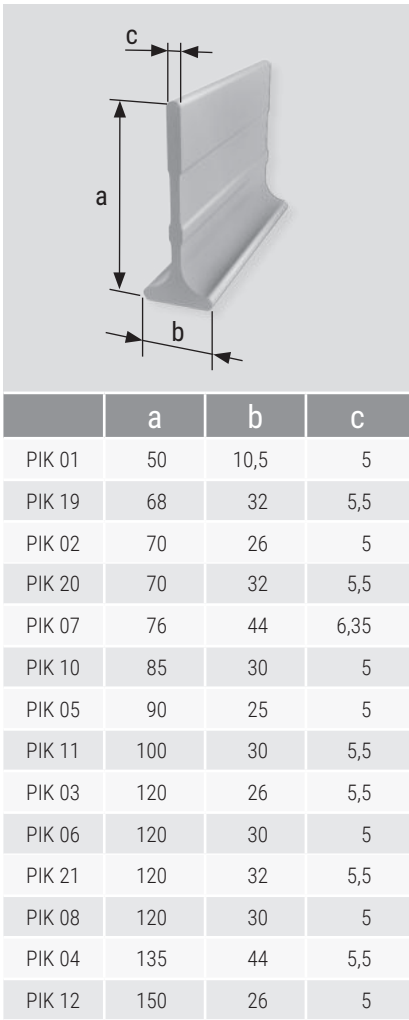
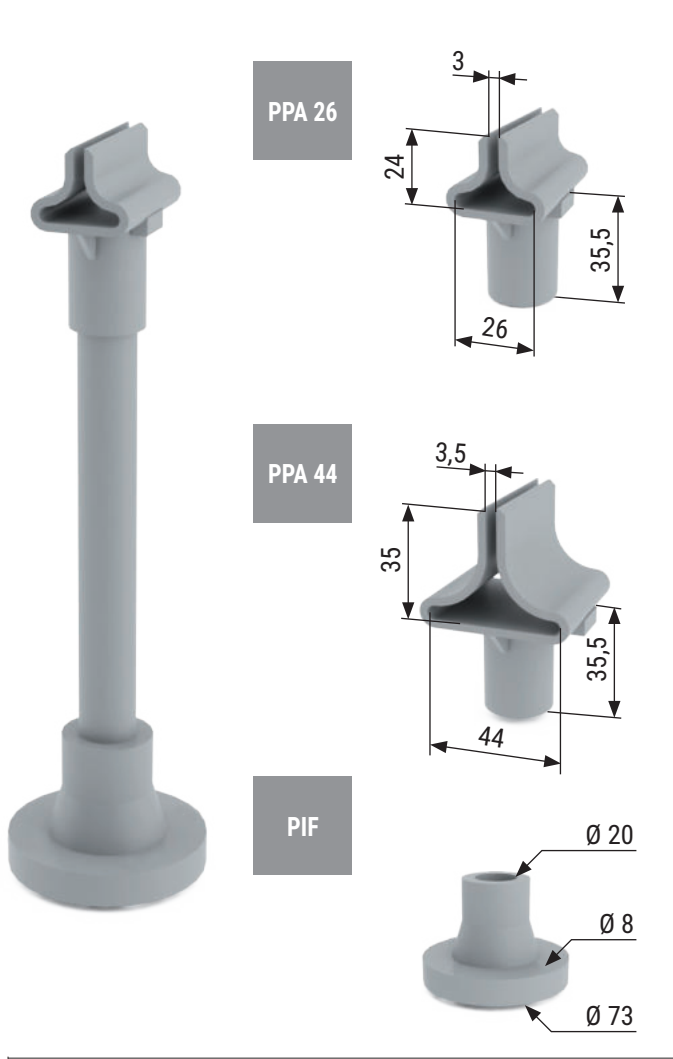
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VSM	S-EP-GC 1
NF	VEE 1
BS	EP 2
NEMA	G-10

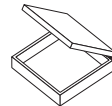
DIN	Hgw 2372.4
ISO	EP GC 4
VSM	S-EP-GC 4
N	VEE 2
NEMA	G-11

DIN	Hp 2061
ISO	PF CP 1
VSM	S-PF-CP 1
NF	P, PO
BS	D 1
NEMA	X, XP

DIN	Hgw 2082
ISO	PF CC 1
VSM	S-PF-CC 1
NF	C
BS	F 2, F 3
NEMA	C







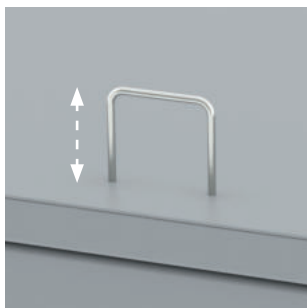
FS



HC - FS



FG

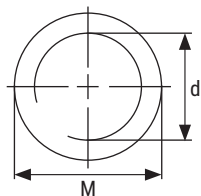


GS



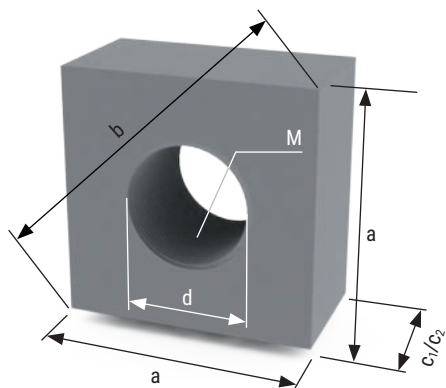


M



M	d	$\textcircled{M}$
8	6,8	2 Nm
10	8,5	5 Nm
12	10,2	8 Nm
14	12	12 Nm
16	14	18 Nm
18	15,5	22 Nm
20	17,5	28 Nm
24	21	60 Nm
27	24	60 Nm
30	26,5	60 Nm

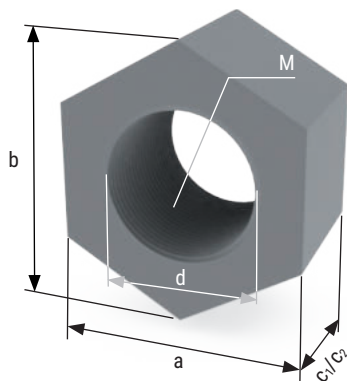
M-4K



M			d	a	b	c ₁ /c ₂
	c ₁	c ₂				
8	1.000 N	2.000 N	6,8	16	23	8/16
10	2.000 N	4.000 N	8,5	18	26	10/20
12	3.250 N	6.500 N	10,2	24	34	12/24
14	4.500 N	9.000 N	12	28	40	14/28
16	6.000 N	12.000 N	14	30	43	16/32
18	7.000 N	14.000 N	15,5	32	45	18/36
20	9.500 N	19.000 N	17,5	36	51	20/40
24	13.000 N	26.000 N	21	38	54	24/48
27	15.000 N	30.000 N	24	40	57	27/54
30	20.000 N	40.000 N	26,5	44	62	30/60

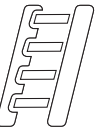
88

M-6K

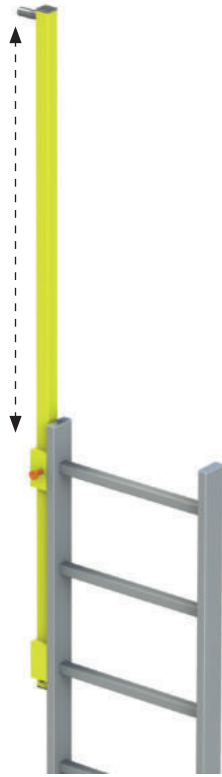


M	d	a	b	c ₁ /c ₂
8	6,8	13	15	8/16
10	8,5	17	20	10/20
12	10,2	19	22	12/24
14	12	-	-	14/28
16	14	24	28	16/32
18	15,5	-	-	18/36
20	17,5	30	35	20/40
24	21	36	42	24/48
27	24	41	48	27/54
30	26,5	46	53	30/60





EXH



GMS

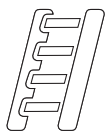


SCG

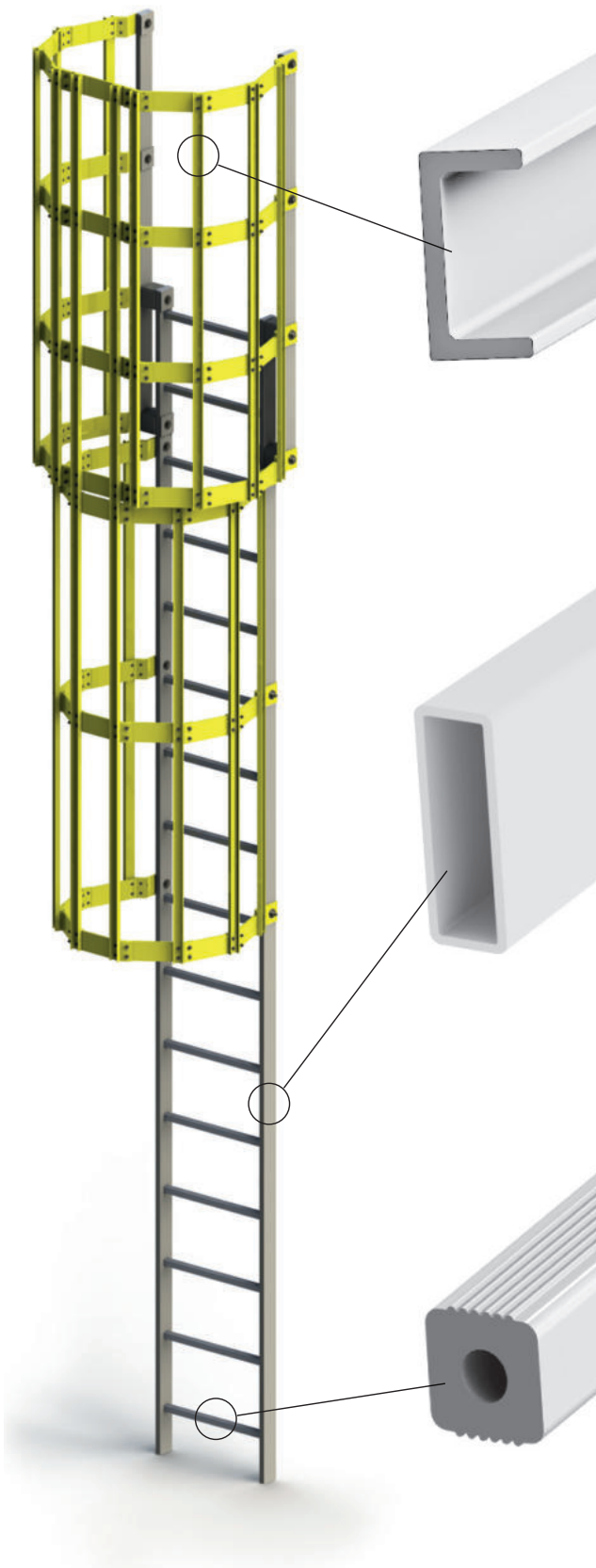


WMS





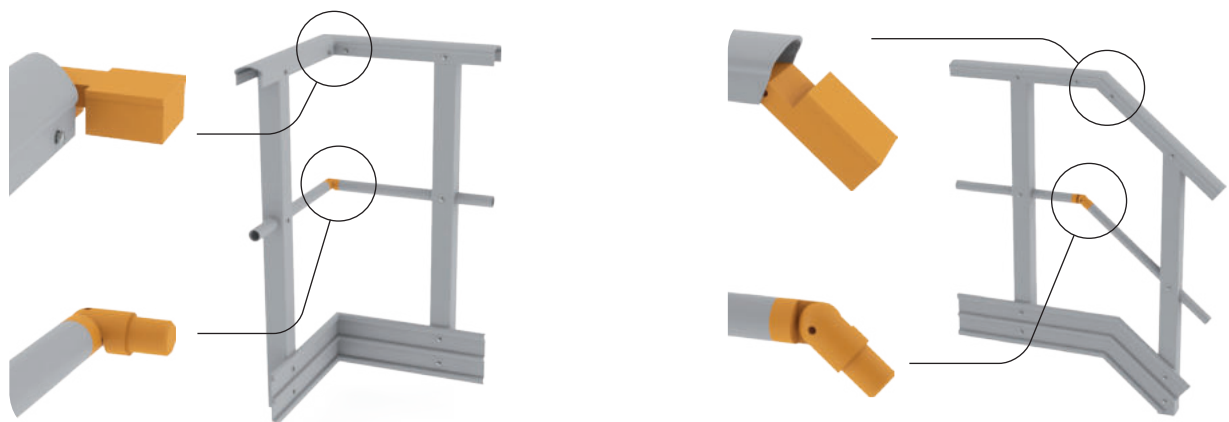
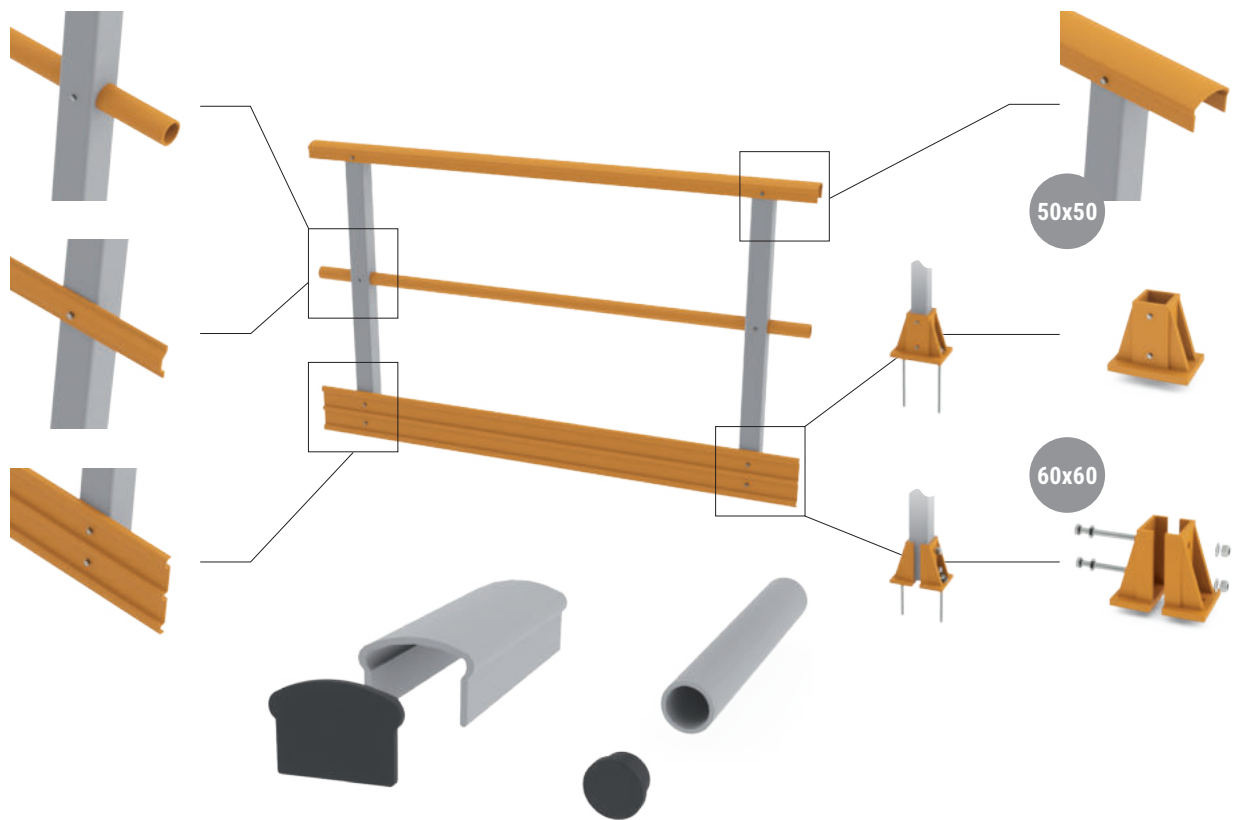
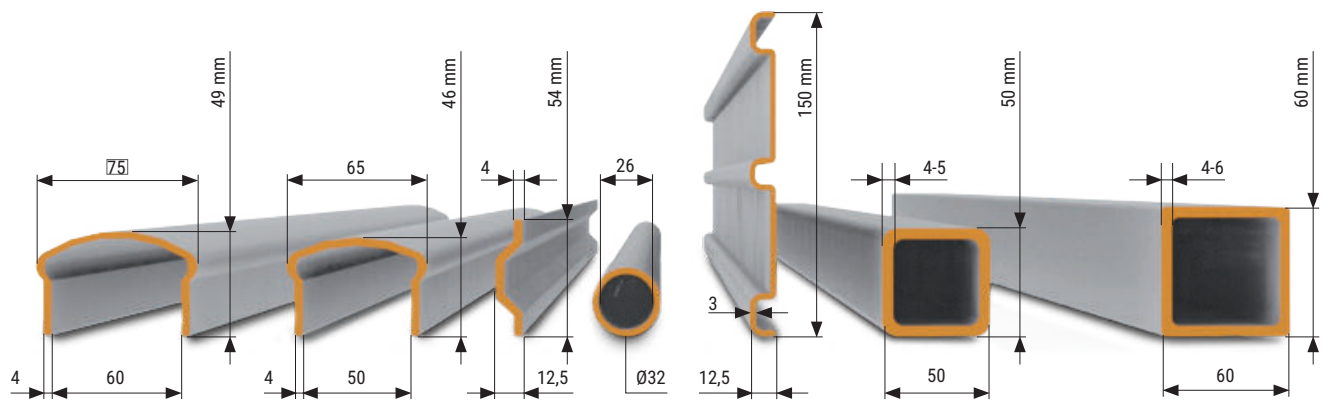
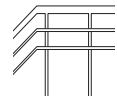
LCL

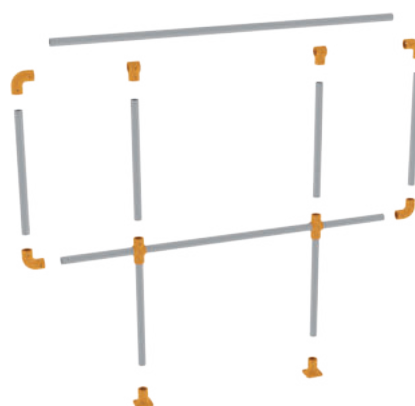
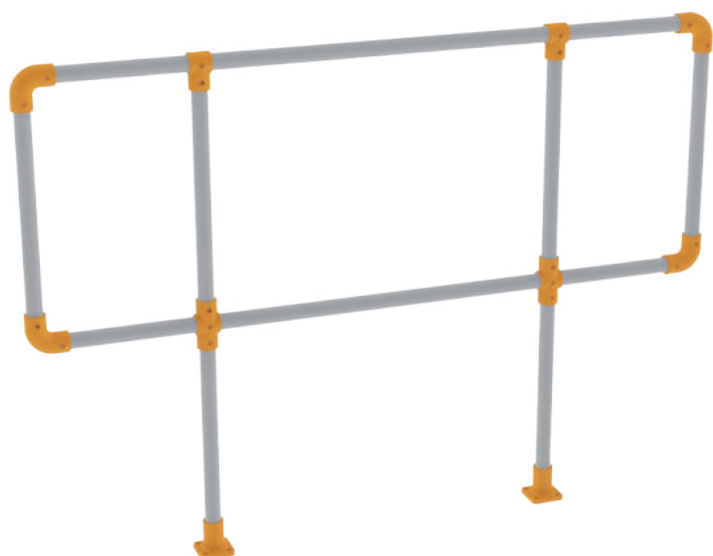
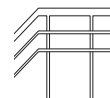


CR-L









L50



T50



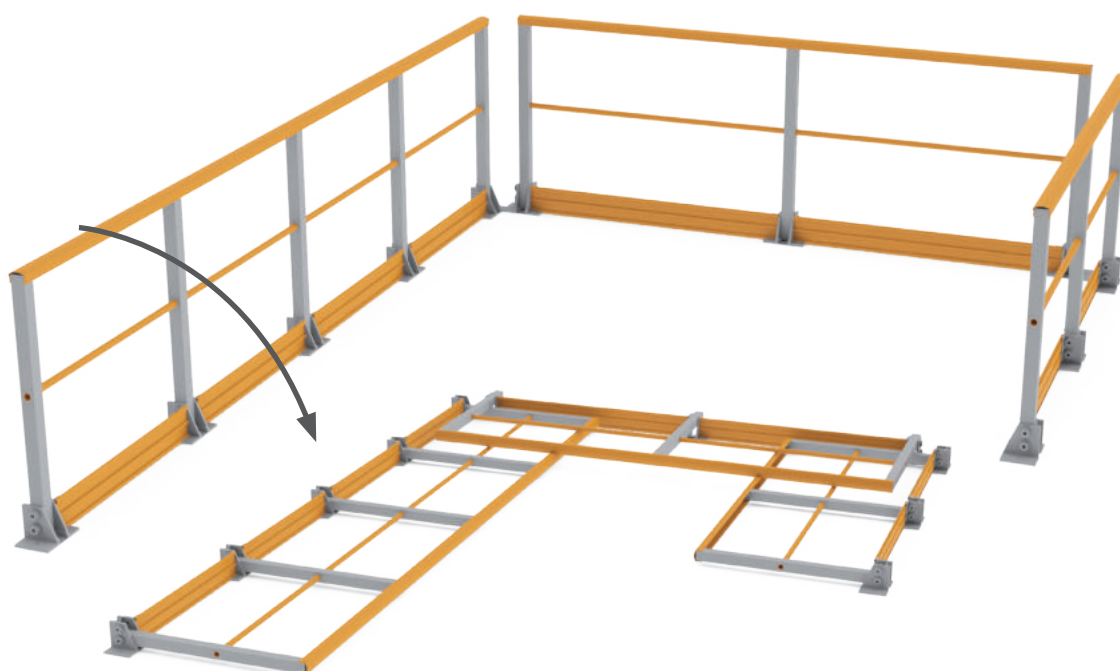
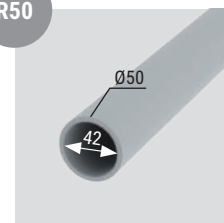
K50

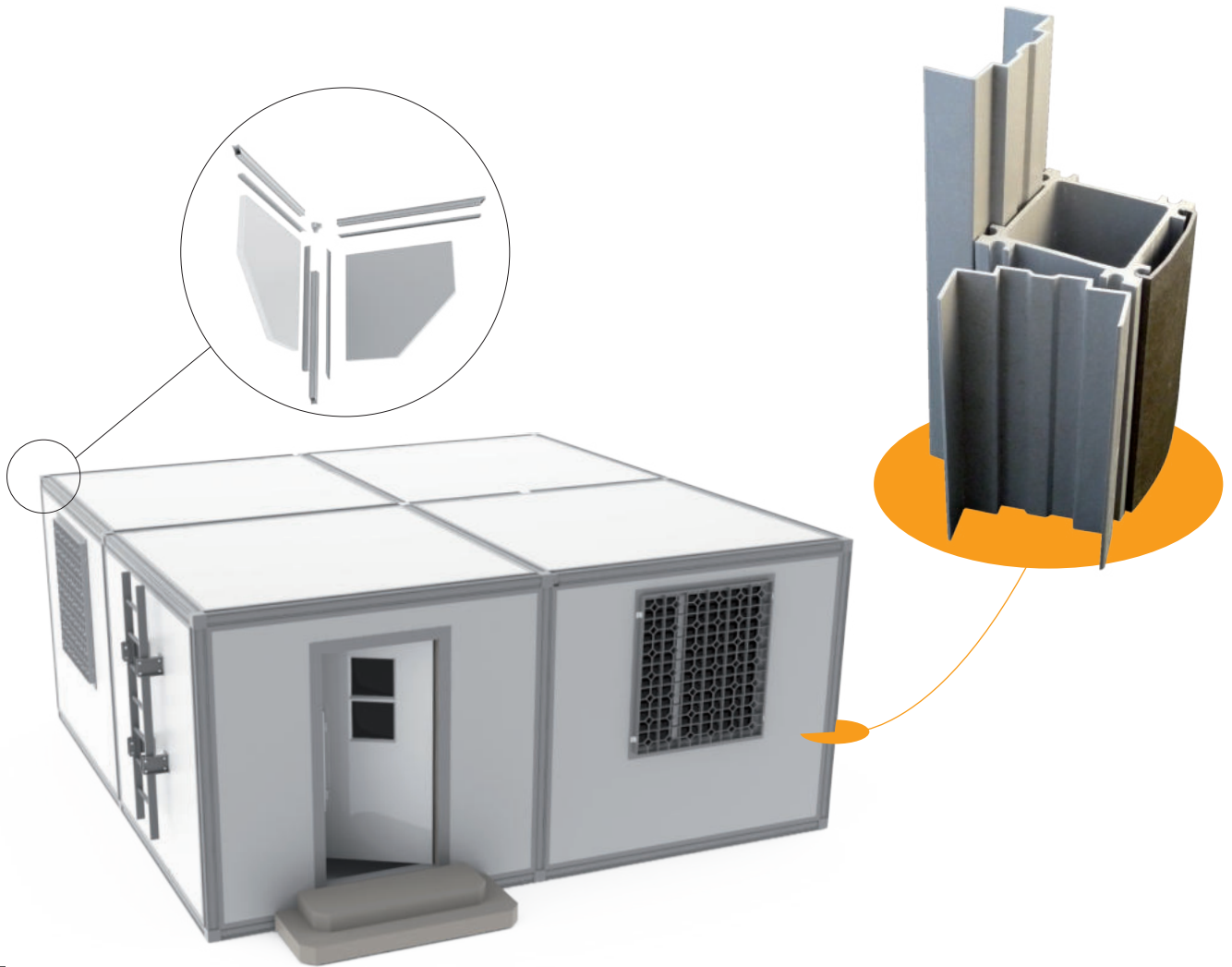


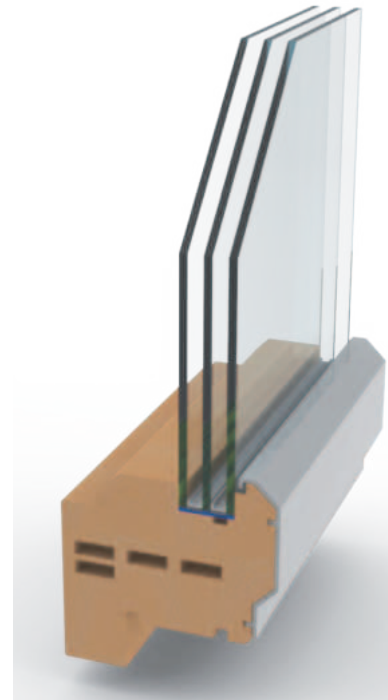
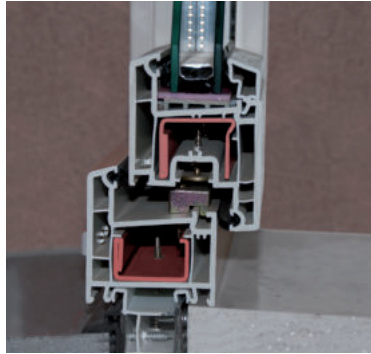
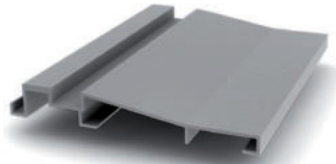
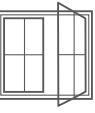
F50



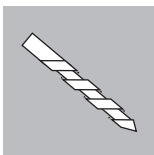
R50



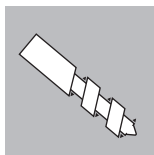




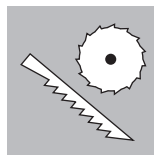
95



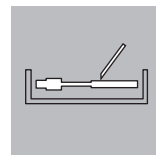
60-80 m/min



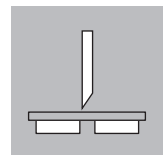
100-400 m/min



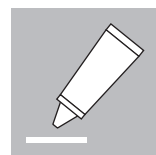
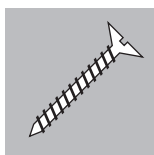
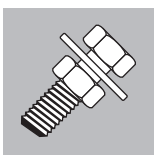
1.800-3.600 m/min



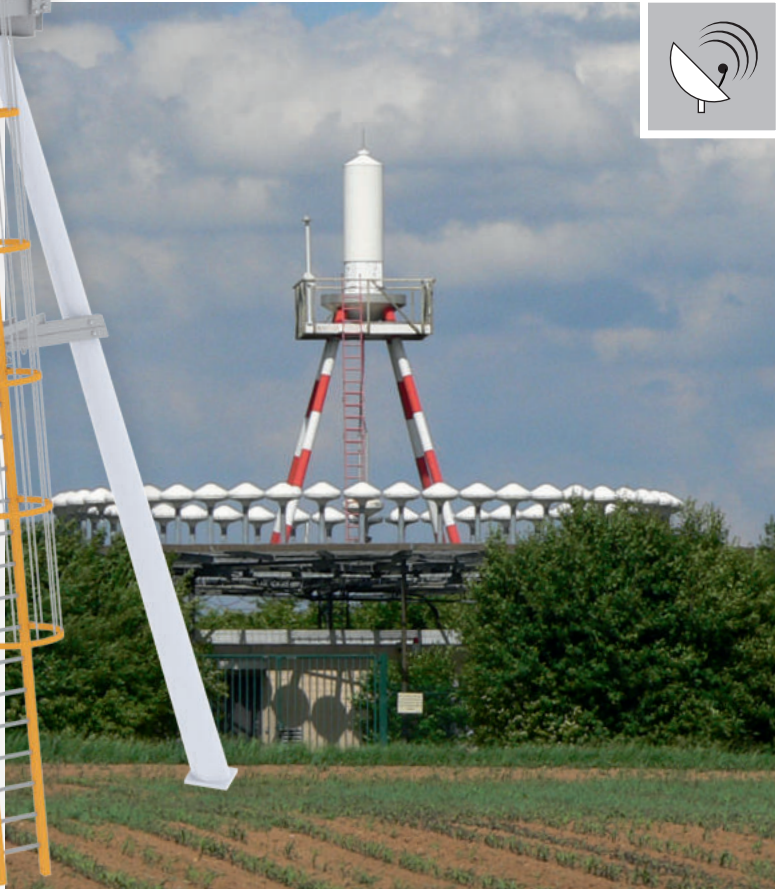
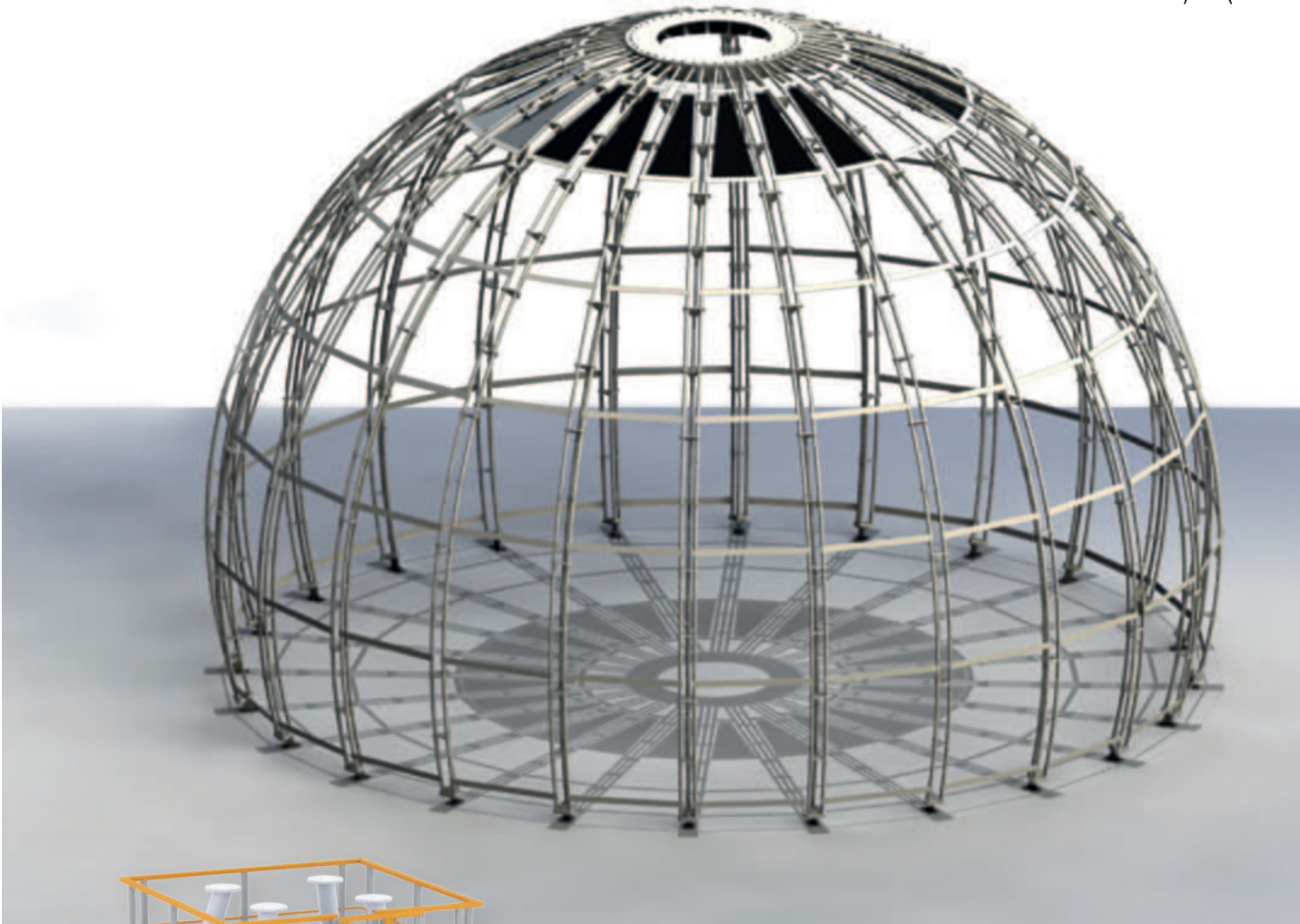
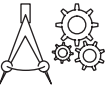
100-400 m/min

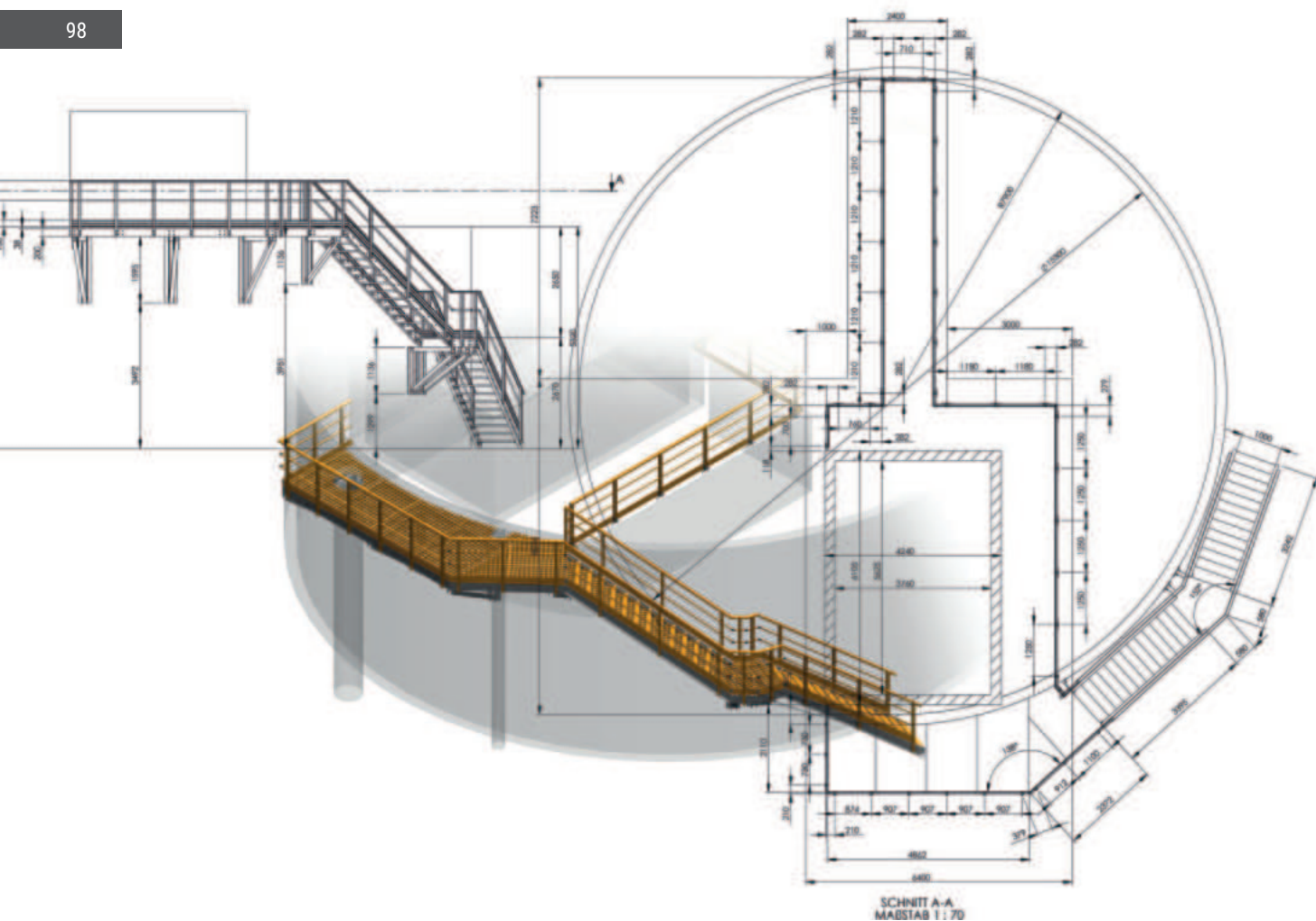
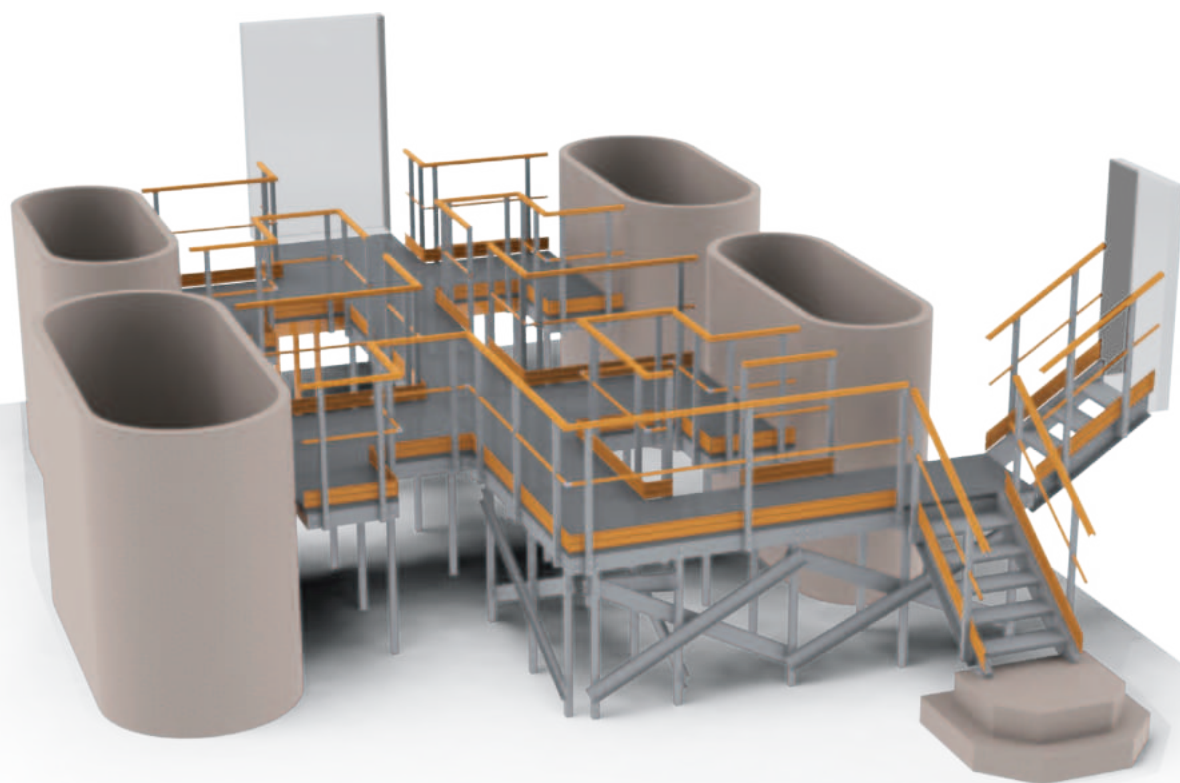
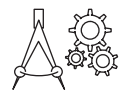


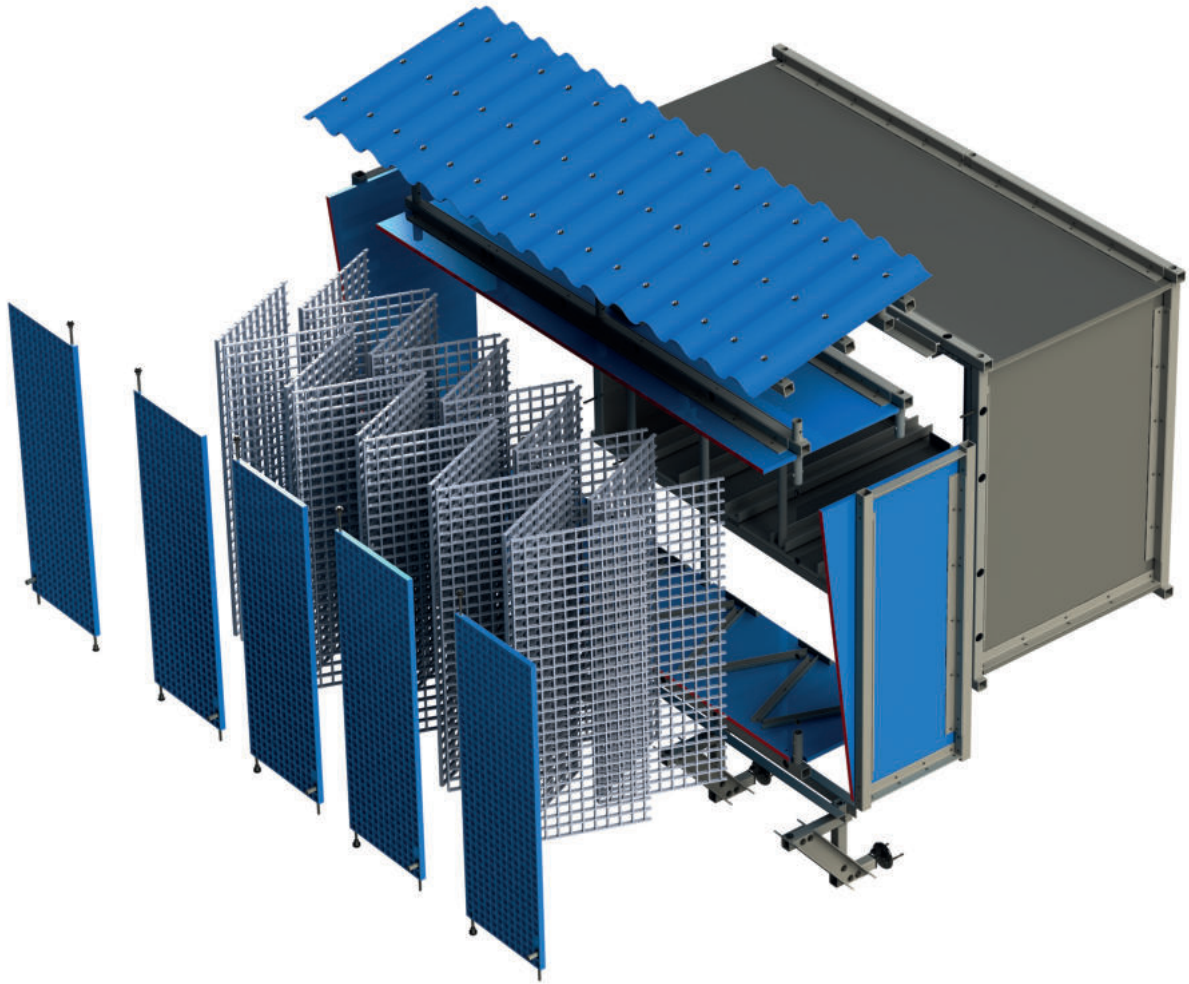
≤ 10 mm













GFK-KONSTRUKTIONSPROFILE

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Typzulassung
21.53-21zbia/017-
2101#048-(067/12-Zul)



100



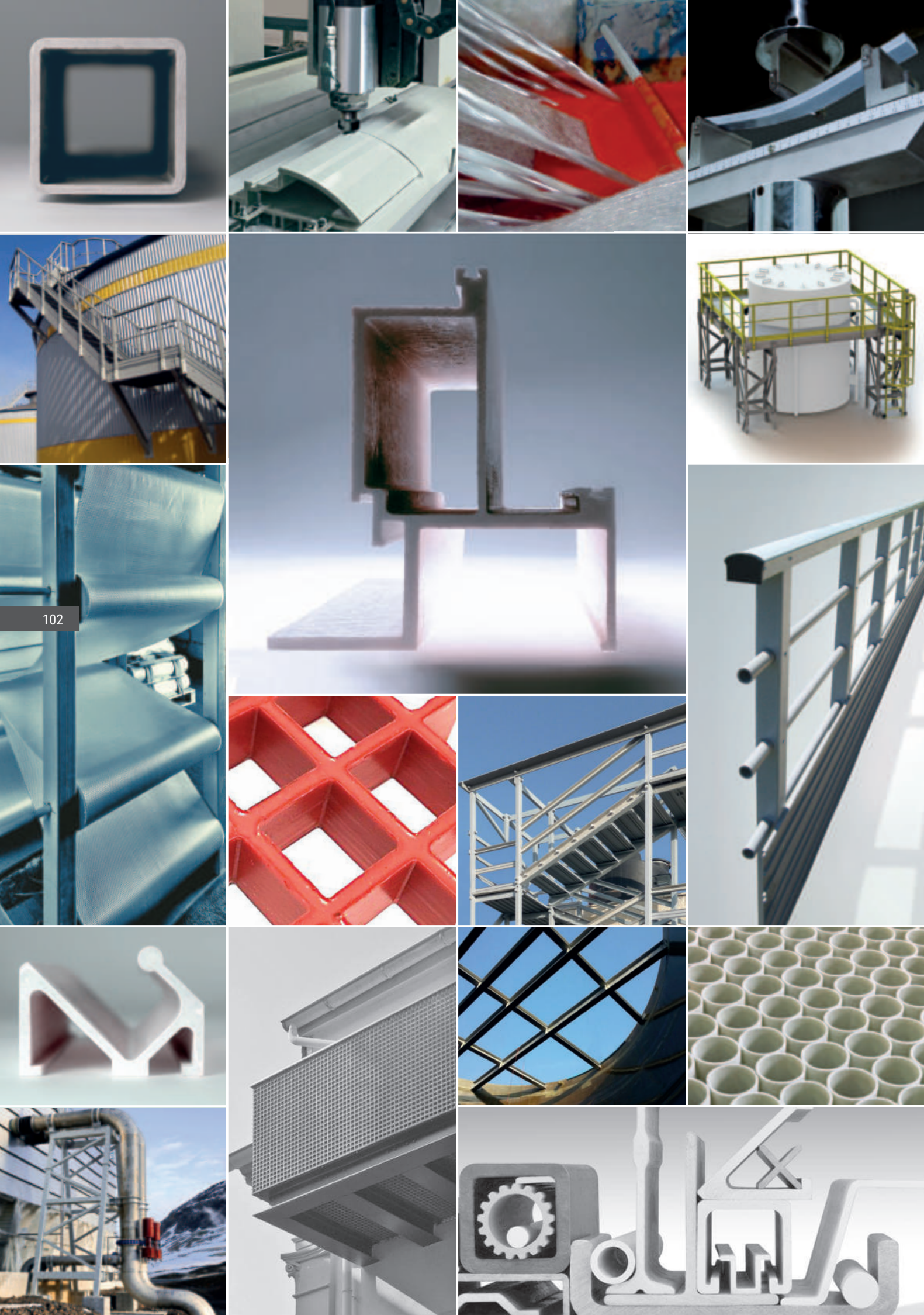
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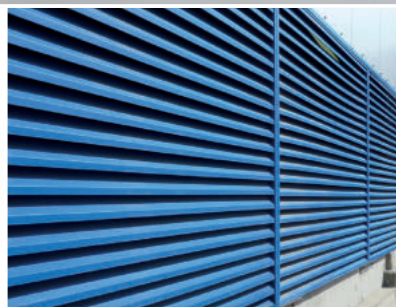
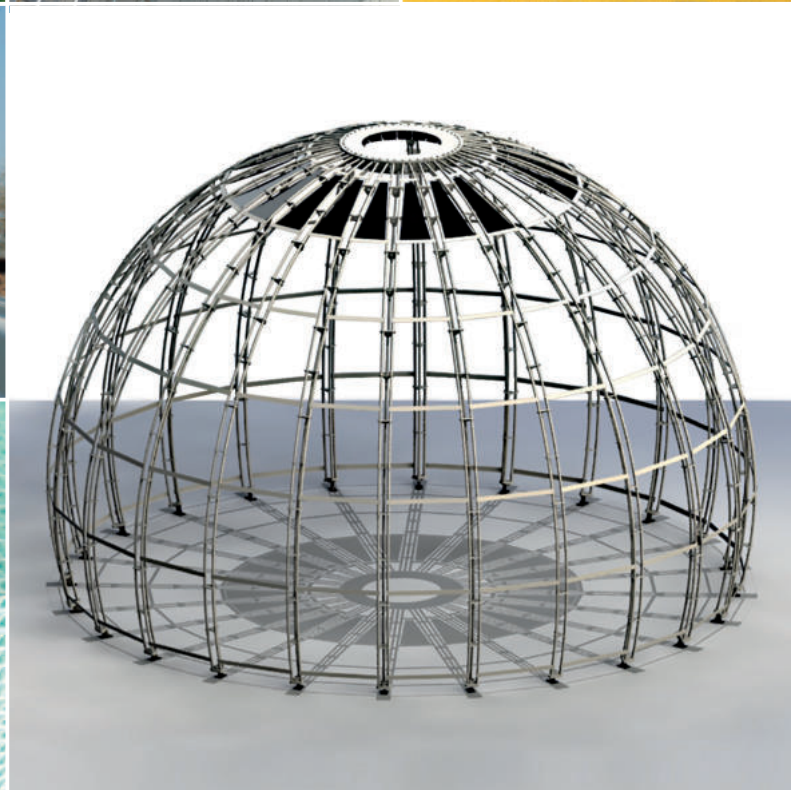
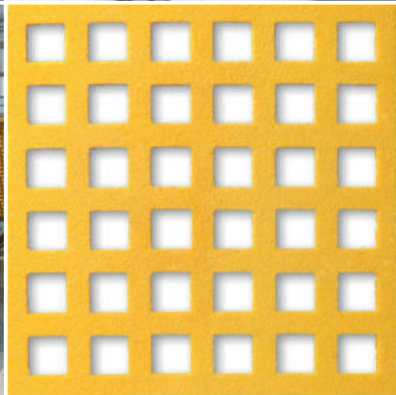
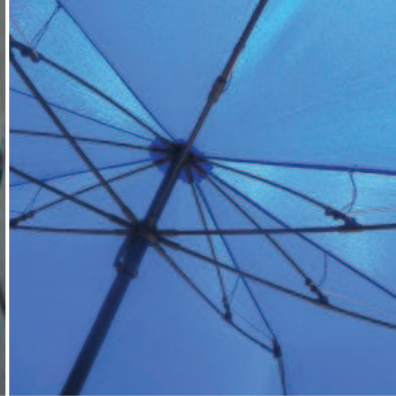
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Typzulassung
21.53-21zbia/018-
2101#006-(008/13-Zul)











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