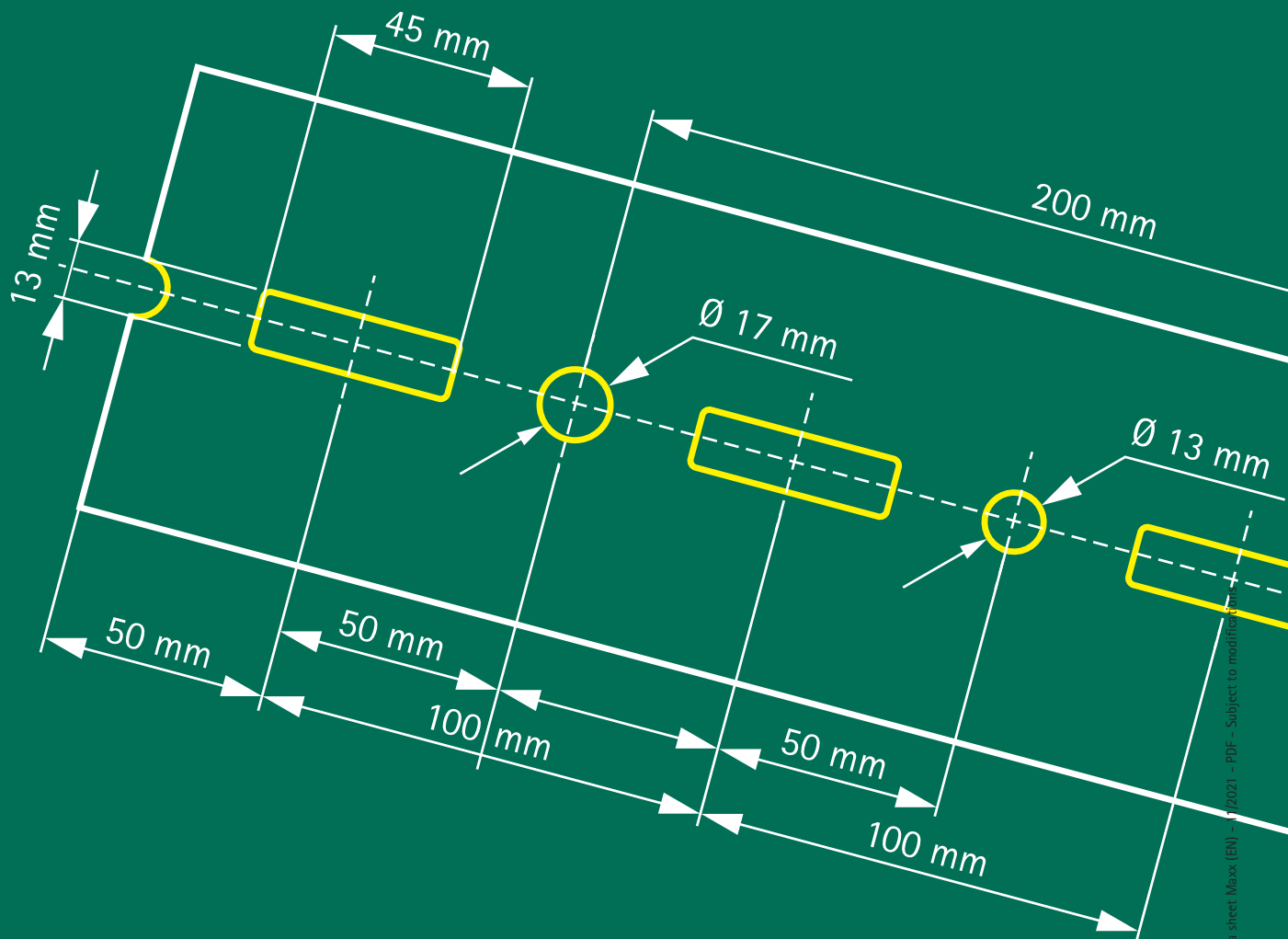
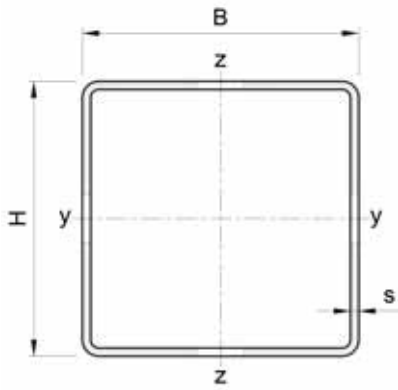


Information and Load Tables



Technical Data Maxx Heavy Profiles Support System



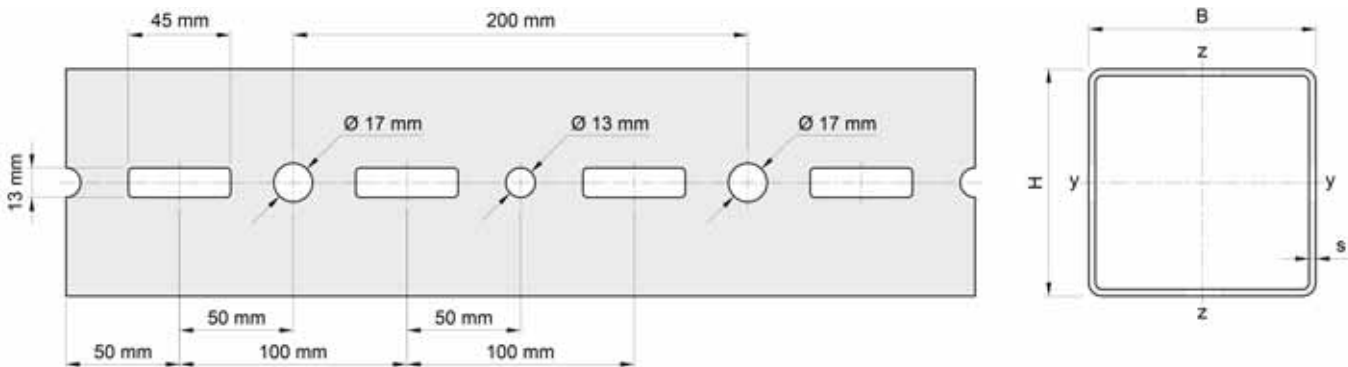
Profile size			Unit Weight	Cross Section Area	Geometrical Moment of Inertia		Geometrical Section Modulus	
H	B	s			I_y	I_z	W_y	W_z
mm	mm	mm	kg	mm ²	cm ⁴	cm ⁴	cm ³	cm ³
80,00	80,00	3,00	6,64	696,80	72,47	72,47	18,12	18,12
100,00	100,00	3,00	8,60	936,82	152,80	152,80	30,56	30,56
120,00	100,00	4,00	12,43	1,382,80	302,33	231,56	50,39	46,31

Perforation pattern of rails

Distance between rail end and first hole is always equal,

Maxx Profile

MX80 (80 x 80 x 3mm) | MX100 (100 x 100 x 3mm) | MX120 (120 x 100 x 4mm)



Profile length & Prefab

The standard length of profiles on stock is 6 meters, Custom length such as shorter or longer profiles up to 8 meters or project specific length can be manufactured on request,

Please contact our Technical Sales Support with such requests,

Calculation method

The published safe working loads are calculated with perforated (slotted) rail,

Loads are calculated with the maximum deflection (f) of $L/200$ (according to RAL-GZ 655/B), safety factor " λ " = 1,54, yield strength $f_y = 235 \text{ N/mm}^2$, E-Module $210,000 \text{ N/mm}^2$,

The weight of the product is always included,

1 N (Newton) = 0,102 kg

1 kg = 9,8 N (Newton)

Fixing of rails to walls or ceilings

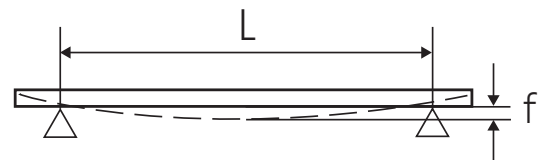
The strength of the anchoring of the rail is not taken into account, The installer must verify if the bolts and wall plugs used are suitable when the rail is used under its maximum load,

Reading the rail loading tables

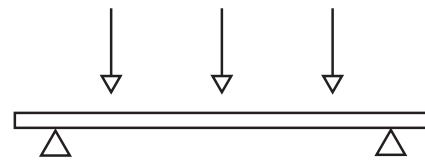
The stated values are only valid for the fixing rail itself (profile safe load table) and for the combination of Baseplate/ Profile as cantilever arm application (cantilever arm safe load table), The maximum safe load of all other construction parts has to be verified, The stated maximum safe load is calculated for a static load at free bending support, (see picture 2)

Special conditions

In the case of doubt or special conditions that are not stated in the loading tables, please do not hesitate to contact our Technical Sales Support,



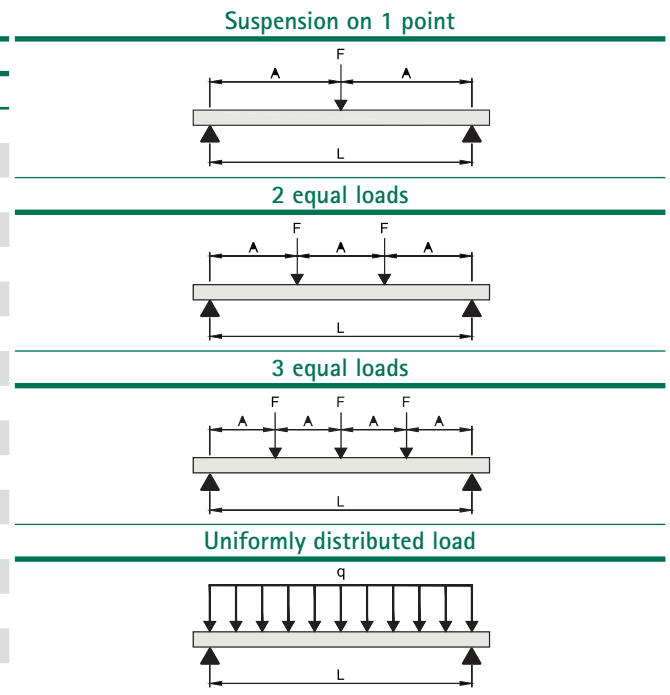
Picture 1



Picture 2

Maxx Heavy Rail Profile

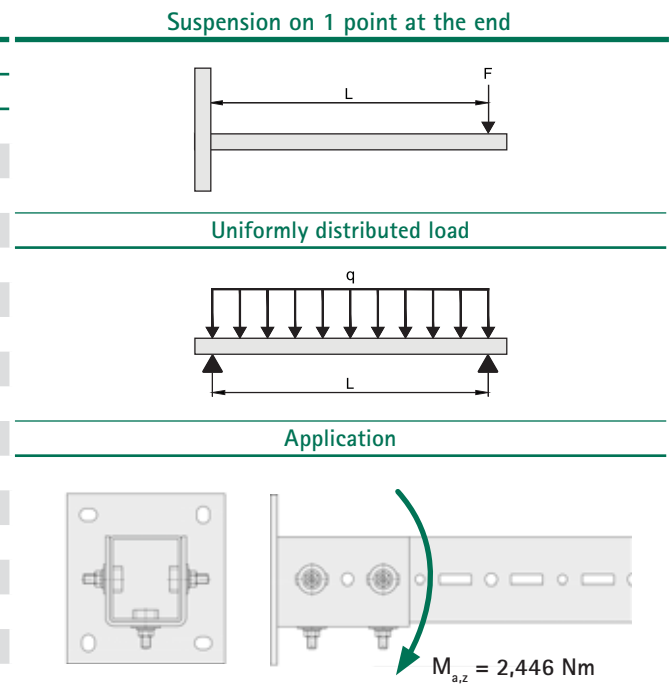
L	Maxx Heavy Rail Profile MX80 (80x80x3)			
	1 x F	2 x F	3 x F	q
(mm)	(N)	(N)	(N)	(N)
2,000	5,464	4,103	2,732	10,928
2,250	4,841	3,637	2,420	9,683
2,500	4,341	3,263	2,170	8,683
2,750	3,931	2,769	1,965	7,548
3,000	3,588	2,310	1,657	6,298
3,250	3,296	1,952	1,400	5,321
3,500	2,839	1,666	1,195	4,542
3,750	2,444	1,434	1,029	3,911
4,000	2,120	1,244	892	3,392
4,250	1,849	1,085	778	2,958
4,500	1,620	951	682	2,592
4,750	1,425	836	600	2,280
5,000	1,257	738	529	2,012
5,250	1,111	652	468	1,778
5,500	983	577	414	1,573
5,750	870	511	366	1,393
6,000	770	452	324	1,232



Max. allowed load in N per suspension point (F), or per uniformly distributed load (q).
 The stated values are only valid for fixing profile. The maximum safe load of all other construction parts has to be verified.

Maxx Baseplate with Maxx Profile (Cantilever Arm Application)

L	Maxx Heavy Rail MX80 (80x80x3)	
	1 x F	q
(mm)	(N)	(N)
500	4,893	9,786
550	4,448	8,896
600	4,077	8,155
650	3,764	7,528
700	3,495	6,990
750	3,262	6,524
800	3,058	6,116
850	2,878	5,756
900	2,718	5,436
950	2,506	5,150
1,000	2,258	4,893
1,050	2,044	4,660
1,100	1,859	4,448
1,200	1,555	4,077
1,300	1,319	3,517
1,400	1,130	3,014
1,500	977	2,607



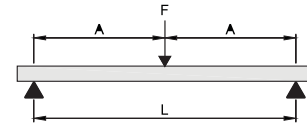
Max. allowed load in N per suspension point (F), or per uniformly distributed load (q).
 The stated values are only valid for the cantilever arm application, using Maxx Baseplate and Maxx Profiles, connected by Maxx Hammerfix.

For all load specifications for cantilever arm application, the maximum allowed Moment ($M_{a,z}$) of the Maxx Baseplate was considered with 2,446 Nm.
 The maximum safe load of all other construction parts has to be verified.

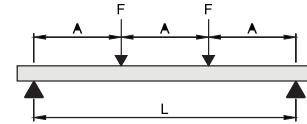
Maxx Heavy Rail Profile

L	Maxx Heavy Rail Profile MX100 (100x100x3)			
	1 x F	2 x F	3 x F	q
(mm)	(N)	(N)	(N)	(N)
2,000	9,242	6,938	4,621	18,484
2,250	8,195	6,154	4,097	16,391
2,500	7,355	5,525	3,677	14,711
2,750	6,667	5,009	3,333	13,334
3,000	6,091	4,579	3,045	12,182
3,250	5,602	4,178	2,801	11,204
3,500	5,181	3,811	2,569	9,763
3,750	4,816	3,498	2,352	8,445
4,000	4,494	3,231	2,157	7,363
4,250	4,209	2,991	1,980	6,463
4,500	3,955	2,772	1,819	5,705
4,750	3,722	2,576	1,671	5,060
5,000	3,506	2,401	1,534	4,506
5,250	3,305	2,244	1,407	4,027
5,500	3,118	2,104	1,289	3,609
5,750	2,944	1,978	1,179	3,241
6,000	2,781	1,865	1,076	2,916
6,500	2,480	1,688	923	2,368
7,000	2,202	1,535	796	1,924
7,500	1,953	1,401	691	1,557
8,000	1,721	1,284	607	1,250

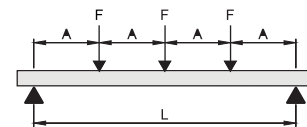
Suspension on 1 point



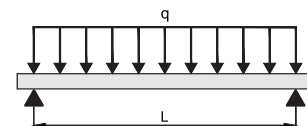
2 equal loads



3 equal loads



Uniformly distributed load



Max. allowed load in N per suspension point (F), or per uniformly distributed load (q).

The stated values are only valid for fixing profile. The maximum safe load of all other construction parts has to be verified.

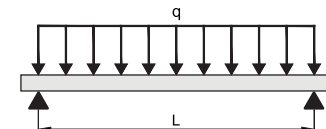
Maxx Baseplate with Maxx Profile (Cantilever Arm Application)

L	Maxx Heavy Rail MX100 (100x100x3)	
	1 x F	q
(mm)	(N)	(N)
500	6,984	13,968
550	6,349	12,698
600	5,820	11,640
650	5,372	10,744
700	4,988	9,977
750	4,656	9,312
800	4,365	8,730
850	4,108	8,216
900	3,880	7,760
950	3,675	7,351
1,000	3,492	6,984
1,050	3,325	6,651
1,100	3,174	6,349
1,200	2,910	5,820
1,300	2,686	5,372
1,400	2,411	4,988
1,500	2,091	4,656

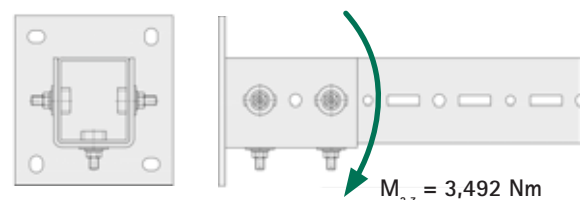
Suspension on 1 point at the end



Uniformly distributed load



Application



Max. allowed load in N per suspension point (F), or per uniformly distributed load (q).

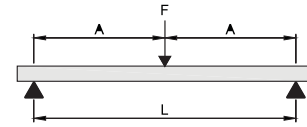
The stated values are only valid for the cantilever arm application, using Maxx Baseplate and Maxx Profiles, connected by Maxx Hammerfix.

For all load specifications for cantilever arm application, the maximum allowed Moment ($M_{a,z}$) of the Maxx Baseplate was considered with 3,492 Nm. The maximum safe load of all other construction parts has to be verified.

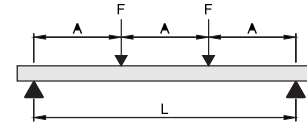
Maxx Heavy Rail Profile

L	Maxx Heavy Rail Profile MX120 (100x120x4)			
	1 x F	2 x F	3 x F	q
(mm)	(N)	(N)	(N)	(N)
2,000	15,256	11,452	7,628	30,513
2,250	13,532	10,160	6,766	27,065
2,500	12,150	9,125	6,075	24,300
2,750	11,016	8,276	5,508	22,033
3,000	10,069	7,567	5,034	20,138
3,250	9,265	6,965	4,632	18,531
3,500	8,574	6,448	4,287	17,148
3,750	7,973	5,998	3,986	15,946
4,000	7,445	5,410	3,722	14,749
4,250	6,977	4,761	3,415	12,979
4,500	6,560	4,215	3,023	11,490
4,750	6,185	3,751	2,691	10,226
5,000	5,713	3,353	2,405	9,142
5,250	5,128	3,010	2,159	8,205
5,500	4,618	2,710	1,944	7,388
5,750	4,170	2,447	1,756	6,672
6,000	3,775	2,216	1,589	6,040
6,500	3,111	1,826	1,309	4,977
7,000	2,576	1,512	1,084	4,121
7,500	2,137	1,254	899	3,419
8,000	1,771	1,039	745	2,833

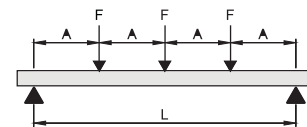
Suspension on 1 point



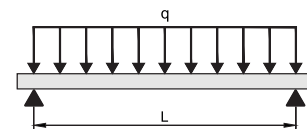
2 equal loads



3 equal loads



Uniformly distributed load



Max. allowed load in N per suspension point (F), or per uniformly distributed load (q).

The stated values are only valid for fixing profile. The maximum safe load of all other construction parts has to be verified.

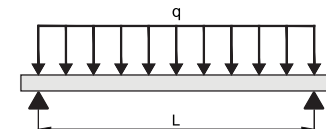
Maxx Baseplate with Maxx Profile (Cantilever Arm Application)

L	Maxx Heavy Rail MX120 (100x120x4)	
	1 x F	q
(mm)	(N)	(N)
500	7,857	15,714
550	7,142	14,285
600	6,547	13,095
650	6,043	12,087
700	5,612	11,224
750	5,238	10,476
800	4,910	9,821
850	4,621	9,243
900	4,365	8,730
950	4,135	8,270
1,000	3,928	7,857
1,050	3,741	7,482
1,100	3,571	7,142
1,200	3,273	6,547
1,300	3,021	6,043
1,400	2,806	5,612
1,500	2,619	5,238

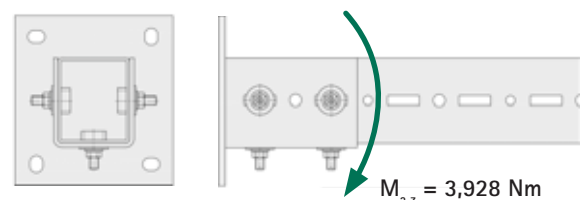
Suspension on 1 point at the end



Uniformly distributed load



Application



Max. allowed load in N per suspension point (F), or per uniformly distributed load (q).

The stated values are only valid for the cantilever arm application, using Maxx Baseplate and Maxx Profiles, connected by Maxx Hammerfix.

For all load specifications for cantilever arm application, the maximum allowed Moment ($M_{a,z}$) of the Maxx Baseplate was considered with 3,928 Nm. The maximum safe load of all other construction parts has to be verified.