

Data sheet

Technical details BIS RapidRail®

- Use of rail load tables
- Rail load tables

Calculation method

The published safe working loads are based on tests with perforated (slotted) rail. For non perforated rail the safe working loads can be taken as 20 % higher. Loads are calculated taking into consideration a maximum deflection (f) of length $1/200 \times L$ and a maximum bending stress of 160 N/mm².

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 has not been taken into consideration. The installer must verify that the bolts and wall plugs used are suitable for the maximum permitted loading of the rail.

Methods of loading

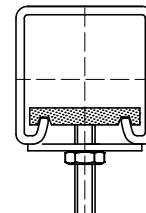
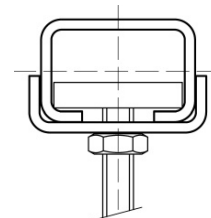
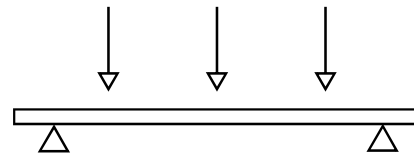
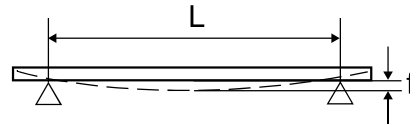
Where loads are suspended beneath rails, the load must not exceed the relevant safe load of the slide nut. To increase rigidity of the installation we recommend the use of a U-formed washer.

Reading the rail loading tables

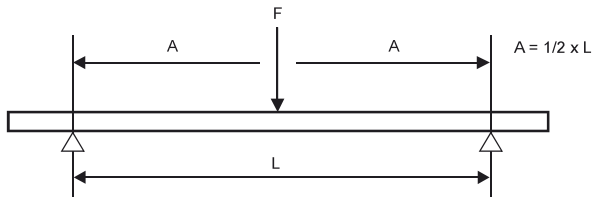
The stated values are only valid for the fixing rail. The maximum safe load of all other construction parts have to be verified. The stated maximum safe load is calculated for a static load at free bending support. Where the segment is marked with a hyphen, the stated length cannot be safely loaded.

Special conditions

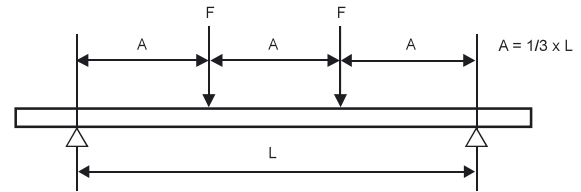
In case of doubt or for special conditions not stated in the loading tables, please do not hesitate to contact our technical department for their advice.



BIS RapidRail® Fixing Rail

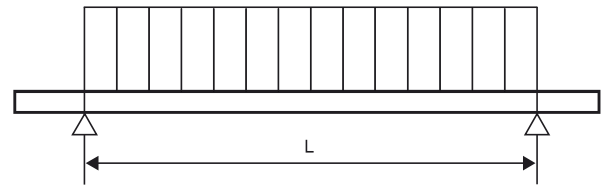
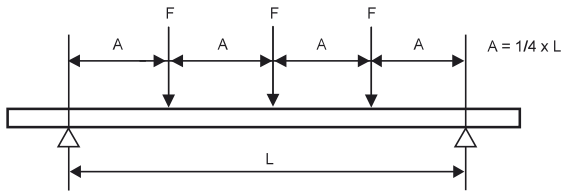


Singel centered load between 2 supports (lbs)				
Length	WM0	WM15	WM2	WM30
0' 10"	168	276	716	1150
1' 0"	140	230	597	959
1' 2"	120	197	512	822
1' 4"	105	173	448	719
1' 6"	83	154	398	639
1' 8"	84	138	358	575
1' 10"	76	126	326	523
2' 0"	70	115	298	479
2' 6"	51	86	239	383
3' 0"	35	60	199	320
3' 6"	26	44	154	274
4' 0"	20	34	118	240
4' 6"	16	27	93	213
5' 0"	13	22	76	192
5' 6"	10	18	62	167
6' 0"	9	15	52	140



Equal load on 2 points between 2 supports (lbs)				
Length	WM0	WM15	WM2	WM30
0' 10"	126	207	537	863
1' 0"	105	173	448	719
1' 2"	90	148	384	616
1' 4"	79	130	336	539
1' 6"	70	115	308	489
1' 8"	63	104	269	431
1' 10"	55	94	244	392
2' 0"	46	79	224	360
2' 6"	30	51	177	288
3' 0"	21	35	123	240
3' 6"	15	26	90	205
4' 0"	12	20	69	180
4' 6"	9	16	55	146
5' 0"	7	13	44	118
5' 6"	6	10	37	98
6' 0"	5	9	31	82

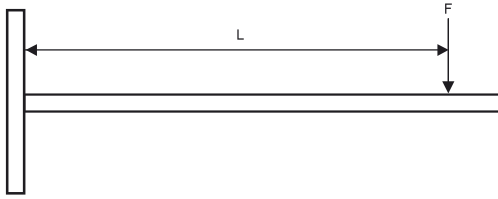
BIS RapidRail® Fixing Rail



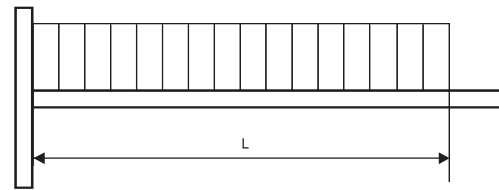
Equal load on 3 points between 2 supports (lbs)				
Length	WM0	WM15	WM2	WM30
0' 10"	84	138	358	575
1' 0"	70	115	298	479
1' 2"	60	99	256	411
1' 4"	52	86	224	360
1' 6"	47	77	199	320
1' 8"	42	69	179	288
1' 10"	38	63	163	261
2' 0"	33	57	149	240
2' 6"	21	36	119	192
3' 0"	15	25	88	160
3' 6"	11	19	65	137
4' 0"	8	14	50	120
4' 6"	7	11	39	105
5' 0"	5	9	32	85
5' 6"	4	8	26	70
6' 0"	4	6	22	59

Uniformly distributed load between 2 supports (lbs)				
Length	WM0	WM15	WM2	WM30
0' 10"	335	553	1433	2301
1' 0"	279	461	1194	1917
1' 2"	240	395	1023	1644
1' 4"	210	346	895	1438
1' 6"	186	307	796	1278
1' 8"	168	276	716	1150
1' 10"	150	251	651	1046
2' 0"	126	216	597	959
2' 6"	81	138	478	767
3' 0"	56	96	336	639
3' 6"	41	70	247	548
4' 0"	32	54	189	479
4' 6"	25	43	149	398
5' 0"	20	34	121	323
5' 6"	17	29	100	267
6' 0"	14	24	84	224

BIS RapidRail® Cantilever Arms



Single suspended load (lbs)				
Length	WM0	WM15	WM2	WM30
0' 4"	105	173	448	719
0' 6"	70	115	298	479
0' 8"	44	76	224	360
0' 10"	28	49	170	288
1' 0"	20	34	118	240
1' 2"	14	25	87	205
1' 4"	11	19	66	177
1' 6"	9	15	52	140
1' 8"	7	12	42	113
1' 10"	6	10	35	94
2' 0"	5	8	29	79
2' 4"	4	6	22	58
2' 6"	3	5	19	50
2' 8"	3	5	17	44
3' 0"	-	4	13	35



Uniformly distributed load over complete length (lbs)				
Length	WM0	WM15	WM2	WM30
0' 4"	210	346	895	1438
0' 6"	140	230	597	959
0' 8"	105	173	448	719
0' 10"	76	129	358	575
1' 0"	53	90	298	479
1' 2"	39	66	231	411
1' 4"	30	51	177	360
1' 6"	23	40	140	320
1' 8"	19	32	113	288
1' 10"	16	27	94	250
2' 0"	13	22	79	210
2' 4"	10	17	58	154
2' 6"	8	14	50	134
2' 8"	7	13	44	118
3' 0"	6	10	35	93