

Calculation method

The published payloads are based on tests with perforated fixing rails. For non-perforated fixing rails, the payload is 20% higher than reported.

The loads are calculated considering a maximum deflection (f) of a value equal to $1/200 \times L$ and a maximum bending load of 160 N/mm^2 .

Example: for a length of 500 mm the maximum payload is 1400 N; the maximum deflection will be $(1/200 \times 500 \text{ mm}) = 2.5 \text{ mm}$

Attaching of the fixing rail to walls or partitions

The anchoring force of the fixing rail has not been taken into consideration.

The installer must check that the screws and anchors used to attach the fixing rail to the wall or ceiling are suitable for the maximum load permitted by the fixing rail.

Loading methods

Where loads are suspended on the fixing rails, the load must not exceed the safe payload of the attachment to the fixing rail. To increase the rigidity of the installation we recommend the use of pre-shaped U washers.

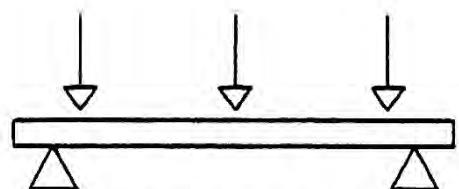
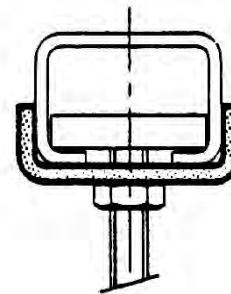
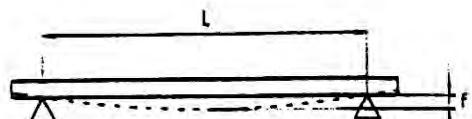
When loading is from above the fixing rail, the possible load is greater than that shown in the tables.

How to read load tables

Where the box is empty, the fixing rail selected for that application cannot be used but one with a higher range must be used.

Special conditions

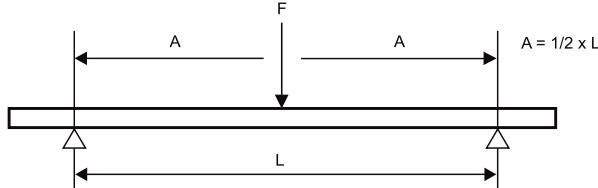
In case of uncertainty or special conditions not shown in the load tables, do not hesitate to contact our technical department for suggestions and advice.



Top loading

CorSTRUT fixing rail

1 point suspension



	single						
L (mm)	41x21 1,5	41x21 2,0	41x41 1,5	41x41 2,0	41x41 2,5	41x62 2,5	41x82 2,5
250	1.848	2.381	5.427	6.556	7.611	14.730	23.035
300	1.540	1.984	4.523	5.463	6.342	12.275	19.196
350	1.320	1.701	3.877	4.683	5.436	10.522	16.453
400	1.155	1.488	3.392	4.098	4.757	9.206	14.397
450	1.027	1.323	3.015	3.642	4.228	8.183	12.797
500	924	1.190	2.714	3.278	3.805	7.365	11.517
600	770	992	2.261	2.732	3.171	6.138	9.598
700	660	850	1.938	2.341	2.718	5.261	8.227
800	557	719	1.696	2.049	2.378	4.603	7.198
900	440	568	1.508	1.821	2.114	4.092	6.399
1.000	356	460	1.357	1.639	1.903	3.683	5.759
1.200	247	320	1.131	1.366	1.586	3.069	4.799
1.400	182	235	969	1.171	1.359	2.630	4.113
1.600	139	180	794	952	1.114	2.302	3.599
1.800	110	142	628	752	881	2.046	3.199
2.000	89	115	508	609	713	1.841	2.879
2.250	70	91	402	481	564	1.624	2.559
2.500	57	74	325	390	456	1.315	2.303
2.750	47	61	269	322	377	1.087	2.094
3.000	40	51	226	271	317	913	1.890
3.250	34	44	193	231	270	778	1.611
3.500	29	38	166	199	233	671	1.389
3.750	25	33	145	173	203	584	1.210
4.000	22	29	127	152	178	514	1.063
4.250	20	25	113	135	158	455	942
4.500	18	23	100	120	141	406	840
4.750	16	20	90	108	126	364	754
5.000	14	18	81	97	114	329	680
5.250	13	17	74	88	104	298	617
5.500	12	15	67	81	94	272	562
5.750	11	14	62	74	86	249	515
6.000	-	13	56	68	79	228	473

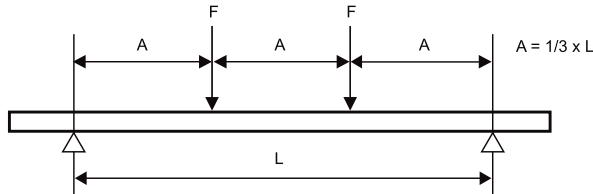
double			
41x21D	41x41D	41x62D	41x82D
7.081	22.804	32.686	42.030
5.901	19.004	27.238	35.025
5.058	16.289	23.347	30.021
4.426	14.253	20.429	26.269
3.934	12.669	18.159	23.350
3.540	11.402	16.343	21.015
2.950	9.502	13.619	17.513
2.529	8.144	11.674	15.011
2.213	7.126	10.214	13.134
1.967	6.335	9.079	11.675
1.770	5.701	8.172	10.508
1.475	4.751	6.810	8.756
1.264	4.072	5.837	7.505
1.015	3.563	5.107	6.567
802	3.167	4.540	5.838
650	2.851	-	-
513	2.534	-	-
416	2.280	-	-
344	2.073	-	-
289	1.864	-	-
246	1.588	-	-
212	1.370	-	-
185	1.193	-	-
162	1.049	-	-
144	929	-	-
128	828	-	-
115	744	-	-
104	671	-	-
94	609	-	-
86	555	-	-
79	507	-	-
72	466	-	-

Maximum payload in N.

**The values reported are only valid for the fixing rail.
The maximum payload of all the other construction parts must be verified.**

CorSTRUT fixing rail

2 equal loads



	single						
L (mm)	41x21 1,5	41x21 2,0	41x41 1,5	41x41 2,0	41x41 2,5	41x62 2,5	41x82 2,5
250	1.386	1.786	4.070	4.917	5.708	11.048	17.276
300	1.155	1.488	3.392	4.098	4.757	9.206	14.397
350	990	1.275	2.907	3.512	4.077	7.891	12.340
400	866	1.116	2.544	3.073	3.568	6.905	10.798
450	770	992	2.261	2.732	3.171	6.138	9.598
500	693	893	2.035	2.459	2.854	5.524	8.638
600	578	744	1.696	2.049	2.378	4.603	7.198
700	427	552	1.454	1.756	2.039	3.946	6.170
800	327	422	1.272	1.537	1.784	3.452	5.399
900	258	334	1.131	1.366	1.586	3.069	4.799
1.000	209	270	1.018	1.229	1.427	2.762	4.319
1.200	145	188	829	993	1.163	2.302	3.599
1.400	107	138	609	730	854	1.973	3.085
1.600	82	106	466	559	654	1.726	2.699
1.800	65	83	368	442	517	1.489	2.399
2.000	52	68	298	358	419	1.206	2.160
2.250	41	53	236	283	331	953	1.920
2.500	33	43	191	229	268	772	1.598
2.750	28	36	158	189	221	638	1.320
3.000	23	30	133	159	186	536	1.109
3.250	20	26	113	135	159	457	945
3.500	17	22	97	117	137	394	815
3.750	15	19	85	102	119	343	710
4.000	13	17	75	89	105	302	624
4.250	12	15	66	79	93	267	553
4.500	10	13	59	71	83	238	493
4.750	-	12	53	63	74	214	443
5.000	-	11	48	57	67	193	399
5.250	-	-	43	52	61	175	362
5.500	-	-	39	47	55	159	330
5.750	-	-	36	43	51	146	302
6.000	-	-	33	40	47	134	277

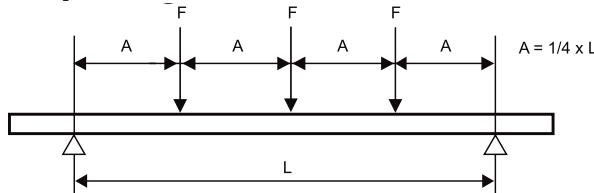
double			
41x21D	41x41D	41x62D	41x82D
5.311	17.103	24.515	31.523
4.426	14.253	20.429	26.269
3.793	12.217	17.510	22.516
3.319	10.690	15.322	19.702
2.950	9.502	13.619	17.513
2.655	8.552	12.257	15.761
2.213	7.126	10.214	13.134
1.897	6.108	8.755	11.258
1.660	5.345	7.661	9.851
1.475	4.751	6.810	8.756
1.328	4.276	6.129	7.881
1.059	3.563	5.107	6.567
778	3.054	4.378	5.629
596	2.672	3.830	4.925
471	2.375	3.405	4.378
381	2.138	-	-
301	1.900	-	-
244	1.576	-	-
202	1.302	-	-
169	1.094	-	-
144	932	-	-
124	804	-	-
108	700	-	-
95	615	-	-
84	545	-	-
75	486	-	-
68	436	-	-
61	394	-	-
55	357	-	-
50	326	-	-
46	298	-	-
42	274	-	-

Max payload in N. Suspension for point (F)

**The values reported are only valid for the fixing rail.
The maximum payload of all the other construction parts must be verified.**

CorSTRUT fixing rail

3 equal loads



	single						
L (mm)	41x21 1,5	41x21 2,0	41x41 1,5	41x41 2,0	41x41 2,5	41x62 2,5	41x82 2,5
250	924	1.190	2.714	3.278	3.805	7.365	11.517
300	770	992	2.261	2.732	3.171	6.138	9.598
350	660	850	1.938	2.341	2.718	5.261	8.227
400	578	744	1.696	2.049	2.378	4.603	7.198
450	513	661	1.508	1.821	2.114	4.092	6.399
500	462	595	1.357	1.639	1.903	3.683	5.759
600	385	496	1.131	1.366	1.586	3.069	4.799
700	306	396	969	1.171	1.359	2.630	4.113
800	234	303	848	1.024	1.189	2.302	3.599
900	185	239	754	911	1.057	2.046	3.199
1.000	150	194	678	820	951	1.841	2.879
1.200	104	135	565	683	793	1.534	2.399
1.400	77	99	437	524	613	1.315	2.057
1.600	59	76	335	401	469	1.151	1.800
1.800	46	60	264	317	371	1.023	1.600
2.000	38	48	214	257	300	865	1.440
2.250	30	38	169	203	237	684	1.280
2.500	24	31	137	164	192	554	1.146
2.750	20	26	113	136	159	458	947
3.000	17	22	95	114	133	385	796
3.250	14	18	81	97	114	328	678
3.500	12	16	70	84	98	283	585
3.750	11	14	61	73	85	246	509
4.000	-	12	54	64	75	216	448
4.250	-	11	47	57	67	192	397
4.500	-	-	42	51	59	171	354
4.750	-	-	38	45	53	153	317
5.000	-	-	34	41	48	138	287
5.250	-	-	31	37	44	126	260
5.500	-	-	28	34	40	114	237
5.750	-	-	26	31	36	105	217
6.000	-	-	24	29	33	96	199

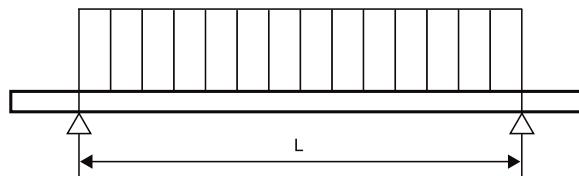
double			
41x21D	41x41D	41x62D	41x82D
3.540	11.402	16.343	21.015
2.950	9.502	13.619	17.513
2.529	8.144	11.674	15.011
2.213	7.126	10.214	13.134
1.967	6.335	9.079	11.675
1.770	5.701	8.172	10.508
1.475	4.751	6.810	8.756
1.264	4.072	5.837	7.505
1.106	3.563	5.107	6.567
983	3.167	4.540	5.838
885	2.851	4.086	5.254
738	2.375	3.405	4.378
558	2.036	2.918	3.753
427	1.782	2.554	3.284
338	1.584	2.270	2.919
274	1.425	-	-
216	1.267	-	-
175	1.130	-	-
145	934	-	-
122	785	-	-
104	669	-	-
89	577	-	-
78	502	-	-
68	441	-	-
61	391	-	-
54	349	-	-
48	313	-	-
44	283	-	-
40	256	-	-
36	234	-	-
33	214	-	-
30	196	-	-

Max payload in N. Suspension for point (F)

**The values reported are only valid for the fixing rail.
The maximum payload of all the other construction parts must be verified.**

CorSTRUT fixing rail

Load distributed uniformly



	single						
L (mm)	41x21 1,5	41x21 2,0	41x41 1,5	41x41 2,0	41x41 2,5	41x62 2,5	41x82 2,5
250	3.697	4.762	10.854	13.112	15.222	29.460	46.070
300	3.081	3.968	9.045	10.927	12.685	24.550	38.391
350	2.640	3.401	7.753	9.366	10.873	21.043	32.907
400	2.310	2.976	6.784	8.195	9.514	18.413	28.794
450	2.054	2.645	6.030	7.285	8.457	16.367	25.594
500	1.848	2.381	5.427	6.556	7.611	14.730	23.035
600	1.540	1.984	4.523	5.463	6.342	12.275	19.196
700	1.163	1.503	3.877	4.683	5.436	10.522	16.453
800	891	1.151	3.392	4.098	4.757	9.206	14.397
900	704	909	3.015	3.642	4.228	8.183	12.797
1.000	570	737	2.714	3.278	3.805	7.365	11.517
1.200	396	512	2.260	2.708	3.170	6.138	9.598
1.400	291	376	1.660	1.989	2.329	5.261	8.227
1.600	223	288	1.271	1.523	1.783	4.603	7.198
1.800	176	227	1.004	1.204	1.409	4.059	6.399
2.000	143	184	814	975	1.141	3.288	5.759
2.250	113	146	643	770	902	2.598	5.119
2.500	91	118	521	624	730	2.104	4.355
2.750	75	97	430	516	604	1.739	3.599
3.000	63	82	362	433	507	1.461	3.024
3.250	54	70	308	369	432	1.245	2.577
3.500	47	60	266	318	373	1.074	2.222
3.750	41	52	231	277	325	935	1.936
4.000	36	46	203	244	285	822	1.701
4.250	32	41	180	216	253	728	1.507
4.500	28	36	161	193	225	649	1.344
4.750	25	33	144	173	202	583	1.206
5.000	23	29	130	156	183	526	1.089
5.250	21	27	118	141	166	477	988
5.500	19	24	108	129	151	435	900
5.750	17	22	98	118	138	398	823
6.000	16	20	90	108	127	365	756

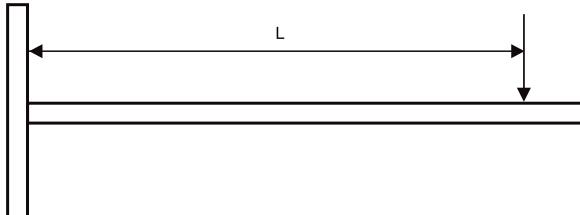
double			
41x21D	41x41D	41x62D	41x82D
14.162	45.609	65.372	84.060
11.802	38.007	54.477	70.050
10.116	32.578	46.694	60.043
8.851	28.506	40.858	52.538
7.868	25.338	36.318	46.700
7.081	22.804	32.686	42.030
5.901	19.004	27.238	35.025
5.058	16.289	23.347	30.021
4.426	14.253	20.429	26.269
3.934	12.669	18.159	23.350
3.540	11.402	16.343	21.015
2.887	9.502	13.619	17.513
2.121	8.144	11.674	15.011
1.624	7.126	10.214	13.134
1.283	6.335	9.079	11.675
1.039	5.701	-	-
821	5.068	-	-
665	4.295	-	-
550	3.549	-	-
462	2.983	-	-
394	2.541	-	-
339	2.191	-	-
296	1.909	-	-
260	1.678	-	-
230	1.486	-	-
205	1.326	-	-
184	1.190	-	-
166	1.074	-	-
151	974	-	-
137	887	-	-
126	812	-	-
115	746	-	-

Max payload in N. Suspension for point (F)

**The values reported are only valid for the fixing rail.
The maximum payload of all the other construction parts must be verified.**

CorSTRUT cantilever arm

1 point suspension



	single						
L (mm)	41x21 1,5	41x21 2,0	41x41 1,5	41x41 2,0	41x41 2,5	41x62 2,5	41x82 2,5
100	1.155	1.488	3.392	4.098	4.757	9.206	14.397
150	770	992	2.261	2.732	3.171	6.138	9.598
200	557	719	1.696	2.049	2.378	4.603	7.198
250	356	460	1.357	1.639	1.903	3.683	5.759
300	247	320	1.131	1.366	1.586	3.069	4.799
350	182	235	969	1.171	1.359	2.630	4.113
400	139	180	794	952	1.114	2.302	3.599
450	110	142	628	752	881	2.046	3.199
500	89	115	508	609	713	1.841	2.879
550	74	95	420	504	589	1.674	2.618
600	62	80	353	423	495	1.427	2.399
700	45	59	259	311	364	1.048	2.057
800	35	45	199	238	279	803	1.661
900	27	36	157	188	220	634	1.313
1.000	22	29	127	152	178	514	1.063
1.100	18	24	105	126	147	425	879
1.200	15	20	88	106	124	357	738
1.300	13	17	75	90	106	304	629
1.400	11	15	65	78	91	262	542
1.500	-	13	56	68	79	228	473

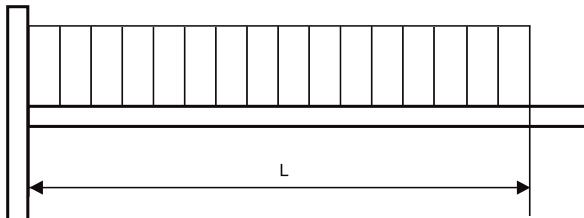
double			
41x21D	41x41D	41x62D	41x82D
4.426	14.253	20.429	26.269
2.950	9.502	13.619	17.513
2.213	7.126	10.214	13.134
1.770	5.701	8.172	10.508
1.475	4.751	6.810	8.756
1.264	4.072	5.837	7.505
1.015	3.563	5.107	6.567
802	3.167	4.540	5.838
650	2.851	4.086	5.254
537	2.591	3.714	4.776
451	2.375	3.405	4.378
331	2.036	2.918	3.753
254	1.638	2.554	3.284
200	1.295	2.270	2.919
162	1.049	2.043	2.627
134	867	1.857	2.388
113	728	1.702	2.189
96	620	1.571	2.021
83	535	1.459	1.876
72	466	1.362	1.751

Max payload in N.

**The values reported are only valid for the fixing rail.
The maximum payload of all the other construction parts must be verified.**

CorSTRUT cantilever arm

Load distributed uniformly



	single						
L (mm)	41x21 1,5	41x21 2,0	41x41 1,5	41x41 2,0	41x41 2,5	41x62 2,5	41x82 2,5
100	2.310	2.976	6.784	8.195	9.514	18.413	28.794
150	1.540	1.984	4.523	5.463	6.342	12.275	19.196
200	1.155	1.488	3.392	4.098	4.757	9.206	14.397
250	924	1.190	2.714	3.278	3.805	7.365	11.517
300	660	853	2.261	2.732	3.171	6.138	9.598
350	485	626	1.938	2.341	2.718	5.261	8.227
400	371	480	1.696	2.049	2.378	4.603	7.198
450	293	379	1.508	1.821	2.114	4.092	6.399
500	238	307	1.356	1.625	1.902	3.683	5.759
550	196	254	1.121	1.343	1.572	3.348	5.235
600	165	213	942	1.128	1.321	3.069	4.799
700	121	157	692	829	970	2.630	4.113
800	93	120	530	635	743	2.140	3.599
900	73	95	418	501	587	1.691	3.199
1.000	59	77	339	406	476	1.370	2.835
1.100	49	63	280	336	393	1.132	2.343
1.200	41	53	235	282	330	951	1.969
1.300	35	45	201	240	281	811	1.678
1.400	30	39	173	207	243	699	1.447
1.500	26	34	151	181	211	609	1.260

double			
41x21D	41x41D	41x61D	41x81D
8.851	28.506	40.858	52,538
5.901	19.004	27.238	35.025
4.426	14.253	20.429	26,269
3.540	11.402	16.343	21.015
2.950	9.502	13.619	17.513
2.529	8.144	11.674	15.011
2.213	7.126	10.214	13.134
1.967	6.335	9.079	11.675
1.732	5.701	8.172	10.508
1.432	5.183	7.429	9.552
1.203	4.751	6.810	8.756
884	4.072	5.837	7.505
677	3.563	5.107	6.567
535	3.167	4.540	5.838
433	2.796	4.086	5.254
358	2.311	3.714	4.776
301	1.942	3.405	4.378
256	1.655	3.143	4.041
221	1.427	2.918	3.753
192	1.243	2.724	3.503

Max payload in N.

**The values reported are only valid for the fixing rail.
The maximum payload of all the other construction parts must be verified.**