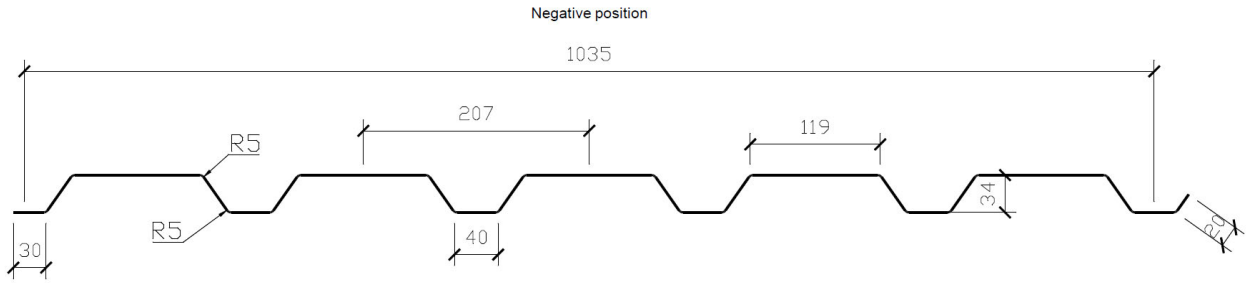
TECHNICAL DATA SHEET

OF PROFILE

Trapeza® 35/207 T

Trapeza® 35/207 T



Technical parameters:

Coil width:	1250 mm
Profile width:	1035 mm
Yield strength:	S320GD, S350GD according to EN 10346
Thickness:	0,40; 0,50; 0,55; 0,60; 0,63; 0,70; 0,75; 0,80; 0,88, 1,00 acc. to EN 10143
Durability/Coating quality:	ZM 60, ZM80, ZM100, ZM120, ZM175, ZM275 and Z100, 140, 200, 225, 275, 350 acc. to EN 10346
Organic coating:	Interieur (DU912, DU901), Hairplus, Hairultra, Hairflon, Keyron, Hairexcel, Sinea, (or acc. to Material guide), acc. to EN 10169
Max. length:	14 m
Min. length:	2 m

Tables of resistance of profiled sheeting ArcelorMittal

For all profiles, steel S320 is used. Material characteristics are as follows:

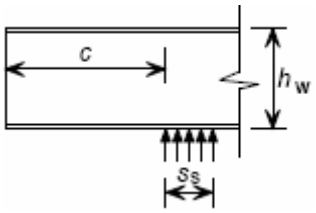
- yield strength f_y= 320 MPa
- proof strength f_u=390 MPa
- modulus of elasticity E = 210 000 MPa
- density 7850 kg/m^3

The design thickness of the sheet given in the tables is the core thickness only. No coatings or paintings are included neither in the thickness nor in the calculated weight of the profiled sheeting. Minus tolerance in the sheet thickness is lower than 5 %.

The design resistances are calculated for uniformly loaded simply supported or continuous beams (where the spans are also uniform).

Ultimate limit state (ULS)

The design resistance according to the ultimate limit state is given by "q_{Ed}" which is calculated with respect to the bending resistance, shear resistance, local transverse forces and their interactions as defined in CSN EN 1993-1-3 and other referenced codes. The width of the end support s_s is 40 mm and 120 mm for the internal support respectively. In the tables, two different resistances are given according to the distance "c" (see figure bellow the paragraph) from the end support to the free end. One resistance "q_{Ed} (c<1,5h) " is for profiles which meets the minimal distance of the overhang "c" at least 40 mm. For the second resistance "q_{Ed} (c≥1,5h) ", the distance at least 1.5 x h_w (web height) clear from a free end is considered.



The real design load must be always smaller or at least equal to the resistance given in the tables. The maximal design resistances (load values) in the tables are related to a one-meter width of the profiled sheeting. Units used in the tables are kN/m^2. The self-weight of the sheeting must be included in the load.

Serviceability limit state (SLS)

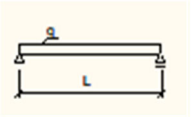
The characteristics load "q_{Ek}" that meets the serviceability limit for deflection of L/200 (where L means the span) is given in the table. In view of the fact that the behavior in the SLS is elastic, characteristic load for different limits may be extrapolated from the table. To fulfil the condition of the limit, the real characteristics load must be lower or at least equal to the value given by the tables.

Used design codes:

ČSN EN 1993-1-1: Navrhování ocelových konstrukcí, Část 1-1: Obecná pravidla a pravidla pro pozemní stavby, ČNI, 2006. (Design of steel structures, Part 1-1: General rules and rules for buildings)

ČSN EN 1993-1-3: Navrhování ocelových konstrukcí, Část 1-3: Obecná pravidla – Doplňující pravidla pro tenkostěnné za studena tvarované prvky a plošné profily, ČNI, 2008. (Design of steel structures, Part 1-3: General rules - Supplementary rules for cold-formed members and sheeting)

ČSN EN 1993-1-5: Navrhování ocelových konstrukcí, Část 1-5: Boulení stěn, ČNI, 2008. (Design of steel structures, Part 1-5: Plated structural elements)



Single span – positive position

Trapeza® 35/207 T		Span [m]																	
t [mm]	S320	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00
0,4	q_{Rd} (c<1.5h)	4,443	3,333	2,205	1,531	1,125	0,861	0,680	0,551	0,456	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rd} (c≥1.5h)	6,124	3,445	2,205	1,531	1,125	0,861	0,680	0,551	0,456	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rk} (L/200)	4,602	1,941	0,994	0,575	0,362	0,243	0,170	0,124	0,093	0,072	0,057	0,045	0,037	0,030	0,025	0,021	0,018	0,016
0,5	q_{Rd} (c<1.5h)	7,217	5,413	3,811	2,646	1,944	1,489	1,176	0,953	0,787	0,662	0,564	0,486	0,423	0,372	0,330	0,294	0,264	0,238
	q_{Rd} (c≥1.5h)	10,585	5,954	3,811	2,646	1,944	1,489	1,176	0,953	0,787	0,662	0,564	0,486	0,423	0,372	0,330	0,294	0,264	0,238
	q_{Rk} (L/200)	7,870	3,320	1,700	0,984	0,619	0,415	0,291	0,212	0,160	0,123	0,097	0,077	0,063	0,052	0,043	0,036	0,031	0,027
0,55	q_{Rd} (c<1.5h)	8,830	6,623	4,609	3,201	2,351	1,800	1,422	1,152	0,952	0,800	0,682	0,588	0,512	0,450	0,399	0,356	0,319	0,288
	q_{Rd} (c≥1.5h)	12,802	7,201	4,609	3,201	2,351	1,800	1,422	1,152	0,952	0,800	0,682	0,588	0,512	0,450	0,399	0,356	0,319	0,288
	q_{Rk} (L/200)	9,488	4,003	2,049	1,186	0,747	0,500	0,351	0,256	0,192	0,148	0,117	0,093	0,076	0,063	0,052	0,044	0,037	0,032
0,6	q_{Rd} (c<1.5h)	10,592	7,944	5,370	3,729	2,740	2,098	1,657	1,343	1,110	0,932	0,794	0,685	0,597	0,524	0,465	0,414	0,372	0,336
	q_{Rd} (c≥1.5h)	14,917	8,391	5,370	3,729	2,740	2,098	1,657	1,343	1,110	0,932	0,794	0,685	0,597	0,524	0,465	0,414	0,372	0,336
	q_{Rk} (L/200)	11,060	4,666	2,389	1,383	0,871	0,583	0,410	0,299	0,224	0,173	0,136	0,109	0,088	0,073	0,061	0,051	0,044	0,037
0,63	q_{Rd} (c<1.5h)	11,720	8,790	5,846	4,060	2,982	2,283	1,804	1,461	1,208	1,015	0,865	0,746	0,650	0,571	0,506	0,451	0,405	0,365
	q_{Rd} (c≥1.5h)	16,238	9,134	5,846	4,060	2,982	2,283	1,804	1,461	1,208	1,015	0,865	0,746	0,650	0,571	0,506	0,451	0,405	0,365
	q_{Rk} (L/200)	12,024	5,073	2,597	1,503	0,947	0,634	0,445	0,325	0,244	0,188	0,148	0,118	0,096	0,079	0,066	0,056	0,047	0,041
0,7	q_{Rd} (c<1.5h)	14,555	10,916	7,009	4,868	3,576	2,738	2,163	1,752	1,448	1,217	1,037	0,894	0,779	0,684	0,606	0,541	0,485	0,438
	q_{Rd} (c≥1.5h)	19,470	10,952	7,009	4,868	3,576	2,738	2,163	1,752	1,448	1,217	1,037	0,894	0,779	0,684	0,606	0,541	0,485	0,438
	q_{Rk} (L/200)	14,334	6,047	3,096	1,792	1,128	0,756	0,531	0,387	0,291	0,224	0,176	0,141	0,115	0,094	0,079	0,066	0,056	0,048
0,75	q_{Rd} (c<1.5h)	16,752	12,322	7,886	5,476	4,023	3,080	2,434	1,971	1,629	1,369	1,167	1,006	0,876	0,770	0,682	0,608	0,546	0,493
	q_{Rd} (c≥1.5h)	21,906	12,322	7,886	5,476	4,023	3,080	2,434	1,971	1,629	1,369	1,167	1,006	0,876	0,770	0,682	0,608	0,546	0,493
	q_{Rk} (L/200)	16,033	6,764	3,463	2,004	1,262	0,845	0,594	0,433	0,325	0,251	0,197	0,158	0,128	0,106	0,088	0,074	0,063	0,054
0,8	q_{Rd} (c<1.5h)	19,092	13,750	8,800	6,111	4,490	3,438	2,716	2,200	1,818	1,528	1,302	1,122	0,978	0,859	0,761	0,679	0,609	0,550
	q_{Rd} (c≥1.5h)	24,445	13,750	8,800	6,111	4,490	3,438	2,716	2,200	1,818	1,528	1,302	1,122	0,978	0,859	0,761	0,679	0,609	0,550
	q_{Rk} (L/200)	17,771	7,497	3,839	2,221	1,399	0,937	0,658	0,480	0,360	0,278	0,218	0,175	0,142	0,117	0,098	0,082	0,070	0,060
0,88	q_{Rd} (c<1.5h)	23,129	16,154	10,338	7,179	5,275	4,038	3,191	2,585	2,136	1,795	1,529	1,319	1,149	1,010	0,894	0,798	0,716	0,646
	q_{Rd} (c≥1.5h)	28,718	16,154	10,338	7,179	5,275	4,038	3,191	2,585	2,136	1,795	1,529	1,319	1,149	1,010	0,894	0,798	0,716	0,646
	q_{Rk} (L/200)	20,630	8,703	4,456	2,579	1,624	1,088	0,764	0,557	0,418	0,322	0,254	0,203	0,165	0,136	0,113	0,096	0,081	0,070
1	q_{Rd} (c<1.5h)	29,856	19,688	12,600	8,750	6,429	4,922	3,889	3,150	2,603	2,188	1,864	1,607	1,400	1,231	1,090	0,972	0,873	0,788
	q_{Rd} (c≥1.5h)	35,001	19,688	12,600	8,750	6,429	4,922	3,889	3,150	2,603	2,188	1,864	1,607	1,400	1,231	1,090	0,972	0,873	0,788
	q_{Rk} (L/200)	26,189	11,049	5,657	3,274	2,062	1,381	0,970	0,707	0,531	0,409	0,322	0,258	0,210	0,173	0,144	0,121	0,103	0,088
1,25	q_{Rd} (c<1.5h)	45,263	25,461	16,295	11,316	8,314	6,365	5,029	4,074	3,367	2,829	2,410	2,078	1,811	1,591	1,410	1,257	1,128	1,018
	q_{Rd} (c≥1.5h)	45,263	25,461	16,295	11,316	8,314	6,365	5,029	4,074	3,367	2,829	2,410	2,078	1,811	1,591	1,410	1,257	1,128	1,018
	q_{Rk} (L/200)	35,880	15,137	7,750	4,485	2,824	1,892	1,329	0,969	0,728	0,561	0,441	0,353	0,287	0,237	0,197	0,166	0,141	0,121

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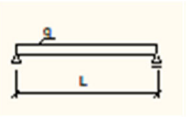
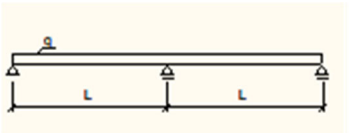
Single span – negative position



Trapeza® 35/207 T		Span [m]																	
t [mm]	S320	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00
0,4	q_{Rd} (c<1.5h)	4,443	3,333	2,206	1,532	1,125	0,862	0,681	0,551	0,456	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rd} (c≥1.5h)	6,127	3,446	2,206	1,532	1,125	0,862	0,681	0,551	0,456	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rk} (L/200)	5,916	2,496	1,278	0,739	0,466	0,312	0,219	0,160	0,120	0,092	0,073	0,058	0,047	0,039	0,033	0,027	0,023	0,020
0,5	q_{Rd} (c<1.5h)	7,217	5,413	3,786	2,629	1,931	1,479	1,168	0,946	0,782	0,657	0,560	0,483	0,421	0,370	0,327	0,292	0,262	0,237
	q_{Rd} (c≥1.5h)	10,516	5,915	3,786	2,629	1,931	1,479	1,168	0,946	0,782	0,657	0,560	0,483	0,421	0,370	0,327	0,292	0,262	0,237
	q_{Rk} (L/200)	10,370	4,375	2,240	1,296	0,816	0,547	0,384	0,280	0,210	0,162	0,127	0,102	0,083	0,068	0,057	0,048	0,041	0,035
0,55	q_{Rd} (c<1.5h)	8,830	6,623	4,702	3,266	2,399	1,837	1,451	1,176	0,972	0,816	0,696	0,600	0,522	0,459	0,407	0,363	0,326	0,294
	q_{Rd} (c≥1.5h)	13,062	7,348	4,702	3,266	2,399	1,837	1,451	1,176	0,972	0,816	0,696	0,600	0,522	0,459	0,407	0,363	0,326	0,294
	q_{Rk} (L/200)	12,846	5,420	2,775	1,606	1,011	0,677	0,476	0,347	0,261	0,201	0,158	0,126	0,103	0,085	0,071	0,059	0,051	0,043
0,6	q_{Rd} (c<1.5h)	10,592	7,944	5,703	3,961	2,910	2,228	1,760	1,426	1,178	0,990	0,844	0,727	0,634	0,557	0,493	0,440	0,395	0,356
	q_{Rd} (c≥1.5h)	15,843	8,912	5,703	3,961	2,910	2,228	1,760	1,426	1,178	0,990	0,844	0,727	0,634	0,557	0,493	0,440	0,395	0,356
	q_{Rk} (L/200)	15,473	6,528	3,342	1,934	1,218	0,816	0,573	0,418	0,314	0,242	0,190	0,152	0,124	0,102	0,085	0,072	0,061	0,052
0,63	q_{Rd} (c<1.5h)	11,720	8,790	6,345	4,406	3,237	2,479	1,958	1,586	1,311	1,102	0,939	0,809	0,705	0,620	0,549	0,490	0,439	0,397
	q_{Rd} (c≥1.5h)	17,625	9,914	6,345	4,406	3,237	2,479	1,958	1,586	1,311	1,102	0,939	0,809	0,705	0,620	0,549	0,490	0,439	0,397
	q_{Rk} (L/200)	17,119	7,222	3,698	2,140	1,348	0,903	0,634	0,462	0,347	0,267	0,210	0,168	0,137	0,113	0,094	0,079	0,067	0,058
0,7	q_{Rd} (c<1.5h)	14,555	10,916	7,608	5,283	3,881	2,972	2,348	1,902	1,572	1,321	1,125	0,970	0,845	0,743	0,658	0,587	0,527	0,475
	q_{Rd} (c≥1.5h)	21,132	11,887	7,608	5,283	3,881	2,972	2,348	1,902	1,572	1,321	1,125	0,970	0,845	0,743	0,658	0,587	0,527	0,475
	q_{Rk} (L/200)	20,515	8,655	4,431	2,564	1,615	1,082	0,760	0,554	0,416	0,321	0,252	0,202	0,164	0,135	0,113	0,095	0,081	0,069
0,75	q_{Rd} (c<1.5h)	16,752	12,564	8,477	5,887	4,325	3,311	2,616	2,119	1,751	1,472	1,254	1,081	0,942	0,828	0,733	0,654	0,587	0,530
	q_{Rd} (c≥1.5h)	23,547	13,245	8,477	5,887	4,325	3,311	2,616	2,119	1,751	1,472	1,254	1,081	0,942	0,828	0,733	0,654	0,587	0,530
	q_{Rk} (L/200)	22,878	9,652	4,942	2,860	1,801	1,206	0,847	0,618	0,464	0,357	0,281	0,225	0,183	0,151	0,126	0,106	0,090	0,077
0,8	q_{Rd} (c<1.5h)	19,092	14,319	9,367	6,505	4,779	3,659	2,891	2,342	1,935	1,626	1,386	1,195	1,041	0,915	0,810	0,723	0,649	0,585
	q_{Rd} (c≥1.5h)	26,019	14,636	9,367	6,505	4,779	3,659	2,891	2,342	1,935	1,626	1,386	1,195	1,041	0,915	0,810	0,723	0,649	0,585
	q_{Rk} (L/200)	25,279	10,664	5,460	3,160	1,990	1,333	0,936	0,683	0,513	0,395	0,311	0,249	0,202	0,167	0,139	0,117	0,100	0,085
0,88	q_{Rd} (c<1.5h)	23,129	16,921	10,829	7,520	5,525	4,230	3,342	2,707	2,237	1,880	1,602	1,381	1,203	1,058	0,937	0,836	0,750	0,677
	q_{Rd} (c≥1.5h)	30,081	16,921	10,829	7,520	5,525	4,230	3,342	2,707	2,237	1,880	1,602	1,381	1,203	1,058	0,937	0,836	0,750	0,677
	q_{Rk} (L/200)	29,187	12,313	6,304	3,648	2,298	1,539	1,081	0,788	0,592	0,456	0,359	0,287	0,233	0,192	0,160	0,135	0,115	0,099
1	q_{Rd} (c<1.5h)	29,856	20,903	13,378	9,290	6,825	5,226	4,129	3,344	2,764	2,323	1,979	1,706	1,486	1,306	1,157	1,032	0,926	0,836
	q_{Rd} (c≥1.5h)	37,161	20,903	13,378	9,290	6,825	5,226	4,129	3,344	2,764	2,323	1,979	1,706	1,486	1,306	1,157	1,032	0,926	0,836
	q_{Rk} (L/200)	36,722	15,492	7,932	4,590	2,891	1,937	1,360	0,991	0,745	0,574	0,451	0,361	0,294	0,242	0,202	0,170	0,145	0,124
1,25	q_{Rd} (c<1.5h)	46,409	28,378	18,162	12,612	9,266	7,094	5,606	4,540	3,752	3,153	2,687	2,317	2,018	1,774	1,571	1,401	1,258	1,135
	q_{Rd} (c≥1.5h)	50,450	28,378	18,162	12,612	9,266	7,094	5,606	4,540	3,752	3,153	2,687	2,317	2,018	1,774	1,571	1,401	1,258	1,135
	q_{Rk} (L/200)	49,129	20,726	10,612	6,141	3,867	2,591	1,820	1,326	0,997	0,768	0,604	0,483	0,393	0,324	0,270	0,227	0,193	0,166

ArcelorMittal

Double span – positive position



Trapeza® 35/207 T		Span [m]																	
t [mm]	S320	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00
0,4	q_{Rd} (c<1.5h)	3,983	2,546	1,774	1,310	1,008	0,800	0,651	0,540	0,455	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rd} (c≥1.5h)	3,983	2,546	1,774	1,310	1,008	0,800	0,651	0,540	0,455	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rk} (L/200)	11,385	4,803	2,459	1,423	0,896	0,600	0,422	0,307	0,231	0,178	0,140	0,112	0,091	0,075	0,063	0,053	0,045	0,038
0,5	q_{Rd} (c<1.5h)	6,578	4,228	2,959	2,192	1,691	1,345	1,096	0,910	0,768	0,657	0,560	0,483	0,421	0,370	0,327	0,292	0,262	0,237
	q_{Rd} (c≥1.5h)	6,578	4,228	2,959	2,192	1,691	1,345	1,096	0,910	0,768	0,657	0,560	0,483	0,421	0,370	0,327	0,292	0,262	0,237
	q_{Rk} (L/200)	19,469	8,214	4,205	2,434	1,533	1,027	0,721	0,526	0,395	0,304	0,239	0,192	0,156	0,128	0,107	0,090	0,077	0,066
0,55	q_{Rd} (c<1.5h)	8,068	5,195	3,641	2,700	2,084	1,659	1,353	1,124	0,949	0,813	0,696	0,600	0,522	0,459	0,407	0,363	0,326	0,294
	q_{Rd} (c≥1.5h)	8,068	5,195	3,641	2,700	2,084	1,659	1,353	1,124	0,949	0,813	0,696	0,600	0,522	0,459	0,407	0,363	0,326	0,294
	q_{Rk} (L/200)	23,472	9,902	5,070	2,934	1,848	1,238	0,869	0,634	0,476	0,367	0,288	0,231	0,188	0,155	0,129	0,109	0,092	0,079
0,6	q_{Rd} (c<1.5h)	9,684	6,245	4,382	3,252	2,512	2,001	1,632	1,357	1,146	0,981	0,844	0,727	0,634	0,557	0,493	0,440	0,395	0,356
	q_{Rd} (c≥1.5h)	9,684	6,245	4,382	3,252	2,512	2,001	1,632	1,357	1,146	0,981	0,844	0,727	0,634	0,557	0,493	0,440	0,395	0,356
	q_{Rk} (L/200)	27,362	11,543	5,910	3,420	2,154	1,443	1,013	0,739	0,555	0,428	0,336	0,269	0,219	0,180	0,150	0,127	0,108	0,092
0,63	q_{Rd} (c<1.5h)	10,715	6,915	4,855	3,604	2,786	2,219	1,811	1,506	1,272	1,089	0,939	0,809	0,705	0,620	0,549	0,490	0,439	0,397
	q_{Rd} (c≥1.5h)	10,715	6,915	4,855	3,604	2,786	2,219	1,811	1,506	1,272	1,089	0,939	0,809	0,705	0,620	0,549	0,490	0,439	0,397
	q_{Rk} (L/200)	29,748	12,550	6,426	3,718	2,342	1,569	1,102	0,803	0,603	0,465	0,366	0,293	0,238	0,196	0,163	0,138	0,117	0,100
0,7	q_{Rd} (c<1.5h)	13,003	8,378	5,874	4,357	3,365	2,679	2,184	1,816	1,533	1,313	1,125	0,970	0,845	0,743	0,658	0,587	0,527	0,475
	q_{Rd} (c≥1.5h)	13,003	8,378	5,874	4,357	3,365	2,679	2,184	1,816	1,533	1,313	1,125	0,970	0,845	0,743	0,658	0,587	0,527	0,475
	q_{Rk} (L/200)	35,461	14,960	7,660	4,433	2,791	1,870	1,313	0,957	0,719	0,554	0,436	0,349	0,284	0,234	0,195	0,164	0,140	0,120
0,75	q_{Rd} (c<1.5h)	14,672	9,436	6,607	4,896	3,777	3,005	2,449	2,035	1,718	1,470	1,254	1,081	0,942	0,828	0,733	0,654	0,587	0,530
	q_{Rd} (c≥1.5h)	14,672	9,436	6,607	4,896	3,777	3,005	2,449	2,035	1,718	1,470	1,254	1,081	0,942	0,828	0,733	0,654	0,587	0,530
	q_{Rk} (L/200)	39,664	16,733	8,568	4,958	3,122	2,092	1,469	1,071	0,805	0,620	0,487	0,390	0,317	0,261	0,218	0,184	0,156	0,134
0,8	q_{Rd} (c<1.5h)	16,406	10,534	7,366	5,453	4,204	3,342	2,722	2,261	1,908	1,626	1,386	1,195	1,041	0,915	0,810	0,723	0,649	0,585
	q_{Rd} (c≥1.5h)	16,406	10,534	7,366	5,453	4,204	3,342	2,722	2,261	1,908	1,626	1,386	1,195	1,041	0,915	0,810	0,723	0,649	0,585
	q_{Rk} (L/200)	43,965	18,548	9,496	5,496	3,461	2,318	1,628	1,187	0,892	0,687	0,540	0,433	0,352	0,290	0,242	0,204	0,173	0,148
0,88	q_{Rd} (c<1.5h)	19,308	12,365	8,630	6,379	4,912	3,902	3,175	2,635	2,223	1,880	1,602	1,381	1,203	1,058	0,937	0,836	0,750	0,677
	q_{Rd} (c≥1.5h)	19,308	12,365	8,630	6,379	4,912	3,902	3,175	2,635	2,223	1,880	1,602	1,381	1,203	1,058	0,937	0,836	0,750	0,677
	q_{Rk} (L/200)	51,037	21,531	11,024	6,380	4,018	2,691	1,890	1,378	1,035	0,797	0,627	0,502	0,408	0,336	0,280	0,236	0,201	0,172
1	q_{Rd} (c<1.5h)	24,197	15,463	10,776	7,955	6,120	4,857	3,950	3,277	2,762	2,323	1,979	1,706	1,486	1,306	1,157	1,032	0,926	0,836
	q_{Rd} (c≥1.5h)	24,197	15,463	10,776	7,955	6,120	4,857	3,950	3,277	2,762	2,323	1,979	1,706	1,486	1,306	1,157	1,032	0,926	0,836
	q_{Rk} (L/200)	64,792	27,334	13,995	8,099	5,100	3,417	2,400	1,749	1,314	1,012	0,796	0,638	0,518	0,427	0,356	0,300	0,255	0,219
1,25	q_{Rd} (c<1.5h)	34,583	21,929	15,195	11,167	8,561	6,776	5,498	4,540	3,752	3,153	2,687	2,317	2,018	1,774	1,571	1,401	1,258	1,135
	q_{Rd} (c≥1.5h)	34,583	21,929	15,195	11,167	8,561	6,776	5,498	4,540	3,752	3,153	2,687	2,317	2,018	1,774	1,571	1,401	1,258	1,135
	q_{Rk} (L/200)	88,765	37,448	19,173	11,096	6,987	4,681	3,288	2,397	1,801	1,387	1,091	0,873	0,710	0,585	0,488	0,411	0,349	0,300

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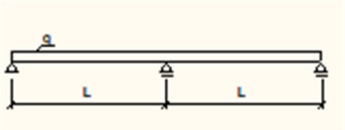
Double span – negative position



Trapeza® 35/207 T		Span [m]																		
t [mm]	S320	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00
0,4	q_{Rd} (c<1.5h)	3,982	2,545	1,774	1,310	1,008	0,800	0,651	0,540	0,455	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rd} (c≥1.5h)	3,982	2,545	1,774	1,310	1,008	0,800	0,651	0,540	0,455	0,383	0,326	0,281	0,245	0,215	0,191	0,170	0,153	0,138
	q_{Rk} (L/200)	14,635	6,174	3,161	1,829	1,152	0,772	0,542	0,395	0,297	0,229	0,180	0,144	0,117	0,096	0,080	0,068	0,058	0,049
0,5	q_{Rd} (c<1.5h)	6,599	4,244	2,972	2,202	1,699	1,351	1,101	0,915	0,772	0,661	0,564	0,486	0,423	0,372	0,330	0,294	0,264	0,238
	q_{Rd} (c≥1.5h)	6,599	4,244	2,972	2,202	1,699	1,351	1,101	0,915	0,772	0,661	0,564	0,486	0,423	0,372	0,330	0,294	0,264	0,238
	q_{Rk} (L/200)	25,654	10,823	5,541	3,207	2,019	1,353	0,950	0,693	0,520	0,401	0,315	0,252	0,205	0,169	0,141	0,119	0,101	0,087
0,55	q_{Rd} (c<1.5h)	7,988	5,136	3,596	2,664	2,055	1,635	1,332	1,107	0,935	0,800	0,682	0,588	0,512	0,450	0,399	0,356	0,319	0,288
	q_{Rd} (c≥1.5h)	7,988	5,136	3,596	2,664	2,055	1,635	1,332	1,107	0,935	0,800	0,682	0,588	0,512	0,450	0,399	0,356	0,319	0,288
	q_{Rk} (L/200)	31,781	13,408	6,865	3,973	2,502	1,676	1,177	0,858	0,645	0,497	0,391	0,313	0,254	0,209	0,175	0,147	0,125	0,107
0,6	q_{Rd} (c<1.5h)	9,399	6,035	4,221	3,125	2,409	1,915	1,560	1,296	1,094	0,932	0,794	0,685	0,597	0,524	0,465	0,414	0,372	0,336
	q_{Rd} (c≥1.5h)	9,399	6,035	4,221	3,125	2,409	1,915	1,560	1,296	1,094	0,932	0,794	0,685	0,597	0,524	0,465	0,414	0,372	0,336
	q_{Rk} (L/200)	38,280	16,150	8,269	4,785	3,013	2,019	1,418	1,034	0,777	0,598	0,470	0,377	0,306	0,252	0,210	0,177	0,151	0,129
0,63	q_{Rd} (c<1.5h)	10,287	6,600	4,614	3,414	2,631	2,091	1,703	1,414	1,193	1,015	0,865	0,746	0,650	0,571	0,506	0,451	0,405	0,365
	q_{Rd} (c≥1.5h)	10,287	6,600	4,614	3,414	2,631	2,091	1,703	1,414	1,193	1,015	0,865	0,746	0,650	0,571	0,506	0,451	0,405	0,365
	q_{Rk} (L/200)	42,353	17,868	9,148	5,294	3,334	2,233	1,569	1,144	0,859	0,662	0,520	0,417	0,339	0,279	0,233	0,196	0,167	0,143
0,7	q_{Rd} (c<1.5h)	12,479	7,993	5,580	4,125	3,176	2,523	2,054	1,704	1,438	1,217	1,037	0,894	0,779	0,684	0,606	0,541	0,485	0,438
	q_{Rd} (c≥1.5h)	12,479	7,993	5,580	4,125	3,176	2,523	2,054	1,704	1,438	1,217	1,037	0,894	0,779	0,684	0,606	0,541	0,485	0,438
	q_{Rk} (L/200)	50,753	21,411	10,963	6,344	3,995	2,676	1,880	1,370	1,030	0,793	0,624	0,499	0,406	0,335	0,279	0,235	0,200	0,171
0,75	q_{Rd} (c<1.5h)	14,144	9,050	6,313	4,663	3,589	2,850	2,319	1,924	1,623	1,369	1,167	1,006	0,876	0,770	0,682	0,608	0,546	0,493
	q_{Rd} (c≥1.5h)	14,144	9,050	6,313	4,663	3,589	2,850	2,319	1,924	1,623	1,369	1,167	1,006	0,876	0,770	0,682	0,608	0,546	0,493
	q_{Rk} (L/200)	56,599	23,878	12,225	7,075	4,455	2,985	2,096	1,528	1,148	0,884	0,696	0,557	0,453	0,373	0,311	0,262	0,223	0,191
0,8	q_{Rd} (c<1.5h)	15,890	10,157	7,080	5,227	4,022	3,192	2,596	2,154	1,816	1,528	1,302	1,122	0,978	0,859	0,761	0,679	0,609	0,550
	q_{Rd} (c≥1.5h)	15,890	10,157	7,080	5,227	4,022	3,192	2,596	2,154	1,816	1,528	1,302	1,122	0,978	0,859	0,761	0,679	0,609	0,550
	q_{Rk} (L/200)	62,538	26,383	13,508	7,817	4,923	3,298	2,316	1,689	1,269	0,977	0,769	0,615	0,500	0,412	0,344	0,290	0,246	0,211
0,88	q_{Rd} (c<1.5h)	18,849	12,031	8,377	6,180	4,751	3,769	3,065	2,541	2,136	1,795	1,529	1,319	1,149	1,010	0,894	0,798	0,716	0,646
	q_{Rd} (c≥1.5h)	18,849	12,031	8,377	6,180	4,751	3,769	3,065	2,541	2,136	1,795	1,529	1,319	1,149	1,010	0,894	0,798	0,716	0,646
	q_{Rk} (L/200)	72,208	30,463	15,597	9,026	5,684	3,808	2,674	1,950	1,465	1,128	0,887	0,711	0,578	0,476	0,397	0,334	0,284	0,244
1	q_{Rd} (c<1.5h)	23,444	14,918	10,364	7,632	5,860	4,644	3,772	3,125	2,603	2,188	1,864	1,607	1,400	1,231	1,090	0,972	0,873	0,788
	q_{Rd} (c≥1.5h)	23,444	14,918	10,364	7,632	5,860	4,644	3,772	3,125	2,603	2,188	1,864	1,607	1,400	1,231	1,090	0,972	0,873	0,788
	q_{Rk} (L/200)	90,848	38,327	19,623	11,356	7,151	4,791	3,365	2,453	1,843	1,420	1,116	0,894	0,727	0,599	0,499	0,421	0,358	0,307
1,25	q_{Rd} (c<1.5h)	32,538	20,478	14,112	10,329	7,893	6,230	5,029	4,074	3,367	2,829	2,410	2,078	1,811	1,591	1,410	1,257	1,128	1,018
	q_{Rd} (c≥1.5h)	32,538	20,478	14,112	10,329	7,893	6,230	5,029	4,074	3,367	2,829	2,410	2,078	1,811	1,591	1,410	1,257	1,128	1,018
	q_{Rk} (L/200)	121,543	51,276	26,253	15,193	9,568	6,409	4,502	3,282	2,466	1,899	1,494	1,196	0,972	0,801	0,668	0,563	0,478	0,410

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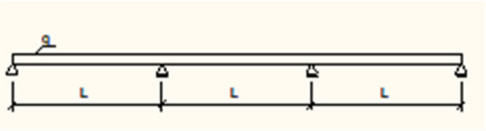
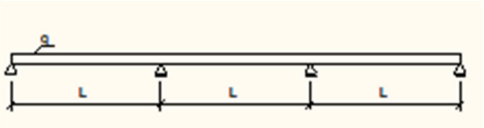
Triple span – positive position



Trapeza® 35/207 T		Span [m]																	
t [mm]	S320	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00
0,4	q_{Rd} (c<1.5h)	4,750	3,057	2,142	1,587	1,225	0,975	0,795	0,660	0,558	0,477	0,408	0,352	0,306	0,269	0,238	0,213	0,191	0,172
	q_{Rd} (c≥1.5h)	4,750	3,057	2,142	1,587	1,225	0,975	0,795	0,660	0,558	0,477	0,408	0,352	0,306	0,269	0,238	0,213	0,191	0,172
	q_{Rk} (L/200)	8,419	3,552	1,818	1,052	0,663	0,444	0,312	0,227	0,171	0,132	0,103	0,083	0,067	0,055	0,046	0,039	0,033	0,028
0,5	q_{Rd} (c<1.5h)	7,831	5,068	3,566	2,652	2,052	1,637	1,336	1,112	0,940	0,806	0,698	0,604	0,526	0,462	0,409	0,365	0,328	0,296
	q_{Rd} (c≥1.5h)	7,831	5,068	3,566	2,652	2,052	1,637	1,336	1,112	0,940	0,806	0,698	0,604	0,526	0,462	0,409	0,365	0,328	0,296
	q_{Rk} (L/200)	14,397	6,074	3,110	1,800	1,133	0,759	0,533	0,389	0,292	0,225	0,177	0,142	0,115	0,095	0,079	0,067	0,057	0,049
0,55	q_{Rd} (c<1.5h)	9,599	6,224	4,385	3,264	2,528	2,018	1,649	1,373	1,161	0,995	0,863	0,750	0,653	0,574	0,508	0,454	0,407	0,367
	q_{Rd} (c≥1.5h)	9,599	6,224	4,385	3,264	2,528	2,018	1,649	1,373	1,161	0,995	0,863	0,750	0,653	0,574	0,508	0,454	0,407	0,367
	q_{Rk} (L/200)	17,357	7,322	3,749	2,170	1,366	0,915	0,643	0,469	0,352	0,271	0,213	0,171	0,139	0,114	0,095	0,080	0,068	0,059
0,6	q_{Rd} (c<1.5h)	11,517	7,478	5,274	3,930	3,046	2,433	1,989	1,657	1,402	1,202	1,042	0,909	0,792	0,696	0,617	0,550	0,494	0,446
	q_{Rd} (c≥1.5h)	11,517	7,478	5,274	3,930	3,046	2,433	1,989	1,657	1,402	1,202	1,042	0,909	0,792	0,696	0,617	0,550	0,494	0,446
	q_{Rk} (L/200)	20,234	8,536	4,370	2,529	1,593	1,067	0,749	0,546	0,410	0,316	0,249	0,199	0,162	0,133	0,111	0,094	0,080	0,068
0,63	q_{Rd} (c<1.5h)	12,739	8,278	5,842	4,355	3,377	2,697	2,206	1,838	1,556	1,334	1,157	1,012	0,881	0,775	0,686	0,612	0,549	0,496
	q_{Rd} (c≥1.5h)	12,739	8,278	5,842	4,355	3,377	2,697	2,206	1,838	1,556	1,334	1,157	1,012	0,881	0,775	0,686	0,612	0,549	0,496
	q_{Rk} (L/200)	21,998	9,280	4,752	2,750	1,732	1,160	0,815	0,594	0,446	0,344	0,270	0,216	0,176	0,145	0,121	0,102	0,087	0,074
0,7	q_{Rd} (c<1.5h)	15,469	10,035	7,072	5,267	4,081	3,257	2,662	2,217	1,876	1,608	1,394	1,213	1,057	0,929	0,823	0,734	0,659	0,594
	q_{Rd} (c≥1.5h)	15,469	10,035	7,072	5,267	4,081	3,257	2,662	2,217	1,876	1,608	1,394	1,213	1,057	0,929	0,823	0,734	0,659	0,594
	q_{Rk} (L/200)	26,223	11,063	5,664	3,278	2,064	1,383	0,971	0,708	0,532	0,410	0,322	0,258	0,210	0,173	0,144	0,121	0,103	0,089
0,75	q_{Rd} (c<1.5h)	17,464	11,309	7,960	5,921	4,584	3,656	2,986	2,486	2,102	1,801	1,561	1,352	1,177	1,035	0,917	0,818	0,734	0,662
	q_{Rd} (c≥1.5h)	17,464	11,309	7,960	5,921	4,584	3,656	2,986	2,486	2,102	1,801	1,561	1,352	1,177	1,035	0,917	0,818	0,734	0,662
	q_{Rk} (L/200)	29,331	12,374	6,335	3,666	2,309	1,547	1,086	0,792	0,595	0,458	0,360	0,289	0,235	0,193	0,161	0,136	0,115	0,099
0,8	q_{Rd} (c<1.5h)	19,540	12,631	8,879	6,598	5,104	4,068	3,321	2,763	2,336	2,000	1,732	1,493	1,301	1,143	1,013	0,903	0,811	0,732
	q_{Rd} (c≥1.5h)	19,540	12,631	8,879	6,598	5,104	4,068	3,321	2,763	2,336	2,000	1,732	1,493	1,301	1,143	1,013	0,903	0,811	0,732
	q_{Rk} (L/200)	32,511	13,715	7,022	4,064	2,559	1,714	1,204	0,878	0,659	0,508	0,400	0,320	0,260	0,214	0,179	0,151	0,128	0,110
0,88	q_{Rd} (c<1.5h)	23,016	14,840	10,411	7,725	5,968	4,752	3,876	3,223	2,722	2,330	2,002	1,727	1,504	1,322	1,171	1,044	0,937	0,846
	q_{Rd} (c≥1.5h)	23,016	14,840	10,411	7,725	5,968	4,752	3,876	3,223	2,722	2,330	2,002	1,727	1,504	1,322	1,171	1,044	0,937	0,846
	q_{Rk} (L/200)	37,741	15,922	8,152	4,718	2,971	1,990	1,398	1,019	0,766	0,590	0,464	0,371	0,302	0,249	0,207	0,175	0,149	0,127
1	q_{Rd} (c<1.5h)	28,864	18,571	13,008	9,640	7,439	5,920	4,825	4,009	3,385	2,896	2,474	2,133	1,858	1,633	1,447	1,290	1,158	1,045
	q_{Rd} (c≥1.5h)	28,864	18,571	13,008	9,640	7,439	5,920	4,825	4,009	3,385	2,896	2,474	2,133	1,858	1,633	1,447	1,290	1,158	1,045
	q_{Rk} (L/200)	47,912	20,213	10,349	5,989	3,771	2,527	1,775	1,294	0,972	0,749	0,589	0,471	0,383	0,316	0,263	0,222	0,189	0,162
1,25	q_{Rd} (c<1.5h)	41,361	26,403	18,385	13,564	10,430	8,274	6,727	5,578	4,691	3,941	3,358	2,896	2,522	2,217	1,964	1,752	1,572	1,419
	q_{Rd} (c≥1.5h)	41,361	26,403	18,385	13,564	10,430	8,274	6,727	5,578	4,691	3,941	3,358	2,896	2,522	2,217	1,964	1,752	1,572	1,419
	q_{Rk} (L/200)	65,639	27,692	14,178	8,205	5,167	3,461	2,431	1,772	1,332	1,026	0,807	0,646	0,525	0,433	0,361	0,304	0,258	0,222

ArcelorMittal

Triple span – negative position



Trapeza® 35/207 T		Span [m]																	
t [mm]	S320	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00
0,4	q_{Rd} (c<1.5h)	4,750	3,057	2,141	1,587	1,225	0,975	0,795	0,660	0,557	0,477	0,408	0,352	0,306	0,269	0,238	0,213	0,191	0,172
	q_{Rd} (c≥1.5h)	4,750	3,057	2,141	1,587	1,225	0,975	0,795	0,660	0,557	0,477	0,408	0,352	0,306	0,269	0,238	0,213	0,191	0,172
	q_{Rk} (L/200)	10,822	4,566	2,338	1,353	0,852	0,571	0,401	0,292	0,220	0,169	0,133	0,106	0,087	0,071	0,059	0,050	0,043	0,037
0,5	q_{Rd} (c<1.5h)	7,856	5,086	3,580	2,663	2,061	1,644	1,343	1,118	0,945	0,810	0,702	0,608	0,529	0,465	0,412	0,368	0,330	0,298
	q_{Rd} (c≥1.5h)	7,856	5,086	3,580	2,663	2,061	1,644	1,343	1,118	0,945	0,810	0,702	0,608	0,529	0,465	0,412	0,368	0,330	0,298
	q_{Rk} (L/200)	18,970	8,003	4,098	2,371	1,493	1,000	0,703	0,512	0,385	0,296	0,233	0,187	0,152	0,125	0,104	0,088	0,075	0,064
0,55	q_{Rd} (c<1.5h)	9,508	6,156	4,332	3,222	2,494	1,989	1,625	1,352	1,144	0,980	0,849	0,735	0,640	0,563	0,498	0,445	0,399	0,360
	q_{Rd} (c≥1.5h)	9,508	6,156	4,332	3,222	2,494	1,989	1,625	1,352	1,144	0,980	0,849	0,735	0,640	0,563	0,498	0,445	0,399	0,360
	q_{Rk} (L/200)	23,501	9,915	5,076	2,938	1,850	1,239	0,870	0,635	0,477	0,367	0,289	0,231	0,188	0,155	0,129	0,109	0,093	0,079
0,6	q_{Rd} (c<1.5h)	11,194	7,237	5,087	3,781	2,925	2,331	1,903	1,584	1,339	1,147	0,993	0,856	0,746	0,656	0,581	0,518	0,465	0,420
	q_{Rd} (c≥1.5h)	11,194	7,237	5,087	3,781	2,925	2,331	1,903	1,584	1,339	1,147	0,993	0,856	0,746	0,656	0,581	0,518	0,465	0,420
	q_{Rk} (L/200)	28,307	11,942	6,114	3,538	2,228	1,493	1,048	0,764	0,574	0,442	0,348	0,279	0,226	0,187	0,156	0,131	0,111	0,096
0,63	q_{Rd} (c<1.5h)	12,255	7,917	5,562	4,132	3,195	2,546	2,078	1,728	1,461	1,251	1,081	0,932	0,812	0,714	0,632	0,564	0,506	0,457
	q_{Rd} (c≥1.5h)	12,255	7,917	5,562	4,132	3,195	2,546	2,078	1,728	1,461	1,251	1,081	0,932	0,812	0,714	0,632	0,564	0,506	0,457
	q_{Rk} (L/200)	31,319	13,213	6,765	3,915	2,465	1,652	1,160	0,846	0,635	0,489	0,385	0,308	0,251	0,206	0,172	0,145	0,123	0,106
0,7	q_{Rd} (c<1.5h)	14,874	9,592	6,730	4,995	3,859	3,073	2,507	2,084	1,761	1,507	1,296	1,118	0,974	0,856	0,758	0,676	0,607	0,548
	q_{Rd} (c≥1.5h)	14,874	9,592	6,730	4,995	3,859	3,073	2,507	2,084	1,761	1,507	1,296	1,118	0,974	0,856	0,758	0,676	0,607	0,548
	q_{Rk} (L/200)	37,530	15,833	8,107	4,691	2,954	1,979	1,390	1,013	0,761	0,586	0,461	0,369	0,300	0,247	0,206	0,174	0,148	0,127
0,75	q_{Rd} (c<1.5h)	16,864	10,864	7,617	5,649	4,362	3,473	2,831	2,354	1,988	1,701	1,458	1,257	1,095	0,963	0,853	0,761	0,683	0,616
	q_{Rd} (c≥1.5h)	16,864	10,864	7,617	5,649	4,362	3,473	2,831	2,354	1,988	1,701	1,458	1,257	1,095	0,963	0,853	0,761	0,683	0,616
	q_{Rk} (L/200)	41,854	17,657	9,040	5,232	3,295	2,207	1,550	1,130	0,849	0,654	0,514	0,412	0,335	0,276	0,230	0,194	0,165	0,141
0,8	q_{Rd} (c<1.5h)	18,953	12,197	8,545	6,334	4,888	3,890	3,171	2,635	2,225	1,904	1,627	1,403	1,222	1,074	0,952	0,849	0,762	0,688
	q_{Rd} (c≥1.5h)	18,953	12,197	8,545	6,334	4,888	3,890	3,171	2,635	2,225	1,904	1,627	1,403	1,222	1,074	0,952	0,849	0,762	0,688
	q_{Rk} (L/200)	46,245	19,510	9,989	5,781	3,640	2,439	1,713	1,249	0,938	0,723	0,568	0,455	0,370	0,305	0,254	0,214	0,182	0,156
0,88	q_{Rd} (c<1.5h)	22,493	14,454	10,115	7,491	5,778	4,595	3,744	3,110	2,625	2,244	1,912	1,648	1,436	1,262	1,118	0,997	0,895	0,808
	q_{Rd} (c≥1.5h)	22,493	14,454	10,115	7,491	5,778	4,595	3,744	3,110	2,625	2,244	1,912	1,648	1,436	1,262	1,118	0,997	0,895	0,808
	q_{Rk} (L/200)	53,396	22,526	11,534	6,674	4,203	2,816	1,978	1,442	1,083	0,834	0,656	0,525	0,427	0,352	0,293	0,247	0,210	0,180
1	q_{Rd} (c<1.5h)	28,005	17,941	12,527	9,260	7,132	5,666	4,612	3,828	3,229	2,734	2,330	2,009	1,750	1,538	1,363	1,215	1,091	0,984
	q_{Rd} (c≥1.5h)	28,005	17,941	12,527	9,260	7,132	5,666	4,612	3,828	3,229	2,734	2,330	2,009	1,750	1,538	1,363	1,215	1,091	0,984
	q_{Rk} (L/200)	67,180	28,341	14,511	8,397	5,288	3,543	2,488	1,814	1,363	1,050	0,826	0,661	0,537	0,443	0,369	0,311	0,264	0,227
1,25	q_{Rd} (c<1.5h)	39,015	24,716	17,115	12,572	9,634	7,622	6,183	5,092	4,208	3,536	3,013	2,598	2,263	1,989	1,762	1,572	1,411	1,273
	q_{Rd} (c≥1.5h)	39,015	24,716	17,115	12,572	9,634	7,622	6,183	5,092	4,208	3,536	3,013	2,598	2,263	1,989	1,762	1,572	1,411	1,273
	q_{Rk} (L/200)	89,878	37,917	19,414	11,235	7,075	4,740	3,329	2,427	1,823	1,404	1,105	0,884	0,719	0,592	0,494	0,416	0,354	0,303

Explanatory note:

q_{Ed} (c<1,5h) design resistance [kN/m²] — end support width at least 40 mm, end support at distance at least 40 mm clear from a free end; internal support width at least 120 mm

q_{Ed} (c≥1,5h) design resistance [kN/m²] — end support width at least 40 mm, end support at distance at least 1.5 x h_w (web height) clear from a free end; internal support width at least 120 mm

q_{Ek} (δ≤L/200) characteristics load that meets the serviceability limit for deflection of L/200 [kN/m²]