

EQC 106.250.750

12.2016

Application:	Structural metal roof deck	Finishing:	Interior liner and Galvanised
Yield Stress (MPa):	320	Intermediate Support width:	≥160 mm
Ym:	1	End Support width:	≥40 mm

t _N [mm]	Weight kg/m ²	Broad flange in compression						Narrow flange in compression				
		M _{c,Rk,F} [kNm/m]	M _{c,Rk,B} [kNm/m]	I _{eff} [cm ⁴ /m]	V _{w,Rk} [kN/m]	R _{w,Rk,B} [kN/m]	R _{w,Rk,A} [kN/m]	M _{c,Rk,F} [kNm/m]	M _{c,Rk,B} [kNm/m]	I _{eff} [cm ⁴ /m]	V _{w,Rk} [kN/m]	R _{w,Rk,A} [kN/m]
0,75	9,81	7,70	7,78	169,55	50,11	37,11	11,05	7,78	7,70	175,29	50,11	50,11
0,88	11,51	9,60	9,58	203,69	80,04	51,00	15,35	9,58	9,60	212,37	80,04	80,04
1,00	13,08	11,35	11,27	235,76	103,83	65,39	19,86	11,27	11,35	242,64	103,83	103,83



Safe Imposed (positive) Loads (kN/m²) The load shown is the ultimate load divided by 1.5.

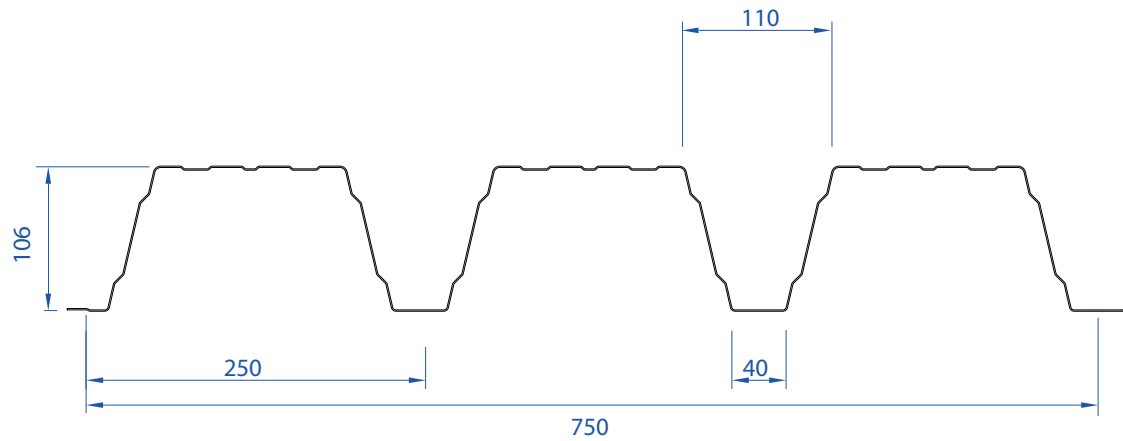
Single Span																				
t _N [mm]	0,75				0,88				1,00				1,25				1,50			
Span (m)	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300
4,40	2,12	1,61	1,28	1,07	2,57	1,93	1,54	1,29	2,98	2,23	1,79	1,49								
4,60	1,87	1,40	1,12		2,25	1,69	1,35	1,12	2,60	1,95	1,56	1,30								
4,80	1,65	1,24			1,98	1,49	1,19		2,29	1,72	1,38	1,15								
5,00	1,46	1,09			1,75	1,31	1,05		2,03	1,52	1,22	1,01								
5,20	1,30				1,56	1,17			1,80	1,35	1,08									
5,40	1,16				1,39	1,04			1,61	1,21										
5,60	1,04				1,25				1,44	1,08										
5,80					1,12				1,30											
6,00					1,01				1,17											
6,20									1,06											
6,40																				
6,60																				
6,80																				
7,00																				
7,20																				

Double Span																				
t _N [mm]	0,75				0,88				1,00				1,25				1,50			
Span (m)	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300
4,40	2,12	2,12	2,12	2,12	2,64	2,64	2,64	2,64	3,13	3,13	3,13	3,13								
4,60	1,94	1,94	1,94	1,94	2,42	2,42	2,42	2,42	2,86	2,86	2,86	2,86								
4,80	1,78	1,78	1,78	1,78	2,22	2,22	2,22	2,22	2,63	2,63	2,63	2,63								
5,00	1,64	1,64	1,64	1,64	2,05	2,05	2,05	2,05	2,42	2,42	2,42	2,42								
5,20	1,52	1,52	1,52	1,52	1,89	1,89	1,89	1,89	2,24	2,24	2,24	2,20								
5,40	1,41	1,41	1,41	1,41	1,76	1,76	1,76	1,70	2,08	2,08	2,08	1,96								
5,60	1,31	1,31	1,31	1,27	1,63	1,63	1,63	1,52	1,93	1,93	1,93	1,76								
5,80	1,22	1,22	1,22	1,14	1,52	1,52	1,52	1,37	1,80	1,80	1,80	1,58								
6,00	1,14	1,14	1,14	1,03	1,42	1,42	1,42	1,24	1,68	1,68	1,68	1,43								
6,20	1,07	1,07	1,07		1,33	1,33	1,33	1,12	1,57	1,57	1,56	1,30								
6,40	1,00	1,00	1,00		1,25	1,25	1,22	1,02	1,48	1,48	1,42	1,18								
6,60					1,18	1,18	1,11		1,39	1,39	1,29	1,08								
6,80					1,11	1,11	1,02		1,31	1,31	1,18									
7,00					1,04	1,04			1,24	1,24	1,08									
7,20									1,17	1,17										

Multiple Span																				
t _N [mm]	0,75				0,88				1,00				1,25				1,50			
Span (m)	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300
4,40	2,36	2,36	2,36	2,06	3,03	3,03	2,97	2,47	3,67	3,67	3,43	2,86								
4,60	2,19	2,19	2,16	1,80	2,80	2,80	2,60	2,16	3,39	3,39	3,00	2,50								
4,80	2,04	2,04	1,90	1,58	2,60	2,60	2,28	1,90	3,14	3,14	2,64	2,20								
5,00	1,90	1,90	1,68	1,40	2,42	2,42	2,02	1,68	2,92	2,92	2,34	1,95								
5,20	1,77	1,77	1,50	1,25	2,26	2,25	1,80	1,50	2,73	2,60	2,08	1,73								
5,40	1,66	1,66	1,34	1,11	2,12	2,01	1,60	1,34	2,55	2,32	1,86	1,55								
5,60	1,56	1,50	1,20	1,00	1,98	1,80	1,44	1,20	2,39	2,08	1,67	1,39								
5,80	1,47	1,35	1,08		1,86	1,62	1,30	1,08	2,23	1,87	1,50	1,25								
6,00	1,38	1,22			1,75	1,46	1,17		2,09	1,69	1,35	1,13								
6,20	1,30	1,10			1,65	1,33	1,06		1,95	1,53	1,23	1,02								
6,40	1,23	1,00			1,56	1,20			1,83	1,39	1,12									
6,60	1,17				1,46	1,10			1,70	1,27	1,02									
6,80	1,10				1,34	1,00			1,55	1,16										
7,00	1,02				1,23				1,42	1,07										
7,20					1,13				1,31											

APPLIED STANDARDS / NOTES

Tolerances/Coatings	EN 10143	Steel Quality	EN 10346	Handling	European Recommendations
Tests/Calculations	EN 1990, EN 1991 1-6, EN 1993 1-3, EN 1993 1-5 (Calculations are to Eurocode, however additional checks such as fixings are required)				
	Deck self weight has not been allowed for, so has to be included in applied loads				



Safe Wind Suction (negative) Loads (kN/m²) The load shown is the ultimate load divided by 1.5.

Single Span

t _N [mm]	0,75				0,88				1,00				1,25				1,50			
Span (m)	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300
4,40	2,14	1,66	1,33	1,11	2,64	2,01	1,61	1,34	3,06	2,30	1,84	1,53								
4,60	1,94	1,45	1,16		2,35	1,76	1,41	1,17	2,68	2,01	1,61	1,34								
4,80	1,70	1,28	1,00		2,06	1,55	1,24	1,00	2,36	1,77	1,42	1,18								
5,00	1,51	1,13			1,83	1,37	1,10		2,09	1,57	1,25	1,04								
5,20	1,34	1,00			1,62	1,22			1,86	1,39	1,11									
5,40	1,20				1,45	1,09			1,66	1,24										
5,60	1,07				1,30				1,49	1,11										
5,80					1,17				1,34	1,00										
6,00					1,06				1,21											
6,20									1,09											
6,40									1,00											
6,60																				
6,80																				
7,00																				
7,20																				

Double Span

t _N [mm]	0,75				0,88				1,00				1,25				1,50			
Span (m)	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300
4,40	2,12	2,12	2,12	2,12	2,64	2,64	2,64	2,64	3,13	3,13	3,13	3,13								
4,60	1,94	1,94	1,94	1,94	2,42	2,42	2,42	2,42	2,86	2,86	2,86	2,86								
4,80	1,78	1,78	1,78	1,78	2,22	2,22	2,22	2,22	2,63	2,63	2,63	2,63								
5,00	1,64	1,64	1,64	1,64	2,05	2,05	2,05	2,05	2,42	2,42	2,42	2,42								
5,20	1,52	1,52	1,52	1,52	1,89	1,89	1,89	1,89	2,24	2,24	2,24	2,24								
5,40	1,41	1,41	1,41	1,41	1,76	1,76	1,76	1,76	2,08	2,08	2,08	2,08								
5,60	1,31	1,31	1,31	1,31	1,63	1,63	1,63	1,59	1,93	1,93	1,93	1,81								
5,80	1,22	1,22	1,22	1,18	1,52	1,52	1,52	1,43	1,80	1,80	1,80	1,63								
6,00	1,14	1,14	1,14	1,06	1,42	1,42	1,42	1,29	1,68	1,68	1,68	1,47								
6,20	1,07	1,07	1,07		1,33	1,33	1,33	1,17	1,57	1,57	1,57	1,33								
6,40	1,00	1,00	1,00		1,25	1,25	1,25	1,06	1,48	1,48	1,46	1,21								
6,60					1,18	1,18	1,16		1,39	1,39	1,33	1,11								
6,80					1,11	1,11	1,06		1,31	1,31	1,21	1,00								
7,00					1,04	1,04			1,24	1,24	1,11									
7,20									1,17	1,17	1,00									

Multiple Span

t _N [mm]	0,75				0,88				1,00				1,25				1,50			
Span (m)	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300	L/150	L/200	L/250	L/300
4,40	2,65	2,65	2,55	2,13	3,31	3,31	3,09	2,58	3,91	3,91	3,53	2,94								
4,60	2,43	2,43	2,23	1,86	3,02	3,02	2,71	2,26	3,58	3,58	3,09	2,58								
4,80	2,23	2,23	1,97	1,64	2,78	2,78	2,38	1,99	3,28	3,28	2,72	2,27								
5,00	2,05	2,05	1,74	1,45	2,56	2,56	2,11	1,76	3,03	3,01	2,41	2,01								
5,20	1,90	1,90	1,55	1,29	2,37	2,34	1,87	1,56	2,80	2,68	2,14	1,78								
5,40	1,76	1,73	1,38	1,15	2,19	2,09	1,67	1,39	2,59	2,39	1,91	1,59								
5,60	1,64	1,55	1,24	1,00	2,04	1,88	1,50	1,25	2,41	2,14	1,71	1,43								
5,80	1,53	1,39	1,11		1,90	1,69	1,35	1,13	2,25	1,93	1,54	1,29								
6,00	1,43	1,26	1,00		1,78	1,52	1,22	1,00	2,10	1,74	1,39	1,16								
6,20	1,34	1,14			1,66	1,38	1,11		1,97	1,58	1,26	1,05								
6,40	1,25	1,04			1,56	1,26	1,00		1,85	1,44	1,15									
6,60	1,18				1,47	1,15			1,74	1,31	1,05									
6,80	1,11				1,38	1,05			1,60	1,20										
7,00	1,05				1,28				1,46	1,10										
7,20					1,18				1,34	1,00										

APPLIED STANDARDS / NOTES

Tolerances/Coatings	EN 10143	Steel Quality	EN 10346	Handling	European Recommendations
Tests/Calculations	EN 990, EN 1991 1-6, EN 1993 1-3, EN 1993 1-5 (Calculations are to Eurocode, however additional checks such as fixings are required)				
	Deck self weight has not been allowed for, so has to be included in applied loads				