

S-308-K STEEL COMPOSITE FLOOR

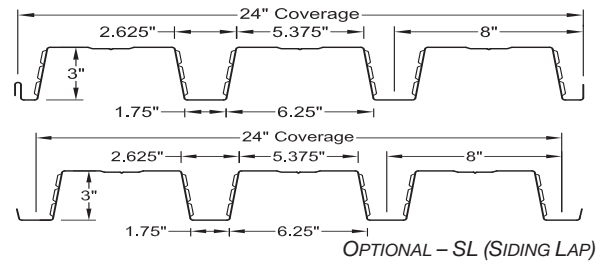
METRIC

STEEL DECK SECTION PROPERTIES (Per metre of width)						COMPOSITE SLAB PROPERTIES (Per metre of width)					
Base Steel Thickness (mm)	Weight (Z275)		Section Modulus (x10 ³ mm ³)		Deflection Inertia (x10 ⁶ mm ⁴)	Overall Slab Depth, D (mm)					
	(kg/m ²)	(mm ²)	Midspan	Support		130	140	150	160	170	180
0.762	10.4	1286	19.2	20.9	1.09	Slab Weight (kPa)					
0.914	12.4	1543	23.5	26.2	1.31	1.88	2.11	2.34	2.56	2.79	3.01
1.219	16.4	2057	32.4	36.6	1.74	Concrete Volume (m ³ /10m ²)					
1.524	20.5	2572	41.4	46.0	2.16	0.75	0.85	0.95	1.05	1.15	1.25

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (psf)

SLAB DEPTH, D (mm)		130			140			150			160			170			180		
BASE STEEL (mm)	SLAB SPAN (mm)	DECK SPAN			DECK SPAN			DECK SPAN			DECK SPAN			DECK SPAN			DECK SPAN		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0.762	2400	10.5	10.5	10.5	11.8	11.8	11.8	13.1	13.1	13.1	14.4	14.4	14.4	15.7	15.7	15.7	17.0	17.0	17.0
	2500	9.8	9.8	9.8	11.0	11.0	11.0	12.2	12.2	12.2	13.4	13.4	13.4	14.6	14.6	14.6	15.8	15.8	15.8
	2600	9.1	9.1	9.1	10.2	10.2	10.2	11.4	11.4	11.4	12.5	12.5	12.5	13.6	13.6	13.6	14.8	14.8	14.8
	2800	8.0	8.0	8.0	9.0	9.0	9.0	10.0	10.0	10.0	11.0	11.0	11.0	12.0	12.0	12.0	12.9	12.9	12.9
	3000	7.1	7.1	7.1	8.0	8.0	8.0	8.8	8.8	8.8	9.7	9.7	9.7	10.6	10.6	10.6	11.5	11.5	11.5
	3200	6.3	6.3	6.3	7.1	7.1	7.1	7.9	7.9	7.9	8.7	8.7	8.7	9.5	9.5	9.5	10.2	10.2	10.2
	3400	5.7	5.7	5.7	6.4	6.4	6.4	7.1	7.1	7.1	7.8	7.8	7.8	8.5	8.5	8.5	9.2	9.2	9.2
	3500	5.4	5.4	5.4	6.1	6.1	6.1	6.8	6.8	6.8	7.4	7.4	7.4	8.1	8.1	8.1	8.8	8.8	8.8
3600	5.2	5.2	5.2	5.8	5.8	5.8	6.4	6.4	6.4	7.1	7.1	7.1	7.7	7.7	7.7	8.4	8.4	8.4	
0.914	2400	11.4	11.4	11.4	12.8	12.8	12.8	14.2	14.2	14.2	15.6	15.6	15.6	17.0	17.0	17.0	18.4	18.4	18.4
	2500	10.7	10.7	10.7	12.0	12.0	12.0	13.3	13.3	13.3	14.6	14.6	14.6	15.9	15.9	15.9	17.3	17.3	17.3
	2600	10.0	10.0	10.0	11.2	11.2	11.2	12.5	12.5	12.5	13.7	13.7	13.7	15.0	15.0	15.0	16.2	16.2	16.2
	2800	8.9	8.9	8.9	10.0	10.0	10.0	11.1	11.1	11.1	12.2	12.2	12.2	13.3	13.3	13.3	14.4	14.4	14.4
	3000	8.0	8.0	8.0	9.0	9.0	9.0	10.0	10.0	10.0	10.9	10.9	10.9	11.9	11.9	11.9	12.9	12.9	12.9
	3200	7.2	7.2	7.2	8.1	8.1	8.1	9.0	9.0	9.0	9.9	9.9	9.9	10.8	10.8	10.8	11.7	11.7	11.7
	3400	6.6	6.6	6.6	7.4	7.4	7.4	8.2	8.2	8.2	9.0	9.0	9.0	9.8	9.8	9.8	10.6	10.6	10.6
	3500	6.3	6.3	6.3	7.1	7.1	7.1	7.9	7.9	7.9	8.6	8.6	8.6	9.4	9.4	9.4	10.2	10.2	10.2
3600	6.0	6.0	6.0	6.8	6.8	6.8	7.5	7.5	7.5	8.3	8.3	8.3	9.0	9.0	9.0	9.8	9.8	9.8	
1.219	2600	11.6	11.6	11.6	13.1	13.1	13.1	14.5	14.5	14.5	16.0	16.0	16.0	17.4	17.4	17.4	18.9	18.9	18.9
	2800	10.5	10.5	10.5	11.8	11.8	11.8	13.1	13.1	13.1	14.4	14.4	14.4	15.8	15.8	15.8	17.1	17.1	17.1
	3000	9.6	9.6	9.6	10.8	10.8	10.8	12.0	12.0	12.0	13.2	13.2	13.2	14.4	14.4	14.4	15.6	15.6	15.6
	3200	8.8	8.8	8.8	9.9	9.9	9.9	11.0	11.0	11.0	12.1	12.1	12.1	13.2	13.2	13.2	14.3	14.3	14.3
	3400	8.2	8.2	8.2	9.2	9.2	9.2	10.2	10.2	10.2	11.2	11.2	11.2	12.2	12.2	12.2	13.2	13.2	13.2
	3500	7.9	7.9	7.9	8.8	8.8	8.8	9.8	9.8	9.8	10.8	10.8	10.8	11.7	11.7	11.7	12.7	12.7	12.7
	3600	7.6	7.6	7.6	8.5	8.5	8.5	9.5	9.5	9.5	10.4	10.4	10.4	11.3	11.3	11.3	12.3	12.3	12.3
	3800	7.1	7.1	7.1	7.9	7.9	7.9	8.8	8.8	8.8	9.7	9.7	9.7	10.6	10.6	10.6	11.4	11.4	11.4
4000	6.6	6.6	6.6	7.4	7.4	7.4	8.3	8.3	8.3	9.1	9.1	9.1	9.9	9.9	9.9	10.7	10.7	10.7	
1.524	2800	10.5	10.5	10.5	11.8	11.8	11.8	13.1	13.1	13.1	14.4	14.4	14.4	15.7	15.7	15.7	17.0	17.0	17.0
	3000	9.6	9.6	9.6	10.8	10.8	10.8	12.0	12.0	12.0	13.2	13.2	13.2	14.3	14.3	14.3	15.5	15.5	15.5
	3200	8.8	8.8	8.8	9.9	9.9	9.9	11.0	11.0	11.0	12.1	12.1	12.1	13.2	13.2	13.2	14.3	14.3	14.3
	3400	8.1	8.1	8.1	9.1	9.1	9.1	10.2	10.2	10.2	11.2	11.2	11.2	12.2	12.2	12.2	13.2	13.2	13.2
	3500	7.8	7.8	7.8	8.8	8.8	8.8	9.8	9.8	9.8	10.8	10.8	10.8	11.7	11.7	11.7	12.7	12.7	12.7
	3600	7.6	7.6	7.6	8.5	8.5	8.5	9.4	9.4	9.4	10.4	10.4	10.4	11.3	11.3	11.3	12.3	12.3	12.3
	3800	7.0	7.0	7.0	7.9	7.9	7.9	8.8	8.8	8.8	9.7	9.7	9.7	10.6	10.6	10.6	11.4	11.4	11.4
	4000	6.6	6.6	6.6	7.4	7.4	7.4	8.2	8.2	8.2	9.1	9.1	9.1	9.9	9.9	9.9	10.7	10.7	10.7
4200	6.2	6.2	6.2	7.0	7.0	7.0	7.8	7.8	7.8	8.5	8.5	8.5	9.3	9.3	9.3	10.1	10.1	10.1	

- Notes:**
- One shore support required at midspan in shaded areas.
 - Slab weight includes steel deck and concrete slab, which has been accounted for in load table.
 - See Composite slab notes and design example.



S-308-K STEEL COMPOSITE FLOOR IMPERIAL

STEEL DECK SECTION PROPERTIES (Per foot of width)						COMPOSITE SLAB PROPERTIES (Per foot of width)											
Base Steel Thickness (in.)	Weight	Area	Section Modulus		Deflection Inertia (in ⁴)	Overall Slab Depth, D (in.)											
	(Z275)	(in ²)	Midspan	Support		5.0	5.5	6.0	6.5	7.0	7.5						
(psf)	(in ²)	Midspan	Support	Deflection Inertia (in ⁴)	Slab Weight (psf)												
(psf)	(in ²)	Midspan	Support	Deflection Inertia (in ⁴)	Concrete Volume (yd ³ /100ft ²)												
0.030	2.12	0.607	0.357	0.389	0.654	39.4	45.7	51.9	58.2	64.4	70.7	0.87	1.02	1.18	1.33	1.49	1.64
0.036	2.54	0.729	0.437	0.487	0.832												
0.048	3.36	0.972	0.603	0.654	1.20												
0.060	4.19	1.22	0.770	0.811	1.56												

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (psf)																			
SLAB DEPTH, D (in.)		5.0			5.5			6.0			6.5			7.0			7.5		
BASE STEEL THICKNESS (in.)	SLAB SPAN (ft)	DECK SPAN			DECK SPAN			DECK SPAN			DECK SPAN			DECK SPAN			DECK SPAN		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0.030	8.0	221	221	221	257	257	257	293	293	293	329	329	329	365	365	365	401	401	401
	8.5	196	196	196	229	229	229	261	261	261	293	293	293	325	325	325	357	357	357
	9.0	176	176	176	204	204	204	233	233	233	262	262	262	290	290	290	319	319	319
	9.5	158	158	158	184	184	184	210	210	210	236	236	236	262	262	262	287	287	287
	10.0	143	143	143	167	167	167	190	190	190	213	213	213	237	237	237	260	260	260
	10.5	130	130	130	152	152	152	173	173	173	194	194	194	215	215	215	237	237	237
	11.0	119	119	119	139	139	139	158	158	158	177	177	177	197	197	197	216	216	216
	11.5	109	109	109	127	127	127	145	145	145	163	163	163	181	181	181	198	198	198
0.036	8.0	262	262	262	304	304	304	347	347	347	390	390	390	432	432	432	475	475	475
	8.5	235	235	235	274	274	274	312	312	312	350	350	350	389	389	389	427	427	427
	9.0	213	213	213	248	248	248	282	282	282	317	317	317	352	352	352	387	387	387
	9.5	194	194	194	225	225	225	257	257	257	289	289	289	320	320	320	352	352	352
	10.0	177	177	177	206	206	206	235	235	235	264	264	264	293	293	293	322	322	322
	10.5	163	163	163	190	190	190	216	216	216	243	243	243	270	270	270	296	296	296
	11.0	151	151	151	175	175	175	200	200	200	225	225	225	249	249	249	274	274	274
	11.5	140	140	140	163	163	163	185	185	185	208	208	208	231	231	231	254	254	254
0.048	9.0	276	276	276	321	321	321	367	367	367	412	412	412	457	457	457	502	502	502
	9.5	255	255	255	296	296	296	338	338	338	380	380	380	421	421	421	463	463	463
	10.0	236	236	236	274	274	274	313	313	313	352	352	352	390	390	390	429	429	429
	10.5	219	219	219	255	255	255	291	291	291	327	327	327	363	363	363	399	399	399
	11.0	205	205	205	238	238	238	272	272	272	306	306	306	339	339	339	373	373	373
	11.5	192	192	192	223	223	223	255	255	255	286	286	286	318	318	318	349	349	349
	12.0	179	179	179	207	207	207	240	240	240	269	269	269	299	299	299	328	328	328
	12.5	158	158	158	188	188	188	223	223	223	254	254	254	282	282	282	310	310	310
0.060	10.0	235	235	235	274	274	274	313	313	313	351	351	351	390	390	390	428	428	428
	10.5	219	219	219	255	255	255	291	291	291	327	327	327	363	363	363	398	398	398
	11.0	204	204	204	238	238	238	272	272	272	305	305	305	339	339	339	372	372	372
	11.5	192	192	192	223	223	223	254	254	254	286	286	286	317	317	317	349	349	349
	12.0	180	180	180	210	210	210	239	239	239	269	269	269	298	298	298	328	328	328
	12.5	170	170	170	198	198	198	226	226	226	253	253	253	281	281	281	309	309	309
	13.0	154	154	154	187	187	187	213	213	213	240	240	240	266	266	266	292	292	292
	13.5	138	138	138	177	177	177	202	202	202	227	227	227	252	252	252	277	277	277
14.0	123	123	123	163	163	163	192	192	192	216	216	216	240	240	240	263	263	263	

- Notes:**
- One shore support required at midspan in shaded areas.
 - Slab weight includes steel deck and concrete slab, which has been accounted for in load table.
 - See Composite slab notes and design example.

