

OPTIONAL - SL (SIDING LAP)

S-15-K STEEL COMPOSITE FLOOR

METRIC

STEEL DECK SECTION PROPERTIES (Per metre of width)

Base Steel Thickness (mm)	Mass (ZF75)		Section Modulus (x10 ³ mm ³)		Deflection Inertia (x10 ⁶ mm ⁴)
	(kg/m ²)	(mm ²)	Midspan	Support	
0.762	8.4	1032	8.83	9.34	0.216
0.914	10.0	1238	10.7	11.1	0.265
1.219	13.2	1651	14.6	14.7	0.351
1.524	16.5	2064	18.1	18.1	0.436

COMPOSITE SLAB PROPERTIES (Per metre of width)

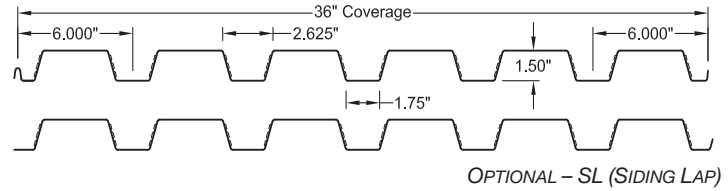
Overall Slab Depth, D (mm)					
100	110	120	130	140	150
Slab Weight (kPa)					
1.85	2.08	2.30	2.53	2.75	2.98
Concrete Volume (m³/10m²)					
0.76	0.86	0.96	1.06	1.16	1.26

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (kPa)

SLAB DEPTH, D (mm)		100			110			120			130			140			150		
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	1500	27.7	27.7	27.7	31.3	31.3	31.3	34.9	34.9	34.9	38.5	38.5	38.5	42.2	42.2	42.2	45.8	45.8	45.8
	1600	24.8	24.8	24.8	28.0	28.0	28.0	31.3	31.3	31.3	34.5	34.5	34.5	37.8	37.8	37.8	41.0	41.0	41.0
	1800	19.7	19.7	19.7	22.6	22.6	22.6	25.6	25.6	25.6	28.3	28.3	28.3	31.0	31.0	31.0	33.7	33.7	33.7
	2000	15.6	15.6	15.6	18.0	18.0	18.0	20.4	20.4	20.4	22.8	22.8	22.8	25.2	25.2	25.2	27.5	27.5	27.5
	2200	12.7	12.7	12.7	14.6	14.6	14.6	16.6	16.6	16.6	18.5	18.5	18.5	20.4	20.4	20.4	22.4	22.4	22.4
	2400	10.4	10.4	10.4	12.0	12.0	12.0	13.6	13.6	13.6	15.2	15.2	15.2	16.8	16.8	16.8	18.4	18.4	18.4
	2500	9.5	9.5	9.5	11.0	11.0	11.0	12.4	12.4	12.4	13.9	13.9	13.9	15.3	15.3	15.3	16.8	16.8	16.8
0.914	1500	30.7	30.7	30.7	34.8	34.8	34.8	38.8	38.8	38.8	42.8	42.8	42.8	46.9	46.9	46.9	50.9	50.9	50.9
	1600	27.7	27.7	27.7	31.4	31.4	31.4	35.0	35.0	35.0	38.6	38.6	38.6	42.3	42.3	42.3	45.9	45.9	45.9
	1800	23.0	23.0	23.0	26.0	26.0	26.0	29.1	29.1	29.1	32.1	32.1	32.1	35.1	35.1	35.1	38.1	38.1	38.1
	2000	18.4	18.4	18.4	21.3	21.3	21.3	24.2	24.2	24.2	27.1	27.1	27.1	29.8	29.8	29.8	32.4	32.4	32.4
	2200	15.0	15.0	15.0	17.3	17.3	17.3	19.7	19.7	19.7	22.0	22.0	22.0	24.4	24.4	24.4	26.8	26.8	26.8
	2400	12.4	12.4	12.4	14.3	14.3	14.3	16.3	16.3	16.3	18.2	18.2	18.2	20.2	20.2	20.2	22.1	22.1	22.1
	2500	11.3	11.3	11.3	13.1	13.1	13.1	14.8	14.8	14.8	16.6	16.6	16.6	18.4	18.4	18.4	20.2	20.2	20.2
	2600	10.3	10.3	10.3	12.0	12.0	12.0	13.6	13.6	13.6	15.2	15.2	15.2	16.8	16.8	16.8	18.5	18.5	18.5
2800	8.7	8.7	8.7	10.1	10.1	10.1	11.5	11.5	11.5	12.8	12.8	12.8	14.2	14.2	14.2	15.6	15.6	15.6	
1.219	1800	27.9	27.9	27.9	31.6	31.6	31.6	35.3	35.3	35.3	39.0	39.0	39.0	42.6	42.6	42.6	46.3	46.3	46.3
	2000	23.3	23.3	23.3	27.2	27.2	27.2	30.4	30.4	30.4	33.6	33.6	33.6	36.7	36.7	36.7	39.9	39.9	39.9
	2200	19.0	19.0	19.0	22.2	22.2	22.2	25.4	25.4	25.4	28.6	28.6	28.6	31.8	31.8	31.8	34.9	34.9	34.9
	2400	15.8	15.8	15.8	18.4	18.4	18.4	21.1	21.1	21.1	23.7	23.7	23.7	26.4	26.4	26.4	29.0	29.0	29.0
	2500	14.4	14.4	14.4	16.8	16.8	16.8	19.3	19.3	19.3	21.7	21.7	21.7	24.1	24.1	24.1	26.5	26.5	26.5
	2600	13.2	13.2	13.2	15.4	15.4	15.4	17.7	17.7	17.7	19.9	19.9	19.9	22.1	22.1	22.1	24.4	24.4	24.4
	2800	11.2	11.2	11.2	13.1	13.1	13.1	15.0	15.0	15.0	16.9	16.9	16.9	18.8	18.8	18.8	20.7	20.7	20.7
	3000	9.4	9.4	9.4	11.2	11.2	11.2	12.8	12.8	12.8	14.5	14.5	14.5	16.1	16.1	16.1	17.7	17.7	17.7
3200	7.7	7.7	7.7	9.6	9.6	9.6	11.1	11.1	11.1	12.5	12.5	12.5	13.9	13.9	13.9	15.3	15.3	15.3	
1.524	2000	24.0	24.0	24.0	27.2	27.2	27.2	30.3	30.3	30.3	33.5	33.5	33.5	36.7	36.7	36.7	39.8	39.8	39.8
	2200	21.0	21.0	21.0	23.8	23.8	23.8	26.6	26.6	26.6	29.3	29.3	29.3	32.1	32.1	32.1	34.9	34.9	34.9
	2400	18.7	18.7	18.7	21.1	21.1	21.1	23.6	23.6	23.6	26.1	26.1	26.1	28.5	28.5	28.5	31.0	31.0	31.0
	2500	17.6	17.6	17.6	20.0	20.0	20.0	22.3	22.3	22.3	24.7	24.7	24.7	27.0	27.0	27.0	29.3	29.3	29.3
	2600	15.7	15.7	15.7	18.4	18.4	18.4	21.2	21.2	21.2	23.4	23.4	23.4	25.6	25.6	25.6	27.8	27.8	27.8
	2800	12.5	12.5	12.5	15.7	15.7	15.7	18.1	18.1	18.1	20.5	20.5	20.5	22.9	22.9	22.9	25.2	25.2	25.2
	3000	10.2	10.2	10.2	13.4	13.4	13.4	15.5	15.5	15.5	17.6	17.6	17.6	19.7	19.7	19.7	21.7	21.7	21.7
	3200	8.4	8.4	8.4	11.1	11.1	11.1	13.4	13.4	13.4	15.2	15.2	15.2	17.0	17.0	17.0	18.8	18.8	18.8
3400	7.0	7.0	7.0	9.3	9.3	9.3	11.7	11.7	11.7	13.3	13.3	13.3	14.8	14.8	14.8	16.4	16.4	16.4	

- 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-15-K STEEL COMPOSITE FLOOR

IMPERIAL

STEEL DECK SECTION PROPERTIES (Per foot of width)

Base Steel Thickness (in.)	Weight (ZF75)		Section Modulus (in ³)		Deflection Inertia (in ⁴)
	(psf)	(in ²)	Midspan	Support	
0.030	1.72	0.487	0.164	0.174	0.157
0.036	2.05	0.585	0.206	0.207	0.194
0.048	2.71	0.780	0.271	0.273	0.257
0.060	3.37	0.975	0.337	0.337	0.320

COMPOSITE SLAB PROPERTIES (Per foot of width)

Overall Slab Depth, D (in.)					
4.0	4.5	5.0	5.5	6.0	6.5
Slab Weight (psf)					
41.1	47.3	53.6	59.8	66.1	72.3
Concrete Volume (yd³/100ft²)					
0.94	1.09	1.25	1.40	1.56	1.71

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (psf)

SLAB DEPTH, D (in.)		4.0			4.5			5.0			5.5			6.0			6.5		
BASE STEEL (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	5.0	572	572	572	665	665	665	759	759	759	852	852	852	945	945	945	1038	1038	1038
	5.5	484	484	484	566	566	566	645	645	645	725	725	725	804	804	804	883	883	883
	6.0	402	402	402	477	477	477	552	552	552	626	626	626	695	695	695	763	763	763
	6.5	337	337	337	401	401	401	464	464	464	528	528	528	591	591	591	654	654	654
	7.0	286	286	286	340	340	340	394	394	394	448	448	448	502	502	502	556	556	556
	7.5	245	245	245	292	292	292	338	338	338	384	384	384	430	430	430	477	477	477
	8.0	212	212	212	252	252	252	292	292	292	332	332	332	372	372	372	412	412	412
0.036	5.0	637	637	637	741	741	741	845	845	845	949	949	949	1053	1053	1053	1157	1157	1157
	5.5	547	547	547	636	636	636	726	726	726	815	815	815	904	904	904	994	994	994
	6.0	473	473	473	555	555	555	633	633	633	711	711	711	789	789	789	866	866	866
	6.5	398	398	398	475	475	475	552	552	552	628	628	628	696	696	696	765	765	765
	7.0	339	339	339	404	404	404	470	470	470	535	535	535	601	601	601	667	667	667
	7.5	291	291	291	347	347	347	404	404	404	460	460	460	517	517	517	573	573	573
	8.0	251	251	251	300	300	300	349	349	349	398	398	398	448	448	448	497	497	497
	8.5	219	219	219	262	262	262	305	305	305	347	347	347	390	390	390	433	433	433
0.048	6.0	581	581	581	676	676	676	771	771	771	866	866	866	961	961	961	1056	1056	1056
	6.5	507	507	507	604	604	604	689	689	689	773	773	773	858	858	858	943	943	943
	7.0	432	432	432	521	521	521	610	610	610	697	697	697	774	774	774	850	850	850
	7.5	372	372	372	449	449	449	526	526	526	603	603	603	680	680	680	757	757	757
	8.0	323	323	323	390	390	390	457	457	457	524	524	524	591	591	591	658	658	658
	8.5	282	282	282	341	341	341	400	400	400	459	459	459	517	517	517	576	576	576
	9.0	248	248	248	300	300	300	352	352	352	404	404	404	456	456	456	507	507	507
	9.5	219	219	219	265	265	265	311	311	311	357	357	357	403	403	403	449	449	449
	10.0	195	195	195	236	236	236	277	277	277	318	318	318	359	359	359	400	400	400
0.060	7.0	467	467	467	543	543	543	620	620	620	696	696	696	773	773	773	849	849	849
	7.5	424	424	424	494	494	494	563	563	563	633	633	633	703	703	703	772	772	772
	8.0	383	383	383	452	452	452	516	516	516	580	580	580	643	643	643	707	707	707
	8.5	335	335	335	410	410	410	475	475	475	534	534	534	593	593	593	651	651	651
	9.0	295	295	295	361	361	361	427	427	427	493	493	493	549	549	549	604	604	604
	9.5	251	251	251	320	320	320	379	379	379	437	437	437	496	496	496	554	554	554
	10.0	216	216	216	285	285	285	338	338	338	390	390	390	442	442	442	495	495	495
	10.5	186	186	186	255	255	255	302	302	302	349	349	349	396	396	396	443	443	443
	11.0	162	162	162	229	229	229	271	271	271	314	314	314	356	356	356	398	398	398

- 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.

