

S-308 ROOF DECK

METRIC

STEEL DECK SECTION PROPERTIES (Per foot of width)

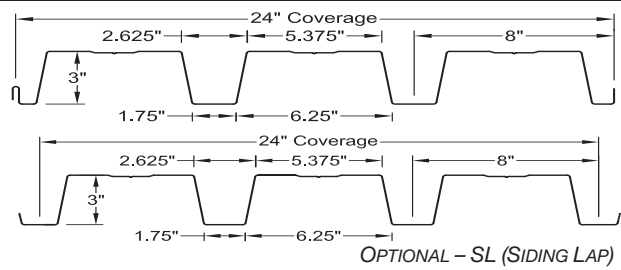
Base Steel Thickness (mm)	Coated Steel Thickness (Z275) (mm)	Coated Weight (kg/m ²)	Section Modulus (10 ³ mm ³)		Deflection Inertia (10 ⁶ mm ⁴)	Specified Web Crippling Data			
			Midspan	Support		P _{e1} End (kN)	P _{e2} End (kN)	P _{i1} Interior (kN)	P _{i2} Interior (kN)
0.762	0.802	10.4	19.2	20.9	0.893	1.93	0.483	3.98	0.677
0.914	0.954	12.5	23.5	26.2	1.14	2.89	0.721	5.88	1.00
1.22	1.26	16.5	32.4	35.2	1.63	5.38	1.35	10.8	1.84
1.52	1.56	20.6	41.4	43.7	2.12	8.68	2.17	17.3	2.95

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (psf)

SPAN LENGTH (m)		1 - SPAN				2 SPAN				3 - SPAN			
		BASE STEEL THICKNESS (mm)				BASE STEEL THICKNESS (mm)				BASE STEEL THICKNESS (mm)			
		0.762	0.914	1.22	1.52	0.762	0.914	1.22	1.52	0.762	0.914	1.22	1.52
1.8	S	6.53	8.01	11.0	14.1	7.12	8.92	12.0	14.9	8.90	11.1	15.0	18.6
	D	13.3	16.9	24.3	31.6	31.8	40.4	58.2	75.7	25.1	31.9	45.9	59.6
2.0	S	5.29	6.49	8.94	11.4	5.77	7.22	9.71	12.1	7.21	9.03	12.1	15.1
	D	9.66	12.3	17.7	23.0	23.2	29.5	42.4	55.2	18.3	23.2	33.4	43.5
2.2	S	4.37	5.36	7.39	9.45	4.77	5.97	8.03	10.0	5.96	7.46	10.0	12.5
	D	7.26	9.23	13.3	17.3	17.4	22.2	31.9	41.5	13.7	17.4	25.1	32.7
2.4	S	3.68	4.51	6.21	7.94	4.00	5.02	6.74	8.37	5.01	6.27	8.43	10.5
	D	5.59	7.11	10.2	13.3	13.4	17.1	24.6	31.9	10.6	13.4	19.3	25.2
2.6	S	3.13	3.84	5.29	6.76	3.41	4.27	5.75	7.13	4.27	5.34	7.18	8.91
	D	4.40	5.59	8.05	10.5	10.6	13.4	19.3	25.1	8.31	10.6	15.2	19.8
2.8	S	2.70	3.31	4.56	5.83	2.94	3.68	4.96	6.15	3.68	4.61	6.19	7.68
	D	3.52	4.48	6.44	8.38	8.45	10.7	15.5	20.1	6.66	8.46	12.2	15.8
3.0	S	2.35	2.88	3.97	5.08	2.56	3.21	4.32	5.36	3.20	4.01	5.40	6.69
	D	2.86	3.64	5.24	6.81	6.87	8.74	12.6	16.4	5.41	6.88	9.90	12.9
3.2	S	2.07	2.54	3.49	4.47	2.25	2.82	3.79	4.71	2.82	3.53	4.74	5.88
	D	2.36	3.00	4.32	5.61	5.66	7.20	10.4	13.5	4.46	5.67	8.16	10.6
3.4	S	1.83	2.25	3.09	3.96	2.00	2.50	3.36	4.17	2.49	3.12	4.20	5.21
	D	1.97	2.50	3.60	4.68	4.72	6.00	8.64	11.2	3.72	4.73	6.80	8.85
3.6	S	1.63	2.00	2.79	3.53	1.78	2.23	3.00	3.72	2.22	2.79	3.75	4.65
	D	1.66	2.11	3.03	3.94	3.98	5.06	7.28	9.46	3.13	3.98	5.73	7.45
3.8	S	1.47	1.80	2.48	3.17	1.60	2.00	2.69	3.34	2.00	2.50	3.36	4.17
	D	1.41	1.79	2.58	3.35	3.38	4.30	6.19	8.05	2.66	3.39	4.87	6.34
4.0	S	1.32	1.62	2.24	2.86	1.44	1.81	2.43	3.01	1.80	2.26	3.04	3.77
	D	1.21	1.54	2.21	2.87	2.90	3.69	5.31	6.90	2.28	2.90	4.18	5.43
4.2	S	1.20	1.47	2.03	2.59	1.31	1.64	2.20	2.73	1.63	2.05	2.75	3.42
	D	1.04	1.33	1.91	2.48	2.50	3.18	4.58	5.96	1.97	2.51	3.61	4.69
4.4	S	1.09	1.34	1.85	2.36	1.19	1.49	2.01	2.49	1.49	1.87	2.51	3.11
	D	0.91	1.15	1.66	2.16	2.18	2.77	3.99	5.18	1.72	2.18	3.14	4.08
4.6	S	1.00	1.23	1.69	2.16	1.09	1.37	1.84	2.28	1.36	1.71	2.29	2.85
	D	0.79	1.01	1.45	1.89	1.91	2.42	3.49	4.54	1.50	1.91	2.75	3.57
4.8	S	0.92	1.13	1.55	1.98	1.00	1.25	1.69	2.09	1.25	1.57	2.11	2.61
	D	0.70	0.89	1.28	1.66	1.68	2.13	3.07	3.99	1.32	1.68	2.42	3.14
5.0	S	0.85	1.04	1.43	1.83	0.92	1.16	1.55	1.93	1.15	1.44	1.94	2.41
	D	0.62	0.79	1.13	1.47	1.48	1.89	2.79	3.53	1.17	1.49	2.14	2.78

- Notes:**
1. Based on ASTM A 653 Grade 33 structural steel.
 2. Values in row "S" are based on strength.
 3. Values in row "D" are based on deflection of 1/180th span.
 4. Web crippling not included in strength calculations. See Example.
- Limit States Design principles were used in accordance with CSA Standard S136-01





S-308 ROOF DECK IMPERIAL

STEEL DECK SECTION PROPERTIES (Per foot of width)

Base Steel Thickness (in.)	Coated Steel Thickness (G90) (in.)	Coated Weight (psf)	Section Modulus (in ³)		Deflection Inertia (in ⁴)	Specified Web Crippling Data			
			Midspan	Support		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)
0.030	0.0315	2.14	0.357	0.389	0.655	131	32.8	270	45.9
0.036	0.0375	2.55	0.438	0.487	0.832	196	48.9	399	67.8
0.048	0.0495	3.38	0.603	0.655	1.20	365	91.2	734	125
0.060	0.0615	4.22	0.771	0.812	1.56	589	147	1174	200

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (psf)

SPAN LENGTH (ft)		1 - SPAN				2 SPAN				3 - SPAN			
		BASE STEEL THICKNESS (INCHES)				BASE STEEL THICKNESS (INCHES)				BASE STEEL THICKNESS (INCHES)			
		0.030	0.036	0.048	0.060	0.030	0.036	0.048	0.060	0.030	0.036	0.048	0.060
6.0	S	131	160	221	283	143	179	240	298	178	223	300	372
	D	264	336	484	629	635	806	1161	1509	500	635	914	1188
6.5	S	111	137	188	241	122	152	204	254	152	190	256	317
	D	208	264	380	495	499	634	913	1187	393	500	719	935
7.0	S	96	118	162	208	105	131	176	219	131	164	220	273
	D	167	212	305	396	400	508	731	950	315	400	576	748
7.5	S	84	103	141	181	91	114	154	191	114	143	192	238
	D	135	172	248	322	325	413	594	773	256	325	468	608
8.0	S	74	90	124	159	80	101	135	167	100	126	169	209
	D	112	142	204	265	268	340	490	637	211	268	386	501
8.5	S	65	80	110	141	71	89	120	148	89	111	149	185
	D	93	118	170	221	223	284	408	531	176	223	322	418
9.0	S	58	71	98	126	63	79	107	132	79	99	133	165
	D	78	100	143	186	188	239	344	447	148	188	271	352
9.5	S	52	64	88	113	57	71	96	119	71	89	120	148
	D	67	85	122	158	160	203	292	380	126	160	230	299
10.0	S	47	58	80	102	51	64	86	107	64	80	108	134
	D	57	73	104	136	137	174	251	326	108	137	197	257
10.5	S	43	52	72	92	47	58	78	97	58	73	98	122
	D	49	63	90	117	118	150	217	282	93	118	171	222
11.0	S	39	48	66	84	42	53	71	89	53	66	89	111
	D	43	55	78	102	103	131	188	245	81	103	148	193
11.5	S	36	44	60	77	39	49	65	81	49	61	82	101
	D	38	48	69	89	90	115	165	214	71	90	130	169
12.0	S	33	40	55	71	36	45	60	74	45	56	75	93
	D	33	42	60	79	79	101	145	189	62	79	114	149
12.5	S	30	37	51	65	33	41	55	69	41	51	69	86
	D	29	37	53	70	70	89	128	167	55	70	101	131
13.0	S	28	34	47	60	30	38	51	63	38	48	64	79
	D	26	33	48	62	62	79	114	148	49	62	90	117
13.5	S	26	32	44	56	28	35	47	59	35	44	59	74
	D	23	29	42	55	56	71	102	132	44	56	80	104
14.0	S	24	29	41	52	26	33	44	55	33	41	55	68
	D	21	26	38	49	50	63	91	119	39	50	72	94

- Notes:**
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