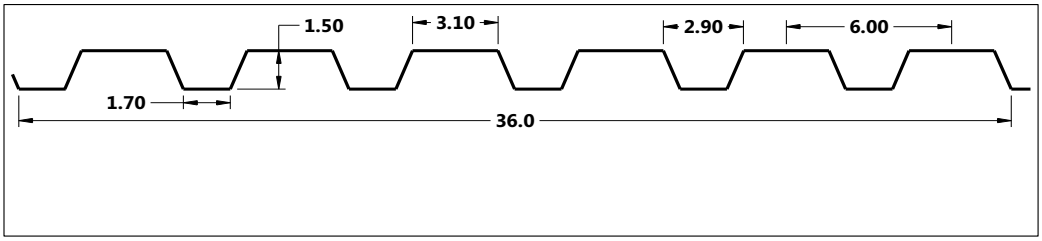
ACCUFORM METAL LTD. AFRD 15-36 ROOF DECK



SECTION PROPERTIES (PER FOOT OF WIDTH)

	Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Sec. Modulus Midspan (in^3)	Sec. Modulus Support (in^3)	Deflection Moment of Inertia (in^4)	Specified Web Crippling Data P_{e1} End (lb)	P_{e2} End (lb)	P_{i1} Interior (lb)	P_{i2} Interior (lb)
IMPERIAL	0.030	1.69	40	0.179	0.183	0.168	217	54.3	416	70.7
	0.036	2.02	40	0.231	0.233	0.211	321	80.2	614	104
	0.048	2.67	40	0.314	0.325	0.294	591	148	1128	192
	0.060	3.32	40	0.397	0.402	0.367	946	236	1801	306

Live load factor = 1.5; Importance factor = 0.90; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (psf)

SPAN LENGTH (ft)		1-SPAN BASE STEEL THICKNESS (in.)					2-SPAN BASE STEEL THICKNESS (in.)					3-SPAN BASE STEEL THICKNESS (in.)				
		0.030	0.036	0.048	0.060		0.030	0.036	0.048	0.060		0.030	0.036	0.048	0.060	
4.0	S	182	231	314	397		183	233	325	402		229	291	406	502	
	D	255	320	445	556		612	769	1067	1334		482	605	840	1050	
4.5	S	144	182	248	314		145	184	257	317		181	230	321	397	
	D	179	225	312	390		430	540	749	937		339	425	590	738	
5.0	S	116	148	201	254		117	149	208	257		146	187	260	321	
	D	131	164	228	284		313	394	546	683		247	310	430	538	
5.5	S	96	122	166	210		97	123	172	212		121	154	215	265	
	D	98	123	171	214		235	296	410	513		185	233	323	404	
6.0	S	81	102	140	177		81	104	144	178		102	130	180	223	
	D	76	95	132	165		181	228	316	395		143	179	249	311	
6.5	S	69	87	119	150		69	88	123	152		87	110	154	190	
	D	59	75	104	129		143	179	249	311		112	141	196	245	
7.0	S	59	75	103	130		60	76	106	131		75	95	133	164	
	D	48	60	83	104		114	143	199	249		90	113	157	196	
7.5	S	52	66	89	113		52	66	92	114		65	83	115	143	
	D	39	49	67	84		93	117	162	202		73	92	127	159	
8.0	S	45	58	79	99		46	58	81	100		57	73	101	125	
	D	32	40	56	69		77	96	133	167		60	76	105	131	
8.5	S	40	51	70	88		41	52	72	89		51	65	90	111	
	D	27	33	46	58		64	80	111	139		50	63	88	109	
9.0	S	36	46	62	78		36	46	64	79		45	58	80	99	
	D	22	28	39	49		54	67	94	117		42	53	74	92	
9.5	S	32	41	56	70		32	41	58	71		41	52	72	89	
	D	19	24	33	41		46	57	80	100		36	45	63	78	
10.0	S	29	37	50	64		29	37	52	64		37	47	65	80	
	D	16	20	28	36		39	49	68	85		31	39	54	67	
10.5	S	26	33	46	58		27	34	47	58		33	42	59	73	
	D	14	18	25	31		34	42	59	74		27	33	46	58	
11.0	S	24	30	42	53		24	31	43	53		30	39	54	66	
	D	12	15	21	27		29	37	51	64		23	29	40	50	

Notes:

1. Based on ASTM A653 Grade 40 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.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.
6. Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.

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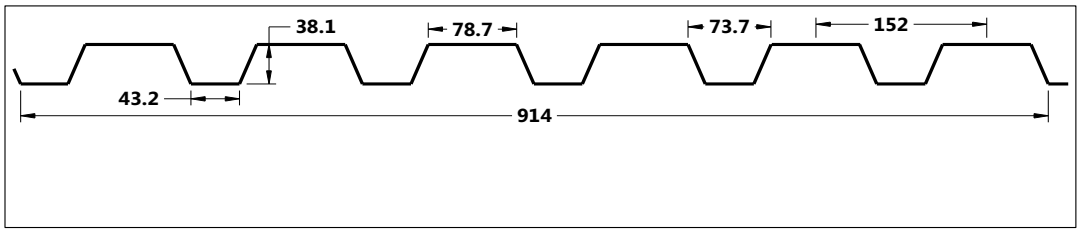

SECTION PROPERTIES (PER METRE OF WIDTH)

	Base Steel Thickness (mm)	Mass Z275 (kg/m^2)	Yield Stress (MPa)	Sec. Modulus Midspan ($x10^3$ mm^3)	Sec. Modulus Support ($x10^3$ mm^3)	Deflection Moment of Inertia ($x10^6$mm^4)	Specified Web Crippling Data P_{e1} End (kN)	P_{e2} End (kN)	P_{i1} Interior (kN)	P_{i2} Interior (kN)
METRIC	0.762	8.25	275	9.75	9.84	0.230	3.16	0.790	6.05	1.03
	0.914	9.85	275	12.3	12.5	0.289	4.67	1.17	8.93	1.52
	1.22	13.0	275	16.9	17.5	0.401	8.60	2.15	16.4	2.79
	1.52	16.2	275	21.4	21.6	0.501	13.8	3.44	26.2	4.46

Live load factor = 1.5; Importance factor = 0.90; Importance Category = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

SPAN LENGTH (m)		1-SPAN BASE STEEL THICKNESS (mm)					2-SPAN BASE STEEL THICKNESS (mm)					3-SPAN 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	
1.2	S	8.97	11.4	15.5	19.6		9.02	11.5	16.0	19.8		11.3	14.4	20.0	24.7	
	D	12.8	16.1	22.3	27.9		30.8	38.6	53.6	67.0		24.2	30.4	42.2	52.7	
1.4	S	6.59	8.35	11.4	14.4		6.63	8.45	11.8	14.5		8.28	10.6	14.7	18.2	
	D	8.07	10.1	14.1	17.6		19.4	24.3	33.8	42.2		15.3	19.2	26.6	33.2	
1.6	S	5.04	6.39	8.72	11.0		5.07	6.47	9.00	11.1		6.34	8.08	11.3	13.9	
	D	5.40	6.79	9.42	11.8		13.0	16.3	22.6	28.3		10.2	12.8	17.8	22.3	
1.8	S	3.98	5.05	6.89	8.70		4.01	5.11	7.11	8.79		5.01	6.39	8.89	11.0	
	D	3.80	4.77	6.62	8.27		9.11	11.4	15.9	19.8		7.17	9.01	12.5	15.6	
2.0	S	3.23	4.09	5.58	7.05		3.25	4.14	5.76	7.12		4.06	5.17	7.20	8.90	
	D	2.77	3.47	4.82	6.03		6.64	8.34	11.6	14.5		5.23	6.57	9.12	11.4	
2.2	S	2.67	3.38	4.61	5.82		2.68	3.42	4.76	5.89		3.35	4.28	5.95	7.36	
	D	2.08	2.61	3.62	4.53		4.99	6.27	8.70	10.9		3.93	4.93	6.85	8.56	
2.4	S	2.24	2.84	3.87	4.89		2.25	2.87	4.00	4.95		2.82	3.59	5.00	6.18	
	D	1.60	2.01	2.79	3.49		3.84	4.83	6.70	8.37		3.03	3.80	5.28	6.59	
2.6	S	1.91	2.42	3.30	4.17		1.92	2.45	3.41	4.22		2.40	3.06	4.26	5.27	
	D	1.26	1.58	2.20	2.74		3.02	3.80	5.27	6.58		2.38	2.99	4.15	5.18	
2.8	S	1.65	2.09	2.85	3.60		1.66	2.11	2.94	3.63		2.07	2.64	3.67	4.54	
	D	1.01	1.27	1.76	2.20		2.42	3.04	4.22	5.27		1.91	2.39	3.32	4.15	
3.0	S	1.43	1.82	2.48	3.13		1.44	1.84	2.56	3.17		1.80	2.30	3.20	3.96	
	D	0.82	1.03	1.43	1.79		1.97	2.47	3.43	4.29		1.55	1.95	2.70	3.38	
3.2	S	1.26	1.60	2.18	2.75		1.27	1.62	2.25	2.78		1.59	2.02	2.81	3.48	
	D	0.68	0.85	1.18	1.47		1.62	2.04	2.83	3.53		1.28	1.60	2.23	2.78	
3.4	S	1.12	1.42	1.93	2.44		1.12	1.43	1.99	2.46		1.40	1.79	2.49	3.08	
	D	0.56	0.71	0.98	1.23		1.35	1.70	2.36	2.94		1.06	1.34	1.86	2.32	
3.6	S	1.00	1.26	1.72	2.18		1.00	1.28	1.78	2.20		1.25	1.60	2.22	2.75	
	D	0.47	0.60	0.83	1.03		1.14	1.43	1.98	2.48		0.90	1.13	1.56	1.95	
3.8	S	0.89	1.13	1.55	1.95		0.90	1.15	1.60	1.97		1.12	1.43	2.00	2.47	
	D	0.40	0.51	0.70	0.88		0.97	1.22	1.69	2.11		0.76	0.96	1.33	1.66	
4.0	S	0.81	1.02	1.39	1.76		0.81	1.03	1.44	1.78		1.01	1.29	1.80	2.23	
	D	0.35	0.43	0.60	0.75		0.83	1.04	1.45	1.81		0.65	0.82	1.14	1.42	

Notes:

1. Based on ASTM A653M Grade 275 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.
5. Limit States Design principles were used in accordance with CSA Standard S136-16.
6. Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.