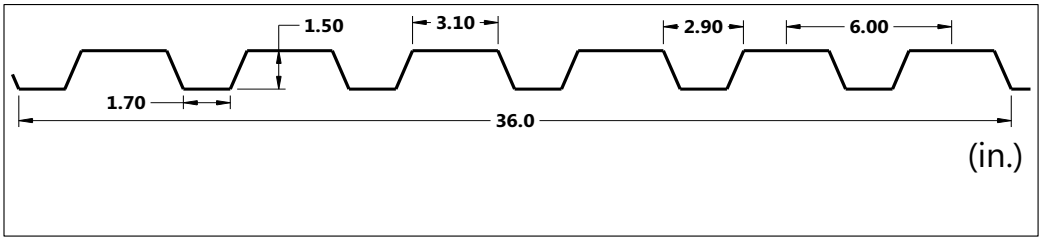
ACCUFORM METAL LTD. AFRD 15-36 ROOF DECK



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	33	0.190	0.189	0.173	179	44.8	343	58.4
	0.036	2.02	33	0.233	0.241	0.216	265	66.2	506	86.1
	0.048	2.67	33	0.318	0.325	0.295	488	122	930	158
	0.060	3.32	33	0.400	0.402	0.367	780	195	1486	253

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	157	192	262	330		156	198	268	331		195	248	335	414	
	D	262	327	446	556		628	784	1071	1334		495	617	844	1050	
4.5	S	124	152	207	261		123	157	212	262		154	196	265	327	
	D	184	229	313	390		441	550	752	937		347	433	592	738	
5.0	S	101	123	168	211		100	127	171	212		125	159	214	265	
	D	134	167	229	284		322	401	548	683		253	316	432	538	
5.5	S	83	102	139	175		83	105	142	175		103	131	177	219	
	D	101	126	172	214		242	301	412	513		190	237	324	404	
6.0	S	70	86	116	147		69	88	119	147		87	110	149	184	
	D	78	97	132	165		186	232	317	395		147	183	250	311	
6.5	S	59	73	99	125		59	75	101	125		74	94	127	157	
	D	61	76	104	129		146	183	250	311		115	144	197	245	
7.0	S	51	63	86	108		51	65	87	108		64	81	109	135	
	D	49	61	83	104		117	146	200	249		92	115	157	196	
7.5	S	45	55	75	94		44	56	76	94		56	71	95	118	
	D	40	50	68	84		95	119	162	202		75	94	128	159	
8.0	S	39	48	65	83		39	50	67	83		49	62	84	104	
	D	33	41	56	69		79	98	134	167		62	77	105	131	
8.5	S	35	43	58	73		35	44	59	73		43	55	74	92	
	D	27	34	47	58		65	82	112	139		52	64	88	109	
9.0	S	31	38	52	65		31	39	53	65		39	49	66	82	
	D	23	29	39	49		55	69	94	117		43	54	74	92	
9.5	S	28	34	46	59		28	35	48	59		35	44	59	73	
	D	20	24	33	41		47	58	80	100		37	46	63	78	
10.0	S	25	31	42	53		25	32	43	53		31	40	54	66	
	D	17	21	29	36		40	50	69	85		32	39	54	67	
10.5	S	23	28	38	48		23	29	39	48		28	36	49	60	
	D	14	18	25	31		35	43	59	74		27	34	47	58	
11.0	S	21	25	35	44		21	26	35	44		26	33	44	55	
	D	13	16	21	27		30	38	52	64		24	30	41	50	

Notes:

1 Based on ASTM A653 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.
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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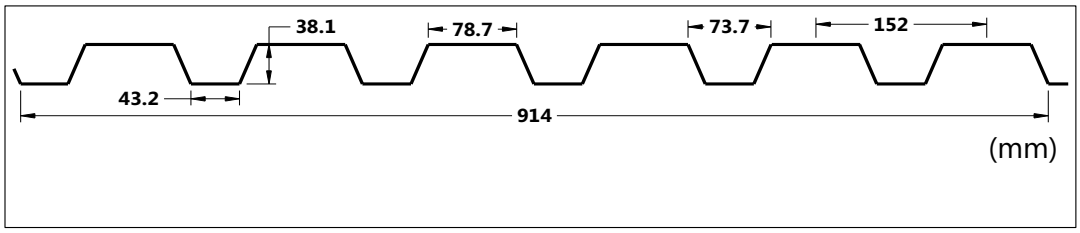

SECTION PROPERTIES (PER METRE OF WIDTH)

	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	230	10.2	10.2	0.236	2.64	0.660	5.06	0.861
	0.914	9.85	230	12.5	12.9	0.294	3.90	0.976	7.47	1.27
	1.22	13.0	230	17.1	17.5	0.402	7.19	1.80	13.7	2.33
	1.52	16.2	230	21.5	21.6	0.501	11.5	2.88	21.9	3.73

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	7.83	9.61	13.1	16.5		7.79	9.90	13.4	16.6		9.73	12.4	16.7	20.7	
	D	13.1	16.4	22.4	27.9		31.5	39.3	53.8	67.0		24.8	31.0	42.4	52.7	
1.4	S	5.75	7.06	9.61	12.1		5.72	7.27	9.83	12.2		7.15	9.09	12.3	15.2	
	D	8.27	10.3	14.1	17.6		19.8	24.8	33.9	42.2		15.6	19.5	26.7	33.2	
1.6	S	4.40	5.40	7.36	9.28		4.38	5.57	7.53	9.31		5.47	6.96	9.41	11.6	
	D	5.54	6.91	9.45	11.8		13.3	16.6	22.7	28.3		10.5	13.1	17.9	22.3	
1.8	S	3.48	4.27	5.81	7.33		3.46	4.40	5.95	7.36		4.33	5.50	7.44	9.19	
	D	3.89	4.85	6.64	8.27		9.33	11.7	15.9	19.8		7.35	9.17	12.6	15.6	
2.0	S	2.82	3.46	4.71	5.94		2.80	3.56	4.82	5.96		3.50	4.45	6.02	7.45	
	D	2.84	3.54	4.84	6.03		6.80	8.49	11.6	14.5		5.36	6.69	9.15	11.4	
2.2	S	2.33	2.86	3.89	4.91		2.32	2.94	3.98	4.92		2.90	3.68	4.98	6.16	
	D	2.13	2.66	3.64	4.53		5.11	6.38	8.73	10.9		4.03	5.02	6.87	8.56	
2.4	S	1.96	2.40	3.27	4.12		1.95	2.47	3.35	4.14		2.43	3.09	4.18	5.17	
	D	1.64	2.05	2.80	3.49		3.94	4.91	6.72	8.37		3.10	3.87	5.29	6.59	
2.6	S	1.67	2.05	2.79	3.51		1.66	2.11	2.85	3.53		2.07	2.64	3.56	4.41	
	D	1.29	1.61	2.20	2.74		3.10	3.86	5.29	6.58		2.44	3.04	4.16	5.18	
2.8	S	1.44	1.76	2.40	3.03		1.43	1.82	2.46	3.04		1.79	2.27	3.07	3.80	
	D	1.03	1.29	1.76	2.20		2.48	3.09	4.23	5.27		1.95	2.44	3.33	4.15	
3.0	S	1.25	1.54	2.09	2.64		1.25	1.58	2.14	2.65		1.56	1.98	2.68	3.31	
	D	0.84	1.05	1.43	1.79		2.02	2.52	3.44	4.29		1.59	1.98	2.71	3.38	
3.2	S	1.10	1.35	1.84	2.32		1.09	1.39	1.88	2.33		1.37	1.74	2.35	2.91	
	D	0.69	0.86	1.18	1.47		1.66	2.07	2.84	3.53		1.31	1.63	2.23	2.78	
3.4	S	0.97	1.20	1.63	2.05		0.97	1.23	1.67	2.06		1.21	1.54	2.08	2.58	
	D	0.58	0.72	0.99	1.23		1.39	1.73	2.36	2.94		1.09	1.36	1.86	2.32	
3.6	S	0.87	1.07	1.45	1.83		0.87	1.10	1.49	1.84		1.08	1.37	1.86	2.30	
	D	0.49	0.61	0.83	1.03		1.17	1.46	1.99	2.48		0.92	1.15	1.57	1.95	
3.8	S	0.78	0.96	1.30	1.64		0.78	0.99	1.33	1.65		0.97	1.23	1.67	2.06	
	D	0.41	0.52	0.71	0.88		0.99	1.24	1.69	2.11		0.78	0.97	1.33	1.66	
4.0	S	0.70	0.86	1.18	1.48		0.70	0.89	1.20	1.49		0.88	1.11	1.51	1.86	
	D	0.35	0.44	0.61	0.75		0.85	1.06	1.45	1.81		0.67	0.84	1.14	1.42	

Notes:

1. Based on ASTM A653M Grade 230 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.