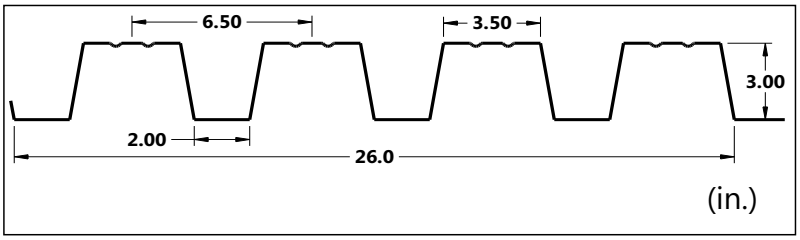
ACCUFORM METAL LTD. AFRD 3-26 ROOF DECK



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	2.32	40	0.431	0.449	0.781	195	48.8	403	68.6
	0.036	2.77	40	0.554	0.567	0.981	291	72.7	596	101
	0.048	3.68	40	0.776	0.813	1.38	543	136	1096	186
	0.060	4.58	40	0.988	1.02	1.76	876	219	1752	298

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
6.0	S	192	246	345	439	199	252	361	451	249	315	452	564
	D	263	330	465	591	631	793	1116	1418	497	624	879	1117
6.5	S	163	210	294	374	170	215	308	385	212	268	385	481
	D	207	260	366	465	496	623	878	1115	391	491	691	878
7.0	S	141	181	253	323	146	185	266	332	183	231	332	415
	D	165	208	293	372	397	499	703	893	313	393	554	703
7.5	S	123	158	221	281	128	161	231	289	159	201	289	361
	D	135	169	238	303	323	406	572	726	254	320	450	572
8.0	S	108	138	194	247	112	142	203	254	140	177	254	317
	D	111	139	196	249	266	334	471	598	210	263	371	471
8.5	S	96	123	172	219	99	125	180	225	124	157	225	281
	D	92	116	164	208	222	279	393	499	175	220	309	393
9.0	S	85	109	153	195	89	112	161	201	111	140	201	251
	D	78	98	138	175	187	235	331	420	147	185	260	331
9.5	S	76	98	138	175	80	100	144	180	99	126	180	225
	D	66	83	117	149	159	200	281	357	125	157	221	281
10.0	S	69	89	124	158	72	91	130	163	90	113	163	203
	D	57	71	100	128	136	171	241	306	107	135	190	241
10.5	S	63	80	113	143	65	82	118	147	81	103	148	184
	D	49	62	87	110	118	148	208	265	93	116	164	208
11.0	S	57	73	103	131	59	75	108	134	74	94	134	168
	D	43	54	75	96	102	129	181	230	81	101	143	181
11.5	S	52	67	94	120	54	69	98	123	68	86	123	154
	D	37	47	66	84	90	113	159	201	71	89	125	159
12.0	S	48	62	86	110	50	63	90	113	62	79	113	141
	D	33	41	58	74	79	99	140	177	62	78	110	140
12.5	S	44	57	79	101	46	58	83	104	57	73	104	130
	D	29	37	51	65	70	88	123	157	55	69	97	123
13.0	S	41	52	73	94	42	54	77	96	53	67	96	120
	D	26	32	46	58	62	78	110	139	49	61	86	110
13.5	S	38	49	68	87	39	50	71	89	49	62	89	111
	D	23	29	41	52	55	70	98	124	44	55	77	98
14.0	S	35	45	63	81	37	46	66	83	46	58	83	104
	D	21	26	37	47	50	62	88	112	39	49	69	88

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 1/240th 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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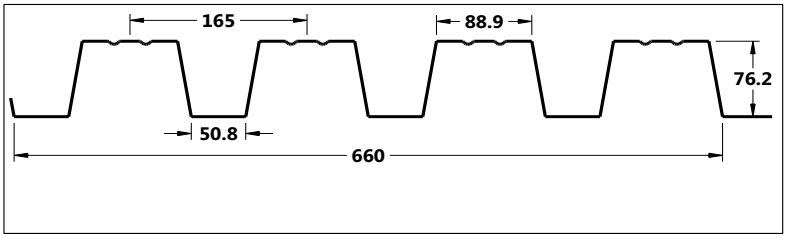

SECTION PROPERTIES (PER METRE OF WIDTH)

	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	12.0	275	23.2	24.1	1.07	2.84	0.709	5.87	0.998
	0.914	14.3	275	29.8	30.5	1.34	4.23	1.06	8.67	1.47
	1.22	19.0	275	41.7	43.7	1.89	7.90	1.97	15.9	2.71
	1.52	23.7	275	53.1	54.6	2.40	12.7	3.19	25.5	4.33

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	
2.0	S	7.66	9.83	13.8	17.5		7.96	10.1	14.4	18.0		9.95	12.6	18.0	22.5	
	D	9.62	12.1	17.0	21.6		23.1	29.0	40.9	51.9		18.2	22.9	32.2	40.9	
2.2	S	6.33	8.12	11.4	14.5		6.58	8.31	11.9	14.9		8.23	10.4	14.9	18.6	
	D	7.23	9.09	12.8	16.3		17.4	21.8	30.7	39.0		13.7	17.2	24.2	30.7	
2.4	S	5.32	6.83	9.56	12.2		5.53	6.98	10.0	12.5		6.91	8.73	12.5	15.6	
	D	5.57	7.00	9.86	12.5		13.4	16.8	23.7	30.0		10.5	13.2	18.6	23.7	
2.5	S	4.90	6.29	8.81	11.2		5.10	6.44	9.24	11.5		6.37	8.05	11.6	14.4	
	D	4.93	6.19	8.72	11.1		11.8	14.9	20.9	26.6		9.31	11.7	16.5	20.9	
2.6	S	4.53	5.82	8.15	10.4		4.71	5.95	8.54	10.7		5.89	7.44	10.7	13.3	
	D	4.38	5.50	7.75	9.85		10.5	13.2	18.6	23.6		8.28	10.4	14.7	18.6	
2.8	S	3.91	5.02	7.03	8.94		4.06	5.13	7.36	9.19		5.08	6.41	9.21	11.5	
	D	3.51	4.41	6.21	7.88		8.42	10.6	14.9	18.9		6.63	8.33	11.7	14.9	
3.0	S	3.40	4.37	6.12	7.79		3.54	4.47	6.42	8.01		4.42	5.59	8.02	10.0	
	D	2.85	3.58	5.05	6.41		6.84	8.60	12.1	15.4		5.39	6.77	9.54	12.1	
3.2	S	2.99	3.84	5.38	6.85		3.11	3.93	5.64	7.04		3.89	4.91	7.05	8.80	
	D	2.35	2.95	4.16	5.28		5.64	7.09	10.0	12.7		4.44	5.58	7.86	9.98	
3.4	S	2.65	3.40	4.76	6.07		2.76	3.48	4.99	6.24		3.44	4.35	6.24	7.79	
	D	1.96	2.46	3.47	4.40		4.70	5.91	8.32	10.6		3.70	4.65	6.55	8.32	
3.5	S	2.50	3.21	4.50	5.72		2.60	3.28	4.71	5.88		3.25	4.11	5.89	7.36	
	D	1.80	2.26	3.18	4.04		4.31	5.42	7.63	9.69		3.39	4.26	6.01	7.63	
3.6	S	2.36	3.03	4.25	5.41		2.46	3.10	4.45	5.56		3.07	3.88	5.57	6.95	
	D	1.65	2.07	2.92	3.71		3.96	4.98	7.01	8.90		3.12	3.92	5.52	7.01	
3.8	S	2.12	2.72	3.81	4.86		2.21	2.79	4.00	4.99		2.76	3.48	5.00	6.24	
	D	1.40	1.76	2.48	3.15		3.37	4.23	5.96	7.57		2.65	3.33	4.69	5.96	
4.0	S	1.91	2.46	3.44	4.38		1.99	2.51	3.61	4.51		2.49	3.14	4.51	5.63	
	D	1.20	1.51	2.13	2.70		2.89	3.63	5.11	6.49		2.27	2.86	4.02	5.11	

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 1/240th 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.