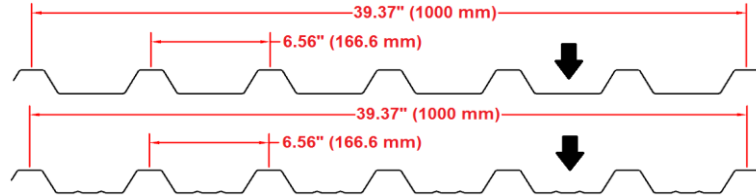




DUCHESNE
Solidly Dependable®

LC 29 & LC 29RG ROOFING & SIDING



The load tables mentioned above do not necessarily represent the product availability. Please refer to the product catalogue.

SECTION PROPERTIES (PER FOOT OF WIDTH)

IMPERIAL	Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Sec. Modulus		Deflection Moment of 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)
				(in ³)	(in ³)					
	0.018	1.01	33	0.0780	0.0732	0.0815	50.8	12.7	101	17.1
	0.024	1.32	33	0.114	0.111	0.112	95.1	23.8	187	31.8
	0.030	1.64	33	0.153	0.142	0.140	154	38.5	301	51.2
	0.036	1.96	33	0.186	0.174	0.167	227	56.8	443	75.3
	0.048	2.59	33	0.245	0.238	0.222	418	105	810	138

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (PSF)

SPAN LENGTH (ft)		1-SPAN					2-SPAN					3-SPAN				
		BASE STEEL THICKNESS (inches)					BASE STEEL THICKNESS (inches)					BASE STEEL THICKNESS (inches)				
		0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048
4.0	S	64	94	126	153	202	60	92	117	144	196	75	114	147	179	245
	D	123	169	211	253	336	296	406	507	608	807	233	320	399	479	636
4.5	S	51	74	99	121	160	48	72	93	113	155	60	90	116	142	194
	D	87	119	148	178	236	208	285	356	427	567	164	225	281	336	447
5.0	S	41	60	81	98	129	39	59	75	92	125	48	73	94	115	157
	D	63	87	108	130	172	152	208	260	311	413	119	164	205	245	326
5.5	S	34	50	67	81	107	32	48	62	76	104	40	61	78	95	130
	D	47	65	81	97	129	114	156	195	234	311	90	123	154	184	245
6.0	S	29	42	56	68	90	27	41	52	64	87	34	51	65	80	109
	D	37	50	63	75	100	88	120	150	180	239	69	95	118	142	188
6.5	S	24	36	48	58	77	23	35	44	54	74	29	43	56	68	93
	D	29	39	49	59	78	69	95	118	142	188	54	75	93	112	148
7.0	S	21	31	41	50	66	20	30	38	47	64	25	37	48	59	80
	D	23	32	39	47	63	55	76	95	113	151	44	60	75	89	119
7.5	S	18	27	36	44	58	17	26	33	41	56	21	33	42	51	70
	D	19	26	32	38	51	45	62	77	92	122	35	49	61	73	96
8.0	S	16	24	31	38	51	15	23	29	36	49	19	29	37	45	61
	D	15	21	26	32	42	37	51	63	76	101	29	40	50	60	79
8.5	S	14	21	28	34	45	13	20	26	32	43	17	25	32	40	54
	D	13	18	22	26	35	31	42	53	63	84	24	33	42	50	66
9.0	S	13	19	25	30	40	12	18	23	28	39	15	23	29	35	48
	D	11	15	19	22	30	26	36	45	53	71	20	28	35	42	56
9.5	S	11	17	22	27	36	11	16	21	25	35	13	20	26	32	43
	D	9	13	16	19	25	22	30	38	45	60	17	24	30	36	47
10.0	S	10	15	20	25	32	10	15	19	23	31	12	18	23	29	39
	D	8	11	14	16	22	19	26	32	39	52	15	20	26	31	41
10.5	S	9	14	18	22	29	9	13	17	21	28	11	17	21	26	36
	D	7	9	12	14	19	16	22	28	34	45	13	18	22	26	35
11.0	S	9	12	17	20	27	8	12	16	19	26	10	15	19	24	32
	D	6	8	10	12	16	14	20	24	29	39	11	15	19	23	31

- 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.

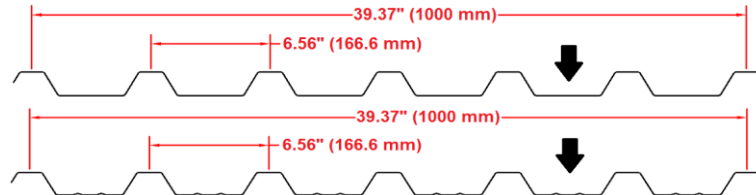
Limit States Design principles were used in accordance with CSA Standard S136-07





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LC 29 & LC 29RG ROOFING & SIDING



The load tables mentioned above do not necessarily represent the product availability. Please refer to the product catalogue.

SECTION PROPERTIES (PER METRE OF WIDTH)

METRIC	Base Steel Thickness (mm)	Mass Z275 (kg/m ²)	Yield Stress (MPa)	Sec. Modulus		Deflection Moment of Inertia (x10 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)
				(x10 ³ mm ³)	(x10 ³ mm ³)					
	0.457	4.91	230	4.19	3.93	0.111	0.749	0.187	1.49	0.253
	0.610	6.46	230	6.13	5.96	0.153	1.40	0.351	2.76	0.469
	0.762	8.00	230	8.19	7.64	0.191	2.27	0.568	4.44	0.755
	0.914	9.55	230	9.99	9.35	0.228	3.35	0.838	6.53	1.11
	1.22	12.6	230	13.2	12.8	0.303	6.17	1.54	12.0	2.03

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOAD (kPa)

SPAN LENGTH (m)		1-SPAN					2-SPAN					3-SPAN				
		BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)				
		0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22
1.2	S	3.21	4.70	6.28	7.66	10.1	3.01	4.57	5.86	7.17	9.78	3.76	5.71	7.33	8.96	12.2
	D	6.19	8.50	10.6	12.7	16.9	4.86	20.4	25.5	30.5	40.6	1.70	16.1	20.1	24.0	31.9
1.4	S	2.36	3.45	4.61	5.63	7.42	2.21	3.36	4.31	5.26	7.19	2.76	4.20	5.38	6.58	8.98
	D	3.90	5.35	6.68	8.01	10.6	9.36	12.9	16.0	19.2	25.5	7.37	10.1	12.6	15.1	20.1
1.5	S	2.05	3.01	4.02	4.90	6.47	1.93	2.93	3.75	4.59	6.26	2.41	3.66	4.69	5.73	7.83
	D	3.17	4.35	5.43	6.51	8.65	7.61	10.5	13.0	15.6	20.8	5.99	8.23	10.3	12.3	16.4
1.6	S	1.80	2.64	3.53	4.31	5.68	1.69	2.57	3.30	4.03	5.50	2.12	3.21	4.12	5.04	6.88
	D	2.61	3.59	4.48	5.36	7.13	6.27	8.61	10.8	12.9	17.1	4.94	6.78	8.46	10.1	13.5
1.8	S	1.43	2.09	2.79	3.40	4.49	1.34	2.03	2.60	3.18	4.35	1.67	2.54	3.26	3.98	5.44
	D	1.83	2.52	3.14	3.77	5.01	4.40	6.04	7.55	9.04	12.0	3.47	4.76	5.94	7.12	9.46
2.0	S	1.16	1.69	2.26	2.76	3.64	1.08	1.65	2.11	2.58	3.52	1.35	2.06	2.64	3.22	4.40
	D	1.34	1.84	2.29	2.75	3.65	3.21	4.41	5.50	6.59	8.76	2.53	3.47	4.33	5.19	6.90
2.2	S	0.95	1.40	1.87	2.28	3.01	0.90	1.36	1.74	2.13	2.91	1.12	1.70	2.18	2.67	3.64
	D	1.00	1.38	1.72	2.06	2.74	2.41	3.31	4.13	4.95	6.58	1.90	2.61	3.26	3.90	5.18
2.4	S	0.80	1.17	1.57	1.91	2.53	0.75	1.14	1.47	1.79	2.45	0.94	1.43	1.83	2.24	3.06
	D	0.77	1.06	1.33	1.59	2.11	1.86	2.55	3.18	3.81	5.07	1.46	2.01	2.51	3.00	3.99
2.5	S	0.74	1.08	1.45	1.76	2.33	0.69	1.05	1.35	1.65	2.25	0.87	1.32	1.69	2.06	2.82
	D	0.68	0.94	1.17	1.41	1.87	1.64	2.26	2.82	3.37	4.48	1.29	1.78	2.22	2.66	3.53
2.6	S	0.68	1.00	1.34	1.63	2.15	0.64	0.97	1.25	1.53	2.08	0.80	1.22	1.56	1.91	2.61
	D	0.61	0.84	1.04	1.25	1.66	1.46	2.01	2.50	3.00	3.99	1.15	1.58	1.97	2.36	3.14
2.8	S	0.59	0.86	1.15	1.41	1.86	0.55	0.84	1.08	1.32	1.80	0.69	1.05	1.35	1.65	2.25
	D	0.49	0.67	0.84	1.00	1.33	1.17	1.61	2.01	2.40	3.19	0.92	1.26	1.58	1.89	2.51
3.0	S	0.51	0.75	1.00	1.23	1.62	0.48	0.73	0.94	1.15	1.57	0.60	0.91	1.17	1.43	1.96
	D	0.40	0.54	0.68	0.81	1.08	0.95	1.31	1.63	1.95	2.59	0.75	1.03	1.28	1.54	2.04
3.2	S	0.45	0.66	0.88	1.08	1.42	0.42	0.64	0.82	1.01	1.38	0.53	0.80	1.03	1.26	1.72
	D	0.33	0.45	0.56	0.67	0.89	0.78	1.08	1.34	1.61	2.14	0.62	0.85	1.06	1.27	1.68
3.4	S	0.40	0.59	0.78	0.95	1.26	0.37	0.57	0.73	0.89	1.22	0.47	0.71	0.91	1.12	1.52
	D	0.27	0.37	0.47	0.56	0.74	0.65	0.90	1.12	1.34	1.78	0.51	0.71	0.88	1.06	1.40

- Notes:**
- 1 Based on ASTM A 653M 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.

Limit States Design principles were used in accordance with CSA Standard S136-07

