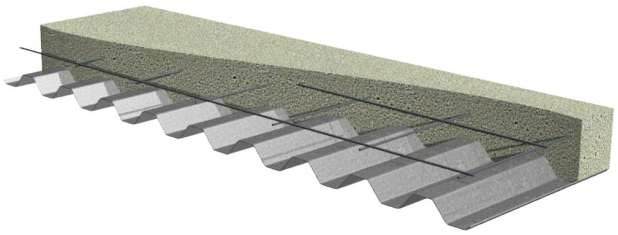
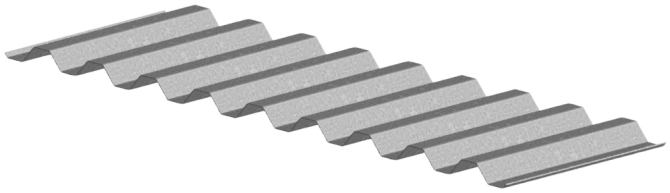
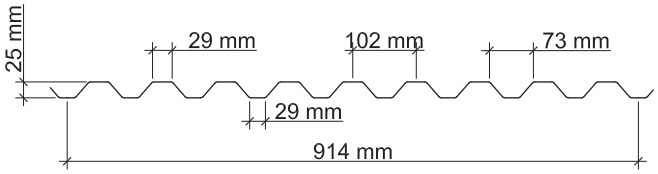
1.0C-36 NON-COMPOSITE & ROOF DECK
GRADE 80 STEEL

Metric LSD





Nominal Dimensions



Nested
Side-lap

Section Properties

Deck Gage	Deck Weight w_{dd} (kg/m²)	Base Metal Thickness t (mm)	Yield Strength F_y (MPa)	Effective Moment of Inertia at Service Load* $I_d = (2I_e+I_g)/3$ I_d+ (mm⁴x10³)	I_d- (mm⁴x10³)	Effective Section Modulus* at F_y = 414 MPa S_e+ (mm³x10³)	S_e- (mm³x10³)	Factored Moment* øM$_n$+ (N-m)	øM$_n$- (N-m)	Vertical Web Shear* øV$_n$ (kN)
26	4.39	**0.46**	414	53.3	53.3	3.50	3.66	1301	1361	31
24	5.86	**0.61**	414	77.8	77.8	5.32	5.54	1982	2062	51
22	7.32	**0.75**	414	95.6	95.6	6.94	7.04	2582	2622	63
20	8.78	**0.91**	414	113.3	113.3	8.60	8.60	3203	3203	77

*Physical Properties per meter (m) of width

Factored Reactions at Supports Based on Web Crippling, øR$_n$ (kN/m)

Deck Gage	Bearing Length of Webs (mm) One-Flange Loading End Bearing 40	50	75	Interior Bearing 40	50	75
26	9.4	10.1	11.8	12.8	13.7	15.7
24	16.0	17.2	19.9	22.4	24.0	27.2
22	23.5	25.3	29.1	33.6	35.8	40.5
20	33.5	36.0	41.3	48.6	51.6	58.1

Standard Features

- ASTM A653/A653M SS GR80, with Z275/G90 galvanized or ZF75/A25 galvannealed
- Standard lengths – 1.83 m to 12.8 m
- Cold-formed steel deck conforms to CAN/CSA S136-16 and meets the guidelines of CSSBI 10M-2018.

Optional Features

- Inquire regarding cost and lead times for:
  - -Short cuts < 1.83 m
  - -Sheet Lengths > 12.8 m
  - -Alternative metallic and painted finishes
- Side-lap or bottom flange slot venting

Inward Uniform Factored Loads, LSD (kPa)

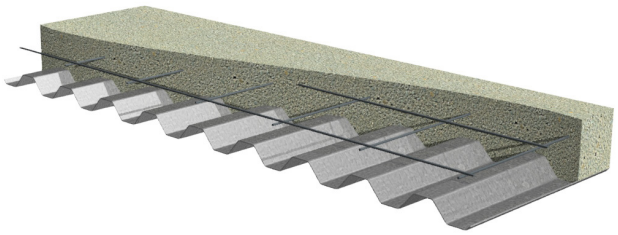
Deck Gage	Spans	Criteria	Span (mm) 600	750	900	1050	1200	1350	1500	1650	1800	1950	2100
26	Single	$øW_n$	29.0	18.6	12.9	9.5	7.2	5.7	4.6	3.8	3.2	2.7	2.4
		L/240	16.1	8.2	4.8	3.0	2.0	1.4	1.0	0.8	0.6	0.5	0.4
	Double	$øW_n$	28.5	18.6	13.1	9.7	7.5	5.9	4.8	4.0	3.3	2.9	2.5
		L/240	38.8	19.8	11.5	7.2	4.8	3.4	2.5	1.9	1.4	1.1	0.9
	Triple	$øW_n$	34.7	22.9	16.2	12.0	9.3	7.3	6.0	4.9	4.2	3.6	3.1
		L/240	30.4	15.6	9.0	5.7	3.8	2.7	1.9	1.5	1.1	0.9	0.7
24	Single	$øW_n$	44.1	28.3	19.6	14.4	11.0	8.7	7.1	5.8	4.9	4.2	3.6
		L/240	23.5	12.0	7.0	4.4	2.9	2.1	1.5	1.1	0.9	0.7	0.5
	Double	$øW_n$	43.6	28.4	19.9	14.7	11.3	9.0	7.3	6.0	5.1	4.3	3.7
		L/240	56.6	29.0	16.8	10.6	7.1	5.0	3.6	2.7	2.1	1.6	1.3
	Triple	$øW_n$	53.3	35.0	24.7	18.3	14.1	11.2	9.1	7.5	6.3	5.4	4.7
		L/240	44.4	22.7	13.2	8.3	5.5	3.9	2.8	2.1	1.6	1.3	1.0
22	Single	$øW_n$	57.5	36.8	25.6	18.8	14.4	11.4	9.2	7.6	6.4	5.4	4.7
		L/240	28.9	14.8	8.6	5.4	3.6	2.5	1.8	1.4	1.1	0.8	0.7
	Double	$øW_n$	55.2	36.0	25.3	18.7	14.4	11.4	9.3	7.7	6.4	5.5	4.7
		L/240	69.6	35.6	20.6	13.0	8.7	6.1	4.5	3.3	2.6	2.0	1.6
	Triple	$øW_n$	67.5	44.4	31.3	23.2	17.9	14.2	11.5	9.5	8.0	6.9	5.9
		L/240	54.5	27.9	16.2	10.2	6.8	4.8	3.5	2.6	2.0	1.6	1.3
20	Single	$øW_n$	71.3	45.7	31.7	23.3	17.8	14.1	11.4	9.4	7.9	6.8	5.8
		L/240	34.2	17.5	10.1	6.4	4.3	3.0	2.2	1.6	1.3	1.0	0.8
	Double	$øW_n$	67.4	44.0	30.9	22.8	17.6	13.9	11.3	9.4	7.9	6.7	5.8
		L/240	82.5	42.2	24.4	15.4	10.3	7.2	5.3	4.0	3.1	2.4	1.9
	Triple	$øW_n$	82.3	54.1	38.2	28.3	21.8	17.3	14.1	11.7	9.8	8.4	7.2
		L/240	64.6	33.1	19.2	12.1	8.1	5.7	4.1	3.1	2.4	1.9	1.5

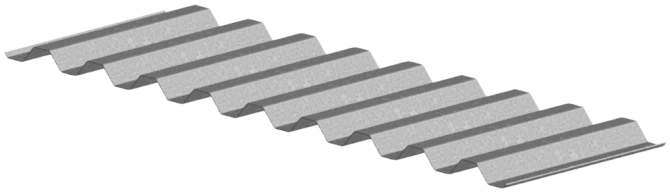
Note:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.

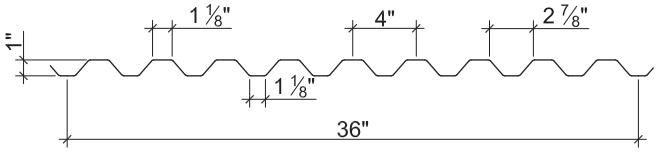
1.0C-36 NON-COMPOSITE & ROOF DECK
GRADE 80 STEEL

Imperial LSD





Nominal Dimensions



Section Properties

Deck Gage	Deck Weight w_{dd} (psf)	Base Metal Thickness t (in.)	Yield Strength F_y (ksi)	Effective Moment of Inertia at Service Load $I_d = (2I_e+I_g)/3$ I_d+ (in⁴/ft)	I_d- (in⁴/ft)	Effective Section Modulus at F_y = 60 ksi S_e+ (in³/ft)	S_e- (in³/ft)	Factored Moment øM$_n$+ (lb-ft/ft)	øM$_n$- (lb-ft/ft)	Vertical Web Shear øV$_n$ (lb/ft)
26	0.9	0.0179	60	0.039	0.039	0.065	0.068	293	306	2120
24	1.2	0.0239	60	0.057	0.057	0.099	0.103	446	464	3525
22	1.5	0.0295	60	0.070	0.070	0.129	0.131	581	590	4338
20	1.8	0.0358	60	0.083	0.083	0.160	0.160	720	720	5248

Factored Reactions at Supports Based on Web Crippling, øR$_n$ (lb/ft)

Deck Gage	Bearing Length of Webs One-Flange Loading End Bearing 1½"	2"	3"	Interior Bearing 1½"	2"	3"
26	631	699	813	864	946	1082
24	1077	1188	1374	1515	1649	1875
22	1587	1744	2008	2270	2463	2786
20	2264	2480	2844	3287	3553	4000

Standard Features

- ASTM A653/A653M SS GR80, with Z275/G90 galvanized or ZF75/A25 galvannealed
- Standard lengths – 6'-0" to 42'-0"
- Cold-formed steel deck conforms to CAN/CSA S136-16 and meets the guidelines of CSSBI 10M-2018.

Optional Features

- Inquire regarding cost and lead times for:
  - -Short cuts < 6'-0"
  - -Sheet Lengths > 42'-0"
  - -Alternative metallic and painted finishes
- Side-lap or bottom flange slot venting

Inward Uniform Factored Loads, LSD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.) 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"
26	Single	$øW_n$	585	374	260	191	146	116	94	77	65	55	48
		L/240	320	164	95	60	40	28	20	15	12	9	7
	Double	$øW_n$	576	376	264	196	151	119	97	80	68	58	50
		L/240	770	394	228	144	96	68	49	37	29	22	18
	Triple	$øW_n$	702	463	327	242	187	148	121	100	84	72	62
		L/240	603	309	179	113	75	53	39	29	22	18	14
24	Single	$øW_n$	891	570	396	291	223	176	143	118	99	84	73
		L/240	467	239	138	87	58	41	30	22	17	14	11
	Double	$øW_n$	881	574	402	297	229	181	147	122	102	87	75
		L/240	1125	576	333	210	141	99	72	54	42	33	26
	Triple	$øW_n$	1078	707	498	369	284	225	183	152	128	109	94
		L/240	882	452	261	165	110	77	56	42	33	26	21
22	Single	$øW_n$	1161	743	516	379	290	229	186	154	129	110	95
		L/240	574	294	170	107	72	50	37	28	21	17	13
	Double	$øW_n$	1116	728	511	378	291	230	187	155	130	111	96
		L/240	1382	707	409	258	173	121	88	66	51	40	32
	Triple	$øW_n$	1365	897	632	469	361	286	233	193	162	138	119
		L/240	1083	554	321	202	135	95	69	52	40	32	25
20	Single	$øW_n$	1440	922	640	470	360	284	230	190	160	136	118
		L/240	680	348	202	127	85	60	44	33	25	20	16
	Double	$øW_n$	1362	889	624	461	355	281	228	189	159	136	117
		L/240	1638	839	485	306	205	144	105	79	61	48	38
	Triple	$øW_n$	1665	1094	771	572	441	350	284	235	198	169	146
		L/240	1284	657	380	240	161	113	82	62	48	37	30

Note:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.