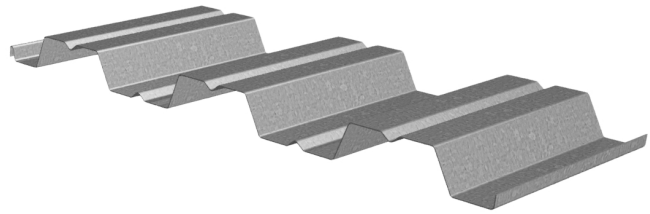
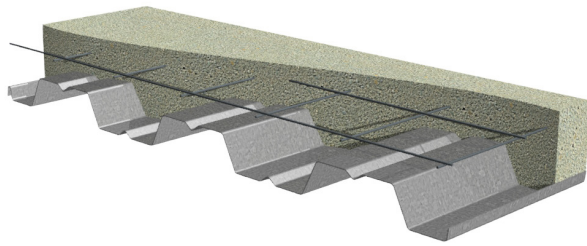
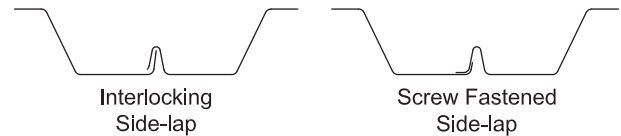
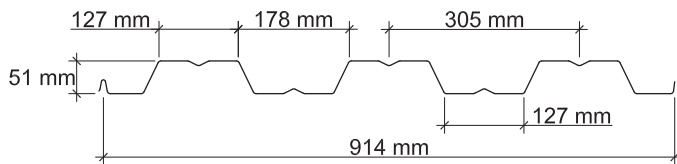


2C-36 NON-COMPOSITE DECK GRADE 50 STEEL

Metric
LSD



Nominal Dimensions



Section Properties

Deck Gage	Deck Weight w_{dd} (kg/m ²)	Base Metal Thickness t (mm)	Yield Strength F_y (MPa)	Effective Moment of Inertia at Service Load* $I_d = (2I_e + I_y)/3$		Effective Section Modulus* at $F_y = 345$ MPa		Factored Moment*		Vertical Web Shear* ϕV_n (kN)
				I_{d+} (mm ⁴ x10 ³)	I_{d-} (mm ⁴ x10 ³)	S_{e+} (mm ³ x10 ³)	S_{e-} (mm ³ x10 ³)	ϕM_{n+} (N-m)	ϕM_{n-} (N-m)	
22	7.81	0.75	345	442.5	442.5	13.12	13.71	4071	4256	31
20	9.27	0.91	345	558.5	555.8	17.53	18.12	5437	5621	45
18	12.20	1.20	345	760.6	760.6	26.08	26.88	8091	8339	61
16	15.62	1.52	345	960.0	960.0	34.57	35.05	10725	10877	76

*Physical Properties per meter (m) of width

Factored Reactions at Supports Based on Web Crippling, ϕR_n (kN/m)

Deck Gage	Bearing Length of Webs (mm)											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	40	50	75	100	100	150	40	50	75	100	100	150
22	7.3	7.9	9.1	10.1	14.6	16.8	6.7	7.1	8.0	8.7	17.6	20.4
20	10.5	11.3	12.9	14.3	20.9	23.9	10.3	10.9	12.1	13.2	25.6	29.5
18	17.7	18.9	21.6	23.8	35.1	39.9	18.8	19.8	21.9	23.7	43.7	50.1
16	27.2	29.0	32.9	36.1	53.9	60.9	30.7	32.2	35.5	38.2	67.7	77.3

Standard Features

- ASTM A653/A653M SS GR50 Min., with Z275/G90 galvanized or ZF75/A25 galvanized
- 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
- Factory Hanger Tabs

2C-36 NON-COMPOSITE DECK GRADE 50 STEEL

Metric
LSD

Inward Uniform Factored Loads, LSD (kPa)

Deck Gage	Spans	Criteria	Span (mm)										
			1500	1700	1900	2100	2300	2500	2700	2900	3100	3300	3500
22	Single	ϕW_n	14.5	11.3	9.0	7.4	6.2	5.2	4.5	3.9	3.4	3.0	2.7
		L/240	8.6	5.9	4.2	3.1	2.4	1.8	1.5	1.2	1.0	0.8	0.7
	Double	ϕW_n	13.8	10.9	8.9	7.3	6.2	5.3	4.5	3.9	3.5	3.1	2.7
		L/240	20.6	14.2	10.1	7.5	5.7	4.5	3.5	2.9	2.3	1.9	1.6
	Triple	ϕW_n	16.6	13.3	10.8	9.0	7.6	6.5	5.6	4.9	4.3	3.8	3.4
		L/240	16.2	11.1	7.9	5.9	4.5	3.5	2.8	2.2	1.8	1.5	1.3
20	Single	ϕW_n	19.4	15.1	12.1	9.9	8.2	7.0	6.0	5.2	4.5	4.0	3.6
		L/240	10.8	7.4	5.3	3.9	3.0	2.3	1.9	1.5	1.2	1.0	0.8
	Double	ϕW_n	18.5	14.6	11.9	9.8	8.2	7.0	6.0	5.2	4.6	4.1	3.6
		L/240	25.9	17.8	12.7	9.4	7.2	5.6	4.4	3.6	2.9	2.4	2.0
	Triple	ϕW_n	22.4	17.9	14.5	12.0	10.1	8.6	7.5	6.5	5.7	5.0	4.5
		L/240	20.3	13.9	10.0	7.4	5.6	4.4	3.5	2.8	2.3	1.9	1.6
18	Single	ϕW_n	28.8	22.5	18.0	14.7	12.3	10.4	8.9	7.7	6.8	6.0	5.3
		L/240	14.7	10.1	7.2	5.4	4.1	3.2	2.5	2.0	1.7	1.4	1.2
	Double	ϕW_n	27.0	21.4	17.4	14.4	12.1	10.3	8.9	7.7	6.8	6.0	5.4
		L/240	35.4	24.3	17.4	12.9	9.8	7.7	6.1	4.9	4.0	3.3	2.8
	Triple	ϕW_n	32.5	26.0	21.2	17.6	14.9	12.7	11.0	9.6	8.4	7.4	6.6
		L/240	27.8	19.1	13.7	10.1	7.7	6.0	4.8	3.8	3.1	2.6	2.2
16	Single	ϕW_n	38.2	29.8	23.8	19.5	16.3	13.8	11.8	10.2	9.0	7.9	7.0
		L/240	18.6	12.7	9.1	6.8	5.1	4.0	3.2	2.6	2.1	1.7	1.5
	Double	ϕW_n	35.0	27.8	22.6	18.7	15.7	13.4	11.6	10.1	8.8	7.8	7.0
		L/240	44.7	30.7	22.0	16.3	12.4	9.7	7.7	6.2	5.1	4.2	3.5
	Triple	ϕW_n	42.1	33.7	27.5	22.9	19.3	16.5	14.3	12.4	10.9	9.7	8.6
		L/240	35.0	24.1	17.2	12.8	9.7	7.6	6.0	4.8	4.0	3.3	2.8

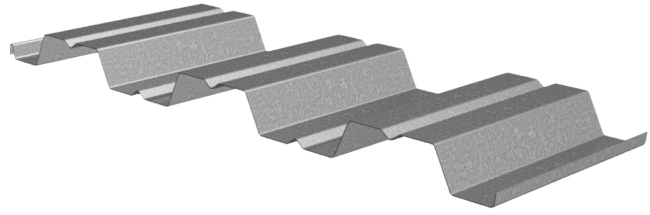
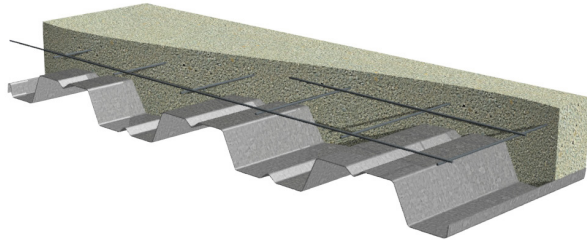
Note:

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

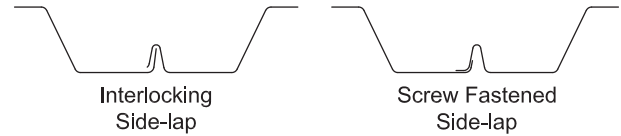
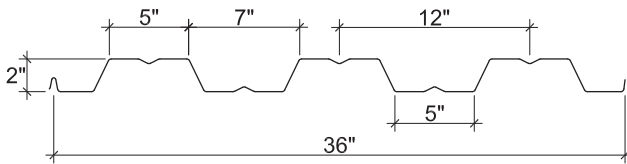
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2C-36 NON-COMPOSITE DECK GRADE 50 STEEL

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 $I_d = (2I_e + I_g)/3$		Effective Section Modulus at $F_y = 50$ ksi		Factored Moment		Vertical Web Shear ϕV_n (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	ϕM_n+ (lb-ft/ft)	ϕM_n- (lb-ft/ft)	
22	1.6	0.0295	50	0.324	0.324	0.244	0.255	915	957	2101
20	1.9	0.0358	50	0.409	0.407	0.326	0.337	1222	1264	3096
18	2.5	0.0474	50	0.557	0.557	0.485	0.500	1819	1875	4147
16	3.2	0.0598	50	0.703	0.703	0.643	0.652	2411	2445	5209

Factored Reactions at Supports Based on Web Crippling, ϕR_n (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	1½"	2"	3"	4"	4"	6"	1½"	2"	3"	4"	4"	6"
22	494	543	625	694	1007	1157	456	491	550	600	1212	1406
20	709	777	891	987	1441	1650	698	750	836	908	1762	2035
18	1196	1304	1485	1638	2419	2750	1277	1364	1509	1633	3008	3454
16	1841	1999	2265	2489	3707	4192	2084	2216	2439	2627	4665	5327

Standard Features

- ASTM A653/A653M SS GR50 Min., with Z275/G90 galvanized or ZF75/A25 galvanized
- 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
- Factory Hanger Tabs

2C-36 NON-COMPOSITE DECK GRADE 50 STEEL

Inward Uniform Factored Loads, LSD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	10'-0"	11'-0"
22	Single	ϕW_n	293	242	203	173	149	130	114	101	90	73	61
		L/240	170	128	98	77	62	50	41	35	29	21	16
	Double	ϕW_n	279	234	199	171	149	130	115	102	92	75	62
		L/240	409	308	237	186	149	121	100	83	70	51	38
	Triple	ϕW_n	336	283	242	209	182	160	141	126	113	92	77
		L/240	321	241	186	146	117	95	78	65	55	40	30
20	Single	ϕW_n	391	323	272	231	200	174	153	135	121	98	81
		L/240	214	161	124	98	78	64	52	44	37	27	20
	Double	ϕW_n	374	313	266	228	198	173	153	136	122	99	82
		L/240	514	386	298	234	187	152	126	105	88	64	48
	Triple	ϕW_n	454	382	325	280	243	214	189	168	151	123	102
		L/240	403	303	233	183	147	119	98	82	69	50	38
18	Single	ϕW_n	582	481	404	344	297	259	227	201	180	146	120
		L/240	292	219	169	133	106	87	71	59	50	37	27
	Double	ϕW_n	547	459	390	335	291	255	226	201	180	146	121
		L/240	704	529	407	320	256	208	172	143	121	88	66
	Triple	ϕW_n	659	556	475	409	357	313	277	247	222	181	150
		L/240	552	414	319	251	201	163	135	112	95	69	52
16	Single	ϕW_n	772	638	536	457	394	343	301	267	238	193	159
		L/240	369	277	213	168	134	109	90	75	63	46	35
	Double	ϕW_n	708	595	506	435	379	332	293	261	234	190	158
		L/240	888	667	514	404	324	263	217	181	152	111	83
	Triple	ϕW_n	852	719	615	531	463	407	360	321	288	235	196
		L/240	696	523	403	317	254	206	170	142	119	87	65

Note:

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

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