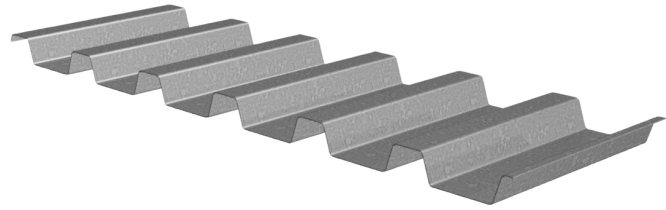
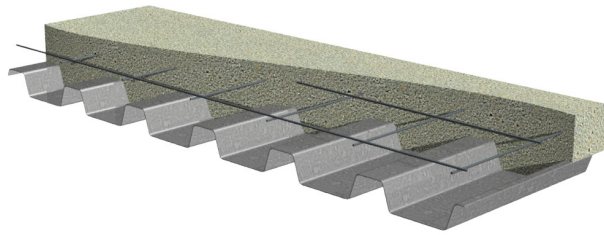
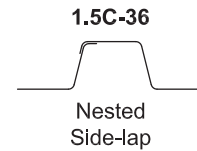
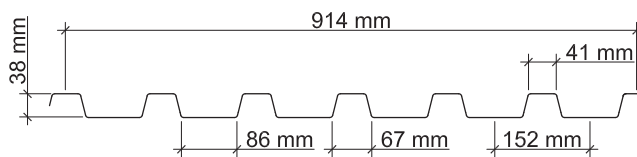


# 1.5C-36 NON-COMPOSITE DECK GRADE 50 STEEL

Metric  
LSD



## Nominal Dimensions



## Section Properties

Deck Gage	Deck Weight $w_{dd}$ (kg/m <sup>2</sup> )	Base Metal Thickness $t$ (mm)	Yield Strength $F_y$ (MPa)	Effective Moment of Inertia at Service Load* $I_d = (2I_e + I_g)/3$		Effective Section Modulus* at $F_y = 345$ MPa		Factored Moment*		Vertical Web Shear* $\phi V_n$ (kN)
				$I_{d+}$ (mm <sup>4</sup> x10 <sup>3</sup> )	$I_{d-}$ (mm <sup>4</sup> x10 <sup>3</sup> )	$S_{e+}$ (mm <sup>3</sup> x10 <sup>3</sup> )	$S_{e-}$ (mm <sup>3</sup> x10 <sup>3</sup> )	$\phi M_{n+}$ (N-m)	$\phi M_{n-}$ (N-m)	
22	7.81	0.75	345	243.1	211.7	9.62	9.09	2987	2818	50
20	9.76	0.91	345	296.3	269.0	12.31	12.04	3819	3735	60
18	12.69	1.20	345	396.0	378.3	17.10	16.45	5305	5104	79

\*Physical Properties per meter (m) of width

## Factored Reactions at Supports Based on Web Crippling, $\phi R_n$ (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	75	100	40	50	75	100	75	100
22	16.3	17.5	20.2	22.1	28.2	30.7	15.7	16.6	18.6	20.1	34.9	38.2
20	23.2	24.9	28.6	31.2	40.6	43.9	23.7	25.0	27.9	30.0	50.7	55.2
18	38.9	41.6	47.3	51.4	68.4	73.4	42.7	45.0	49.7	53.1	86.7	93.5

## 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

# 1.5C-36 NON-COMPOSITE DECK GRADE 50 STEEL

Metric  
LSD

## Inward Uniform Factored Loads, LSD (kPa)

Deck Gage	Spans	Criteria	Span (mm)										
			1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
22	Single	$\phi W_n$	16.6	12.2	9.4	7.4	6.0	4.9	4.2	3.5	3.1	2.7	2.3
		L/240	9.2	5.8	3.9	2.7	2.0	1.5	1.1	0.9	0.7	0.6	0.5
	Double	$\phi W_n$	15.3	11.3	8.7	6.9	5.6	4.6	3.9	3.3	2.9	2.5	2.2
		L/240	19.3	12.1	8.1	5.7	4.2	3.1	2.4	1.9	1.5	1.2	1.0
	Triple	$\phi W_n$	18.9	14.0	10.8	8.6	7.0	5.8	4.9	4.1	3.6	3.1	2.7
		L/240	15.1	9.5	6.4	4.5	3.3	2.4	1.9	1.5	1.2	1.0	0.8
20	Single	$\phi W_n$	21.3	15.6	12.0	9.5	7.7	6.3	5.3	4.5	3.9	3.4	3.0
		L/240	11.2	7.0	4.7	3.3	2.4	1.8	1.4	1.1	0.9	0.7	0.6
	Double	$\phi W_n$	20.1	14.9	11.5	9.1	7.4	6.1	5.2	4.4	3.8	3.3	2.9
		L/240	24.5	15.4	10.3	7.3	5.3	4.0	3.1	2.4	1.9	1.6	1.3
	Triple	$\phi W_n$	24.8	18.5	14.2	11.3	9.2	7.6	6.4	5.5	4.7	4.1	3.6
		L/240	19.2	12.1	8.1	5.7	4.1	3.1	2.4	1.9	1.5	1.2	1.0
18	Single	$\phi W_n$	29.5	21.7	16.6	13.1	10.6	8.8	7.4	6.3	5.4	4.7	4.2
		L/240	15.0	9.4	6.3	4.4	3.2	2.4	1.9	1.5	1.2	1.0	0.8
	Double	$\phi W_n$	27.4	20.3	15.7	12.4	10.1	8.4	7.0	6.0	5.2	4.5	4.0
		L/240	34.4	21.7	14.5	10.2	7.4	5.6	4.3	3.4	2.7	2.2	1.8
	Triple	$\phi W_n$	33.8	25.2	19.4	15.4	12.6	10.4	8.8	7.5	6.5	5.6	5.0
		L/240	27.0	17.0	11.4	8.0	5.8	4.4	3.4	2.7	2.1	1.7	1.4

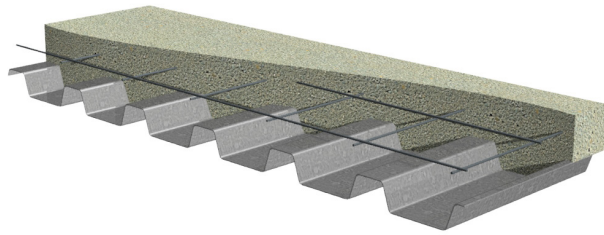
### Note:

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

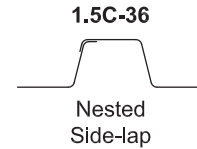
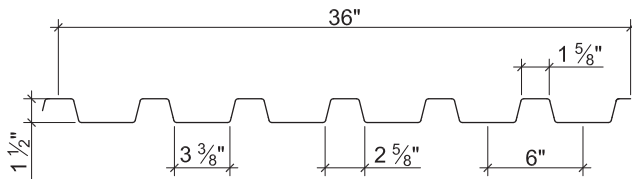
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# 1.5C-36 NON-COMPOSITE DECK GRADE 50 STEEL

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 $\phi V_n$ (lb/ft)
				$I_{d+}$ (in <sup>4</sup> /ft)	$I_{d-}$ (in <sup>4</sup> /ft)	$S_{e+}$ (in <sup>3</sup> /ft)	$S_{e-}$ (in <sup>3</sup> /ft)	$\phi M_{n+}$ (lb-ft/ft)	$\phi M_{n-}$ (lb-ft/ft)	
22	1.6	0.0295	50	0.178	0.155	0.179	0.169	671	634	3398
20	2.0	0.0358	50	0.217	0.197	0.229	0.224	859	840	4105
18	2.6	0.0474	50	0.290	0.277	0.318	0.306	1193	1148	5388

## Factored Reactions at Supports Based on Web Crippling, $\phi R_n$ (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	1 1/2"	2"	3"	4"	3"	4"	1 1/2"	2"	3"	4"	3"	4"
22	1098	1207	1389	1517	1945	2103	1061	1143	1281	1377	2407	2617
20	1567	1717	1969	2140	2792	3005	1605	1723	1921	2057	3494	3782
18	2626	2863	3261	3519	4707	5029	2894	3092	3423	3637	5966	6410

## 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

# 1.5C-36 NON-COMPOSITE DECK GRADE 50 STEEL

## Inward Uniform Factored Loads, LSD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"
22	Single	$\phi W_n$	336	265	215	178	149	127	110	95	84	66	54
		L/240	182	128	93	70	54	42	34	28	23	16	12
	Double	$\phi W_n$	309	245	199	165	139	119	103	89	79	62	50
		L/240	382	269	196	147	113	89	71	58	48	34	24
	Triple	$\phi W_n$	381	304	247	205	173	148	128	111	98	78	63
		L/240	300	211	153	115	89	70	56	45	37	26	19
20	Single	$\phi W_n$	429	339	275	227	191	163	140	122	107	85	69
		L/240	222	156	114	86	66	52	41	34	28	20	14
	Double	$\phi W_n$	407	323	263	218	184	157	136	118	104	82	67
		L/240	486	341	249	187	144	113	91	74	61	43	31
	Triple	$\phi W_n$	502	400	326	271	229	195	169	147	130	103	83
		L/240	381	268	195	147	113	89	71	58	48	33	24
18	Single	$\phi W_n$	596	471	382	315	265	226	195	170	149	118	95
		L/240	297	209	152	114	88	69	55	45	37	26	19
	Double	$\phi W_n$	554	441	359	298	251	214	185	162	142	113	91
		L/240	683	480	350	263	203	159	128	104	85	60	44
	Triple	$\phi W_n$	683	545	445	369	312	266	230	201	177	140	114
		L/240	536	376	274	206	159	125	100	81	67	47	34

**Note:**

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

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