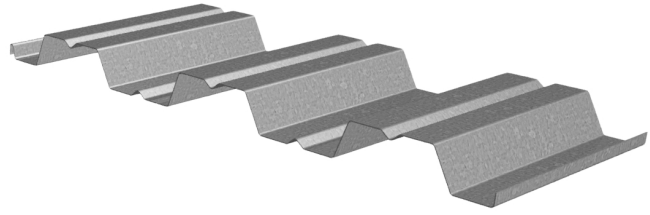
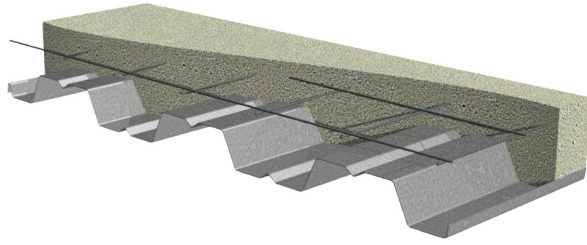
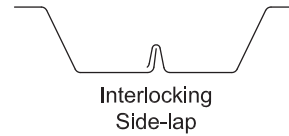
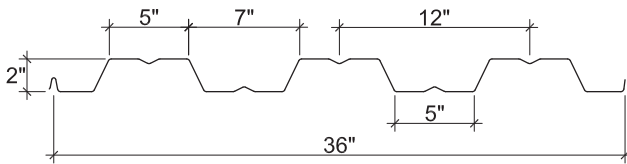


# 2C-36 NON-COMPOSITE DECK GRADE 50 STEEL

LRFD



## 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		Design 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	0.324	0.324	0.244	0.255	915	957	2495
20	1.9	0.0358	50	0.409	0.407	0.326	0.337	1222	1264	3677
18	2.5	0.0474	50	0.557	0.557	0.485	0.500	1819	1875	4925
16	3.2	0.0598	50	0.703	0.703	0.643	0.652	2411	2445	6185

## Design 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	
	1½"	2"	3"	4"	4"	6"	1½"	2"	3"	4"	4"	6"
22	556	611	703	781	1141	1312	554	597	668	729	1374	1593
20	798	874	1002	1110	1634	1869	848	910	1015	1103	1997	2306
18	1345	1467	1671	1843	2741	3117	1550	1656	1833	1982	3410	3914
16	2071	2249	2548	2800	4202	4751	2530	2691	2962	3190	5287	6037

## Standard Features

- ASTM A653 SS GR50 Min. with G60
- Standard lengths – 6'-0" to 42'-0"
- IAPMO UES ER-652 and UL Listed
- Tables conform to ANSI/SDI NC-2017

## 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

LRFD

## Inward Uniform Design Loads, LRFD (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	$\phi W_n$	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	$\phi W_n$	286	239	203	174	151	132	116	103	92	75	62
		L/240	409	308	237	186	149	121	100	83	70	51	38
	Triple	$\phi W_n$	348	292	248	213	185	163	144	128	114	93	77
		L/240	321	241	186	146	117	95	78	65	55	40	30
20	Single	$\phi W_n$	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	$\phi W_n$	382	319	270	231	200	175	154	137	123	100	83
		L/240	514	386	298	234	187	152	126	105	88	64	48
	Triple	$\phi W_n$	467	391	332	285	247	217	191	170	152	124	103
		L/240	403	303	233	183	147	119	98	82	69	50	38
18	Single	$\phi W_n$	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	$\phi W_n$	561	469	397	341	295	258	228	203	181	147	122
		L/240	704	529	407	320	256	208	172	143	121	88	66
	Triple	$\phi W_n$	682	572	487	419	364	319	282	251	224	183	152
		L/240	552	414	319	251	201	163	135	112	95	69	52
16	Single	$\phi W_n$	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	$\phi W_n$	728	609	516	443	384	336	297	264	236	192	159
		L/240	888	667	514	404	324	263	217	181	152	111	83
	Triple	$\phi W_n$	884	742	632	544	473	414	366	326	292	238	198
		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.

NOTICE: Design defects that could cause injury or death may result from relying on the information in this document without independent verification by a qualified professional. The information in this document is provided "AS IS". Nucor Corporation and its affiliates expressly disclaim: (i) any and all representations, warranties and conditions and (ii) all liability arising out of or related to this document and the information in it.