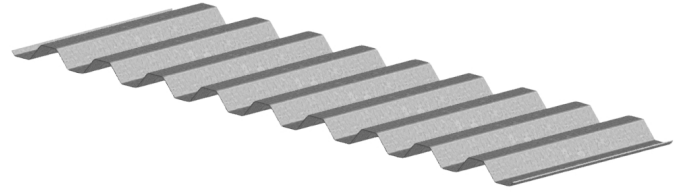
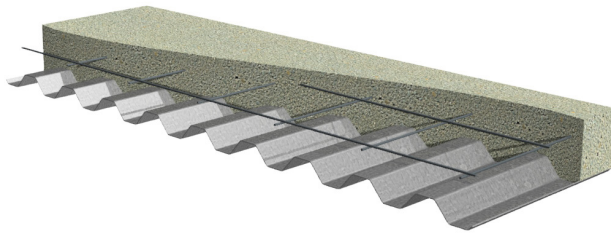
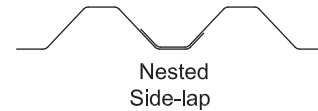
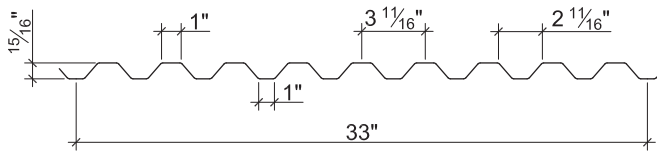


# 1.0C-33 NON-COMPOSITE & ROOF DECK GRADE 80 STEEL

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 $F_y = 60$ 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)	
26	0.9	0.0179	60	0.036	0.036	0.065	0.068	293	306	2442
24	1.2	0.0239	60	0.050	0.049	0.096	0.097	432	437	3239
22	1.5	0.0295	60	0.062	0.062	0.121	0.120	545	540	3972
20	1.8	0.0358	60	0.076	0.076	0.147	0.146	662	657	4785

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

Deck Gage	Bearing Length of Webs One-Flange Loading					
	End Bearing			Interior Bearing		
	1 1/2"	2"	3"	1 1/2"	2"	3"
26	737	816	876	757	828	881
24	1272	1403	1496	1435	1563	1653
22	1885	2072	2199	2244	2434	2562
20	2707	2965	3130	3356	3628	3801

## Standard Features

- ASTM A653 SS GR80 with G60
- Standard lengths – 6'-0" to 42'-0"
- IAPMO UES ER-0652 and UL Listed
- Tables conform to ANSI/SDI NC-2017 and RD-2017

## 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

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## Inward Uniform Design Loads, LRFD (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	$\phi W_n$	585	374	260	191	146	116	94	77	65	55	48
		L/240	295	151	87	55	37	26	19	14	11	9	7
	Double	$\phi W_n$	584	380	266	197	151	120	97	80	68	58	50
		L/240	711	364	211	133	89	62	45	34	26	21	17
	Triple	$\phi W_n$	716	469	330	244	188	149	121	100	84	72	62
		L/240	557	285	165	104	70	49	36	27	21	16	13
24	Single	$\phi W_n$	864	553	384	282	216	171	138	114	96	82	71
		L/240	410	210	121	76	51	36	26	20	15	12	10
	Double	$\phi W_n$	827	539	379	280	215	171	138	115	96	82	71
		L/240	967	495	287	180	121	85	62	47	36	28	23
	Triple	$\phi W_n$	1012	664	468	347	267	212	172	143	120	103	88
		L/240	758	388	225	141	95	67	49	36	28	22	18
22	Single	$\phi W_n$	1089	697	484	356	272	215	174	144	121	103	89
		L/240	508	260	151	95	64	45	33	24	19	15	12
	Double	$\phi W_n$	1023	667	468	346	266	211	171	142	119	102	88
		L/240	1224	627	363	228	153	107	78	59	45	36	29
	Triple	$\phi W_n$	1250	821	579	429	331	262	213	177	149	127	109
		L/240	959	491	284	179	120	84	61	46	36	28	22
20	Single	$\phi W_n$	1323	847	588	432	331	261	212	175	147	125	108
		L/240	623	319	185	116	78	55	40	30	23	18	15
	Double	$\phi W_n$	1243	811	569	421	324	257	208	172	145	124	107
		L/240	1500	768	444	280	188	132	96	72	56	44	35
	Triple	$\phi W_n$	1519	998	704	522	402	319	259	215	181	154	133
		L/240	1176	602	348	219	147	103	75	57	44	34	27

**Note:**

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

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