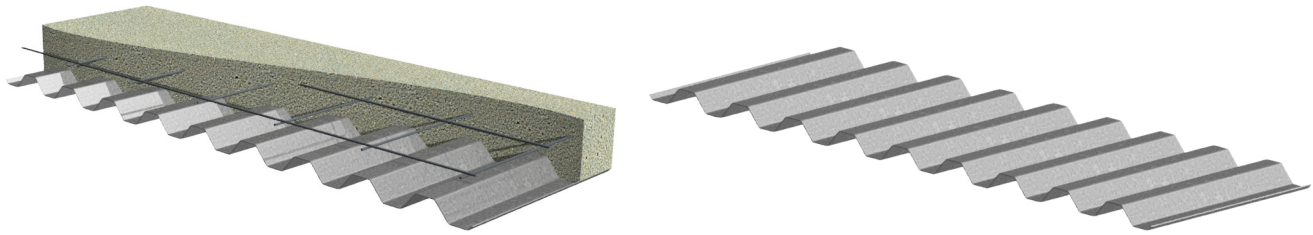
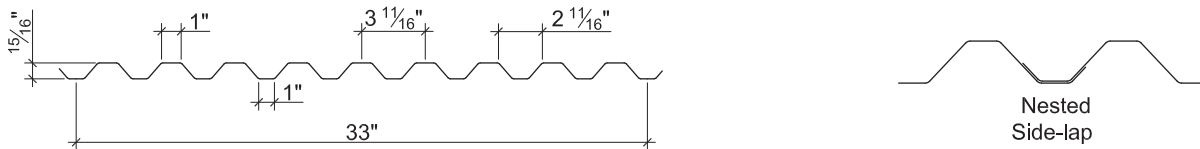


# 1.0C-33 NON-COMPOSITE DECK & ROOF DECK GRADE 80 STEEL

ASD



## 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		Allowable Moment		Vertical Web Shear $V_n/\Omega$ (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)	$M_{n+}/\Omega$ (lb-ft/ft)	$M_{n-}/\Omega$ (lb-ft/ft)	
26	0.9	0.0179	60	0.036	0.036	0.065	0.068	195	204	1606
24	1.2	0.0239	60	0.050	0.049	0.096	0.097	287	290	2131
22	1.5	0.0295	60	0.062	0.062	0.121	0.120	362	359	2613
20	1.8	0.0358	60	0.076	0.076	0.147	0.146	440	437	3148

## Allowable Reactions at Supports Based on Web Crippling, $R_n/\Omega$ (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	482	534	572	509	557	592
24	832	917	978	965	1050	1111
22	1232	1354	1437	1508	1636	1723
20	1769	1938	2046	2256	2439	2556

## 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 Allowable Loads, ASD (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	$W_n / \Omega$	389	249	173	127	97	77	62	51	43	37	32
		L/240	295	151	87	55	37	26	19	14	11	9	7
	Double	$W_n / \Omega$	388	253	177	131	101	80	65	53	45	38	33
		L/240	---	---	---	---	89	62	45	34	26	21	17
	Triple	$W_n / \Omega$	476	312	219	162	125	99	81	67	56	48	41
		L/240	---	285	165	104	70	49	36	27	21	16	13
24	Single	$W_n / \Omega$	575	368	255	188	144	114	92	76	64	54	47
		L/240	410	210	121	76	51	36	26	20	15	12	10
	Double	$W_n / \Omega$	550	359	252	186	143	113	92	76	64	55	47
		L/240	---	---	---	180	121	85	62	47	36	28	23
	Triple	$W_n / \Omega$	672	442	311	231	178	141	115	95	80	68	59
		L/240	---	388	225	141	95	67	49	36	28	22	18
22	Single	$W_n / \Omega$	725	464	322	237	181	143	116	96	81	69	59
		L/240	508	260	151	95	64	45	33	24	19	15	12
	Double	$W_n / \Omega$	680	443	311	230	177	140	114	94	79	68	58
		L/240	---	---	---	228	153	107	78	59	45	36	29
	Triple	$W_n / \Omega$	830	546	385	285	220	175	142	117	99	84	73
		L/240	---	491	284	179	120	84	61	46	36	28	22
20	Single	$W_n / \Omega$	880	563	391	287	220	174	141	116	98	83	72
		L/240	623	319	185	116	78	55	40	30	23	18	15
	Double	$W_n / \Omega$	826	539	379	280	215	171	139	115	96	82	71
		L/240	---	---	---	280	188	132	96	72	56	44	35
	Triple	$W_n / \Omega$	1009	664	468	347	267	212	172	143	120	103	89
		L/240	---	602	348	219	147	103	75	57	44	34	27

### Notes:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.
2. The symbol "---" indicates that the uniform allowable load based on deflection exceeds the allowable load based on stress.

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