

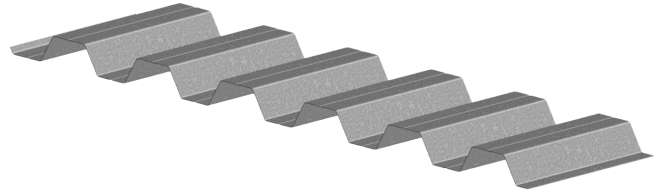
2N-48 ROOF DECKS

A653 GALVANIZED STEEL

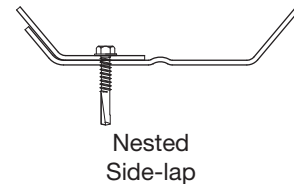
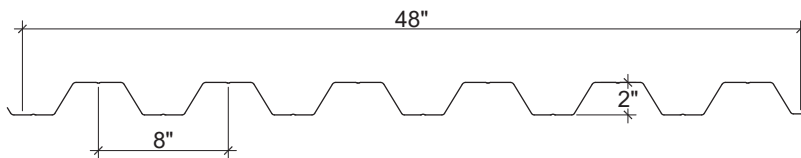
LRFD

N ROOF DECKS

- 2N-48 Deck used with Side-lap Screws



Nominal Dimensions



Section Properties

Deck Gage	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		Design 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	0.0299	72	0.297	0.301	0.230	0.231	1244	1249	4082
20	0.0359	72	0.367	0.370	0.294	0.293	1585	1582	5828
18	0.0478	72	0.508	0.508	0.432	0.426	2331	2300	9638
16	0.0598	50	0.649	0.644	0.617	0.591	2314	2218	9132

Design 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"	3"	5"	1½"	2"	3"	4"	3"	5"
22	1163	1277	1470	1633	2185	2586	1159	1248	1398	1524	2608	3122
20	1637	1794	2056	2277	3076	3621	1735	1862	2076	2257	3724	4437
18	2789	3040	3463	3819	5236	6111	3211	3429	3795	4105	6454	7627
16	2938	3191	3614	3973	5513	6389	3580	3808	4191	4514	6871	8067

Standard Features

- ASTM A653 SS GR80 Class 3 for 22, 20 & 18 gage
- ASTM A653 SS GR50 for 16 gage
- Standard lengths – 6'-0" to 40'-0"
- Galvanized G60 or G90 and galvanized with optional white primer
- IAPMO UES ER-2018 and FM Listed

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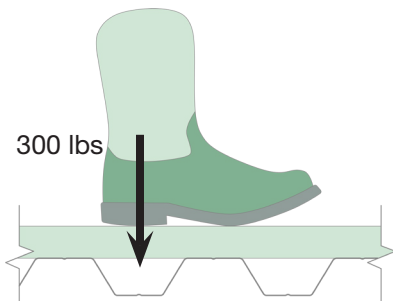
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Inward Uniform Design Loads, LRFD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)								
			8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"
22	Single	ϕW_n	156	138	123	110	100	90	82	75	69
		L/180	51	42	36	30	26	22	19	17	15
	Double	ϕW_n	153	136	122	109	99	90	82	75	69
		L/180	124	103	87	74	63	55	48	42	37
	Triple	ϕW_n	190	169	151	136	123	112	102	93	86
		L/180	97	81	68	58	50	43	37	33	29
20	Single	ϕW_n	198	176	157	140	127	115	105	96	88
		L/180	63	52	44	37	32	28	24	21	19
	Double	ϕW_n	195	173	154	139	125	114	104	95	87
		L/180	152	127	107	91	78	67	59	51	45
	Triple	ϕW_n	242	215	192	173	156	142	129	118	109
		L/180	119	99	84	71	61	53	46	40	35
18	Single	ϕW_n	291	258	230	207	186	169	154	141	130
		L/180	87	72	61	52	44	38	33	29	26
	Double	ϕW_n	284	252	225	202	183	166	151	138	127
		L/180	209	174	147	125	107	92	80	70	62
	Triple	ϕW_n	354	314	280	252	228	207	188	173	159
		L/180	164	137	115	98	84	72	63	55	48
16	Single	ϕW_n	289	256	229	205	185	168	153	140	129
		L/180	111	92	78	66	57	49	43	37	33
	Double	ϕW_n	274	243	217	195	176	160	146	133	123
		L/180	265	221	186	158	136	117	102	89	78
	Triple	ϕW_n	341	303	270	243	219	199	182	166	153
		L/180	207	173	146	124	106	92	80	70	61

Notes:

1. End bearing length = 2 in. Interior bearing length = 4 in.



1 inch minimum thickness polyisocyanurate board meeting
ASTM C1289 Type II Class 2 Grade 2 passes
FM Procedure Class Number-4451: Test Method for Determining the Foot
Traffic Resistance and Bearing Capacity of Insulation

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