

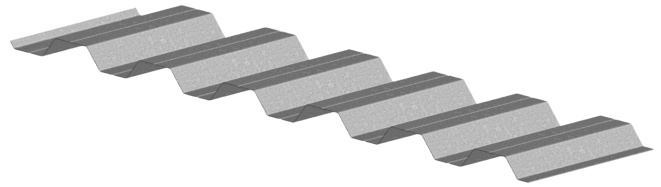
1.5N-48 ROOF DECKS

A653 GALVANIZED STEEL

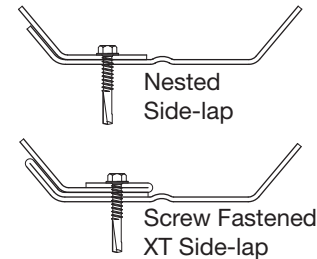
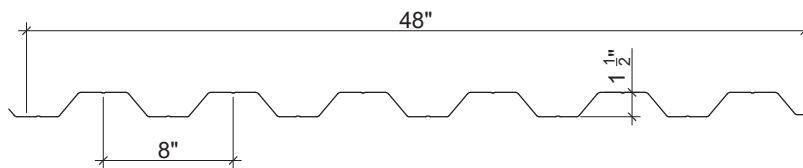
LRFD

N ROOF DECKS

- 1.5N-48 Deck used with Side-lap Screws
- 1.5XTN-48 Deck used with Side-lap Screws



Nominal Dimensions



XT Available in 22, 20, & 18 gage

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	0.157	0.161	0.160	0.160	863	865	3618
20	0.0359	72	0.194	0.198	0.205	0.203	1105	1099	5043
18	0.0478	72	0.270	0.272	0.303	0.297	1635	1603	7786
16	0.0598	50	0.346	0.343	0.428	0.414	1606	1553	6823

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	
	1 1/2"	2"	3"	4"	3"	5"	1 1/2"	2"	3"	4"	3"	5"
22	1064	1168	1345	1493	1961	2320	1081	1165	1304	1422	2373	2841
20	1495	1638	1877	2079	2761	3250	1611	1729	1928	2095	3384	4032
18	2540	2768	3153	3478	4700	5484	2963	3165	3503	3788	5854	6918
16	2672	2902	3287	3613	4950	5738	3293	3503	3855	4151	6227	7311

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

1.5N-48 ROOF DECKS

A653 GALVANIZED STEEL

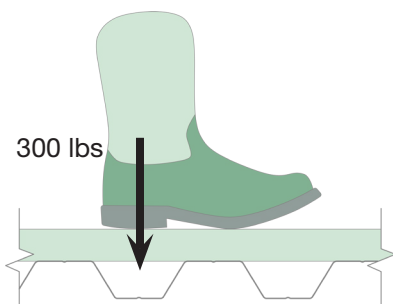
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Inward Uniform Design Loads, LRFD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)								
			6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
22	Single	ϕW_n	192	163	141	123	108	96	85	76	69
		L/180	64	50	40	33	27	22	19	16	14
	Double	ϕW_n	189	161	139	121	107	95	85	76	69
		L/180	157	123	99	80	66	55	47	40	34
	Triple	ϕW_n	234	200	173	151	133	118	105	95	86
		L/180	123	97	77	63	52	43	36	31	27
20	Single	ϕW_n	246	209	180	157	138	122	109	98	88
		L/180	79	62	49	40	33	28	23	20	17
	Double	ϕW_n	240	205	177	155	136	121	108	97	87
		L/180	193	152	122	99	81	68	57	49	42
	Triple	ϕW_n	298	255	220	192	169	150	134	121	109
		L/180	151	119	95	77	64	53	45	38	33
18	Single	ϕW_n	363	310	267	233	204	181	161	145	131
		L/180	109	86	69	56	46	38	32	28	24
	Double	ϕW_n	351	300	259	226	199	176	157	141	128
		L/180	265	208	167	136	112	93	79	67	57
	Triple	ϕW_n	436	373	322	281	248	220	196	176	159
		L/180	208	163	131	106	88	73	62	52	45
16	Single	ϕW_n	357	304	262	228	201	178	159	142	128
		L/180	140	110	88	72	59	49	41	35	30
	Double	ϕW_n	339	290	250	218	192	170	152	137	123
		L/180	334	263	211	171	141	118	99	84	72
	Triple	ϕW_n	421	360	311	272	239	212	190	170	154
		L/180	262	206	165	134	110	92	78	66	57

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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