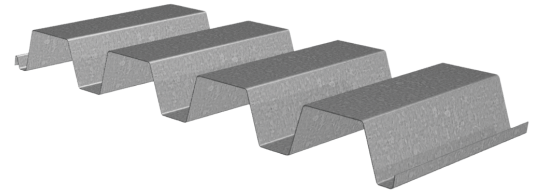


PLN3™-32/HSN3™-32 ROOF DECKS GRADE 50 STEEL

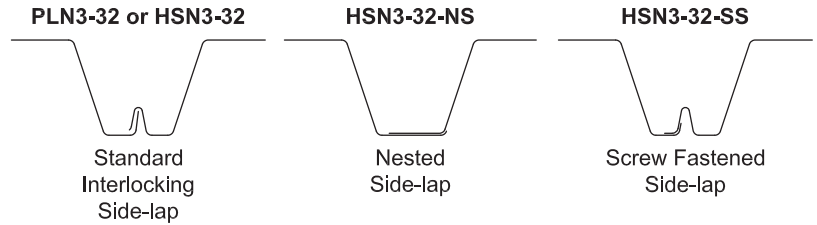
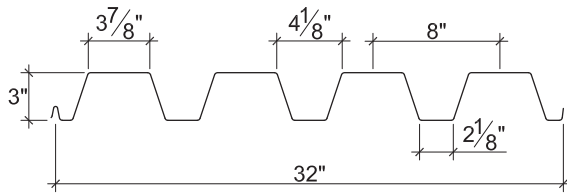
ASD

N3 ROOF DECKS

- PLN3-32 Deck used with PunchLok® II System
- HSN3-32 Deck used with TSWs or BPs
- HSN3-32-NS Deck used with Side-lap Screws
- HSN3-32-SS Deck used with Side-lap Screws



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		Vertical Web Shear V_n/Ω (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	
22	2.0	0.0299	50	0.721	0.785	0.353	0.405	2346
20	2.4	0.0359	50	0.890	0.953	0.452	0.509	3829
18	3.1	0.0478	50	1.229	1.273	0.671	0.722	6823
16	3.9	0.0598	50	1.570	1.587	0.883	0.932	9108

Allowable Reactions at Supports Based on Web Crippling, R_n/Ω (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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	562	617	711	789	1239	1447	537	578	648	706	1448	1707
20	794	870	997	1104	1737	2153	811	871	971	1055	2065	2596
18	1359	1481	1687	1860	2940	3682	1520	1623	1797	1943	3573	4547
16	2062	2240	2537	2788	4428	5495	2453	2609	2871	3092	5455	6883

Standard Features

- ASTM A653 SS GR50 Min., with G60 or G90, white or gray primer optional
- ASTM A1008 SS GR50 Min. with gray primer
- Standard lengths – 6'-0" to 40'-0"
- IAPMO UES ER-2018, UL, and FM Listed
- Tables conform to ANSI/SDI RD-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Short cuts < 6'-0"
 - Sheet Lengths > 40'-0"
 - Alternative metallic and painted finishes
- Web and Fully Perforated Acoustical Versions

PLN3™-32/HSN3™-32 ROOF DECKS GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	440	196	110	87	70	58	49	36	28	22	18
		L/240	---	---	92	65	47	36	27	17	12	8	6
	Double	W_n / Ω	445	211	122	97	79	66	55	41	31	25	20
		L/240	---	---	---	---	---	---	---	---	30	21	15
	Triple	W_n / Ω	531	258	150	120	98	81	69	51			
		L/240	---	---	---	---	89	67	52	33			
20	Single	W_n / Ω	564	251	141	111	90	75	63	46	35	28	23
		L/240	---	---	114	80	58	44	34	21	14	10	7
	Double	W_n / Ω	587	272	155	123	100	83	70	51	39	31	25
		L/240	---	---	---	---	---	---	---	---	37	26	19
	Triple	W_n / Ω	711	335	193	153	125	103	87	64			
		L/240	---	---	---	151	110	83	64	40			
18	Single	W_n / Ω	837	372	209	165	134	111	93	68	52	41	33
		L/240	---	---	157	111	81	61	47	29	20	14	10
	Double	W_n / Ω	855	391	222	176	143	118	99	73	56	44	36
		L/240	---	---	---	---	---	---	---	---	49	34	25
	Triple	W_n / Ω	1047	484	276	219	178	147	124	91			
		L/240	---	---	---	209	152	114	88	55			
16	Single	W_n / Ω	1101	490	275	218	176	146	122	90	69	54	44
		L/240	---	476	201	141	103	77	60	38	25	18	13
	Double	W_n / Ω	1108	505	287	227	185	153	128	95	72	57	46
		L/240	---	---	---	---	---	---	---	91	61	43	31
	Triple	W_n / Ω	1357	626	357	283	230	190	160	118			
		L/240	---	---	---	267	194	146	112	71			

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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