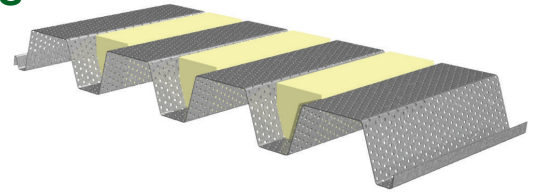


PLN3™-32/HSN3™-32 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

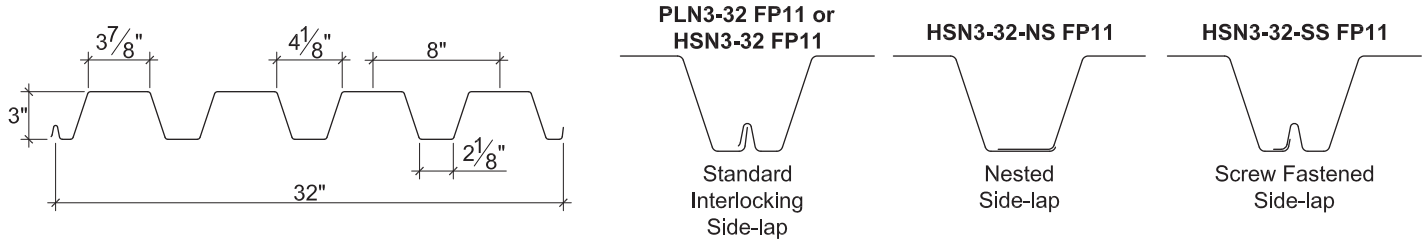
ASD

11% OPEN FULLY PERFORATED N3 ROOF DECKS

- PLN3-32 FP11 Deck used with PunchLok® II System
- HSN3-32 FP11 Deck used with TSWs or BPs
- HSN3-32-NS FP11 Deck used with Side-lap Screws
- HSN3-32-SS FP11 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	1.8	0.0299	50	0.577	0.603	0.197	0.226	1738
20	2.1	0.0359	50	0.706	0.724	0.252	0.284	2853
18	2.8	0.0478	50	0.958	0.961	0.374	0.403	5054
16	3.5	0.0598	50	1.199	1.199	0.493	0.520	6746

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	533	586	674	748	1231	1437	482	519	581	633	1391	1641
20	757	830	951	1054	1727	2140	739	793	884	961	1993	2506
18	1307	1424	1622	1789	2925	3663	1411	1507	1668	1804	3469	4414
16	1993	2165	2453	2695	4408	5470	2303	2450	2696	2904	5315	6707

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 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 Perforated Acoustical Versions

PLN3™-32/HSN3™-32 FULLY PERFERED ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP11

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	246	109	61	49	39	33	27	20	15	12	10
		L/240	---	---	---	---	38	28	22	14	9	6	5
	Double	W_n / Ω	261	121	69	55	45	37	31	23	18	14	11
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	317	149	86	68	55	46	39	29			
		L/240	---	---	---	---	---	---	---	26			
20	Single	W_n / Ω	314	140	79	62	50	42	35	26	20	16	13
		L/240	---	---	---	---	46	35	27	17	11	8	6
	Double	W_n / Ω	338	154	88	69	56	47	39	29	22	17	14
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	415	191	109	86	70	58	49	36			
		L/240	---	---	---	---	---	---	---	32			
18	Single	W_n / Ω	466	207	117	92	75	62	52	38	29	23	19
		L/240	---	---	---	86	63	47	36	23	15	11	8
	Double	W_n / Ω	488	220	125	99	80	66	56	41	31	25	20
		L/240	---	---	---	---	---	---	---	---	---	---	19
	Triple	W_n / Ω	602	274	155	123	100	83	69	51			
		L/240	---	---	---	---	---	---	69	43			
16	Single	W_n / Ω	615	273	154	121	98	81	68	50	38	30	25
		L/240	---	---	154	108	79	59	45	29	19	13	10
	Double	W_n / Ω	631	285	161	127	103	85	72	53	40	32	26
		L/240	---	---	---	---	---	---	---	---	---	---	24
	Triple	W_n / Ω	779	354	201	159	129	107	90	66			
		L/240	---	---	---	---	---	---	86	54			

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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