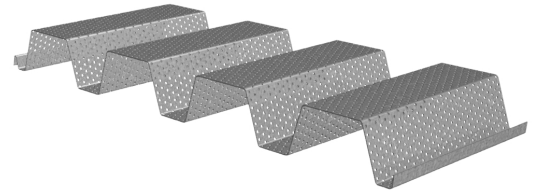


# PLN3™-32/HSN3™-32 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

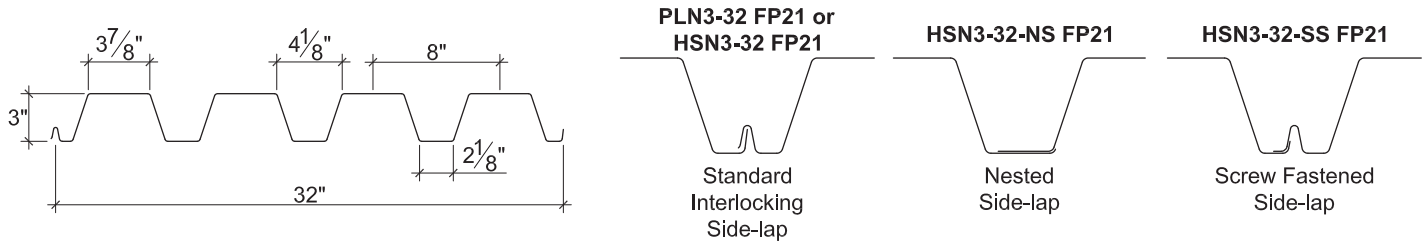
ASD

## 21% OPEN FULLY PERFORATED N3 ROOF DECK

- PLN3-32 FP21 Deck used with PunchLok® II System
- HSN3-32 FP21 Deck used with TSWs or BPs
- HSN3-32-NS FP21 Deck used with Side-lap Screws
- HSN3-32-SS FP21 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 $V_n/\Omega$ (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)	
22	1.6	0.0299	50	0.483	0.496	0.156	0.180	1290
20	1.9	0.0359	50	0.588	0.595	0.200	0.225	2118
18	2.4	0.0478	50	0.789	0.789	0.297	0.320	3752
16	3.1	0.0598	50	0.984	0.984	0.391	0.413	5008

## Allowable Reactions at Supports Based on Web Crippling, $R_n/\Omega$ (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	499	548	631	701	1222	1427	418	450	504	549	1326	1564
20	715	783	898	995	1715	2126	656	704	785	853	1910	2401
18	1246	1359	1547	1707	2908	3641	1285	1372	1519	1643	3348	4260
16	1914	2078	2355	2587	4384	5441	2130	2265	2493	2685	5154	6503

## 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
- Acoustical Insulation
- Web Perforated Acoustical Versions

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

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## Inward Uniform Allowable Loads, ASD (psf)

FP21

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	$W_n / \Omega$	195	86	49	38	31	26	22	16	12	10	8
		L/240	---	---	---	---	---	24	18	12	8	5	4
	Double	$W_n / \Omega$	206	96	55	44	35	29	25	18	14	11	9
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	$W_n / \Omega$	249	118	68	54	44	36	31	23			
		L/240	---	---	---	---	---	---	---	22			
20	Single	$W_n / \Omega$	249	111	62	49	40	33	28	20	16	12	10
		L/240	---	---	---	---	39	29	22	14	9	7	5
	Double	$W_n / \Omega$	267	122	69	55	45	37	31	23	17	14	11
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	$W_n / \Omega$	326	151	86	68	55	46	39	28			
		L/240	---	---	---	---	---	---	---	27			
18	Single	$W_n / \Omega$	371	165	93	73	59	49	41	30	23	18	15
		L/240	---	---	---	71	52	39	30	19	13	9	6
	Double	$W_n / \Omega$	386	175	99	78	63	53	44	32	25	20	16
		L/240	---	---	---	---	---	---	---	---	---	---	16
	Triple	$W_n / \Omega$	475	217	123	98	79	66	55	41			
		L/240	---	---	---	---	---	---	---	36			
16	Single	$W_n / \Omega$	488	217	122	96	78	64	54	40	30	24	20
		L/240	---	---	---	88	65	48	37	24	16	11	8
	Double	$W_n / \Omega$	499	226	128	101	82	68	57	42	32	25	21
		L/240	---	---	---	---	---	---	---	---	---	---	19
	Triple	$W_n / \Omega$	615	280	159	126	102	85	71	52			
		L/240	---	---	---	---	---	---	70	44			

### 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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