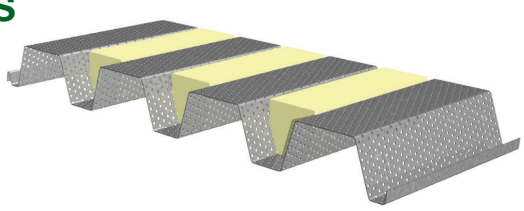
PLN3™-32/HSN3™-32 FULLY PERFED ROOF DECKS
GRADE 50 STEEL

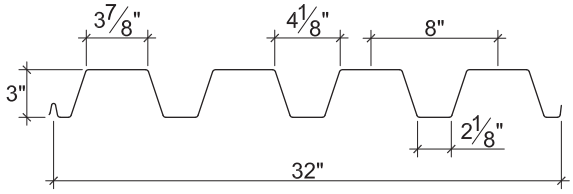
LRFD

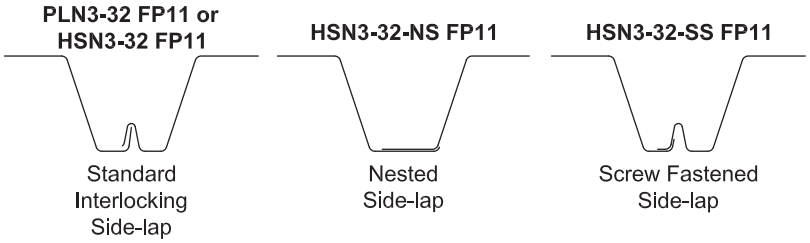
11% OPEN FULLY PERFORATED N3 ROOF DECKS

- **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 $I_d = (2I_e+I_g)/3$ I_d+ (in⁴/ft)	I_d- (in⁴/ft)	Effective Section Modulus at F_y = 50 ksi S_e+ (in³/ft)	S_e- (in³/ft)	Vertical Web Shear øV_n (lb/ft)
22	1.8	0.0299	50	0.577	0.603	0.197	0.226	2642
20	2.1	0.0359	50	0.706	0.724	0.252	0.284	4336
18	2.8	0.0478	50	0.958	0.961	0.374	0.403	7682
16	3.5	0.0598	50	1.199	1.199	0.493	0.520	10253

Design Reactions at Supports Based on Web Crippling, øR_n (lb/ft)

Deck Gage	Bearing Length of Webs: One-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 4"	8"	Two-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 4"	8"
22	815	896	1031	1145	1831	2138	737	794	889	969	2070	2441
20	1159	1270	1455	1612	2569	3184	1131	1214	1353	1471	2965	3727
18	1999	2179	2482	2737	4352	5449	2159	2306	2552	2760	5160	6566
16	3050	3312	3752	4123	6557	8136	3523	3748	4125	4443	7907	9977

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

Inward Uniform Design Loads, LRFD (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	$øW_n$	369	164	92	73	59	49	41	30	23	18	15
		L/240	591	175	74	52	38	28	22	14	9	6	5
	Double	$øW_n$	393	182	104	82	67	55	47	34	26	21	17
		L/240	1488	441	186	131	95	72	55	35	23	16	12
	Triple	$øW_n$	477	224	129	102	83	69	58	43			
		L/240	1116	331	139	98	71	54	41	26			
20	Single	$øW_n$	473	210	118	93	76	62	53	39	30	23	19
		L/240	723	214	90	63	46	35	27	17	11	8	6
	Double	$øW_n$	509	232	132	104	85	70	59	43	33	26	21
		L/240	1786	529	223	157	114	86	66	42	28	20	14
	Triple	$øW_n$	624	287	164	130	105	87	73	54			
		L/240	1365	405	171	120	87	66	51	32			
18	Single	$øW_n$	701	312	175	138	112	93	78	57	44	35	28
		L/240	981	291	123	86	63	47	36	23	15	11	8
	Double	$øW_n$	734	331	187	148	120	100	84	62	47	37	30
		L/240	2371	703	296	208	152	114	88	55	37	26	19
	Triple	$øW_n$	906	412	234	185	150	124	104	77			
		L/240	1853	549	232	163	119	89	69	43			
16	Single	$øW_n$	924	411	231	183	148	122	103	75	58	46	37
		L/240	1228	364	154	108	79	59	45	29	19	13	10
	Double	$øW_n$	949	428	242	192	155	128	108	79	61	48	39
		L/240	2958	877	370	260	189	142	110	69	46	32	24
	Triple	$øW_n$	1172	532	302	239	194	160	135	99			
		L/240	2319	687	290	204	148	111	86	54			

Note:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.