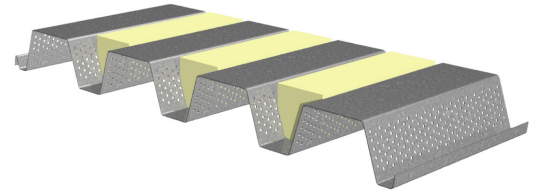


3NLA-32/3NIA-32/3PLNA-32 ACOUSTICAL ROOF DECKS GRADE 80 STEEL

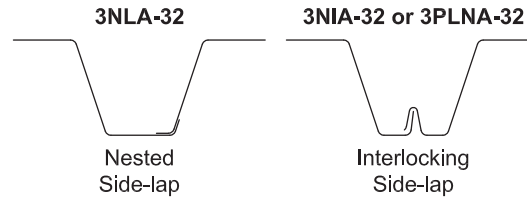
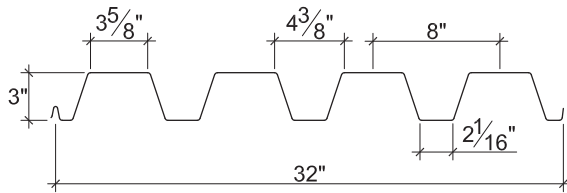
ASD

32" WIDE 3N ACOUSTICAL ROOF DECKS

- 3NLA-32 Deck used with Side-lap Screws
- 3NIA-32 Deck used with TSWs or BPs
- 3PLNA-32 Deck used with PunchLok® II System



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 $F_y = 60$ ksi		Allowable Moment		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)	M_{n+}/Ω (lb-ft/ft)	M_{n-}/Ω (lb-ft/ft)	
22	1.7	0.0295	60	0.604	0.672	0.318	0.329	952	985	1632
20	2.1	0.0358	60	0.754	0.832	0.412	0.440	1234	1317	2924
19	2.4	0.0418	60	0.903	0.989	0.509	0.535	1524	1602	4213
18	2.8	0.0474	60	1.048	1.136	0.605	0.626	1811	1874	5420

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	612	673	775	860	1413	1643	551	594	665	725	1597	1874
20	889	974	1117	1237	2025	2508	868	932	1040	1130	2340	2938
19	1196	1307	1493	1650	2696	3393	1237	1324	1470	1594	3162	4043
18	1520	1657	1888	2082	3400	4258	1640	1751	1939	2097	4033	5133

Standard Features

- ASTM A653 SS GR80, with G60 or G90, white or gray primer optional
- ASTM A1008 SS GR80 with gray primer
- Standard lengths – 6'-0" to 42'-0"
- IAPMO UES ER-0652 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 > 42'-0"
 - Alternative metallic and painted finishes

3NLA-32/3NIA-32/3PLNA-32 ACOUSTICAL ROOF DECKS GRADE 80 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	476	212	119	94	76	63	53	39	30	24	19
		L/240	---	183	77	54	40	30	23	14	10	7	5
	Double	W_n / Ω	393	196	115	92	75	63	53	39	30	24	19
		L/240	---	---	---	---	---	---	---	39	26	18	13
	Triple	W_n / Ω	456	234	140	113	93	77	65	49			
		L/240	---	---	---	---	83	62	48	30			
20	Single	W_n / Ω	617	274	154	122	99	82	69	50	39	30	25
		L/240	---	229	97	68	49	37	29	18	12	8	6
	Double	W_n / Ω	574	274	159	126	103	85	72	53	41	32	26
		L/240	---	---	---	---	---	---	---	48	32	23	16
	Triple	W_n / Ω	682	334	195	156	127	106	89	66			
		L/240	---	---	---	141	103	77	60	38			
19	Single	W_n / Ω	762	339	190	151	122	101	85	62	48	38	30
		L/240	---	274	116	81	59	44	34	22	14	10	7
	Double	W_n / Ω	723	339	195	155	126	104	88	65	50	39	32
		L/240	---	---	---	---	---	---	---	57	38	27	20
	Triple	W_n / Ω	870	416	241	192	156	130	109	81			
		L/240	---	---	239	168	122	92	71	45			
18	Single	W_n / Ω	906	403	226	179	145	120	101	74	57	45	36
		L/240	---	318	134	94	69	52	40	25	17	12	9
	Double	W_n / Ω	860	400	229	182	148	122	103	76	58	46	37
		L/240	---	---	---	---	---	---	---	65	44	31	22
	Triple	W_n / Ω	1040	492	283	225	184	152	128	95			
		L/240	---	---	275	193	141	106	81	51			

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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