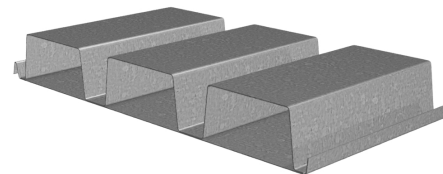


3NP-24 CELLULAR DECK GRADE 40 STEEL

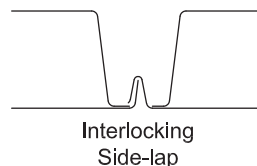
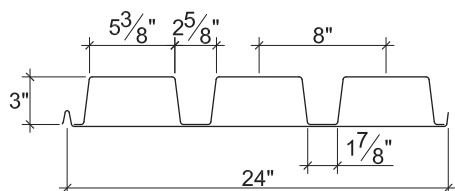
ASD

24" WIDE 3NP CELLULAR ROOF DECK

- 3NP-24 Deck used with TSWs or BPs
- 3NPLP-24 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 $F_y = 40$ 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)	
20/20	3.9	0.0358/0.0358	40	1.754	1.420	0.528	0.543	1054	1084	3589
20/18	4.5	0.0358/0.0474	40	1.897	1.564	0.528	0.628	1054	1253	3589
18/20	4.7	0.0474/0.0358	40	2.246	1.774	0.821	0.707	1639	1411	5738
18/18	5.2	0.0474/0.0474	40	2.455	1.938	0.841	0.791	1679	1579	5738
18/16	5.8	0.0474/0.0598	40	2.641	2.136	0.858	0.921	1713	1838	5738
16/18	6.0	0.0598/0.0474	40	3.019	2.323	1.156	0.952	2307	1900	7204
16/16	6.6	0.0598/0.0598	40	3.259	2.543	1.180	1.082	2355	2160	7204

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"
20/XX	667	731	838	928	1451	1796	686	737	821	893	1733	2176
18/XX	1130	1233	1404	1548	2433	3047	1269	1355	1501	1623	2967	3777
16/XX	1745	1895	2147	2359	3726	4624	1745	1895	2147	2359	3726	5816

Standard Features

- ASTM A653 SS GR40 Min., with G60
- 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 finishes
- Cellular Acoustical Versions

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