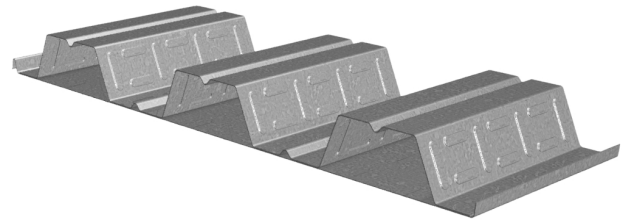


3VLP CELLULAR COMPOSITE DECK GRADE 50 STEEL

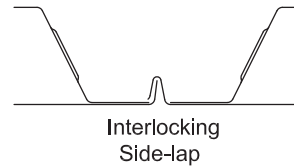
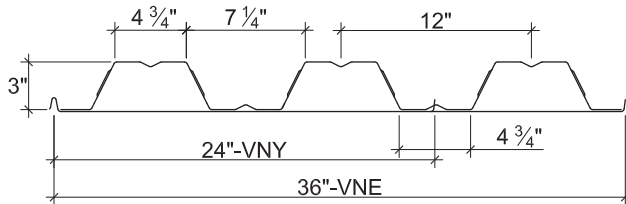
LRFD

3VLP CELLULAR COMPOSITE DECK

- 3VLP Deck used with TSWs or BPs
- 3PLVLP Deck used with PunchLok® II System



Nominal Dimensions



Plant	Cover Width	Pan Connection Method
VNY	24"	Flush Rivets (Underside)
VNE	36"	Resistance Welds

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		Design Moment		Vertical Web Shear ϕV_n (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	ϕM_{n+} (lb-ft/ft)	ϕM_{n-} (lb-ft/ft)	
20/20	3.5	0.0358/0.0358	50	1.490	1.082	0.545	0.465	2044	1744	3777
20/18	4.0	0.0358/0.0474	50	1.575	1.152	0.573	0.512	2149	1920	3777
18/20	4.2	0.0474/0.0358	50	1.881	1.398	0.860	0.670	3225	2513	6628
18/18	4.7	0.0474/0.0474	50	2.011	1.477	0.871	0.715	3266	2681	6628
18/16	5.2	0.0474/0.0598	50	2.127	1.579	0.869	0.798	3259	2993	6628
16/18	5.3	0.0598/0.0474	50	2.415	1.820	1.152	0.917	4320	3439	9312
16/16	5.9	0.0598/0.0598	50	2.557	1.932	1.169	1.002	4384	3758	9312

Design Reactions at Supports Based on Web Crippling, ϕR_n (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	780	855	980	1085	1668	2065	792	851	948	1031	1975	2481
18/XX	1324	1444	1645	1814	2798	3504	1473	1573	1742	1883	3389	4314
16/XX	2049	2226	2521	2771	4291	5324	2430	2585	2845	3065	5275	6656

Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 6'-0" to 42'-0"
- IAPMO UES ER-0652 and UL Listed
- Tables conform to ANSI/SDI C-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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