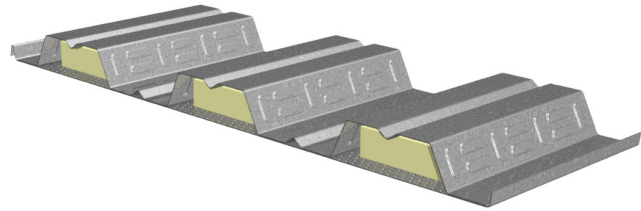


# 2VLPA CELLULAR ACOUSTICAL COMPOSITE DECK GRADE 50 STEEL

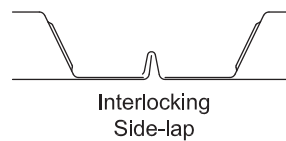
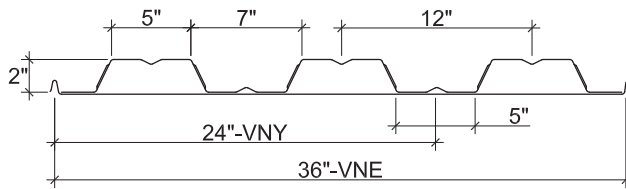
LRFD

## 2VLP CELLULAR ACOUSTICAL COMPOSITE DECK

- 2VLPA Deck used with TSWs or BPs
- 2PLVLP 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 $\phi V_n$ (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)	$\phi M_{n+}$ (lb-ft/ft)	$\phi M_{n-}$ (lb-ft/ft)	
20/20	3.2	0.0358/0.0358	50	0.655	0.491	0.367	0.303	1376	1136	3677
20/18	3.7	0.0358/0.0474	50	0.699	0.526	0.376	0.341	1410	1279	3677
18/20	3.8	0.0474/0.0358	50	0.834	0.634	0.543	0.432	2036	1620	4925
18/18	4.3	0.0474/0.0474	50	0.892	0.675	0.553	0.469	2074	1759	4925
18/16	4.8	0.0474/0.0598	50	0.945	0.716	0.562	0.511	2108	1916	4925
16/18	4.9	0.0598/0.0474	50	1.073	0.830	0.726	0.602	2723	2258	6185
16/16	5.4	0.0598/0.0598	50	1.137	0.877	0.737	0.643	2764	2411	6185

## Design Reactions at Supports Based on Web Crippling, $\phi R_n$ (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	1½"	2"	3"	4"	4"	6"	1½"	2"	3"	4"	4"	6"
20/XX	798	874	1002	1110	1634	1869	848	910	1015	1103	1997	2306
18/XX	1345	1467	1671	1843	2741	3117	1550	1656	1833	1982	3410	3914
16/XX	2071	2249	2548	2800	4202	4751	2530	2691	2962	3190	5287	6037

## 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

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