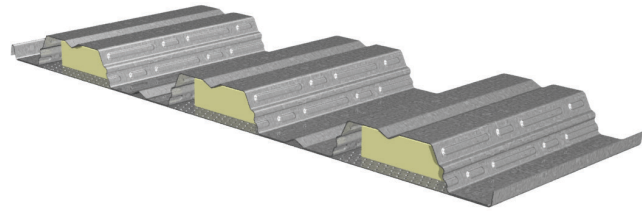


# PLW2CD/W2CD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

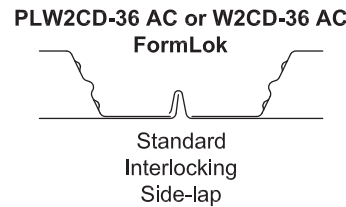
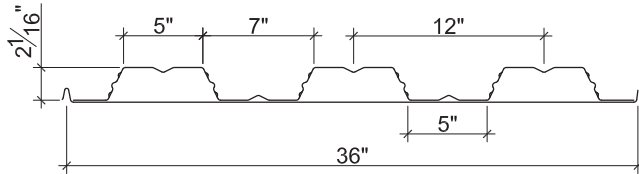
LRFD

## W2 CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLW2CD-36 AC FormLok Deck used with PunchLok® II System
- W2CD-36 AC FormLok Deck used with TSWs or BPs



## 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 $F_y = 50$ ksi		Vertical Web Shear $\phi V_n$ (lb/ft)	Vertical Shear $\phi V_n$	
				$I_{d+}$ (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)		End (lb/ft)	Interior (lb/ft)
20/20	3.4	0.036/0.0359	50	0.653	0.531	0.363	0.420	3715	633	1186
20/18	3.8	0.036/0.0478	50	0.700	0.580	0.370	0.439	3715	588	718
18/20	3.9	0.047/0.0359	50	0.830	0.662	0.524	0.539	4900	692	1504
18/18	4.3	0.047/0.0478	50	0.892	0.717	0.534	0.561	4900	933	1290
18/16	4.8	0.047/0.0598	50	0.945	0.775	0.542	0.579	4900	877	983
16/18	4.9	0.059/0.0478	50	1.065	0.863	0.700	0.690	6132	1004	1570
16/16	5.4	0.059/0.0598	50	1.129	0.926	0.711	0.712	6132	1303	1567

## 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	
	1 1/2"	2"	3"	4"	4"	6"	1 1/2"	2"	3"	4"	4"	6"
20/XX	805	882	1011	1120	1649	1887	857	920	1025	1114	2016	2328
18/XX	1319	1439	1639	1808	2689	3058	1515	1619	1793	1939	3342	3838
16/XX	2005	2177	2468	2712	4071	4604	2439	2595	2857	3078	5116	5844

## Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 7'-6" to 30'-0"
- IAPMO UES ER-2018 and UL Listed
- Tables conform to ANSI/SDI RD-2017 and C-2017

## Optional Features

- Inquire regarding cost and lead times for:
  - Sheet Lengths > 30'-0"
  - Alternative metallic finishes

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