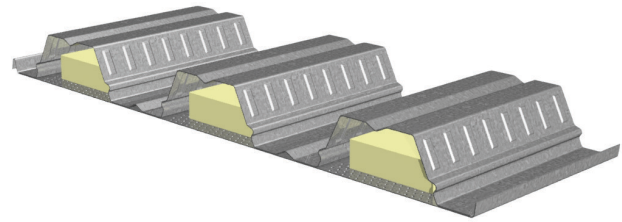


# PLW3CD/W3CD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

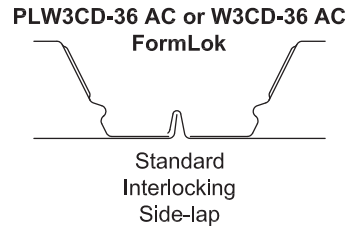
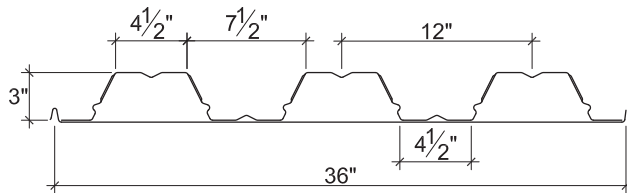
ASD

## W3 CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLW3CD-36 AC FormLok Deck used with PunchLok® II System
- W3CD-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 $V_n/\Omega$ (lb/ft)	Vertical Shear $V_n/\Omega$	
				$I_{d+}$ (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	3.6	0.0359/0.0359	50	1.425	1.124	0.542	0.608	2360	587	1225
20/18	4.0	0.0359/0.0478	50	1.528	1.226	0.542	0.640	2360	539	693
18/20	4.1	0.0478/0.0359	50	1.776	1.425	0.847	0.794	4286	649	1675
18/18	4.6	0.0478/0.0478	50	1.909	1.539	0.863	0.830	4286	892	1339
18/16	5.0	0.0478/0.0598	50	2.020	1.659	0.860	0.862	4286	834	957
16/18	5.2	0.0598/0.0478	50	2.267	1.845	1.099	1.018	6199	963	1619
16/16	5.7	0.0598/0.0598	50	2.402	1.975	1.116	1.057	6199	1238	1526

## Allowable Reactions at Supports Based on Web Crippling, $R_n/\Omega$ (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	493	540	619	686	1090	1351	498	535	596	648	1286	1617
18/XX	845	922	1049	1157	1845	2310	938	1001	1108	1198	2228	2835
16/XX	1285	1395	1581	1737	2779	3449	1517	1614	1776	1913	3406	4297

## 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

NOTICE: Design defects that could cause injury or death may result from relying on the information in this document without independent verification by a qualified professional. The information in this document is provided "AS IS". Nucor Corporation and its affiliates expressly disclaim: (i) any and all representations, warranties and conditions and (ii) all liability arising out of or related to this document and the information in it.