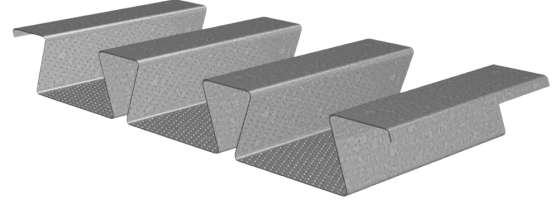


# 3.5DF-24 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

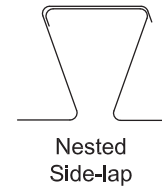
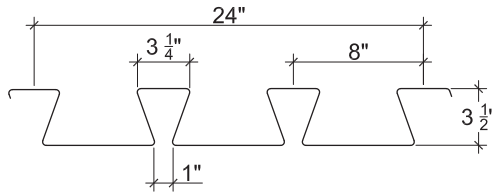
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## 3.5DF-24 AC DOVETAIL ROOF DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish
- FM Listed



## 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		Allowable Moment		Vertical Web Shear
				$I_{d+}$ (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)	$M_{n+}/\Omega$ (lb-ft/ft)	$M_{n-}/\Omega$ (lb-ft/ft)	$V_n/\Omega$ (lb/ft)
18	4.2	0.0478	50	2.318	2.268	0.984	0.834	2456	2081	6813
16	5.3	0.0598	50	2.948	2.947	1.325	1.144	3307	2855	9781

## 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				
	2"	3"	4"	5"	4"	6"	2"	3"	4"	5"	4"	6"
18	1465	1668	1840	1991	2933	3334	1592	1762	1905	2031	3542	4066
16	2217	2512	2760	2979	4415	4992	2565	2823	3040	3232	5411	6179

## Standard Features

- ASTM A653 SS GR 50 Min. with G90
- Standard lengths – 6'-0" to 40'-0"
- Tables conform to ANSI/SDI RD-2017
- IAPMO UES ER-423 and FM Listed

## Optional Features

- Inquire regarding cost and lead times for:
  - 17 gage
  - Alternative metallic and painted finishes

# 3.5DF-24 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

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## Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"
18	Single	$W_n / \Omega$	162	136	116	100	87	77	68	61	54	49	45
		L/240	114	88	69	55	45	37	31	26	22	19	16
	Double	$W_n / \Omega$	136	115	98	84	74	65	57	51	46	42	
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	$W_n / \Omega$	170	143	122								
		L/240	---	---	---								
16	Single	$W_n / \Omega$	219	184	157	135	118	103	92	82	73	66	60
		L/240	145	112	88	70	57	47	39	33	28	24	21
	Double	$W_n / \Omega$	187	157	134	116	101	89	79	70	63	57	
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	$W_n / \Omega$	233	196	167								
		L/240	---	---	166								

### Notes:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.
2. The symbol "---" indicates that the uniform allowable load based on deflection exceeds the allowable load based on stress.

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