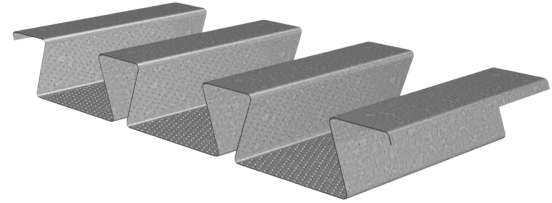


# 3.5DF-24 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

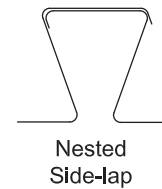
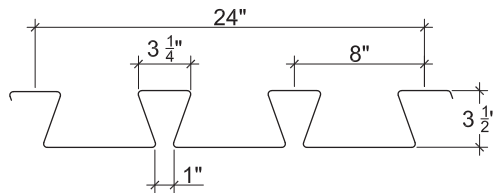
Imperial  
LSD

## 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 $I_d = (2I_e + I_o)/3$		Effective Section Modulus at $F_y = 50$ ksi		Factored 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)	
18	4.2	0.0478	50	2.318	2.268	0.984	0.834	3691	3128	8721
16	5.3	0.0598	50	2.948	2.947	1.325	1.144	4971	4291	12520

## Factored 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	
	2"	3"	4"	5"	4"	6"	2"	3"	4"	5"	4"	6"
18	1992	2269	2502	2708	3850	4376	2006	2220	2400	2559	4650	5337
16	3015	3416	3754	4051	5794	6552	3232	3557	3831	4072	7102	8110

## Standard Features

- ASTM A653/A653M SS GR50 Min., with Z275/G90 galvanized
- Standard lengths – 6'-0" to 40'-0"
- FM Listed
- Cold-formed steel deck conforms to CAN/CSA S136-16 and meets the guidelines of CSSBI 10M-2018.

## 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 Factored Loads, LSD (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	$\phi W_n$	244	205	175	151	131	115	102	91	82	74	67
		L/240	114	88	69	55	45	37	31	26	22	19	16
	Double	$\phi W_n$	204	172	147	127	110	97	86	77	69	62	
		L/240	269	207	163	131	106	87	73	61	52	45	
	Triple	$\phi W_n$	254	214	183								
		L/240	211	162	128								
16	Single	$\phi W_n$	329	276	235	203	177	155	138	123	110	99	90
		L/240	145	112	88	70	57	47	39	33	28	24	21
	Double	$\phi W_n$	280	236	201	174	152	133	118	105	95	86	
		L/240	350	269	212	170	138	114	95	80	68	58	
	Triple	$\phi W_n$	349	294	251								
		L/240	274	211	166								

**Note:**

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.

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