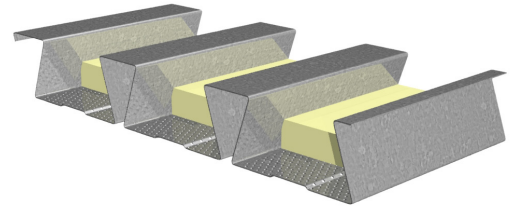


# 3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

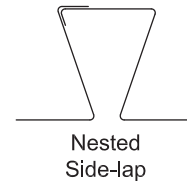
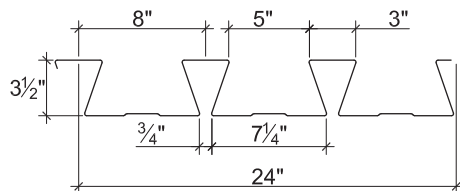
ASD

## 3.5DA ACOUSTICAL 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 $F_y = 40$ ksi		Allowable Moment		Vertical Web Shear $V_n/\Omega$ (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)	$M_{n+}/\Omega$ (lb-ft/ft)	$M_{n-}/\Omega$ (lb-ft/ft)	
20	3.1	0.0358	40	1.531	1.430	0.655	0.657	1307	1311	3435
18	4.1	0.0474	40	2.098	1.950	0.934	0.928	1864	1852	6012
16	5.1	0.0598	40	2.719	2.533	1.255	1.241	2505	2477	8313

### 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"
20	693	794	880	955	1459	1670	714	796	865	926	1724	1991
18	1168	1330	1467	1588	2422	2753	1310	1450	1568	1672	2927	3360
16	1793	2032	2233	2410	3681	4162	2137	2352	2533	2693	4515	5157

### Standard Features

- ASTM A653 SS GR 40 Min. with G90
- Standard lengths – 6'-0" to 42'-0"
- Tables conform to ANSI/SDI RD-2017
- IAPMO UES ER-423 and FM Listed

### Optional Features

- Inquire regarding cost and lead times for:
  - 19 gage
  - Short cuts < 6'-0"
  - Alternative metallic and painted finishes

# 3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

## 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"
20	Single	$W_n / \Omega$	86	73	62	53	46	41	36	32	29	26	24
		L/240	75	58	46	37	30	25	20	17	15	13	11
	Double	$W_n / \Omega$	85	72	61	53	46	41	36	32	29	26	24
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	$W_n / \Omega$	106	89	76	66							
		L/240	---	---	---	65							
18	Single	$W_n / \Omega$	123	104	88	76	66	58	52	46	41	37	34
		L/240	103	80	63	50	41	34	28	24	20	17	15
	Double	$W_n / \Omega$	121	102	87	75	66	58	51	46	41	37	34
		L/240	---	---	---	---	---	---	---	---	---	---	33
	Triple	$W_n / \Omega$	151	127	109	94							
		L/240	---	---	---	88							
16	Single	$W_n / \Omega$	166	139	119	102	89	78	69	62	56	50	45
		L/240	134	103	81	65	53	44	36	31	26	22	19
	Double	$W_n / \Omega$	162	137	117	101	88	77	68	61	55	49	45
		L/240	---	---	---	---	---	---	---	---	---	---	43
	Triple	$W_n / \Omega$	202	170	145	125							
		L/240	---	---	143	114							

### 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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