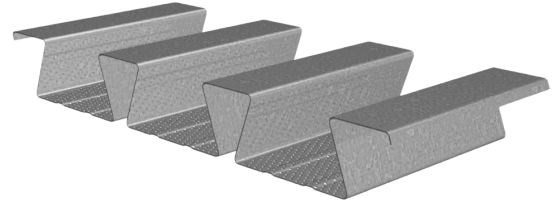


3.5DS-24 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

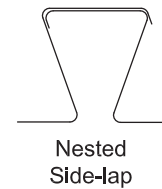
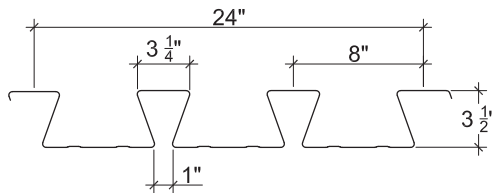
ASD

3.5DS-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 ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	M_{n+}/Ω (lb-ft/ft)	M_{n-}/Ω (lb-ft/ft)	V_n/Ω (lb/ft)
20	3.2	0.0359	50	1.687	1.646	0.674	0.665	1682	1659	3754
18	4.2	0.0478	50	2.313	2.321	0.982	0.999	2450	2492	6813
16	5.3	0.0598	50	2.942	3.040	1.322	1.380	3299	3443	9781

Allowable Reactions at Supports Based on Web Crippling, R_n/Ω (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	859	985	1091	1184	1735	1985	850	948	1030	1103	2046	2363
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:
 - 19 or 17 gage
 - Alternative metallic and painted finishes

3.5DS-24 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

ASD

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 / Ω	111	93	80	69	60	53	47	42	37	34	31
		L/240	83	64	50	40	33	27	23	19	16	14	12
	Double	W_n / Ω	108	91	77	67	58	51	46	41	37	33	
		L/240	---	---	---	---	---	---	---	---	---	32	
	Triple	W_n / Ω	133	113	96								
		L/240	---	---	93								
18	Single	W_n / Ω	162	136	116	100	87	77	68	60	54	49	44
		L/240	114	88	69	55	45	37	31	26	22	19	16
	Double	W_n / Ω	163	137	117	101	88	77	69	61	55	50	
		L/240	---	---	---	---	---	---	---	---	53	46	
	Triple	W_n / Ω	202	170	145								
		L/240	---	166	131								
16	Single	W_n / Ω	218	183	156	135	117	103	91	81	73	66	60
		L/240	145	112	88	70	57	47	39	33	28	24	21
	Double	W_n / Ω	225	189	162	139	122	107	95	85	76	69	
		L/240	---	---	---	---	---	---	---	82	70	60	
	Triple	W_n / Ω	279	235	201								
		L/240	---	218	171								

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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