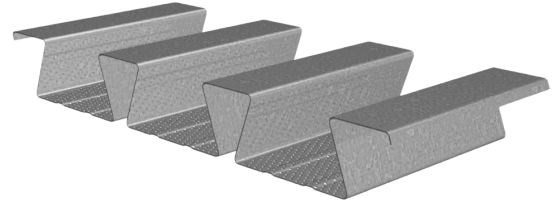


3.5DS-24 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

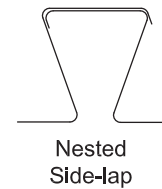
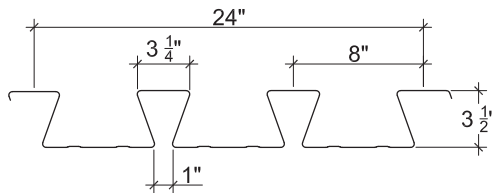
Imperial
LSD

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 $I_d = (2I_e + I_o)/3$		Effective Section Modulus at $F_y = 50$ ksi		Factored Moment		Vertical Web Shear ϕV_n (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	ϕM_{n+} (lb-ft/ft)	ϕM_{n-} (lb-ft/ft)	
20	3.2	0.0359	50	1.687	1.646	0.674	0.665	2528	2494	4805
18	4.2	0.0478	50	2.313	2.321	0.982	0.999	3682	3746	8721
16	5.3	0.0598	50	2.942	3.040	1.322	1.380	4959	5175	12520

Factored Reactions at Supports Based on Web Crippling, ϕR_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"
20	1168	1339	1484	1611	2277	2605	1071	1195	1298	1390	2686	3102
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:
 - 19 or 17 gage
 - Alternative metallic and painted finishes

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

Imperial
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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"
20	Single	ϕW_n	167	140	120	103	90	79	70	62	56	51	46
		L/240	83	64	50	40	33	27	23	19	16	14	12
	Double	ϕW_n	160	135	116	100	87	77	68	61	55	49	
		L/240	195	150	118	95	77	63	53	45	38	32	
	Triple	ϕW_n	198	168	144								
		L/240	153	118	93								
18	Single	ϕW_n	243	205	174	150	131	115	102	91	82	74	67
		L/240	114	88	69	55	45	37	31	26	22	19	16
	Double	ϕW_n	243	205	175	151	132	116	103	92	82	74	
		L/240	275	212	167	134	109	89	75	63	53	46	
	Triple	ϕW_n	301	254	217								
		L/240	216	166	131								
16	Single	ϕW_n	328	276	235	202	176	155	137	122	110	99	90
		L/240	145	112	88	70	57	47	39	33	28	24	21
	Double	ϕW_n	336	283	242	209	182	160	142	127	114	103	
		L/240	361	278	219	175	142	117	98	82	70	60	
	Triple	ϕW_n	417	352	301								
		L/240	283	218	171								

Note:

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