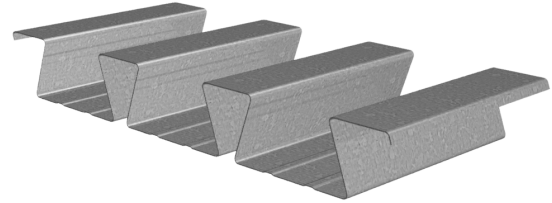


3.5DS-24 DOVETAIL ROOF DECK GRADE 50 STEEL

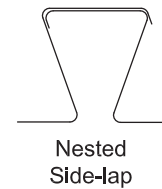
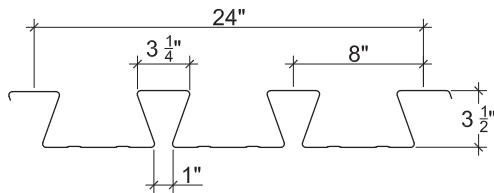
Imperial
LSD

3.5DS-24 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	3.4	0.0359	50	1.951	1.805	0.714	0.757	2677	2840	4805
18	4.5	0.0478	50	2.681	2.505	1.052	1.108	3947	4156	8721
16	5.6	0.0598	50	3.421	3.243	1.414	1.505	5301	5645	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"
- UL and 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
- Perforated Acoustical Versions

3.5DS-24 DOVETAIL ROOF DECK GRADE 50 STEEL

Imperial
LSD

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	177	149	127	109	95	84	74	66	59	54	49
		L/240	96	74	58	47	38	31	26	22	19	16	14
	Double	ϕW_n	181	153	131	113	99	87	77	69	62	56	
		L/240	214	165	130	104	84	70	58	49	42	36	
	Triple	ϕW_n	223	189	162								
		L/240	168	129	102								
18	Single	ϕW_n	261	219	187	161	140	123	109	97	87	79	72
		L/240	132	102	80	64	52	43	36	30	26	22	19
	Double	ϕW_n	269	226	194	167	146	128	114	102	91	83	
		L/240	297	229	180	144	117	97	81	68	58	49	
	Triple	ϕW_n	332	281	240								
		L/240	233	179	141								
16	Single	ϕW_n	350	294	251	216	188	166	147	131	117	106	96
		L/240	168	130	102	82	66	55	46	38	33	28	24
	Double	ϕW_n	366	308	263	227	198	175	155	138	124	112	
		L/240	385	296	233	187	152	125	104	88	75	64	
	Triple	ϕW_n	453	382	327								
		L/240	302	232	183								

Note:

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