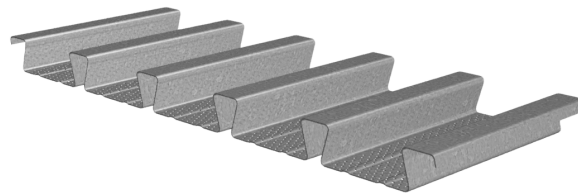


2.0DS-30 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

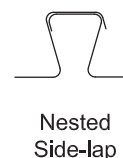
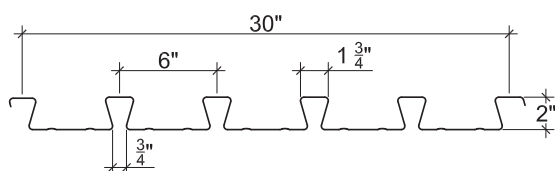
Imperial
LSD

2.0DS-30 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 $I_d = (2I_e + I_y)/3$		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)	
22	2.1	0.0299	50	0.370	0.331	0.281	0.252	1053	945	4268
20	2.5	0.0359	50	0.446	0.417	0.352	0.337	1319	1265	5092
18	3.4	0.0478	50	0.596	0.600	0.481	0.482	1805	1809	6694
16	4.3	0.0598	50	0.765	0.793	0.617	0.624	2315	2340	8262

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	
	1 1/2"	2"	3"	4"	3"	5"	1 1/2"	2"	3"	4"	3"	5"
22	1133	1246	1434	1592	2044	2355	1083	1166	1306	1424	2500	2910
20	1586	1738	1992	2206	2869	3286	1603	1721	1918	2085	3551	4108
18	2679	2921	3327	3669	4866	5514	2926	3125	3459	3740	6112	6997
16	4030	4377	4959	5449	7337	8241	4642	4938	5435	5853	9299	10553

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:
 - 21, 19 or 17 gage
 - Alternative metallic and painted finishes

2.0DS-30 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

Imperial
LSD

Inward Uniform Factored Loads, LSD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"
22	Single	ϕW_n	527	337	234	172	132	104	84	70	59	50	43
		L/240	379	194	112	71	47	33	24	18	14	11	9
	Double	ϕW_n	455	295	207	152	117	93	75	62	52	45	38
		L/240	817	418	242	152	102	72	52	39	30	24	19
	Triple	ϕW_n	561	365	256	189	146	115	94	78	65	56	
		L/240	640	328	190	119	80	56	41	31	24	19	
20	Single	ϕW_n	659	422	293	215	165	130	105	87	73	62	54
		L/240	457	234	135	85	57	40	29	22	17	13	11
	Double	ϕW_n	604	393	275	203	156	124	100	83	70	60	51
		L/240	1029	527	305	192	129	90	66	49	38	30	24
	Triple	ϕW_n	741	485	341	252	194	154	125	104	87	74	
		L/240	806	413	239	150	101	71	52	39	30	23	
18	Single	ϕW_n	903	578	401	295	226	178	144	119	100	85	74
		L/240	610	313	181	114	76	54	39	29	23	18	14
	Double	ϕW_n	857	559	392	290	223	177	143	119	100	85	73
		L/240	1480	758	439	276	185	130	95	71	55	43	35
	Triple	ϕW_n	1048	688	485	360	277	220	179	148	124	106	
		L/240	1160	594	344	217	145	102	74	56	43	34	
16	Single	ϕW_n	1157	741	514	378	289	229	185	153	129	110	94
		L/240	784	401	232	146	98	69	50	38	29	23	18
	Double	ϕW_n	1103	720	506	374	288	228	185	153	129	110	95
		L/240	1957	1002	580	365	245	172	125	94	72	57	46
	Triple	ϕW_n	1346	886	625	464	358	284	231	191	161	137	
		L/240	1534	785	454	286	192	135	98	74	57	45	

Note:

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

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