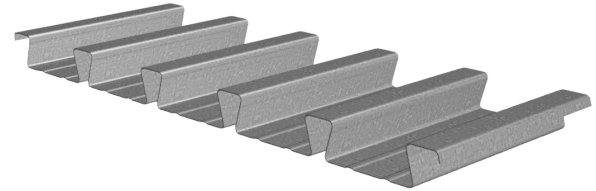


2.0DS-30 DOVETAIL ROOF DECK GRADE 50 STEEL

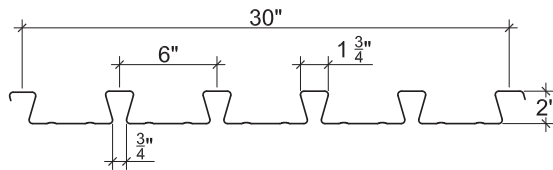
Imperial
LSD

2.0DS-30 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	2.2	0.0299	50	0.430	0.382	0.301	0.306	1130	1146	4268
20	2.7	0.0359	50	0.520	0.473	0.378	0.373	1417	1398	5092
18	3.6	0.0478	50	0.695	0.661	0.527	0.509	1977	1907	6694
16	4.5	0.0598	50	0.872	0.856	0.667	0.648	2501	2430	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"
- 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:
 - 21, 19, or 17 gage
 - Alternative metallic and painted finishes
- Perforated Acoustical Versions

2.0DS-30 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	565	361	251	184	141	112	90	75	63	53	46
		L/240	440	226	131	82	55	39	28	21	16	13	10
	Double	ϕW_n	543	354	249	184	141	112	91	75	63	54	47
		L/240	943	483	279	176	118	83	60	45	35	27	22
	Triple	ϕW_n	664	436	307	228	176	139	113	94	79	67	
		L/240	739	378	219	138	92	65	47	36	27	22	
20	Single	ϕW_n	708	453	315	231	177	140	113	94	79	67	58
		L/240	533	273	158	99	67	47	34	26	20	16	12
	Double	ϕW_n	661	431	303	224	172	136	111	92	77	66	57
		L/240	1167	598	346	218	146	102	75	56	43	34	27
	Triple	ϕW_n	808	531	374	278	214	170	138	114	96	82	
		L/240	915	468	271	171	114	80	59	44	34	27	
18	Single	ϕW_n	988	633	439	323	247	195	158	131	110	94	81
		L/240	712	364	211	133	89	62	46	34	26	21	17
	Double	ϕW_n	898	587	412	305	235	186	151	125	105	90	77
		L/240	1631	835	483	304	204	143	104	78	60	48	38
	Triple	ϕW_n	1096	722	510	378	291	231	188	156	131	112	
		L/240	1278	654	379	239	160	112	82	61	47	37	
16	Single	ϕW_n	1250	800	556	408	313	247	200	165	139	118	102
		L/240	893	457	265	167	112	78	57	43	33	26	21
	Double	ϕW_n	1141	746	525	388	299	237	192	159	134	114	99
		L/240	2112	1081	626	394	264	185	135	102	78	62	49
	Triple	ϕW_n	1390	917	648	481	371	294	239	198	167	143	
		L/240	1655	848	490	309	207	145	106	80	61	48	

Note:

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

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