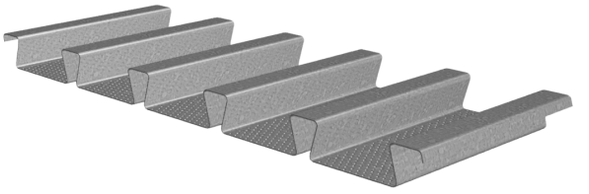
2.0DF-30 AC ACOUSTICAL DOVETAIL ROOF DECK
GRADE 50 STEEL

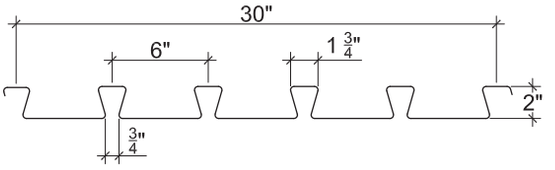
Imperial LSD

2.0DF-30 AC DOVETAIL ROOF DECK

- **Enhanced 2-Coat Polyester Paint**
- **White Factory Primer Paint**
- **Galvanized Finish**
- **FM Listed**



Nominal Dimensions



Nested
Side-lap

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		Factored Moment		Vertical Web Shear
				I_d+ (in⁴/ft)	I_d- (in⁴/ft)	S_e+ (in³/ft)	S_e- (in³/ft)	øM_n+ (lb-ft/ft)	øM_n- (lb-ft/ft)	øV_n (lb/ft)
20	2.5	0.0359	50	0.449	0.431	0.353	0.306	1324	1148	5092
18	3.4	0.0478	50	0.599	0.600	0.483	0.469	1813	1758	6694
16	4.2	0.0598	50	0.752	0.774	0.608	0.614	2281	2303	8262

Factored Reactions at Supports Based on Web Crippling, øR_n (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	1½"	2"	3"	4"	3"	5"	1½"	2"	3"	4"	3"	5"
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:
  - -19 or 17 gage
  - -Alternative metallic and painted finishes

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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"
20	Single	$øW_n$	662	424	294	216	165	131	106	88	74	63	54
		L/240	460	235	136	86	57	40	29	22	17	13	11
	Double	$øW_n$	552	358	251	185	142	112	91	75	63	54	47
		L/240	1063	544	315	198	133	93	68	51	39	31	25
	Triple	$øW_n$	679	443	311	230	177	140	114	94	79	68	
		L/240	834	427	247	156	104	73	53	40	31	24	
18	Single	$øW_n$	906	580	403	296	227	179	145	120	101	86	74
		L/240	614	314	182	114	77	54	39	30	23	18	14
	Double	$øW_n$	835	544	382	282	217	172	139	115	97	83	71
		L/240	1480	758	439	276	185	130	95	71	55	43	35
	Triple	$øW_n$	1022	671	472	350	269	214	174	144	121	103	
		L/240	1160	594	344	217	145	102	74	56	43	34	
16	Single	$øW_n$	1140	730	507	372	285	225	182	151	127	108	93
		L/240	770	394	228	144	96	68	49	37	29	22	18
	Double	$øW_n$	1087	710	499	369	284	225	182	151	127	108	94
		L/240	1910	978	566	356	239	168	122	92	71	56	45
	Triple	$øW_n$	1328	874	616	457	352	280	227	188	158	135	
		L/240	1497	766	444	279	187	131	96	72	55	44	

Note:

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