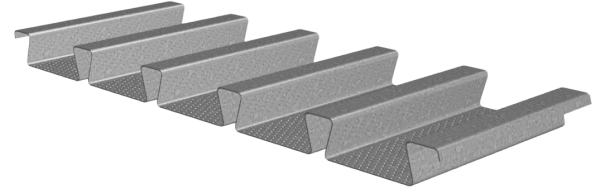


2.0DF-30 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

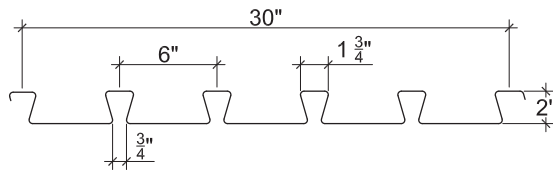
LRFD

2.0DF-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 $I_d = (2I_e + I_o)/3$		Effective Section Modulus at $F_y = 50$ ksi		Design 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	2.5	0.0359	50	0.449	0.431	0.353	0.306	1324	1148	6047
18	3.4	0.0478	50	0.599	0.600	0.483	0.469	1813	1758	7949
16	4.2	0.0598	50	0.752	0.774	0.608	0.614	2281	2303	9812

Design 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	
	1½"	2"	3"	4"	3"	5"	1½"	2"	3"	4"	3"	5"
20	1785	1955	2241	2482	3252	3724	1946	2090	2330	2532	4025	4656
18	3014	3286	3743	4127	5514	6249	3553	3794	4200	4541	6926	7930
16	4534	4924	5578	6130	8315	9340	5637	5996	6599	7108	10538	11960

Standard Features

- ASTM A653 SS GR 50 Min. with G90
- Standard lengths – 6'-0" to 40'-0"
- Tables conform to ANSI/SDI RD-2017
- IAPMO UES ER-423 and FM Listed

Optional Features

- Inquire regarding cost and lead times for:
 - 22, 21, 19 or 17 gage
 - Alternative metallic and painted finishes

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

LRFD

Inward Uniform Design Loads, LRFD (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	ϕW_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	ϕW_n	558	361	252	186	142	113	91	76	64	54	47
		L/240	1063	544	315	198	133	93	68	51	39	31	25
	Triple	ϕW_n	690	448	313	231	178	141	114	94	79	68	
		L/240	834	427	247	156	104	73	53	40	31	24	
18	Single	ϕW_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	ϕW_n	847	549	384	283	218	172	140	116	97	83	72
		L/240	1480	758	439	276	185	130	95	71	55	43	35
	Triple	ϕW_n	1043	680	477	352	271	215	174	144	121	103	
		L/240	1160	594	344	217	145	102	74	56	43	34	
16	Single	ϕW_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	ϕW_n	1105	717	502	371	285	226	183	151	127	109	94
		L/240	1910	978	566	356	239	168	122	92	71	56	45
	Triple	ϕW_n	1358	887	623	461	354	281	228	189	159	135	
		L/240	1497	766	444	279	187	131	96	72	55	44	

Notes:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.
2. The symbol "----" indicates that the uniform allowable load based on deflection exceeds the allowable load based on stress.

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