2.0DS-30 DOVETAIL ROOF DECK
GRADE 50 STEEL

ASD

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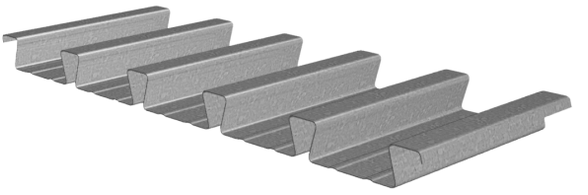
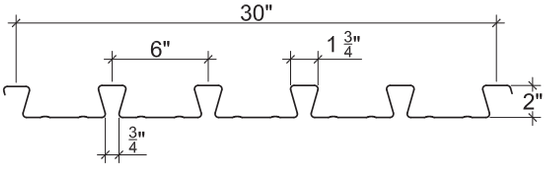
- **Enhanced 2-Coat Polyester Paint**
- **White Factory Primer Paint**
- **Galvanized Finish**
- **FM Listed**



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 $I_d = (2I_e+I_g)/3$ I_d+ (in⁴/ft)	I_d- (in⁴/ft)	Effective Section Modulus at F_y = 50 ksi S_e+ (in³/ft)	S_e- (in³/ft)	Allowable Moment M_n+/Ω (lb-ft/ft)	M_n-/Ω (lb-ft/ft)	Vertical Web Shear V_n/Ω (lb/ft)
22	2.2	0.0299	50	0.430	0.382	0.301	0.306	752	763	3334
20	2.7	0.0359	50	0.520	0.473	0.378	0.373	943	930	3978
18	3.6	0.0478	50	0.695	0.661	0.527	0.509	1315	1269	5229
16	4.5	0.0598	50	0.872	0.856	0.667	0.648	1664	1617	6455

Allowable Reactions at Supports Based on Web Crippling, R_n/Ω (lb/ft)

Deck Gage	Bearing Length of Webs: One-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 3"	5"	Two-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 3"	5"
22	833	916	1054	1171	1557	1794	859	926	1037	1130	1905	2217
20	1166	1278	1465	1622	2186	2503	1272	1366	1523	1655	2706	3130
18	1970	2148	2446	2698	3707	4201	2322	2480	2745	2968	4656	5331
16	2964	3218	3646	4007	5590	6279	3684	3919	4313	4646	7085	8040

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, FM and UL Listed

Optional Features

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

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Inward Uniform Allowable Loads, ASD (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	W_n / Ω	376	241	167	123	94	74	60	50	42	36	31
		L/240	---	226	131	82	55	39	28	21	16	13	10
	Double	W_n / Ω	367	238	166	123	94	75	61	50	42	36	31
		L/240	---	---	---	---	---	---	60	45	35	27	22
	Triple	W_n / Ω	451	294	206	153	117	93	76	63	53	45	
		L/240	---	---	---	138	92	65	47	36	27	22	
20	Single	W_n / Ω	471	302	209	154	118	93	75	62	52	45	38
		L/240	---	273	158	99	67	47	34	26	20	16	12
	Double	W_n / Ω	446	290	203	150	115	91	74	61	51	44	38
		L/240	---	---	---	---	---	---	---	56	43	34	27
	Triple	W_n / Ω	548	358	252	186	143	113	92	76	64	55	
		L/240	---	---	---	171	114	80	59	44	34	27	
18	Single	W_n / Ω	658	421	292	215	164	130	105	87	73	62	54
		L/240	---	364	211	133	89	62	46	34	26	21	17
	Double	W_n / Ω	607	395	276	204	157	124	101	83	70	60	52
		L/240	---	---	---	---	---	---	---	78	60	48	38
	Triple	W_n / Ω	745	487	343	254	195	155	126	104	87	75	
		L/240	---	---	---	239	160	112	82	61	47	37	
16	Single	W_n / Ω	832	532	370	272	208	164	133	110	92	79	68
		L/240	---	457	265	167	112	78	57	43	33	26	21
	Double	W_n / Ω	772	502	352	260	200	158	128	106	89	76	66
		L/240	---	---	---	---	---	---	---	102	78	62	49
	Triple	W_n / Ω	946	619	436	323	248	197	160	132	111	95	
		L/240	---	---	---	309	207	145	106	80	61	48	

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.