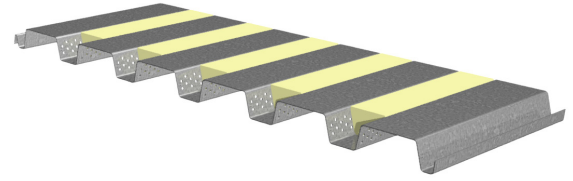


1.5BA-36/1.5BIA-36/1.5PLBA-36 ACOUSTICAL ROOF DECKS GRADE 50 STEEL

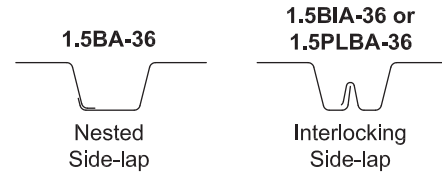
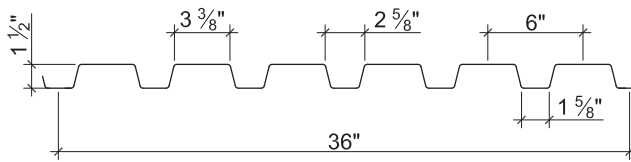
ASD

1.5B ACOUSTICAL ROOF DECKS

- 1.5BA-36 Deck used with Side-lap Screws
- 1.5BIA-36 Deck used with TSWs or BPs
- 1.5PLBA-36 Deck used with PunchLok® II System



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 $I_d = (2I_e + I_g)/3$		Effective Section Modulus at $F_y = 50$ ksi		Allowable Moment		Vertical Web Shear V_n/Ω (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	M_{n+}/Ω (lb-ft/ft)	M_{n-}/Ω (lb-ft/ft)	
22	1.5	0.0295	50	0.148	0.169	0.161	0.170	402	424	2008
20	1.9	0.0358	50	0.187	0.206	0.213	0.218	532	544	2421
19	2.2	0.0418	50	0.227	0.244	0.253	0.264	631	659	2809
18	2.5	0.0474	50	0.263	0.276	0.290	0.302	723	753	3166
16	3.2	0.0598	50	0.346	0.348	0.374	0.382	933	953	3941

Allowable Reactions at Supports Based on Web Crippling, R_n/Ω (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"	4"	1 1/2"	2"	3"	4"	3"	4"
22	783	861	991	1082	1476	1595	798	859	963	1035	1792	1949
20	1122	1230	1410	1532	2120	2281	1214	1304	1453	1556	2608	2823
19	1495	1634	1867	2022	2829	3033	1691	1810	2011	2144	3512	3787
18	1887	2058	2344	2530	3575	3819	2207	2357	2609	2773	4466	4799
16	2899	3148	3567	3822	5501	5838	3585	3814	4198	4432	6941	7407

Standard Features

- ASTM A653 SS GR50 Min., with G60 or G90, white or gray primer optional
- ASTM A1008 SS GR50 Min. with gray primer
- Standard lengths – 6'-0" to 42'-0"
- IAPMO UES ER-0652 and FM Listed
- Tables conform to ANSI/SDI RD-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Short cuts < 6'-0"
 - Sheet Lengths > 42'-0"
 - Alternative metallic and painted finishes

1.5BA-36/1.5BIA-36/1.5PLBA-36 ACOUSTICAL ROOF DECKS GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	Single	W_n / Ω	804	357	201	129	89	66	50	40	32	27	22
		L/240	---	---	152	78	45	28	19	13	10	7	6
	Double	W_n / Ω	750	355	205	133	93	68	53	42	34	28	23
		L/240	---	---	---	---	---	---	52	37	27	20	15
	Triple	W_n / Ω	895	434	253	164	115	85	65	52	42	35	29
		L/240	---	---	---	---	97	61	41	29	21	16	12
20	Single	W_n / Ω	1063	473	266	170	118	87	66	53	43	35	30
		L/240	---	454	192	98	57	36	24	17	12	9	7
	Double	W_n / Ω	948	453	262	170	119	88	67	53	43	36	30
		L/240	---	---	---	---	---	---	64	45	33	24	19
	Triple	W_n / Ω	1127	551	322	210	147	109	84	66	54	45	38
		L/240	---	---	---	204	118	74	50	35	25	19	15
19	Single	W_n / Ω	1262	561	316	202	140	103	79	62	50	42	35
		L/240	---	551	233	119	69	43	29	20	15	11	9
	Double	W_n / Ω	1136	545	316	205	144	106	81	65	52	43	36
		L/240	---	---	---	---	---	---	75	53	39	29	22
	Triple	W_n / Ω	1347	663	388	254	178	132	101	80	65	54	45
		L/240	---	---	---	242	140	88	59	41	30	23	17
18	Single	W_n / Ω	1447	643	362	231	161	118	90	71	58	48	40
		L/240	---	639	269	138	80	50	34	24	17	13	10
	Double	W_n / Ω	1295	622	361	235	164	121	93	74	60	50	42
		L/240	---	---	---	---	---	---	85	60	44	33	25
	Triple	W_n / Ω	1533	756	443	290	204	151	116	92	75	62	52
		L/240	---	---	---	273	158	100	67	47	34	26	20
16	Single	W_n / Ω	1866	829	466	299	207	152	117	92	75	62	52
		L/240	---	---	354	181	105	66	44	31	23	17	13
	Double	W_n / Ω	1631	786	456	297	208	153	118	93	76	63	53
		L/240	---	---	---	---	---	---	107	75	55	41	32
	Triple	W_n / Ω	1929	954	560	366	257	190	147	116	94	78	66
		L/240	---	---	---	345	199	126	84	59	43	32	25

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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