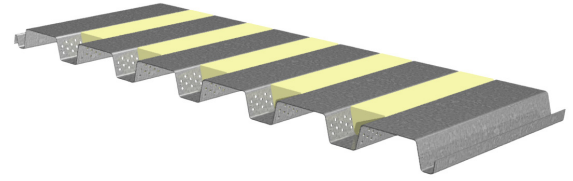


1.5BA-36/1.5BIA-36/1.5PLBA-36 ACOUSTICAL ROOF DECKS GRADE 80 STEEL

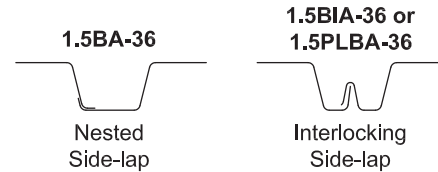
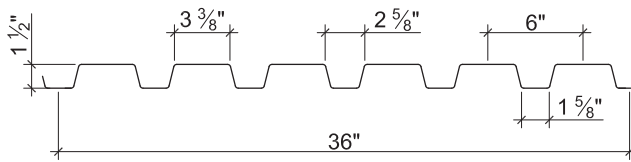
LRFD

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 $F_y = 60$ 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)	
22	1.5	0.0295	60	0.144	0.166	0.154	0.164	693	738	3661
20	1.9	0.0358	60	0.183	0.206	0.204	0.212	918	954	4415
19	2.2	0.0418	60	0.221	0.241	0.250	0.257	1125	1157	5122
18	2.5	0.0474	60	0.259	0.276	0.287	0.299	1292	1346	5774

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	
	1 1/2"	2"	3"	4"	3"	4"	1 1/2"	2"	3"	4"	3"	4"
22	1438	1581	1820	1987	2635	2848	1464	1578	1767	1900	3200	3478
20	2060	2257	2588	2813	3783	4072	2229	2393	2668	2856	4656	5039
19	2746	3000	3427	3712	5050	5414	3105	3324	3692	3936	6270	6760
18	3465	3778	4304	4645	6381	6817	4051	4327	4791	5091	7972	8566

Standard Features

- ASTM A653 SS GR80, with G60 or G90, white or gray primer optional
- ASTM A1008 SS GR80 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 80 STEEL

LRFD

Inward Uniform Design Loads, LRFD (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	ϕW_n	1386	616	347	222	154	113	87	68	55	46	39
		L/240	1180	350	148	76	44	28	18	13	9	7	5
	Double	ϕW_n	1318	622	358	232	162	119	92	72	59	49	41
		L/240	3277	971	410	210	121	76	51	36	26	20	15
	Triple	ϕW_n	1579	761	442	287	201	148	114	90	73	61	51
		L/240	2568	761	321	164	95	60	40	28	21	15	12
20	Single	ϕW_n	1836	816	459	294	204	150	115	91	73	61	51
		L/240	1500	444	187	96	56	35	23	16	12	9	7
	Double	ϕW_n	1679	798	460	298	209	154	118	94	76	63	53
		L/240	4066	1205	508	260	151	95	64	45	33	24	19
	Triple	ϕW_n	2001	973	567	369	259	191	147	117	95	78	66
		L/240	3187	944	398	204	118	74	50	35	25	19	15
19	Single	ϕW_n	2250	1000	563	360	250	184	141	111	90	74	63
		L/240	1811	537	226	116	67	42	28	20	14	11	8
	Double	ϕW_n	2014	962	557	361	253	186	143	113	92	76	64
		L/240	4757	1410	595	304	176	111	74	52	38	29	22
	Triple	ϕW_n	2394	1171	685	447	313	232	178	141	115	95	80
		L/240	3729	1105	466	239	138	87	58	41	30	22	17
18	Single	ϕW_n	2583	1148	646	413	287	211	161	128	103	85	72
		L/240	2122	629	265	136	79	50	33	23	17	13	10
	Double	ϕW_n	2325	1115	646	419	294	217	166	132	107	88	74
		L/240	5448	1614	681	349	202	127	85	60	44	33	25
	Triple	ϕW_n	2757	1355	794	518	364	269	207	164	133	110	93
		L/240	4270	1265	534	273	158	100	67	47	34	26	20

Note:

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

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