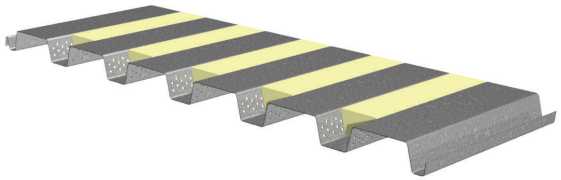
PLB™-36/HSB®-36 ACOUSTICAL ROOF DECKS
GRADE 50 STEEL

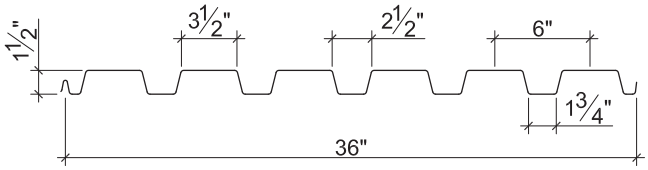
LRFD

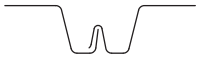
B ACOUSTICAL ROOF DECKS

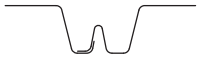
- **PLB-36 AC Deck used with PunchLok® II System**
- **HSB-36 AC Deck used with TSWs or BPs**
- **HSB-36-SS AC Deck used with Side-lap Screws**



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 $I_d = (2I_e+I_g)/3$ I_d+ (in⁴/ft)	I_d- (in⁴/ft)	Effective Section Modulus at F_y = 50 ksi S_e+ (in³/ft)	S_e- (in³/ft)	Vertical Web Shear $øV_n$ (lb/ft)
22	1.9	0.0299	50	0.173	0.187	0.170	0.182	3395
20	2.3	0.0359	50	0.213	0.225	0.223	0.230	4067
18	2.9	0.0478	50	0.294	0.298	0.306	0.322	5381
16	3.5	0.0598	50	0.371	0.371	0.388	0.399	6686

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

Deck Gage	Bearing Length of Webs: One-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 3"	4"	Two-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 3"	4"
22	1277	1403	1615	1746	2312	2478	1321	1423	1594	1699	2835	3053
20	1788	1958	2245	2421	3249	3471	1955	2098	2339	2487	4029	4327
18	3019	3291	3748	4023	5513	5863	3564	3806	4213	4457	6934	7412
16	4542	4933	5588	5974	8321	8813	5652	6013	6617	6973	10554	11236

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 40'-0"
- IAPMO UES ER-2018 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 > 40'-0"
  - -Alternative metallic and painted finishes
- Fully Perforated Acoustical Versions
- HSB-30-NS AC Deck used with Side-lap screws

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	øW$_n$	1274	566	319	204	142	104	80	63	51	42	35
		L/240	1418	420	177	91	53	33	22	16	11	9	7
	Double	øW$_n$	1219	575	331	214	150	110	85	67	54	45	38
		L/240	3691	1094	461	236	137	86	58	41	30	22	17
	Triple	øW$_n$	1461	703	408	265	186	137	105	83	68	56	47
		L/240	2677	793	335	171	99	62	42	29	21	16	12
20	Single	øW$_n$	1672	743	418	268	186	137	105	83	67	55	46
		L/240	1745	517	218	112	65	41	27	19	14	10	8
	Double	øW$_n$	1524	723	417	270	189	139	107	85	69	57	48
		L/240	4441	1316	555	284	164	104	69	49	36	27	21
	Triple	øW$_n$	1819	882	514	334	234	173	133	105	86	71	60
		L/240	3295	976	412	211	122	77	51	36	26	20	15
18	Single	øW$_n$	2295	1020	574	367	255	187	143	113	92	76	64
		L/240	2409	714	301	154	89	56	38	26	19	14	11
	Double	øW$_n$	2107	1006	581	377	264	195	150	118	96	79	67
		L/240	5882	1743	735	376	218	137	92	65	47	35	27
	Triple	øW$_n$	2505	1224	715	466	327	242	186	147	120	99	83
		L/240	4549	1348	569	291	168	106	71	50	36	27	21
16	Single	øW$_n$	2911	1294	728	466	323	238	182	144	116	96	81
		L/240	3040	901	380	195	113	71	48	33	24	18	14
	Double	øW$_n$	2612	1246	721	467	327	241	185	147	119	98	83
		L/240	7323	2170	915	469	271	171	114	80	59	44	34
	Triple	øW$_n$	3106	1518	887	578	406	300	231	183	148	123	103
		L/240	5740	1701	717	367	213	134	90	63	46	34	27

Note:

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