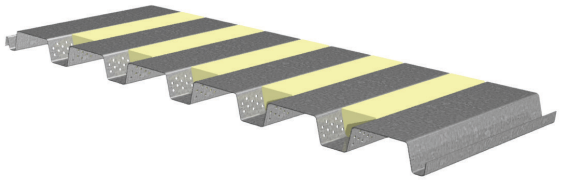
PLB™-36/HSB®-36 ACOUSTICAL ROOF DECKS
GRADE 50 STEEL

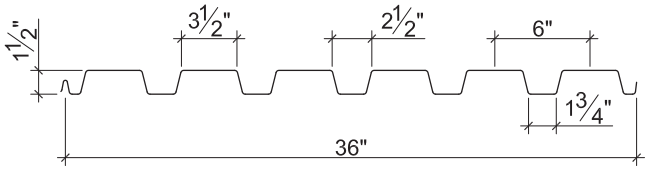
ASD

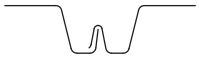
B ACOUSTICAL ROOF DECKS

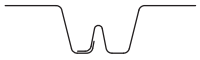
- **PLB-36 AC Deck used with PunchLok® II System**
- **HSB-36 AC Deck used with TSWs or BPs**
- **HSB-36-SS AC Deck used with Side-lap Screws**



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 V_n/Ω (lb/ft)
22	1.9	0.0299	50	0.173	0.187	0.170	0.182	2234
20	2.3	0.0359	50	0.213	0.225	0.223	0.230	2676
18	2.9	0.0478	50	0.294	0.298	0.306	0.322	3540
16	3.5	0.0598	50	0.371	0.371	0.388	0.399	4399

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"	4"	Two-Flange Loading, End Bearing 1½"	2"	3"	4"	Interior Bearing 3"	4"
22	835	917	1056	1141	1554	1666	864	930	1042	1111	1906	2053
20	1168	1280	1467	1582	2184	2334	1278	1371	1529	1626	2708	2909
18	1973	2151	2450	2630	3706	3941	2329	2488	2753	2913	4661	4983
16	2969	3224	3652	3905	5594	5924	3694	3930	4325	4558	7095	7554

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 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	848	377	212	136	94	69	53	42	34	28	24
		L/240	---	---	177	91	53	33	22	16	11	9	7
	Double	W_n / Ω	809	382	220	142	99	73	56	45	36	30	25
		L/240	---	---	---	---	---	---	---	41	30	22	17
	Triple	W_n / Ω	969	467	271	176	124	91	70	56	45	37	31
		L/240	---	---	---	171	99	62	42	29	21	16	12
20	Single	W_n / Ω	1113	494	278	178	124	91	70	55	45	37	31
		L/240	---	---	218	112	65	41	27	19	14	10	8
	Double	W_n / Ω	1011	480	277	179	125	93	71	56	46	38	32
		L/240	---	---	---	---	---	---	69	49	36	27	21
	Triple	W_n / Ω	1206	586	341	222	156	115	88	70	57	47	40
		L/240	---	---	---	211	122	77	51	36	26	20	15
18	Single	W_n / Ω	1527	679	382	244	170	125	95	75	61	50	42
		L/240	---	---	301	154	89	56	38	26	19	14	11
	Double	W_n / Ω	1398	668	387	251	175	130	99	79	64	53	44
		L/240	---	---	---	---	---	---	92	65	47	35	27
	Triple	W_n / Ω	1660	813	475	310	218	161	124	98	80	66	55
		L/240	---	---	---	291	168	106	71	50	36	27	21
16	Single	W_n / Ω	1937	861	484	310	215	158	121	96	77	64	54
		L/240	---	---	380	195	113	71	48	33	24	18	14
	Double	W_n / Ω	1733	828	479	311	217	160	123	98	79	65	55
		L/240	---	---	---	---	---	---	114	80	59	44	34
	Triple	W_n / Ω	2059	1008	589	384	270	200	153	122	99	82	69
		L/240	---	---	---	367	213	134	90	63	46	34	27

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.