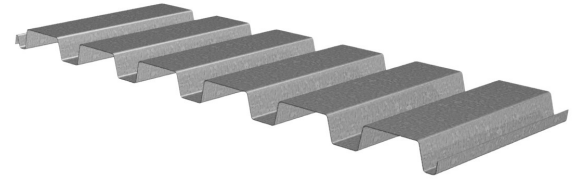


PLB™-36/HSB®-36 ROOF DECKS GRADE 50 STEEL

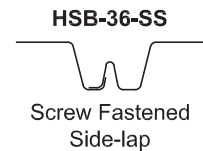
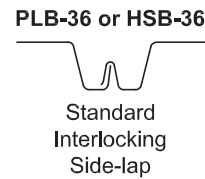
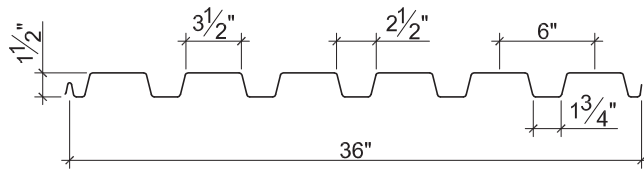
LRFD

B ROOF DECKS

- PLB-36 Deck used with PunchLok® II System
- HSB-36 Deck used with TSWs or BPs
- HSB-36-SS 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 $I_d = (2I_e + I_g)/3$		Effective Section Modulus at $F_y = 50$ ksi		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)	
22	1.9	0.0299	50	0.178	0.192	0.176	0.188	4085
20	2.3	0.0359	50	0.219	0.231	0.230	0.237	4894
18	2.9	0.0478	50	0.302	0.306	0.314	0.331	6481
16	3.5	0.0598	50	0.381	0.381	0.399	0.410	8059

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	1301	1430	1645	1779	2318	2484	1366	1472	1648	1757	2876	3097
20	1817	1991	2282	2461	3256	3479	2014	2162	2410	2562	4081	4383
18	3062	3338	3801	4080	5524	5874	3653	3902	4318	4569	7010	7493
16	4599	4994	5658	6049	8336	8828	5775	6144	6761	7125	10656	11345

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, UL, 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
- Web and Fully Perforated Acoustical Versions
- HSB-30-NS Deck used with Side-lap screws

PLB™-36/HSB®-36 ROOF DECKS

GRADE 50 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	1319	586	330	211	147	108	82	65	53	44	37
		L/240	1459	432	182	93	54	34	23	16	12	9	7
	Double	ϕW_n	1294	602	344	222	155	114	88	69	56	46	39
		L/240	3790	1123	474	243	140	88	59	42	30	23	18
	Triple	ϕW_n	1565	740	426	276	193	142	109	86	70	58	49
		L/240	2970	880	371	190	110	69	46	33	24	18	14
20	Single	ϕW_n	1724	766	431	276	192	141	108	85	69	57	48
		L/240	1795	532	224	115	66	42	28	20	14	11	8
	Double	ϕW_n	1619	756	434	280	195	144	110	87	71	59	49
		L/240	4560	1351	570	292	169	106	71	50	36	27	21
	Triple	ϕW_n	1952	929	536	348	243	179	138	109	88	73	61
		L/240	3574	1059	447	229	132	83	56	39	29	21	17
18	Single	ϕW_n	2354	1046	589	377	262	192	147	116	94	78	65
		L/240	2475	733	309	158	92	58	39	27	20	15	11
	Double	ϕW_n	2239	1051	604	390	272	201	154	122	99	82	69
		L/240	6040	1790	755	387	224	141	94	66	48	36	28
	Triple	ϕW_n	2690	1288	746	484	339	250	192	152	123	102	86
		L/240	4734	1403	592	303	175	110	74	52	38	28	22
16	Single	ϕW_n	2993	1330	748	479	333	244	187	148	120	99	83
		L/240	3122	925	390	200	116	73	49	34	25	19	14
	Double	ϕW_n	2775	1302	748	483	337	249	191	151	122	101	85
		L/240	7521	2228	940	481	279	175	118	83	60	45	35
	Triple	ϕW_n	3335	1596	924	599	419	310	238	188	153	126	106
		L/240	5895	1747	737	377	218	137	92	65	47	35	27

Note:

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

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