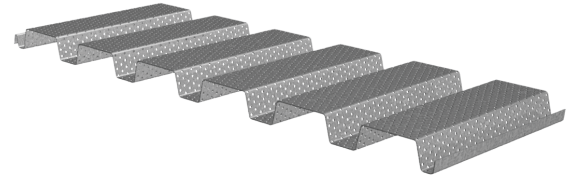


PLB™-36/HSB®-36 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

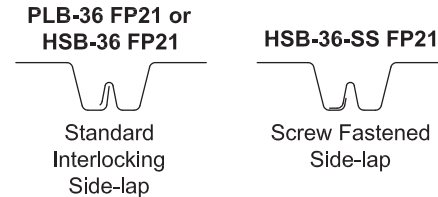
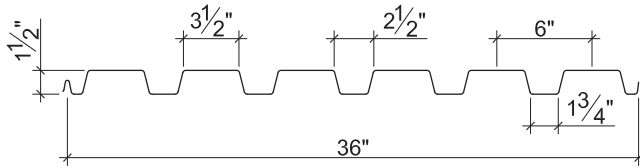
ASD

21% OPEN FULLY PERFORATED B ROOF DECKS

- PLB-36 FP21 Deck used with PunchLok® II System
- HSB-36 FP21 Deck used with TSWs or BPs
- HSB-36-SS FP21 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 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)	
22	1.5	0.0299	50	0.118	0.120	0.078	0.083	1478
20	1.8	0.0359	50	0.143	0.143	0.102	0.105	1771
18	2.3	0.0478	50	0.190	0.190	0.139	0.147	2344
16	2.8	0.0598	50	0.236	0.236	0.177	0.182	2916

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	794	873	1004	1086	1544	1655	787	847	949	1012	1835	1976
20	1118	1224	1404	1514	2171	2320	1177	1264	1409	1498	2618	2812
18	1901	2073	2360	2534	3687	3921	2178	2327	2575	2725	4529	4842
16	2874	3121	3535	3780	5568	5897	3487	3710	4083	4303	6918	7366

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 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
- Acoustical Insulation
- Web Perforated Acoustical Versions
- HSB-30-NS FP21 Deck used with Side-lap screws

PLB™-36/HSB®-36 FULLY PERFORATED ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP21

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	389	173	97	62	43	32	24	19	16	13	11
		L/240	---	---	---	62	36	23	15	11	8	6	4
	Double	W_n / Ω	391	179	102	66	46	34	26	20	17	14	11
		L/240	---	---	---	---	---	---	---	---	---	---	11
	Triple	W_n / Ω	477	222	127	82	57	42	32	25	21	17	14
		L/240	---	---	---	---	---	---	29	20	15	11	8
20	Single	W_n / Ω	509	226	127	81	57	42	32	25	20	17	14
		L/240	---	---	---	75	43	27	18	13	9	7	5
	Double	W_n / Ω	492	226	129	83	58	43	33	26	21	17	15
		L/240	---	---	---	---	---	---	---	---	---	17	13
	Triple	W_n / Ω	599	279	160	103	72	53	41	32	26	22	18
		L/240	---	---	---	---	---	52	35	24	18	13	10
18	Single	W_n / Ω	693	308	173	111	77	57	43	34	28	23	19
		L/240	---	---	---	100	58	36	24	17	12	9	7
	Double	W_n / Ω	684	316	180	116	81	60	46	36	29	24	20
		L/240	---	---	---	---	---	---	---	---	---	23	17
	Triple	W_n / Ω	831	389	223	144	101	74	57	45	37	30	25
		L/240	---	---	---	---	---	69	46	32	24	18	14
16	Single	W_n / Ω	884	393	221	141	98	72	55	44	35	29	25
		L/240	---	---	---	124	72	45	30	21	15	12	9
	Double	W_n / Ω	846	391	223	144	100	74	56	45	36	30	25
		L/240	---	---	---	---	---	---	---	---	---	28	22
	Triple	W_n / Ω	1028	482	276	178	125	92	70	56	45	37	31
		L/240	---	---	---	---	---	85	57	40	29	22	17

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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