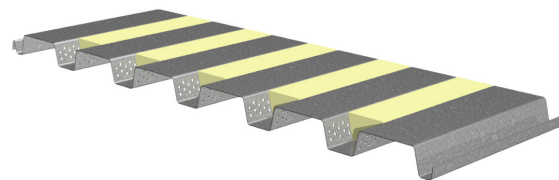


PLB™-36/HSB®-36 ACOUSTICAL ROOF DECKS GRADE 50 STEEL

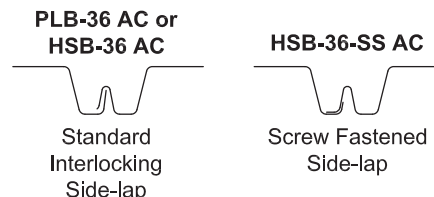
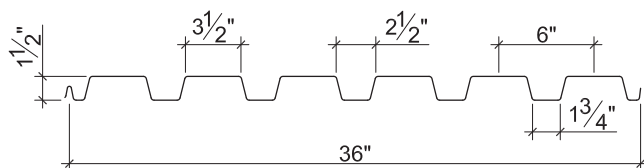
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B ACOUSTICAL ROOF DECKS

- 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 $I_d = (2I_e + I_g)/3$		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	1.9	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						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	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

PLB™-36/HSB®-36 ACOUSTICAL ROOF DECKS

GRADE 50 STEEL

ASD

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	---	---	---	---	107	67	45	32	23	17	13
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	---	---	---	---	129	81	54	38	28	21	16
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	---	---	---	295	171	108	72	51	37	28	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.

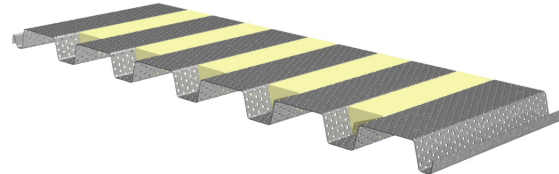
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PLB™-36/HSB®-36 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

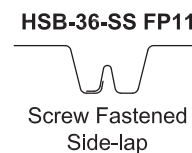
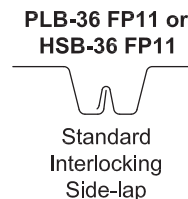
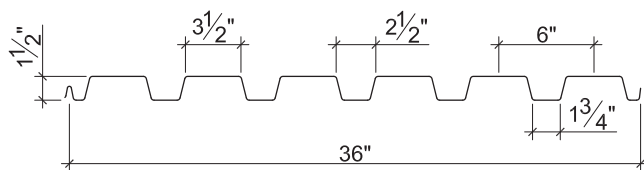
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11% OPEN FULLY PERFORATED B ROOF DECKS

- PLB-36 FP11 Deck used with PunchLok® II System
- HSB-36 FP11 Deck used with TSWs or BPs
- HSB-36-SS FP11 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	1.7	0.0299	50	0.141	0.145	0.098	0.105	1991
20	2.0	0.0359	50	0.173	0.175	0.128	0.132	2385
18	2.6	0.0478	50	0.231	0.231	0.175	0.185	3158
16	3.1	0.0598	50	0.287	0.287	0.223	0.229	3927

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	824	906	1043	1127	1552	1663	844	909	1018	1085	1888	2033
20	1155	1266	1451	1565	2181	2330	1252	1344	1498	1593	2685	2884
18	1955	2131	2427	2605	3702	3936	2291	2446	2708	2865	4628	4947
16	2945	3198	3623	3873	5587	5918	3642	3874	4263	4493	7050	7506

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
- Web Perforated Acoustical Versions
- HSB-30-NS FP11 Deck used with Side-lap screws

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

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP11

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	489	217	122	78	54	40	31	24	20	16	14
		$L/240$	---	---	---	74	43	27	18	13	9	7	5
	Double	W_n / Ω	498	228	129	83	58	43	33	26	21	17	15
		$L/240$	---	---	---	---	---	---	---	---	---	17	13
	Triple	W_n / Ω	610	282	161	104	72	53	41	32	26	22	18
		$L/240$	---	---	---	---	---	52	35	25	18	13	10
20	Single	W_n / Ω	638	284	160	102	71	52	40	32	26	21	18
		$L/240$	---	---	---	91	53	33	22	16	11	9	7
	Double	W_n / Ω	623	285	162	104	73	54	41	32	26	22	18
		$L/240$	---	---	---	---	---	---	---	---	---	21	16
	Triple	W_n / Ω	761	353	202	130	91	67	51	40	33	27	23
		$L/240$	---	---	---	---	---	63	42	30	22	16	13
18	Single	W_n / Ω	873	388	218	140	97	71	55	43	35	29	24
		$L/240$	---	---	---	121	70	44	30	21	15	11	9
	Double	W_n / Ω	867	399	227	146	102	75	57	45	37	30	26
		$L/240$	---	---	---	---	---	---	---	---	36	27	21
	Triple	W_n / Ω	1057	492	282	182	127	93	72	57	46	38	32
		$L/240$	---	---	---	---	---	83	56	39	29	21	17
16	Single	W_n / Ω	1113	494	278	178	124	91	70	55	45	37	31
		$L/240$	---	---	---	151	87	55	37	26	19	14	11
	Double	W_n / Ω	1074	493	281	181	126	93	71	56	46	38	32
		$L/240$	---	---	---	---	---	---	---	---	45	34	26
	Triple	W_n / Ω	1309	609	349	225	157	116	89	70	57	47	40
		$L/240$	---	---	---	---	---	104	69	49	36	27	21

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.

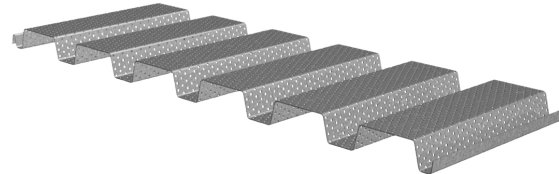
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PLB™-36/HSB®-36 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

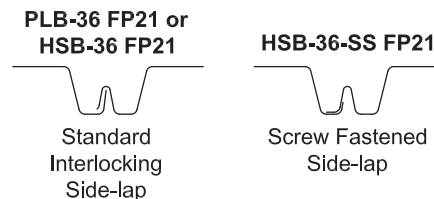
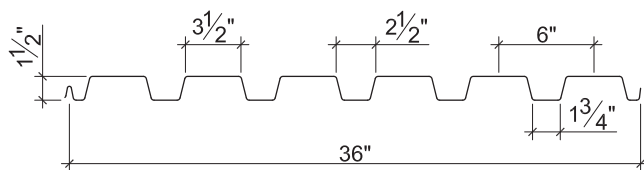
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21% OPEN FULLY PERFORATED B ROOF DECKS

- 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	9
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.

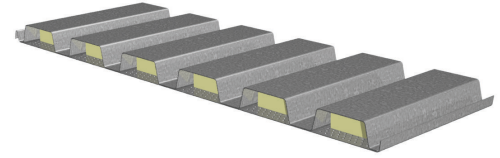
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PLBCD/HSBCD/BCD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

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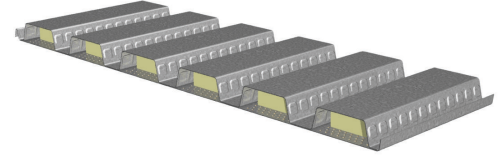
B CELLULAR ACOUSTICAL ROOF DECK

- PLBCD-36 AC Deck used with PunchLok® II System
- HSBCD-36 AC Deck used with TSWs or BPs

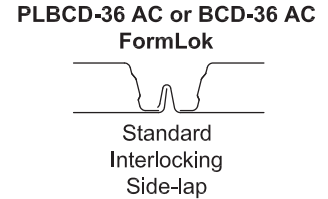
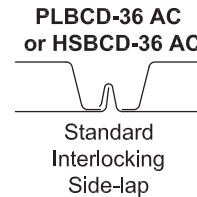
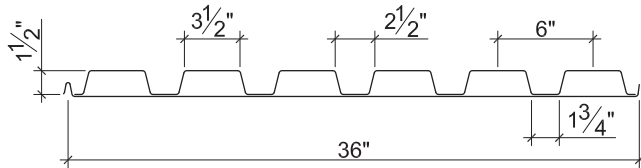


B CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLBCD-36 AC FormLok Deck used with PunchLok® II System
- BCD-36 AC FormLok Deck used with TSWs or BPs



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)	Vertical Shear V_n/Ω	
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)		End	Interior
20/20	3.6	0.0359/0.0359	50	0.405	0.365	0.277	0.382	3220	349	602
20/18	4.1	0.0359/0.0478	50	0.442	0.422	0.285	0.428	3220	325	458
18/20	4.1	0.0478/0.0359	50	0.520	0.450	0.414	0.453	4264	380	705
18/18	4.6	0.0478/0.0478	50	0.570	0.511	0.425	0.552	4264	531	806
18/16	5.1	0.0478/0.0598	50	0.614	0.578	0.434	0.575	4264	502	653
16/18	5.3	0.0598/0.0478	50	0.684	0.598	0.583	0.629	5302	566	898
16/16	5.8	0.0598/0.0598	50	0.737	0.670	0.595	0.700	5302	736	1008

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"
20/XX	1188	1301	1492	1609	2189	2339	1316	1413	1575	1675	2743	2946
18/XX	2001	2182	2485	2667	3714	3949	2388	2550	2822	2986	4713	5038
16/XX	3006	3264	3698	3954	5604	5935	3775	4015	4419	4657	7164	7627

Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 7'-6" to 30'-0"
- IAPMO UES ER-2018, UL, and FM Listed
- Tables conform to ANSI/SDI RD-2017 and C-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Sheet Lengths > 30'-0"
 - Alternative metallic finishes

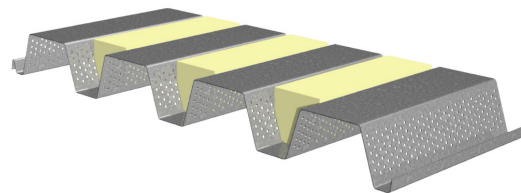
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PLN3™-32/HSN3™-32 ACOUSTICAL ROOF DECKS GRADE 50 STEEL

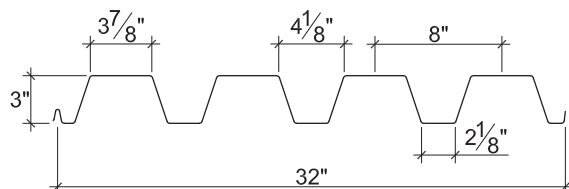
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N3 ACOUSTICAL ROOF DECKS

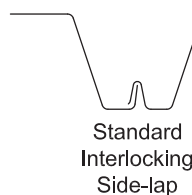
- PLN3-32 AC Deck used with PunchLok® II System
- HSN3-32 AC Deck used with TSWs or BPs
- HSN3-32-NS AC Deck used with Side-lap Screws
- HSN3-32-SS AC Deck used with Side-lap Screws



Nominal Dimensions



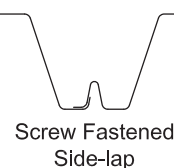
PLN3-32 AC or HSN3-32 AC



HSN3-32-NS AC



HSN3-32-SS AC



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	2.0	0.0299	50	0.674	0.737	0.321	0.374	1901
20	2.4	0.0359	50	0.833	0.894	0.414	0.471	3120
18	3.1	0.0478	50	1.154	1.195	0.620	0.672	5526
16	3.9	0.0598	50	1.475	1.491	0.821	0.870	7373

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	542	596	685	761	1234	1440	499	537	602	656	1409	1662
20	769	842	966	1069	1730	2144	762	818	912	991	2016	2534
18	1323	1442	1642	1811	2930	3669	1445	1543	1708	1847	3502	4455
16	2015	2188	2479	2724	4414	5477	2349	2499	2751	2962	5359	6762

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

PLN3™-32/HSN3™-32 ACOUSTICAL ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	401	178	100	79	64	53	45	33	25	20	16
		L/240	---	---	86	61	44	33	26	16	11	8	6
	Double	W_n / Ω	398	192	111	89	72	60	51	38	29	23	19
		L/240	---	---	---	---	---	---	---	---	28	20	15
	Triple	W_n / Ω	470	233	137	109	89	74	63	47			
		L/240	---	---	---	---	---	69	53	33			
20	Single	W_n / Ω	516	230	129	102	83	68	57	42	32	26	21
		L/240	---	---	107	75	55	41	32	20	13	9	7
	Double	W_n / Ω	532	249	143	114	92	77	65	48	36	29	23
		L/240	---	---	---	---	---	---	---	---	34	24	18
	Triple	W_n / Ω	640	306	177	141	115	95	80	59			
		L/240	---	---	---	---	111	83	64	40			
18	Single	W_n / Ω	773	344	193	153	124	102	86	63	48	38	31
		L/240	---	---	148	104	76	57	44	28	18	13	9
	Double	W_n / Ω	784	361	206	163	133	110	92	68	52	41	33
		L/240	---	---	---	---	---	---	---	---	46	32	24
	Triple	W_n / Ω	954	446	255	203	165	137	115	85			
		L/240	---	---	---	---	148	111	86	54			
16	Single	W_n / Ω	1024	455	256	202	164	135	114	84	64	51	41
		L/240	---	448	189	133	97	73	56	35	24	17	12
	Double	W_n / Ω	1019	468	267	212	172	142	120	88	68	53	43
		L/240	---	---	---	---	---	---	---	86	57	40	29
	Triple	W_n / Ω	1241	578	331	263	214	177	149	110			
		L/240	---	---	---	253	185	139	107	67			

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.

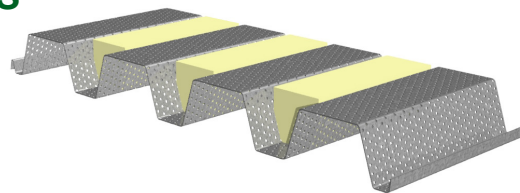
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PLN3™-32/HSN3™-32 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

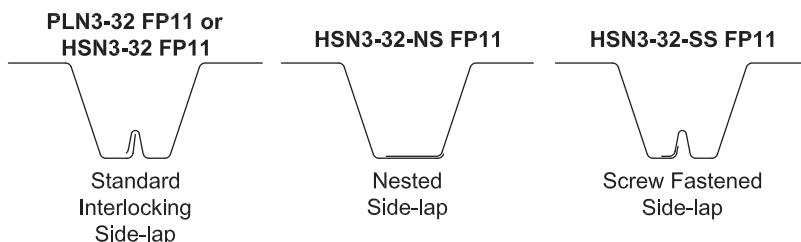
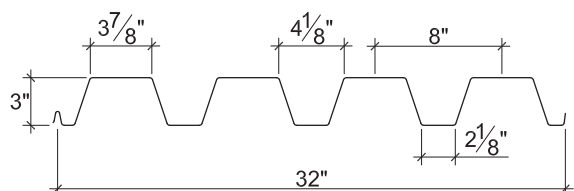
ASD

11% OPEN FULLY PERFORATED N3 ROOF DECKS

- PLN3-32 FP11 Deck used with PunchLok® II System
- HSN3-32 FP11 Deck used with TSWs or BPs
- HSN3-32-NS FP11 Deck used with Side-lap Screws
- HSN3-32-SS FP11 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	1.8	0.0299	50	0.577	0.603	0.197	0.226	1738
20	2.1	0.0359	50	0.706	0.724	0.252	0.284	2853
18	2.8	0.0478	50	0.958	0.961	0.374	0.403	5054
16	3.5	0.0598	50	1.199	1.199	0.493	0.520	6746

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	533	586	674	748	1231	1437	482	519	581	633	1391	1641
20	757	830	951	1054	1727	2140	739	793	884	961	1993	2506
18	1307	1424	1622	1789	2925	3663	1411	1507	1668	1804	3469	4414
16	1993	2165	2453	2695	4408	5470	2303	2450	2696	2904	5315	6707

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
- Web Perforated Acoustical Versions

PLN3™-32/HSN3™-32 FULLY PERFORATED ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP11

Deck Gage	Spans	Criteria	Span (ft.-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	246	109	61	49	39	33	27	20	15	12	10
		$L/240$	---	---	---	---	38	28	22	14	9	6	5
	Double	W_n / Ω	261	121	69	55	45	37	31	23	18	14	11
		$L/240$	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	317	149	86	68	55	46	39	29			
		$L/240$	---	---	---	---	---	---	---	27			
20	Single	W_n / Ω	314	140	79	62	50	42	35	26	20	16	13
		$L/240$	---	---	---	---	46	35	27	17	11	8	6
	Double	W_n / Ω	338	154	88	69	56	47	39	29	22	17	14
		$L/240$	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	415	191	109	86	70	58	49	36			
		$L/240$	---	---	---	---	---	---	---	33			
18	Single	W_n / Ω	466	207	117	92	75	62	52	38	29	23	19
		$L/240$	---	---	---	86	63	47	36	23	15	11	8
	Double	W_n / Ω	488	220	125	99	80	66	56	41	31	25	20
		$L/240$	---	---	---	---	---	---	---	---	---	---	19
	Triple	W_n / Ω	602	274	155	123	100	83	69	51			
		$L/240$	---	---	---	---	---	---	69	43			
16	Single	W_n / Ω	615	273	154	121	98	81	68	50	38	30	25
		$L/240$	---	---	154	108	79	59	45	29	19	13	10
	Double	W_n / Ω	631	285	161	127	103	85	72	53	40	32	26
		$L/240$	---	---	---	---	---	---	---	---	---	---	24
	Triple	W_n / Ω	779	354	201	159	129	107	90	66			
		$L/240$	---	---	---	---	---	---	86	54			

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.

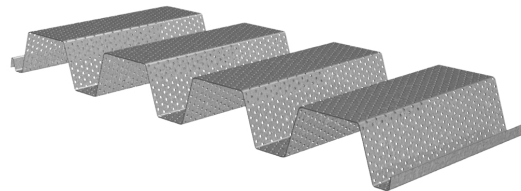
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PLN3™-32/HSN3™-32 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

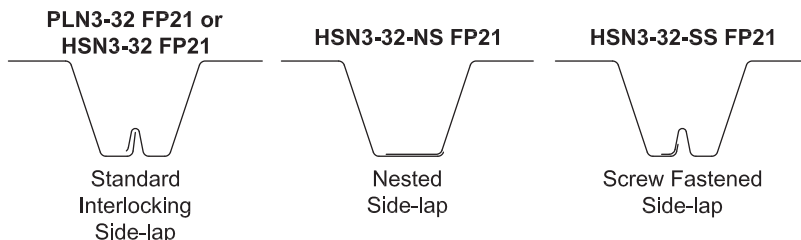
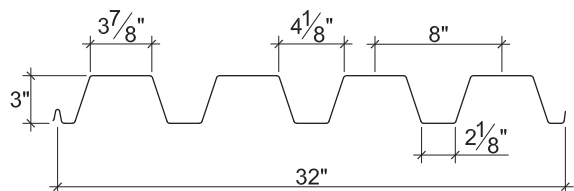
ASD

21% OPEN FULLY PERFORATED N3 ROOF DECK

- PLN3-32 FP21 Deck used with PunchLok® II System
- HSN3-32 FP21 Deck used with TSWs or BPs
- HSN3-32-NS FP21 Deck used with Side-lap Screws
- HSN3-32-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	1.6	0.0299	50	0.483	0.496	0.156	0.180	1290
20	1.9	0.0359	50	0.588	0.595	0.200	0.225	2118
18	2.4	0.0478	50	0.789	0.789	0.297	0.320	3752
16	3.1	0.0598	50	0.984	0.984	0.391	0.413	5008

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	499	548	631	701	1222	1427	418	450	504	549	1326	1564
20	715	783	898	995	1715	2126	656	704	785	853	1910	2401
18	1246	1359	1547	1707	2908	3641	1285	1372	1519	1643	3348	4260
16	1914	2078	2355	2587	4384	5441	2130	2265	2493	2685	5154	6503

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

PLN3™-32/HSN3™-32 FULLY PERFORATED ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP21

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	195	86	49	38	31	26	22	16	12	10	8
		L/240	---	---	---	---	---	24	18	12	8	5	4
	Double	W_n / Ω	206	96	55	44	35	29	25	18	14	11	9
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	249	118	68	54	44	36	31	23			
		L/240	---	---	---	---	---	---	---	22			
20	Single	W_n / Ω	249	111	62	49	40	33	28	20	16	12	10
		L/240	---	---	---	---	39	29	22	14	9	7	5
	Double	W_n / Ω	267	122	69	55	45	37	31	23	17	14	11
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	326	151	86	68	55	46	39	28			
		L/240	---	---	---	---	---	---	---	27			
18	Single	W_n / Ω	371	165	93	73	59	49	41	30	23	18	15
		L/240	---	---	---	71	52	39	30	19	13	9	6
	Double	W_n / Ω	386	175	99	78	63	53	44	32	25	20	16
		L/240	---	---	---	---	---	---	---	---	---	---	16
	Triple	W_n / Ω	475	217	123	98	79	66	55	41			
		L/240	---	---	---	---	---	---	---	36			
16	Single	W_n / Ω	488	217	122	96	78	64	54	40	30	24	20
		L/240	---	---	---	88	65	48	37	24	16	11	8
	Double	W_n / Ω	499	226	128	101	82	68	57	42	32	25	21
		L/240	---	---	---	---	---	---	---	---	---	---	19
	Triple	W_n / Ω	615	280	159	126	102	85	71	52			
		L/240	---	---	---	---	---	---	70	44			

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.

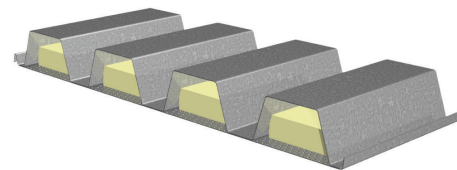
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PLN3CD/HSN3CD/N3CD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

ASD

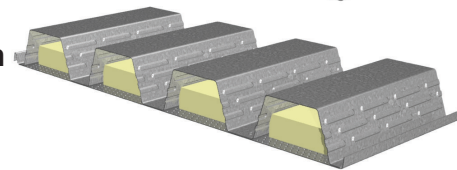
N3 CELLULAR ACOUSTICAL ROOF DECK

- PLN3CD-32 AC Deck used with PunchLok® II System
- HSN3CD-32 AC Deck used with TSWs or BPs

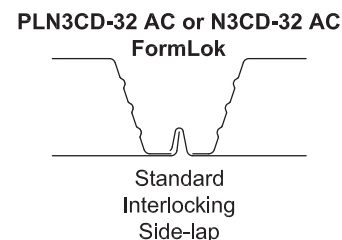
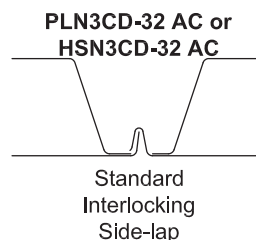
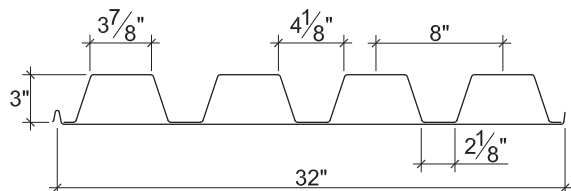


N3 CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLN3CD-32 AC FormLok Deck used with PunchLok® II System
- N3CD-32 AC FormLok Deck used with TSWs or BPs



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)	Vertical Shear V_n/Ω	
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)		End	Interior
20/20	3.9	0.0359/0.0359	50	1.530	1.335	0.507	0.709	3829	546	1186
20/18	4.4	0.0359/0.0478	50	1.664	1.532	0.505	0.801	3829	502	747
18/20	4.6	0.0478/0.0359	50	1.955	1.662	0.796	0.869	6823	603	1438
18/18	5.1	0.0478/0.0478	50	2.127	1.873	0.817	1.030	6823	830	1426
18/16	5.7	0.0478/0.0598	50	2.273	2.124	0.832	1.077	6823	777	1106
16/18	5.9	0.0598/0.0478	50	2.569	2.208	1.096	1.210	9108	895	1684
16/16	6.4	0.0598/0.0598	50	2.749	2.475	1.119	1.314	9108	1152	1734

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
20/XX	794	870	997	1104	1737	2153	811	871	971	1055	2065	2596
18/XX	1359	1481	1687	1860	2940	3682	1520	1623	1797	1943	3573	4547
16/XX	2062	2240	2537	2788	4428	5495	2453	2609	2871	3092	5455	6883

Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 7'-6" to 30'-0"
- IAPMO UES ER-2018, UL, and FM Listed
- Tables conform to ANSI/SDI RD-2017 and C-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Sheet Lengths > 30'-0"
 - Alternative metallic finishes

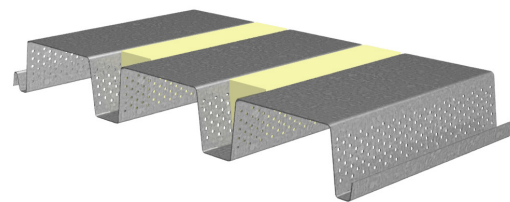
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PLN™-24/N-24 ACOUSTICAL ROOF DECKS GRADE 50 STEEL

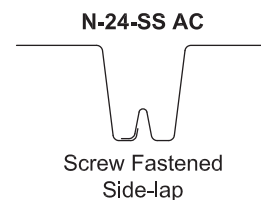
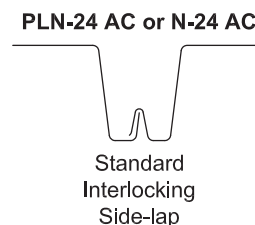
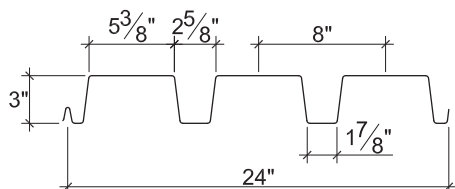
ASD

N-24 ACOUSTICAL ROOF DECKS

- PLN-24 AC Deck used with PunchLok® II System
- N-24 AC Deck used with TSWs or BPs
- N-24-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 $I_d = (2I_e + I_g)/3$		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	2.2	0.0299	50	0.692	0.813	0.317	0.403	2162
20	2.6	0.0359	50	0.859	0.979	0.411	0.498	3293
18	3.5	0.0478	50	1.202	1.300	0.609	0.692	5783
16	4.2	0.0598	50	1.560	1.620	0.784	0.860	7204

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	576	633	729	809	1294	1511	539	580	650	709	1492	1759
20	816	894	1025	1135	1815	2250	819	879	980	1066	2133	2681
18	1401	1528	1740	1919	3074	3846	1546	1652	1828	1977	3699	4704
16	2133	2317	2624	2884	4633	5740	2508	2668	2937	3163	5660	7129

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

PLN™-24/N-24 ACOUSTICAL ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	396	176	99	78	63	52	44	32	25	20	16
		L/240	---	---	89	62	45	34	26	17	11	8	6
	Double	W_n / Ω	435	208	121	96	78	65	55	40	31	25	20
		L/240	---	---	---	---	---	---	---	---	---	22	16
	Triple	W_n / Ω	515	253	148	119	97	81	68	50			
		L/240	---	---	---	---	---	76	58	37			
20	Single	W_n / Ω	513	228	128	101	82	68	57	42	32	25	21
		L/240	---	---	110	77	56	42	33	21	14	10	7
	Double	W_n / Ω	562	263	151	120	98	81	68	50	39	31	25
		L/240	---	---	---	---	---	---	---	---	38	27	19
	Triple	W_n / Ω	676	323	187	149	121	101	85	63			
		L/240	---	---	---	---	121	91	70	44			
18	Single	W_n / Ω	760	338	190	150	122	100	84	62	47	38	30
		L/240	---	---	154	108	79	59	46	29	19	14	10
	Double	W_n / Ω	809	372	212	168	137	113	95	70	54	42	34
		L/240	---	---	---	---	---	---	---	---	50	35	26
	Triple	W_n / Ω	985	460	263	209	170	141	119	87			
		L/240	---	---	---	---	161	121	93	59			
16	Single	W_n / Ω	978	435	245	193	157	129	109	80	61	48	39
		L/240	---	---	200	140	102	77	59	37	25	18	13
	Double	W_n / Ω	1005	463	264	209	170	141	118	87	67	53	43
		L/240	---	---	---	---	---	---	---	---	62	44	32
	Triple	W_n / Ω	1224	571	327	260	211	175	147	109			
		L/240	---	---	---	---	201	151	116	73			

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.

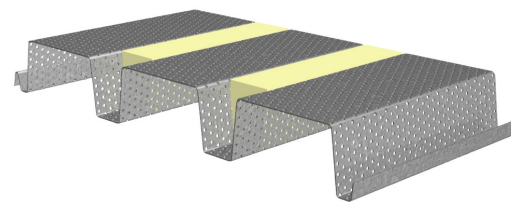
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PLN™-24/N-24 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

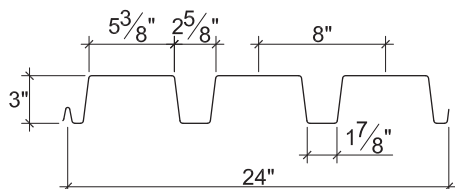
ASD

11% OPEN FULLY PERFORATED ROOF DECKS

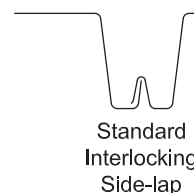
- PLN-24 FP11 Deck used with PunchLok® II System
- N-24 FP11 Deck used with TSWs or BPs
- N-24-SS FP11 Deck used with Side-lap Screws



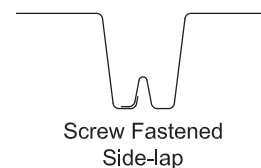
Nominal Dimensions



PLN-24 FP11 or N-24 FP11



N-24-SS FP11



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	2.0	0.0299	50	0.596	0.651	0.192	0.240	1961
20	2.3	0.0359	50	0.734	0.780	0.247	0.296	2988
18	3.1	0.0478	50	1.010	1.034	0.364	0.410	5249
16	3.7	0.0598	50	1.283	1.289	0.467	0.510	6544

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	566	622	716	795	1291	1508	520	560	627	683	1473	1736
20	804	880	1009	1118	1812	2246	794	853	951	1033	2108	2650
18	1384	1508	1718	1894	3069	3840	1509	1612	1784	1929	3664	4658
16	2110	2291	2596	2852	4627	5732	2458	2614	2877	3099	5613	7069

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
- Web Perforated Acoustical Versions

PLN™-24/N-24 FULLY PERFORATED ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP11

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	240	106	60	47	38	32	27	20	15	12	10
		$L/240$	---	---	---	---	---	29	23	14	10	7	5
	Double	W_n / Ω	280	129	74	58	47	39	33	24	19	15	12
		$L/240$	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	340	159	91	72	59	49	41	30			
		$L/240$	---	---	---	---	---	---	---	29			
20	Single	W_n / Ω	308	137	77	61	49	41	34	25	19	15	12
		$L/240$	---	---	---	---	48	36	28	18	12	8	6
	Double	W_n / Ω	353	161	91	72	59	49	41	30	23	18	15
		$L/240$	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	433	199	113	90	73	60	51	37			
		$L/240$	---	---	---	---	---	---	---	35			
18	Single	W_n / Ω	454	202	114	90	73	60	50	37	28	22	18
		$L/240$	---	---	---	---	66	50	38	24	16	11	8
	Double	W_n / Ω	497	224	127	100	81	67	57	42	32	25	20
		$L/240$	---	---	---	---	---	---	---	---	---	---	20
	Triple	W_n / Ω	614	279	158	125	102	84	71	52			
		$L/240$	---	---	---	---	---	---	---	47			
16	Single	W_n / Ω	583	259	146	115	93	77	65	48	36	29	23
		$L/240$	---	---	---	---	84	63	49	31	21	14	11
	Double	W_n / Ω	618	279	158	125	101	84	70	52	40	31	25
		$L/240$	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	763	347	197	156	126	105	88	65			
		$L/240$	---	---	---	---	---	---	---	58			

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.

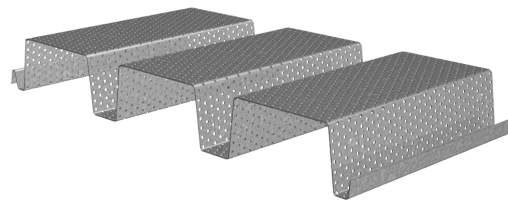
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PLN™-24/N-24 FULLY PERFORED ROOF DECKS GRADE 50 STEEL

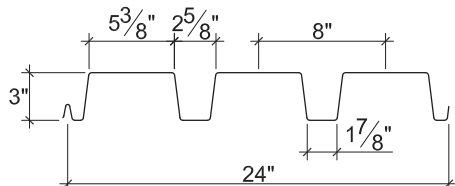
ASD

21% OPEN FULLY PERFORATED ROOF DECKS

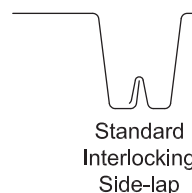
- PLN-24 FP21 Deck used with PunchLok® II System
- N-24 FP21 Deck used with TSWs or BPs
- N-24-SS FP21 Deck used with Side-lap Screws



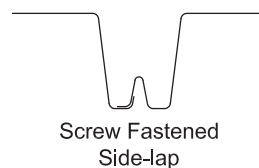
Nominal Dimensions



PLN-24 FP21 or N-24 FP21



N-24-SS FP21



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	1.7	0.0299	50	0.501	0.535	0.152	0.190	1456
20	2.1	0.0359	50	0.616	0.640	0.196	0.235	2218
18	2.8	0.0478	50	0.840	0.849	0.289	0.326	3897
16	3.3	0.0598	50	1.058	1.058	0.371	0.405	4858

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
22	532	585	673	747	1282	1497	455	490	549	599	1407	1659
20	761	834	956	1059	1800	2231	710	762	850	924	2024	2545
18	1323	1442	1642	1811	3051	3818	1382	1476	1634	1767	3542	4503
16	2029	2204	2497	2744	4603	5703	2283	2428	2673	2878	5450	6864

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

PLN™-24/N-24 FULLY PERFORATED ROOF DECKS

GRADE 50 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

FP21

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	6'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	Single	W_n / Ω	190	84	47	37	30	25	21	15	12	9	8
		L/240	---	---	---	---	---	25	19	12	8	6	4
	Double	W_n / Ω	220	102	58	46	37	31	26	19	15	12	9
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	266	125	72	57	47	39	33	24			
		L/240	---	---	---	---	---	---	---	---			
20	Single	W_n / Ω	245	109	61	48	39	32	27	20	15	12	10
		L/240	---	---	---	---	---	30	23	15	10	7	5
	Double	W_n / Ω	278	127	72	57	46	38	32	24	18	14	12
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	341	157	90	71	58	48	40	30			
		L/240	---	---	---	---	---	---	---	29			
18	Single	W_n / Ω	360	160	90	71	58	48	40	29	23	18	14
		L/240	---	---	---	---	55	41	32	20	13	9	7
	Double	W_n / Ω	393	178	101	80	65	54	45	33	25	20	16
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	485	221	126	99	81	67	56	41			
		L/240	---	---	---	---	---	---	---	38			
16	Single	W_n / Ω	463	206	116	91	74	61	51	38	29	23	19
		L/240	---	---	---	---	69	52	40	25	17	12	9
	Double	W_n / Ω	489	221	125	99	80	67	56	41	32	25	20
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	603	275	156	124	100	83	70	51			
		L/240	---	---	---	---	---	---	---	48			

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.

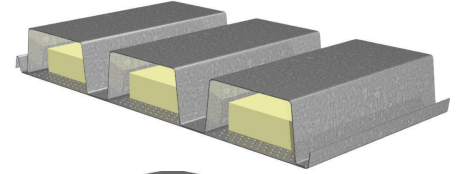
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PLNCD/NCD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

ASD

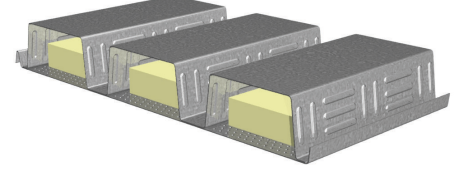
N-24 CELLULAR ACOUSTICAL ROOF DECK

- PLNCD-24 AC Deck used with PunchLok® II System
- NCD-24 AC Deck used with TSWs or BPs

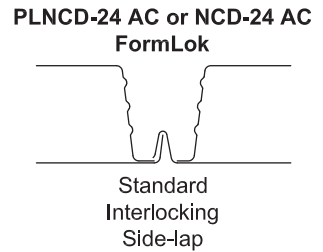
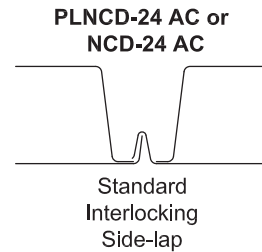
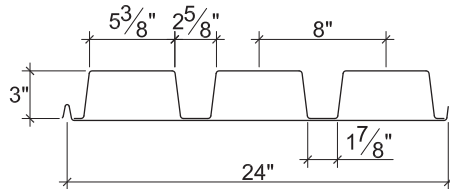


N-24 CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLNCD-24 AC FormLok Deck used with PunchLok® II System
- NCD-24 AC FormLok Deck used with TSWs or BPs



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)	Vertical Shear V_n/Ω	
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)		End	Interior
20/20	4.1	0.0359/0.0359	50	1.626	1.495	0.519	0.706	4011	574	1110
20/18	4.6	0.0359/0.0478	50	1.784	1.728	0.516	0.909	4011	533	821
18/20	4.8	0.0478/0.0359	50	2.090	1.838	0.798	0.852	7087	629	1324
18/18	5.3	0.0478/0.0478	50	2.293	2.105	0.819	1.055	7087	874	1434
18/16	5.8	0.0478/0.0598	50	2.465	2.385	0.836	1.318	7087	824	1157
16/18	6.1	0.0598/0.0478	50	2.786	2.459	1.111	1.199	8835	935	1616
16/16	6.6	0.0598/0.0598	50	3.005	2.774	1.134	1.475	8835	1213	1769

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
20/XX	840	921	1055	1169	1822	2259	867	931	1038	1128	2181	2741
18/XX	1436	1566	1783	1966	3084	3859	1619	1729	1914	2070	3769	4792
16/XX	2179	2367	2681	2946	4647	5757	2609	2775	3054	3289	5754	7247

Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 7'-6" to 30'-0"
- IAPMO UES ER-2018, UL, and FM Listed
- Tables conform to ANSI/SDI RD-2017 and C-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Sheet Lengths > 30'-0"
 - Alternative metallic finishes

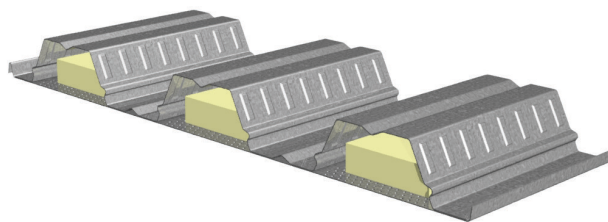
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PLW3CD/W3CD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

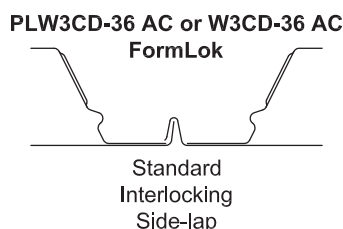
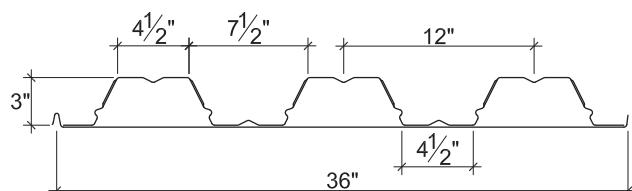
ASD

W3 CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLW3CD-36 AC FormLok Deck used with PunchLok® II System
- W3CD-36 AC FormLok Deck used with TSWs or BPs



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)	Vertical Shear V_n/Ω	
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)		End	Interior
20/20	3.6	0.0359/0.0359	50	1.425	1.124	0.542	0.608	2360	587	1225
20/18	4.0	0.0359/0.0478	50	1.528	1.226	0.542	0.640	2360	539	693
18/20	4.1	0.0478/0.0359	50	1.776	1.425	0.847	0.794	4286	649	1675
18/18	4.6	0.0478/0.0478	50	1.909	1.539	0.863	0.830	4286	892	1339
18/16	5.0	0.0478/0.0598	50	2.020	1.659	0.860	0.862	4286	834	957
16/18	5.2	0.0598/0.0478	50	2.267	1.845	1.099	1.018	6199	963	1619
16/16	5.7	0.0598/0.0598	50	2.402	1.975	1.116	1.057	6199	1238	1526

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"	4"	8"	1 1/2"	2"	3"	4"	4"	8"
20/XX	493	540	619	686	1090	1351	498	535	596	648	1286	1617
18/XX	845	922	1049	1157	1845	2310	938	1001	1108	1198	2228	2835
16/XX	1285	1395	1581	1737	2779	3449	1517	1614	1776	1913	3406	4297

Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 7'-6" to 30'-0"
- IAPMO UES ER-2018 and UL Listed
- Tables conform to ANSI/SDI RD-2017 and C-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Sheet Lengths > 30'-0"
 - Alternative metallic finishes

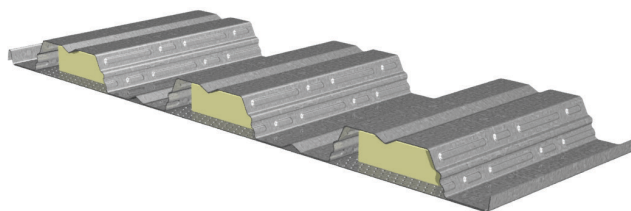
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PLW2CD/W2CD CELLULAR ACOUSTICAL DECK GRADE 50 STEEL

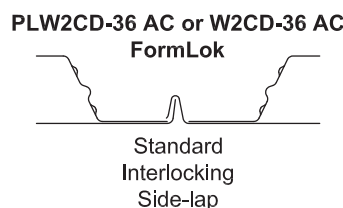
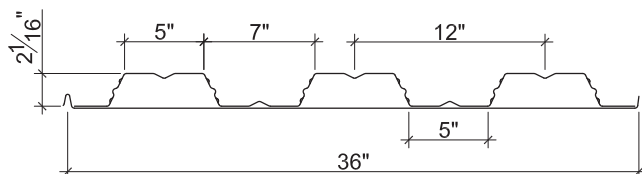
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W2 CELLULAR ACOUSTICAL FORMLOK® COMPOSITE DECK

- PLW2CD-36 AC FormLok Deck used with PunchLok® II System
- W2CD-36 AC FormLok Deck used with TSWs or BPs



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)	Vertical Shear V_n/Ω	
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)		End (lb/ft)	Interior (lb/ft)
20/20	3.4	0.036/0.0359	50	0.653	0.531	0.363	0.420	2444	414	776
20/18	3.8	0.036/0.0478	50	0.700	0.580	0.370	0.439	2444	385	470
18/20	3.9	0.047/0.0359	50	0.830	0.662	0.524	0.539	3224	453	985
18/18	4.3	0.047/0.0478	50	0.892	0.717	0.534	0.561	3224	611	844
18/16	4.8	0.047/0.0598	50	0.945	0.775	0.542	0.579	3224	574	643
16/18	4.9	0.059/0.0478	50	1.065	0.863	0.700	0.690	4034	657	1028
16/16	5.4	0.059/0.0598	50	1.129	0.926	0.711	0.712	4034	853	1026

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"	4"	6"	1 1/2"	2"	3"	4"	4"	6"
20/XX	526	577	661	732	1109	1268	560	601	670	728	1355	1565
18/XX	862	940	1071	1182	1808	2056	990	1058	1172	1267	2247	2580
16/XX	1310	1423	1613	1773	2737	3095	1594	1696	1867	2011	3439	3929

Standard Features

- ASTM A653 SS GR50 Min., with G60
- Standard lengths – 7'-6" to 30'-0"
- IAPMO UES ER-2018 and UL Listed
- Tables conform to ANSI/SDI RD-2017 and C-2017

Optional Features

- Inquire regarding cost and lead times for:
 - Sheet Lengths > 30'-0"
 - Alternative metallic finishes

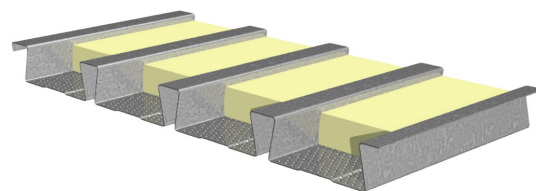
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2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

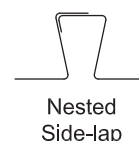
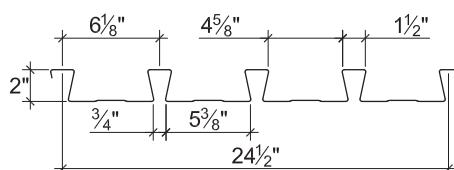
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2.0DA ACOUSTICAL DOVETAIL ROOF DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish
- FM Listed



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 $F_y = 40$ ksi		Allowable Moment		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)	M_{n+}/Ω (lb-ft/ft)	M_{n-}/Ω (lb-ft/ft)	
22	2.0	0.0295	40	0.340	0.310	0.261	0.258	521	515	2896
20	2.4	0.0358	40	0.415	0.385	0.330	0.317	659	633	3498
18	3.2	0.0474	40	0.551	0.528	0.445	0.427	888	852	4584
16	4.0	0.0598	40	0.697	0.684	0.564	0.546	1126	1090	5723

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"	5"	1 1/2"	2"	3"	4"	3"	5"
22	653	717	826	917	1281	1516	702	757	848	925	1567	1877
20	931	1020	1170	1296	1823	2146	1058	1136	1266	1376	2258	2690
18	1556	1697	1933	2132	3036	3544	1893	2023	2239	2422	3813	4507
16	2378	2582	2926	3215	4629	5360	3043	3237	3563	3837	5866	6880

Standard Features

- ASTM A653 SS GR 40 Min. with G90
- Standard lengths – 6'-0" to 42'-0"
- Tables conform to ANSI/SDI RD-2017
- IAPMO UES ER-423 and FM Listed

Optional Features

- Inquire regarding cost and lead times for:
 - 19 gage
 - Short cuts < 6'-0"
 - Alternative metallic and painted finishes

2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"
22	Single	W_n / Ω	260	167	116	85	65	51	42	34	29	25	21
		$L/240$	---	---	103	65	44	31	22	17	13	10	8
	Double	W_n / Ω	251	162	113	83	64	51	41	34	29	24	21
		$L/240$	---	---	---	---	---	---	---	---	28	22	18
	Triple	W_n / Ω	311	201	141	104	80	63	51	42	36	30	26
		$L/240$	---	---	---	---	75	53	38	29	22	17	14
20	Single	W_n / Ω	329	211	146	108	82	65	53	44	37	31	27
		$L/240$	---	---	126	79	53	37	27	20	16	12	10
	Double	W_n / Ω	309	199	139	102	79	62	50	42	35	30	26
		$L/240$	---	---	---	---	---	---	---	---	---	28	22
	Triple	W_n / Ω	382	247	173	128	98	78	63	52	44	37	32
		$L/240$	---	---	---	---	93	65	48	36	28	22	17
18	Single	W_n / Ω	444	284	197	145	111	88	71	59	49	42	36
		$L/240$	---	---	167	105	71	50	36	27	21	16	13
	Double	W_n / Ω	415	268	187	138	106	84	68	56	47	40	35
		$L/240$	---	---	---	---	---	---	---	---	---	38	30
	Triple	W_n / Ω	513	333	233	172	132	104	85	70	59	50	43
		$L/240$	---	---	---	---	128	90	65	49	38	30	24
16	Single	W_n / Ω	563	360	250	184	141	111	90	74	63	53	46
		$L/240$	---	---	212	133	89	63	46	34	26	21	17
	Double	W_n / Ω	530	343	239	176	135	107	87	72	60	51	44
		$L/240$	---	---	---	---	---	---	---	---	---	49	39
	Triple	W_n / Ω	655	425	297	220	169	133	108	90	75	64	55
		$L/240$	---	---	---	---	165	116	85	64	49	39	31

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.

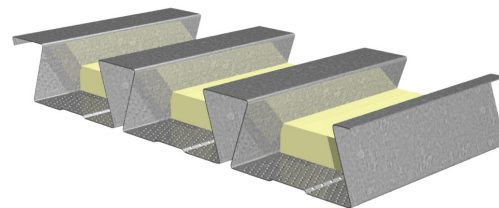
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3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

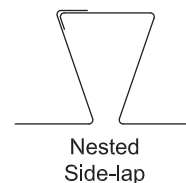
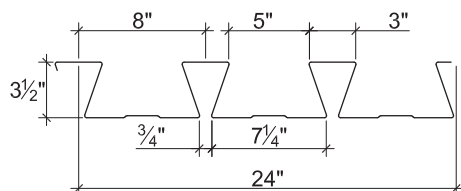
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3.5DA ACOUSTICAL DOVETAIL ROOF DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish
- FM Listed



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 $F_y = 40$ ksi		Allowable Moment		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)	$M_n +/\Omega$ (lb-ft/ft)	$M_n -/\Omega$ (lb-ft/ft)	
20	3.1	0.0358	40	1.531	1.430	0.655	0.657	1307	1311	3435
18	4.1	0.0474	40	2.098	1.950	0.934	0.928	1864	1852	6012
16	5.1	0.0598	40	2.719	2.533	1.255	1.241	2505	2477	8313

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	
	2"	3"	4"	5"	4"	6"	2"	3"	4"	5"	4"	6"
20	693	794	880	955	1459	1670	714	796	865	926	1724	1991
18	1168	1330	1467	1588	2422	2753	1310	1450	1568	1672	2927	3360
16	1793	2032	2233	2410	3681	4162	2137	2352	2533	2693	4515	5157

Standard Features

- ASTM A653 SS GR 40 Min. with G90
- Standard lengths – 6'-0" to 42'-0"
- Tables conform to ANSI/SDI RD-2017
- IAPMO UES ER-423 and FM Listed

Optional Features

- Inquire regarding cost and lead times for:
 - 19 gage
 - Short cuts < 6'-0"
 - Alternative metallic and painted finishes

3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

ASD

Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"
20	Single	W_n / Ω	86	73	62	53	46	41	36	32	29	26	24
		L/240	75	58	46	37	30	25	20	17	15	13	11
	Double	W_n / Ω	85	72	61	53	46	41	36	32	29	26	24
		L/240	---	---	---	---	---	---	---	---	---	---	---
	Triple	W_n / Ω	106	89	76	66							
		L/240	---	---	---	65							
18	Single	W_n / Ω	123	104	88	76	66	58	52	46	41	37	34
		L/240	103	80	63	50	41	34	28	24	20	17	15
	Double	W_n / Ω	121	102	87	75	66	58	51	46	41	37	34
		L/240	---	---	---	---	---	---	---	---	---	---	33
	Triple	W_n / Ω	151	127	109	94							
		L/240	---	---	---	88							
16	Single	W_n / Ω	166	139	119	102	89	78	69	62	56	50	45
		L/240	134	103	81	65	53	44	36	31	26	22	19
	Double	W_n / Ω	162	137	117	101	88	77	68	61	55	49	45
		L/240	---	---	---	---	---	---	---	---	---	---	43
	Triple	W_n / Ω	202	170	145	125							
		L/240	---	---	143	114							

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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