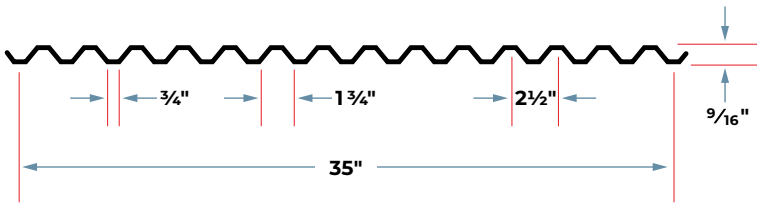


9/16" FORM DECK

GRADE 80 STEEL



Section Properties

Gage	Design Thickness (inches)	Weight (psf)	F _y (ksi)	S _e + (inch ³) per foot	S _e - (inch ³) per foot	ASD (Ω = 1.67)		I _d + (inch ⁴) per ft.	I _d - (inch ⁴) per ft.
						M _p /Ω (inch-lbs per ft)	M _n /Ω (inch-lbs per ft)		
28	0.0149	0.7	60	0.034	0.036	1239	1304	0.012	0.012
26	0.0179	0.9	60	0.045	0.047	1599	1683	0.015	0.015
24	0.0239	1.2	60	0.065	0.068	2348	2433	0.021	0.021
22	0.0295	1.4	60	0.084	0.084	3024	3024	0.024	0.024

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Shear and Web Crippling

Gage	V _n /Ω (lbs/ft)	Web Crippling (R _n /Ω), lbs/ft One Flange Loading End Bearing			Web Crippling (R _n /Ω), lbs/ft One Flange Loading Interior Bearing		
		1-1/2"	2"	3"	1-1/2"	2"	3"
		28	2191	670	744	869	721
26	2686	934	1034	1203	1058	1157	1324
24	3551	1570	1732	2002	1902	2071	2354
22	4384	2291	2519	2900	2890	3135	3546

Note

All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016

Allowable Uniform Downward Loads, ASD (PSF)

Span	Gage	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"
Single	28	826	367	207	132	92	67	52	41	33	27	23
	26	1066	474	266	171	118	87	67	53	43	35	30
	24	1565	696	391	250	174	128	98	77	63	52	43
	22	2016	896	504	323	224	165	126	100	81	67	56
Double	28	870	387	217	139	97	71	54	43	35	29	24
	26	1122	499	280	179	125	92	70	55	45	37	31
	24	1622	721	405	260	180	132	101	80	65	54	45
	22	2016	896	504	323	224	165	126	100	81	67	56
Triple	28	1087	483	272	174	121	89	68	54	43	36	30
	26	1402	623	351	224	156	114	88	69	56	46	39
	24	2027	901	507	324	225	165	127	100	81	67	56
	22	2520	1120	630	403	280	206	158	124	101	83	70

Allowable Uniform Upward Loads, ASD (PSF)

Span	Gage	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"
Single	28	870	387	217	139	97	71	54	43	35	29	24
	26	1122	499	280	179	125	92	70	55	45	37	31
	24	1622	721	405	260	180	132	101	80	65	54	45
	22	2016	896	504	323	224	165	126	100	81	67	56
Double	28	826	367	207	132	92	67	52	41	33	27	23
	26	1066	474	266	171	118	87	67	53	43	35	30
	24	1565	696	391	250	174	128	98	77	63	52	43
	22	2016	896	504	323	224	165	126	100	81	67	56
Triple	28	1033	459	258	165	115	84	65	51	41	34	29
	26	1332	592	333	213	148	109	83	66	53	44	37
	24	1957	870	489	313	217	160	122	97	78	65	54
	22	2520	1120	630	403	280	206	158	124	101	83	70

Notes

- All section properties and ASD ($\Omega = 1.67$) uniform loads are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016
- Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
- Bending Moment formulae used for flexural stress limitations are: Simple and Two Span $M = \frac{wL^2}{8}$ Three Span or More $M = \frac{wL^2}{10}$
- Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Uniform Superimposed Service Load that Causes L/240 Deflection (PSF)

Span	Gage	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"
Single	28	743	220	93	48	28	17	12	8	6	4	3
	26	923	273	115	59	34	22	14	10	7	6	4
	24	1351	400	169	86	50	32	21	15	11	8	6
	22	1576	467	197	101	58	37	25	17	13	9	7
Double	28	1788	530	224	114	66	42	28	20	14	11	8
	26	2222	658	278	142	82	52	35	24	18	13	10
	24	3252	963	406	208	120	76	51	36	26	20	15
	22	3794	1124	474	243	141	88	59	42	30	23	18
Triple	28	1400	415	175	90	52	33	22	15	11	8	6
	26	1739	515	217	111	64	41	27	19	14	10	8
	24	2545	754	318	163	94	59	40	28	20	15	12
	22	2969	880	371	190	110	69	46	33	24	18	14

Note

For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.5. For loads that cause L/360 Deflection, multiply by 0.667.

Construction Span Table – 20 psf Construction Load

Total Slab Depth	Normal Weight Concrete (145 pcf)			
	Deck Type	Maximum Unshored Clear Span		
		1 span	2 span	3 span
2.50 (t=1.94) 27 PSF	9/16x2.5x28 ga	2'-3	2'-9	2'-8
	9/16x2.5x26 ga	2'-10	3'-4	3'-4
	9/16x2.5x24 ga	3'-10	4'-7	4'-7
	9/16x2.5x22 ga	4'-3	5'-7	5'-3
3.00 (t=2.44) 33 PSF	9/16x2.5x28 ga	2'-2	2'-8	2'-7
	9/16x2.5x26 ga	2'-9	3'-3	3'-3
	9/16x2.5x24 ga	3'-8	4'-4	4'-4
	9/16x2.5x22 ga	3'-11	5'-3	4'-11
3.50 (t=2.94) 39 PSF	9/16x2.5x28 ga	2'-2	2'-7	2'-6
	9/16x2.5x26 ga	2'-8	3'-2	3'-1
	9/16x2.5x24 ga	3'-7	4'-2	4'-2
	9/16x2.5x22 ga	3'-9	5'-0	4'-8
4.00 (t=3.44) 45 PSF	9/16x2.5x28 ga	2'-1	2'-6	2'-6
	9/16x2.5x26 ga	2'-7	3'-0	3'-0
	9/16x2.5x24 ga	3'-5	4'-1	4'-1
	9/16x2.5x22 ga	3'-7	4'-9	4'-5
4.50 (t=3.94) 51 PSF	9/16x2.5x28 ga	2'-0	2'-5	2'-5
	9/16x2.5x26 ga	2'-6	2'-11	2'-11
	9/16x2.5x24 ga	3'-3	3'-11	3'-11
	9/16x2.5x22 ga	3'-5	4'-7	4'-3
5.00 (t=4.44) 57 PSF	9/16x2.5x28 ga	1'-12	2'-4	2'-4
	9/16x2.5x26 ga	2'-5	2'-10	2'-10
	9/16x2.5x24 ga	3'-2	3'-10	3'-10
	9/16x2.5x22 ga	3'-4	4'-5	4'-1

Total Slab Depth	Lightweight Concrete (115 pcf)			
	Deck Type	Maximum Unshored Clear Span		
		1 span	2 span	3 span
2.50 (t=1.94) 20 PSF	9/16x2.5x28 ga	2'-10	3'-5	3'-4
	9/16x2.5x26 ga	3'-6	4'-2	4'-2
	9/16x2.5x24 ga	4'-5	5'-8	5'-6
	9/16x2.5x22 ga	4'-8	6'-3	5'-9
3.00 (t=2.44) 25 PSF	9/16x2.5x28 ga	2'-9	3'-3	3'-3
	9/16x2.5x26 ga	3'-4	4'-0	4'-0
	9/16x2.5x24 ga	4'-2	5'-4	5'-1
	9/16x2.5x22 ga	4'-4	5'-10	5'-4
3.50 (t=2.94) 30 PSF	9/16x2.5x28 ga	3'-3	3'-10	3'-10
	9/16x2.5x26 ga	3'-3	3'-10	3'-10
	9/16x2.5x24 ga	3'-11	5'-1	4'-10
	9/16x2.5x22 ga	4'-1	5'-6	5'-0
4.00 (t=3.44) 34 PSF	9/16x2.5x28 ga	2'-7	3'-1	3'-1
	9/16x2.5x26 ga	3'-2	3'-9	3'-9
	9/16x2.5x24 ga	3'-9	4'-11	4'-8
	9/16x2.5x22 ga	3'-11	5'-3	4'-10
4.50 (t=3.94) 39 PSF	9/16x2.5x28 ga	2'-6	3'-0	3'-0
	9/16x2.5x26 ga	3'-0	3'-7	3'-7
	9/16x2.5x24 ga	3'-7	4'-9	4'-5
	9/16x2.5x22 ga	3'-9	5'-0	4'-8
5.00 (t=4.44) 43 PSF	9/16x2.5x28 ga	2'-5	2'-11	2'-11
	9/16x2.5x26 ga	3'-0	3'-6	3'-6
	9/16x2.5x24 ga	3'-6	4'-7	4'-3
	9/16x2.5x22 ga	3'-8	4'-10	4'-6

Note
Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

