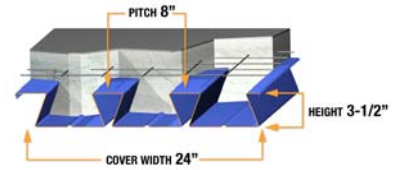


SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I <sub>b</sub>	Sp	Sn	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
20	3.33	1.959	0.767	0.820	909	1042	1154	1916	2061	2193
18	4.40	2.664	1.109	1.190	1534	1748	1928	3186	3415	3622
16	5.54	3.394	1.504	1.540	2362	2676	2940	4851	5184	5485



		MAXIMUM SUPERIMPOSED ASD LOADS, (psf), NO STUDS ON BEAMS											
h (Wc)		5.5 (55.9)			5.75 (58.9)			6 (61.9)			6.25 (64.9)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	142	216	213	151	229	227	160	248	234	168	268	238
	D+L (Deflection)	142	216	213	151	229	227	160	248	234	168	268	238
	L (Deflection)	142	216	213	151	229	227	160	248	234	168	268	238
14'-0"	D+L (Strength)	118	176	162	125	187	170	133	202	173	140	219	173
	D+L (Deflection)	118	176	162	125	187	170	133	202	173	140	219	173
	L (Deflection)	118	176	162	125	187	170	133	202	173	140	219	173
15'-0"	D+L (Strength)	99	144	183	105	152	174	111	166	185	117	180	200
	D+L (Deflection)	99	144	183	105	152	174	111	166	185	117	180	200
	L (Deflection)	99	144	183	105	152	174	111	166	185	117	180	200
16'-0"	D+L (Strength)	83	117	151	88	124	143	93	136	152	99	147	165
	D+L (Deflection)	83	117	151	88	124	143	93	136	152	99	147	165
	L (Deflection)	83	117	151	88	124	143	93	136	152	99	147	165
17'-0"	D+L (Strength)	70	95	125	75	101	118	79	111	125	84	121	136
	D+L (Deflection)	70	95	125	75	101	118	79	111	125	84	121	136
	L (Deflection)	70	95	125	75	101	118	79	111	125	84	121	136
18'-0"	D+L (Strength)	59	77	103	63	82	96	67	90	103	71	98	112
	D+L (Deflection)	59	77	103	63	82	96	67	90	103	71	98	112
	L (Deflection)	59	77	103	63	82	96	67	90	103	71	98	112
19'-0"	D+L (Strength)	47	61	85	53	65	78	57	72	83	60	79	91
	D+L (Deflection)	47	61	85	53	65	78	57	72	83	60	79	91
	L (Deflection)	47	61	85	53	65	78	57	72	83	60	79	91
20'-0"	D+L (Strength)	36	48	69	40	51	63	45	57	67	51	63	74
	D+L (Deflection)	36	48	69	40	51	63	45	57	67	51	63	74
	L (Deflection)	36	48	69	40	51	63	45	57	67	51	63	74
21'-0"	D+L (Strength)	25	36	56	29	39	49	33	44	53	38	49	59
	D+L (Deflection)	25	36	56	29	39	49	33	44	53	38	49	59
	L (Deflection)	25	36	56	29	39	49	33	44	53	38	49	59
22'-0"	D+L (Strength)	17	26	44	20	29	38	23	33	41	27	37	46
	D+L (Deflection)	17	26	44	20	29	38	23	33	41	27	37	46
	L (Deflection)	17	26	44	20	29	38	23	33	41	27	37	46
23'-0"	D+L (Strength)	9	18	34	11	19	28	14	23	30	17	27	34
	D+L (Deflection)	9	18	34	11	19	28	14	23	30	17	27	34
	L (Deflection)	9	18	34	11	19	28	14	23	30	17	27	34
24'-0"	D+L (Strength)	2	10	25	4	11	19	13	14	21	15	17	24
	D+L (Deflection)	2	10	23	4	11	19	13	14	21	15	17	24
	L (Deflection)	2	10	23	4	11	19	13	14	21	15	17	24
25'-0"	D+L (Strength)	5	3	17	6	4	11	7	7	13	8	9	16
	D+L (Deflection)	1	3	13	6	4	11	7	7	13	8	9	16
	L (Deflection)	1	3	13	6	4	11	7	7	13	8	9	16
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	10'-3"	12'-6"	14'-9"	10'-0"	12'-3"	14'-5"	9'-10"	12'-1"	14'-3"	9'-9"	11'-11"	14'-0"	
2span	12'-5"	15'-4"	17'-4"	12'-1"	15'-0"	17'-0"	11'-10"	14'-9"	16'-8"	11'-7"	14'-6"	16'-5"	
3span	12'-10"	15'-10"	17'-10"	12'-6"	15'-6"	17'-7"	12'-3"	15'-3"	17'-3"	12'-0"	15'-0"	17'-0"	
cantilever	5'-3"	6'-8"	7'-10"	5'-2"	6'-7"	7'-8"	5'-1"	6'-6"	7'-7"	5'-0"	6'-4"	7'-5"	
cy/100sf	1.43			1.50			1.58			1.66			

13'-0"	D+L (Strength)	142	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	142	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	142	← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360)

Vertical load span (center to center spacing)

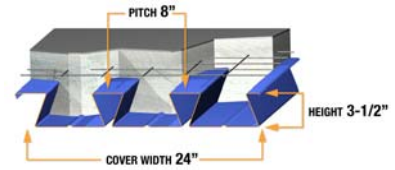
- Wd Weight of deck (uncoated), psf
- I<sub>b</sub> Moment of inertia for deflection per foot of deck width (in<sup>4</sup>)/ft
- Sp Section modulus for positive bending per foot of deck width, (in<sup>3</sup>)/ft
- Sn Section modulus for negative bending per foot of deck width, (in<sup>3</sup>)/ft
- Rbe Allowable exterior web crippling value per foot of deck, plf
- Rbi Allowable interior web crippling value per foot of deck, plf
- h Total height of concrete slab, in
- Wc Weight of concrete (neglecting deflection), psf
- f'c 3000 psi
- D Uniform dead load, psf
- L Uniform live load, psf

If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck Design Handbook, March 1997 and Design Manual, Pub. No. 30, and ASCE's Standard for the Structural Design of Composite Slabs. The loads in these tables are based on a Simple Span Design Analysis.

## 145 PCF NORMAL WEIGHT CONCRETE TABLE

SECTION PROPERTIES fy=40 ksi

GAGE	Wd	I <sub>b</sub>	Sp	Sn	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
20	3.33	1.959	0.767	0.820	909	1042	1154	1916	2061	2193
18	4.40	2.664	1.109	1.190	1534	1748	1928	3186	3415	3622
16	5.54	3.394	1.504	1.540	2362	2676	2940	4851	5184	5485



		MAXIMUM SUPERIMPOSED ASD LOADS, (psf), NO STUDS ON BEAMS											
h (Wc)		6.5 (68.0)			6.75 (71.0)			7 (74.0)			7.25 (77.0)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	177	289	242	186	311	245	195	334	246	204	358	247
	D+L (Deflection)	177	289	242	186	311	245	195	334	246	204	358	247
	L (Deflection)	177	289	242	186	311	245	195	334	246	204	358	247
14'-0"	D+L (Strength)	147	237	262	155	255	282	162	275	303	170	295	325
	D+L (Deflection)	147	237	262	155	255	282	162	275	303	170	295	325
	L (Deflection)	147	237	262	155	255	282	162	275	303	170	295	325
15'-0"	D+L (Strength)	123	195	216	130	210	233	136	227	251	142	244	270
	D+L (Deflection)	123	195	216	130	210	233	136	227	251	142	244	270
	L (Deflection)	123	195	216	130	210	233	136	227	251	142	244	270
16'-0"	D+L (Strength)	104	160	179	109	173	193	114	187	209	120	202	225
	D+L (Deflection)	104	160	179	109	173	193	114	187	209	120	202	225
	L (Deflection)	104	160	179	109	173	193	114	187	209	120	202	225
17'-0"	D+L (Strength)	88	131	148	92	143	160	97	155	173	101	167	187
	D+L (Deflection)	88	131	148	92	143	160	97	155	173	101	167	187
	L (Deflection)	88	131	148	92	143	160	97	155	173	101	167	187
18'-0"	D+L (Strength)	75	107	122	78	117	133	82	127	144	86	138	156
	D+L (Deflection)	75	107	122	78	117	133	82	127	144	86	138	156
	L (Deflection)	75	107	122	78	117	133	82	127	144	86	138	156
19'-0"	D+L (Strength)	63	87	100	67	96	109	70	104	119	73	114	129
	D+L (Deflection)	63	87	100	67	96	109	70	104	119	73	114	129
	L (Deflection)	63	87	100	67	96	109	70	104	119	73	114	129
20'-0"	D+L (Strength)	54	70	81	57	77	89	60	85	98	62	93	107
	D+L (Deflection)	54	70	81	57	77	89	60	85	98	62	93	107
	L (Deflection)	54	70	81	57	77	89	60	85	98	62	93	107
21'-0"	D+L (Strength)	43	55	65	48	61	72	51	68	79	53	75	87
	D+L (Deflection)	43	55	65	48	61	72	51	68	79	53	75	87
	L (Deflection)	43	55	65	48	61	72	51	68	79	53	75	87
22'-0"	D+L (Strength)	31	42	51	36	47	57	39	53	63	41	59	70
	D+L (Deflection)	31	42	51	36	47	57	39	53	63	41	59	70
	L (Deflection)	31	42	51	36	47	57	39	53	63	41	59	70
23'-0"	D+L (Strength)	25	31	39	27	35	44	29	40	50	31	45	55
	D+L (Deflection)	25	31	39	27	35	44	29	40	50	31	45	55
	L (Deflection)	25	31	39	27	35	44	29	40	50	31	45	55
24'-0"	D+L (Strength)	17	21	28	18	25	33	20	29	37	22	33	42
	D+L (Deflection)	17	21	28	18	25	33	20	29	37	22	33	42
	L (Deflection)	17	21	28	18	25	33	20	29	37	22	33	42
25'-0"	D+L (Strength)	9	12	19	10	15	23	12	19	27	13	23	31
	D+L (Deflection)	9	12	19	10	15	23	12	19	27	13	23	31
	L (Deflection)	9	12	19	10	15	23	12	19	27	13	23	31
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	9'-7"	11'-9"	13'-10"	9'-6"	11'-7"	13'-8"	9'-4"	11'-5"	13'-6"	9'-3"	11'-4"	13'-4"	
2span	11'-4"	14'-3"	16'-2"	11'-1"	14'-0"	15'-11"	10'-11"	13'-10"	15'-8"	10'-8"	13'-7"	15'-5"	
3span	11'-9"	14'-9"	16'-8"	11'-6"	14'-6"	16'-5"	11'-4"	14'-3"	16'-2"	11'-1"	14'-1"	15'-11"	
cantilever	4'-11"	6'-3"	7'-4"	4'-11"	6'-2"	7'-2"	4'-10"	6'-1"	7'-1"	4'-9"	6'-0"	7'-0"	
cy/100sf	1.74			1.81			1.89			1.97			

13'-0"	D+L (Strength)	177	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	177	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	177	← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360)

Vertical load span (center to center spacing)

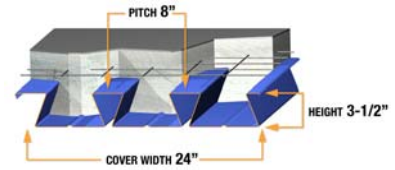
- |                |  |     |   |
|----------------|--|-----|---|
| Wd             | Weight of deck (uncoated), psf   | h   | Total height of concrete slab, in               |
| I <sub>b</sub> | Moment of inertia for deflection per foot of deck width (in <sup>4</sup> )/ft      | Wc  | Weight of concrete (neglecting deflection), psf |
| Sp             | Section modulus for positive bending per foot of deck width, (in <sup>3</sup> )/ft | f'c | 3000 psi  |
| Sn             | Section modulus for negative bending per foot of deck width, (in <sup>3</sup> )/ft | D   | Uniform dead load, psf                          |
| Rbe            | Allowable exterior web crippling value per foot of deck, plf                       | L   | Uniform live load, psf                          |
| Rbi            | Allowable interior web crippling value per foot of deck, plf                       |     |   |

If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck Design Handbook, March 1997 and Design Manual, Pub. No. 30, and ASCE's Standard for the Structural Design of Composite Slabs. The loads in these tables are based on a Simple Span Design Analysis.

## 145 PCF NORMAL WEIGHT CONCRETE TABLE

SECTION PROPERTIES fy=40 ksi

GAGE	Wd	I <sub>b</sub>	Sp	Sn	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
20	3.33	1.959	0.767	0.820	909	1042	1154	1916	2061	2193
18	4.40	2.664	1.109	1.190	1534	1748	1928	3186	3415	3622
16	5.54	3.394	1.504	1.540	2362	2676	2940	4851	5184	5485



MAXIMUM SUPERIMPOSED ASD LOADS, (psf), NO STUDS ON BEAMS													
h (Wc)		7.5 (80.1)			7.75 (83.1)			8 (86.1)			8.25 (89.1)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	213	383	247	222	400	245	231	400	400	239	400	400
	D+L (Deflection)	213	383	247	222	400	245	231	400	400	239	400	400
	L (Deflection)	213	383	247	222	400	245	231	400	400	239	400	400
14'-0"	D+L (Strength)	177	316	348	184	338	372	192	360	396	199	384	400
	D+L (Deflection)	177	316	348	184	338	372	192	360	396	199	384	400
	L (Deflection)	177	316	348	184	338	372	192	360	396	199	384	400
15'-0"	D+L (Strength)	148	262	289	155	280	310	161	299	331	167	319	352
	D+L (Deflection)	148	262	289	155	280	310	161	299	331	167	319	352
	L (Deflection)	148	262	289	155	280	310	161	299	331	167	319	352
16'-0"	D+L (Strength)	125	217	241	130	233	259	135	249	277	141	266	295
	D+L (Deflection)	125	217	241	130	233	259	135	249	277	141	266	295
	L (Deflection)	125	217	241	130	233	259	135	249	277	141	266	295
17'-0"	D+L (Strength)	106	180	202	110	194	216	115	208	232	119	223	248
	D+L (Deflection)	106	180	202	110	194	216	115	208	232	119	223	248
	L (Deflection)	106	180	202	110	194	216	115	208	232	119	223	248
18'-0"	D+L (Strength)	90	149	168	94	161	181	98	173	195	101	186	208
	D+L (Deflection)	90	149	168	94	161	181	98	173	195	101	186	208
	L (Deflection)	90	149	168	94	161	181	98	173	195	101	186	208
19'-0"	D+L (Strength)	77	123	140	80	133	151	83	144	163	86	155	175
	D+L (Deflection)	77	123	140	80	133	151	83	144	163	86	155	175
	L (Deflection)	77	123	140	80	133	151	83	144	163	86	155	175
20'-0"	D+L (Strength)	65	101	116	68	110	126	71	119	136	74	128	146
	D+L (Deflection)	65	101	116	68	110	126	71	119	136	74	128	146
	L (Deflection)	65	101	116	68	110	126	71	119	136	74	128	146
21'-0"	D+L (Strength)	55	82	95	54	89	104	56	97	113	58	106	122
	D+L (Deflection)	55	82	95	54	89	104	56	97	113	58	106	122
	L (Deflection)	55	82	95	54	89	104	56	97	113	58	106	122
22'-0"	D+L (Strength)	43	65	77	45	72	85	47	79	92	49	86	100
	D+L (Deflection)	43	65	77	45	72	85	47	79	92	49	86	100
	L (Deflection)	43	65	77	45	72	85	47	79	92	49	86	100
23'-0"	D+L (Strength)	34	51	62	36	56	68	38	62	75	40	69	82
	D+L (Deflection)	34	51	62	36	56	68	38	62	75	40	69	82
	L (Deflection)	34	51	62	36	56	68	38	62	75	40	69	82
24'-0"	D+L (Strength)	23	38	48	25	43	53	27	48	59	29	53	66
	D+L (Deflection)	23	38	48	25	43	53	27	48	59	29	53	66
	L (Deflection)	23	38	48	25	43	53	27	48	59	29	53	66
25'-0"	D+L (Strength)	14	27	36	16	31	41	17	35	46	18	40	51
	D+L (Deflection)	14	27	36	16	31	41	17	35	46	18	40	51
	L (Deflection)	14	27	36	16	31	41	17	35	46	18	40	51
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	9'-1"	11'-2"	13'-2"	9'-0"	11'-0"	13'-0"	8'-11"	10'-11"	12'-10"	8'-10"	10'-9"	12'-8"	
2span	10'-6"	13'-5"	15'-2"	10'-4"	13'-2"	15'-0"	10'-2"	13'-0"	14'-9"	10'-0"	12'-10"	14'-7"	
3span	10'-11"	13'-10"	15'-8"	10'-8"	13'-8"	15'-6"	10'-6"	13'-5"	15'-3"	10'-4"	13'-3"	15'-1"	
cantilever	4'-8"	5'-11"	6'-10"	4'-7"	5'-10"	6'-9"	4'-7"	5'-9"	6'-8"	4'-6"	5'-8"	6'-7"	
cy/100sf	2.04			2.12			2.20			2.28			

13'-0"	D+L (Strength)	213	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	213	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	213	← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360)

Vertical load span (center to center spacing)

- |                |  |     |   |
|----------------|--|-----|---|
| Wd             | Weight of deck (uncoated), psf   | h   | Total height of concrete slab, in               |
| I <sub>b</sub> | Moment of inertia for deflection per foot of deck width (in <sup>4</sup> )/ft      | Wc  | Weight of concrete (neglecting deflection), psf |
| Sp             | Section modulus for positive bending per foot of deck width, (in <sup>3</sup> )/ft | f'c | 3000 psi  |
| Sn             | Section modulus for negative bending per foot of deck width, (in <sup>3</sup> )/ft | D   | Uniform dead load, psf                          |
| Rbe            | Allowable exterior web crippling value per foot of deck, plf                       | L   | Uniform live load, psf                          |
| Rbi            | Allowable interior web crippling value per foot of deck, plf                       |     |   |

If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck Design Handbook, March 1997 and Design Manual, Pub. No. 30, and ASCE's Standard for the Structural Design of Composite Slabs. The loads in these tables are based on a Simple Span Design Analysis.

## 145 PCF NORMAL WEIGHT CONCRETE TABLE