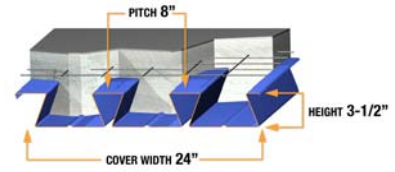


SECTION PROPERTIES fy=40 ksi

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 (42.4)			5.75 (44.7)			6 (47.0)			6.25 (49.3)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	146	158	228	155	166	239	164	176	254	173	179	272
	D+L (Deflection)	146	158	228	155	166	239	164	176	254	173	179	272
	L (Deflection)	146	158	228	155	166	239	164	176	254	173	179	272
14'-0"	D+L (Strength)	122	119	181	129	244	188	137	265	198	144	280	211
	D+L (Deflection)	122	119	181	129	244	188	137	265	198	144	280	211
	L (Deflection)	122	119	181	129	227	188	137	253	198	144	280	211
15'-0"	D+L (Strength)	102	188	142	109	209	147	115	223	154	122	239	162
	D+L (Deflection)	102	188	142	109	209	147	115	223	154	122	239	162
	L (Deflection)	102	166	142	109	185	147	115	206	154	122	230	162
16'-0"	D+L (Strength)	87	162	111	92	181	114	98	189	230	103	202	227
	D+L (Deflection)	87	158	111	92	179	114	98	189	230	103	202	227
	L (Deflection)	87	137	111	92	152	114	98	170	188	103	189	209
17'-0"	D+L (Strength)	74	140	170	78	157	186	83	160	196	88	171	193
	D+L (Deflection)	74	124	145	78	141	162	83	160	183	88	171	193
	L (Deflection)	74	114	129	78	127	142	83	142	157	88	158	174
18'-0"	D+L (Strength)	63	122	148	67	137	163	71	136	168	75	146	165
	D+L (Deflection)	63	97	115	67	111	129	71	127	146	75	146	165
	L (Deflection)	63	96	108	67	107	120	71	119	132	75	133	147
19'-0"	D+L (Strength)	54	107	130	58	119	143	61	115	144	65	124	141
	D+L (Deflection)	54	76	90	58	87	102	61	101	116	65	116	132
	L (Deflection)	54	76	90	58	87	102	61	101	112	65	113	125
20'-0"	D+L (Strength)	47	94	114	50	102	126	53	98	124	56	105	120
	D+L (Deflection)	47	58	71	50	68	80	53	79	92	56	92	105
	L (Deflection)	47	58	71	50	68	80	53	79	92	56	92	105
21'-0"	D+L (Strength)	40	83	101	43	86	111	45	83	106	48	89	103
	D+L (Deflection)	34	44	54	41	52	63	45	61	72	48	72	84
	L (Deflection)	34	44	54	41	52	63	45	61	72	48	72	84
22'-0"	D+L (Strength)	34	73	89	37	73	97	39	70	91	41	75	88
	D+L (Deflection)	24	32	41	30	39	48	37	46	56	41	55	66
	L (Deflection)	24	32	41	30	39	48	37	46	56	41	55	66
23'-0"	D+L (Strength)	30	65	79	32	62	83	34	58	77	35	63	74
	D+L (Deflection)	15	22	30	20	28	36	26	34	42	33	42	50
	L (Deflection)	15	22	30	20	28	36	26	34	42	33	42	50
24'-0"	D+L (Strength)	25	56	70	27	52	71	29	48	66	31	53	63
	D+L (Deflection)	8	14	21	12	18	25	17	24	31	22	30	38
	L (Deflection)	8	14	21	12	18	25	17	24	31	22	30	38
25'-0"	D+L (Strength)	22	48	62	23	43	61	25	39	55	26	43	52
	D+L (Deflection)	1	7	13	5	11	17	9	15	21	14	21	27
	L (Deflection)	1	7	13	5	11	17	9	15	21	14	21	27
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	11'-5"	14'-1"	16'-3"	11'-2"	13'-9"	16'-0"	11'-0"	13'-6"	15'-9"	10'-9"	13'-3"	15'-6"	
2span	13'-10"	16'-9"	19'-0"	13'-7"	16'-6"	18'-8"	13'-4"	16'-3"	18'-4"	13'-1"	16'-0"	18'-1"	
3span	14'-4"	17'-4"	19'-0"	14'-1"	17'-1"	18'-9"	13'-9"	16'-9"	18'-7"	13'-6"	16'-6"	18'-4"	
cantilever	5'-9"	7'-4"	8'-6"	5'-8"	7'-3"	8'-4"	5'-7"	7'-1"	8'-3"	5'-6"	7'-0"	8'-1"	
cy/100sf	1.43			1.50			1.58			1.66			

13'-0"	D+L (Strength)	146	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	146	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	146	← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360)

Vertical load span (center to center spacing)

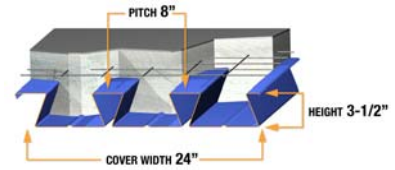
- |                |  |     |   |
|----------------|--|-----|---|
| Wd             | Weight of deck (uncoated), psf   | h   | Total height of concrete slab, in               |
| I <sub>b</sub> | Moment of inertia for deflection per foot of deck width (in <sup>4</sup> )/ft      | Wc  | Weight of concrete (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.

## 110 PCF LIGHTWEIGHT 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 (51.6)			6.75 (53.9)			7 (56.1)			7.25 (58.4)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	182	181	284	191	362	292	200	379	300	209	396	307
	D+L (Deflection)	182	181	284	191	362	292	200	379	300	209	396	307
	L (Deflection)	182	181	284	191	362	292	200	379	300	209	396	307
14'-0"	D+L (Strength)	152	295	219	160	309	223	167	324	227	175	339	230
	D+L (Deflection)	152	295	219	160	309	223	167	324	227	175	339	230
	L (Deflection)	152	295	219	160	309	223	167	324	227	175	339	230
15'-0"	D+L (Strength)	128	254	166	134	267	167	141	279	323	147	292	345
	D+L (Deflection)	128	254	166	134	267	167	141	279	323	147	292	345
	L (Deflection)	128	254	166	134	267	167	141	279	323	147	292	345
16'-0"	D+L (Strength)	108	218	238	114	232	256	119	243	274	125	254	294
	D+L (Deflection)	108	218	238	114	232	256	119	243	274	125	254	294
	L (Deflection)	108	210	232	114	232	256	119	243	274	125	254	294
17'-0"	D+L (Strength)	92	185	203	97	199	218	102	213	234	106	223	251
	D+L (Deflection)	92	185	203	97	199	218	102	213	234	106	223	251
	L (Deflection)	92	175	193	97	194	214	102	213	234	106	223	251
18'-0"	D+L (Strength)	79	157	173	83	170	187	87	183	200	91	196	215
	D+L (Deflection)	79	157	173	83	170	187	87	183	200	91	196	215
	L (Deflection)	79	148	163	83	163	180	87	180	198	91	196	215
19'-0"	D+L (Strength)	68	134	148	71	145	160	75	156	172	78	168	185
	D+L (Deflection)	68	132	148	71	145	160	75	156	172	78	168	185
	L (Deflection)	68	126	138	71	139	153	75	153	169	78	168	185
20'-0"	D+L (Strength)	59	114	127	62	124	137	64	133	148	67	144	159
	D+L (Deflection)	59	105	121	62	120	137	64	133	148	67	144	159
	L (Deflection)	59	105	119	62	119	131	64	132	145	67	144	159
21'-0"	D+L (Strength)	50	97	108	53	105	117	56	114	127	58	123	137
	D+L (Deflection)	50	83	96	53	96	110	56	110	126	58	123	137
	L (Deflection)	50	83	96	53	96	110	56	110	125	58	123	137
22'-0"	D+L (Strength)	43	82	92	46	89	100	48	97	109	50	105	118
	D+L (Deflection)	43	65	76	46	76	88	48	88	101	50	100	115
	L (Deflection)	43	65	76	46	76	88	48	88	101	50	100	115
23'-0"	D+L (Strength)	37	69	78	39	76	85	41	82	93	43	90	101
	D+L (Deflection)	37	50	60	39	59	70	41	69	81	43	80	93
	L (Deflection)	37	50	60	39	59	70	41	69	81	43	80	93
24'-0"	D+L (Strength)	32	58	66	34	64	72	36	70	79	37	76	86
	D+L (Deflection)	29	37	46	34	45	54	36	54	64	37	63	74
	L (Deflection)	29	37	46	34	45	54	36	54	64	37	63	74
25'-0"	D+L (Strength)	28	48	55	29	53	61	27	58	67	29	64	73
	D+L (Deflection)	19	27	34	25	33	41	27	40	49	29	48	58
	L (Deflection)	19	27	34	25	33	41	27	40	49	29	48	58
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	10'-7"	13'-0"	15'-3"	10'-5"	12'-9"	15'-0"	10'-2"	12'-6"	14'-9"	10'-0"	12'-4"	14'-6"	
2span	12'-10"	15'-9"	17'-10"	12'-7"	15'-6"	17'-6"	12'-4"	15'-3"	17'-3"	12'-2"	15'-1"	17'-1"	
3span	13'-3"	16'-3"	18'-2"	13'-0"	16'-0"	18'-0"	12'-9"	15'-9"	17'-10"	12'-7"	15'-7"	17'-7"	
cantilever	5'-5"	6'-11"	8'-0"	5'-4"	6'-9"	7'-11"	5'-3"	6'-8"	7'-9"	5'-3"	6'-7"	7'-8"	
cy/100sf	1.74			1.81			1.89			1.97			

13'-0"	D+L (Strength)	182	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	182	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	182	← 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                       |     |   |

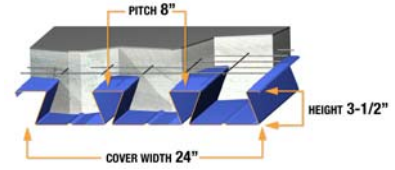
If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck 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.

## 110 PCF LIGHTWEIGHT 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 (60.7)			7.75 (63.0)			8 (65.3)			8.25 (67.6)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	218	400	314	227	400	320	236	400	325	245	400	329
	D+L (Deflection)	218	400	314	227	400	320	236	400	325	245	400	329
	L (Deflection)	218	400	314	227	400	320	236	400	325	245	400	329
14'-0"	D+L (Strength)	182	353	233	190	368	235	197	382	236	205	397	400
	D+L (Deflection)	182	353	233	190	368	235	197	382	236	205	397	400
	L (Deflection)	182	353	233	190	368	235	197	382	236	205	397	400
15'-0"	D+L (Strength)	154	305	368	160	317	393	166	330	400	173	343	400
	D+L (Deflection)	154	305	368	160	317	393	166	330	400	173	343	400
	L (Deflection)	154	305	368	160	317	393	166	330	400	173	343	400
16'-0"	D+L (Strength)	130	265	314	136	276	335	141	287	356	147	298	379
	D+L (Deflection)	130	265	314	136	276	335	141	287	356	147	298	379
	L (Deflection)	130	265	314	136	276	335	141	287	356	147	298	379
17'-0"	D+L (Strength)	111	232	268	116	242	287	120	252	306	125	261	325
	D+L (Deflection)	111	232	268	116	242	287	120	252	306	125	261	325
	L (Deflection)	111	232	268	116	242	287	120	252	306	125	261	325
18'-0"	D+L (Strength)	95	205	230	99	213	246	103	222	263	107	230	280
	D+L (Deflection)	95	205	230	99	213	246	103	222	263	107	230	280
	L (Deflection)	95	205	230	99	213	246	103	222	263	107	230	280
19'-0"	D+L (Strength)	82	180	198	85	189	212	89	197	227	92	204	242
	D+L (Deflection)	82	180	198	85	189	212	89	197	227	92	204	242
	L (Deflection)	82	180	198	85	189	212	89	197	227	92	204	242
20'-0"	D+L (Strength)	70	155	171	73	166	183	76	175	196	79	182	210
	D+L (Deflection)	70	155	171	73	166	183	76	175	196	79	182	210
	L (Deflection)	70	155	171	73	166	183	76	175	196	79	182	210
21'-0"	D+L (Strength)	61	133	147	63	143	158	66	154	170	69	163	182
	D+L (Deflection)	61	133	147	63	143	158	66	154	170	69	163	182
	L (Deflection)	61	133	147	63	143	158	66	154	170	69	163	182
22'-0"	D+L (Strength)	52	114	127	55	123	137	57	132	147	59	142	157
	D+L (Deflection)	52	114	127	55	123	137	57	132	147	59	142	157
	L (Deflection)	52	114	127	55	123	137	57	132	147	59	142	157
23'-0"	D+L (Strength)	45	97	109	47	105	118	49	114	127	48	122	136
	D+L (Deflection)	45	97	109	47	105	118	49	114	127	48	122	136
	L (Deflection)	45	97	109	47	105	118	49	114	127	48	122	136
24'-0"	D+L (Strength)	36	83	93	38	90	101	39	97	109	41	105	118
	D+L (Deflection)	36	83	93	38	90	101	39	97	109	41	105	118
	L (Deflection)	36	83	93	38	90	101	39	97	109	41	105	118
25'-0"	D+L (Strength)	30	70	80	32	76	86	33	83	94	35	90	101
	D+L (Deflection)	30	70	80	32	76	86	33	83	94	35	90	101
	L (Deflection)	30	70	80	32	76	86	33	83	94	35	90	101
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	9'-11"	12'-2"	14'-3"	9'-10"	12'-0"	14'-2"	9'-8"	11'-11"	14'-0"	9'-7"	11'-9"	13'-10"	
2span	11'-11"	14'-10"	16'-10"	11'-9"	14'-8"	16'-7"	11'-7"	14'-6"	16'-5"	11'-5"	14'-3"	16'-2"	
3span	12'-4"	15'-4"	17'-5"	12'-2"	15'-2"	17'-2"	12'-0"	14'-11"	16'-11"	11'-9"	14'-9"	16'-9"	
cantilever	5'-2"	6'-6"	7'-7"	5'-1"	6'-5"	7'-6"	5'-0"	6'-4"	7'-5"	5'-0"	6'-3"	7'-4"	
cy/100sf	2.04			2.12			2.20			2.28			

13'-0"	D+L (Strength)	218	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	218	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	218	← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360)

- 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.

110 PCF LIGHTWEIGHT CONCRETE TABLE