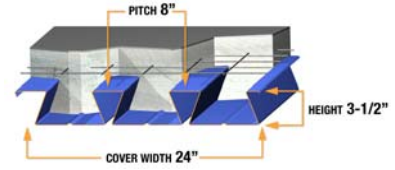


SECTION PROPERTIES fy=40 ksi

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 (44.3)			5.75 (46.7)			6 (49.1)			6.25 (51.5)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	145	155	226	154	163	238	163	171	253	172	173	271
	D+L (Deflection)	145	155	226	154	163	238	163	171	253	172	173	271
	L (Deflection)	145	155	226	154	163	238	163	171	253	172	173	271
14'-0"	D+L (Strength)	121	223	178	129	248	186	136	255	196	144	274	208
	D+L (Deflection)	121	223	178	129	248	186	136	255	196	144	274	208
	L (Deflection)	121	211	178	129	236	186	136	255	196	144	274	208
15'-0"	D+L (Strength)	102	190	140	108	212	144	115	213	151	121	230	158
	D+L (Deflection)	102	190	140	108	212	144	115	213	151	121	230	158
	L (Deflection)	102	172	140	108	192	144	115	213	151	121	230	158
16'-0"	D+L (Strength)	86	164	108	92	179	217	97	179	214	102	193	213
	D+L (Deflection)	86	164	108	92	179	212	97	179	214	102	193	213
	L (Deflection)	86	142	108	92	158	176	97	176	195	102	193	213
17'-0"	D+L (Strength)	73	142	172	78	151	189	83	151	182	87	163	180
	D+L (Deflection)	73	128	149	78	146	168	83	151	182	87	163	180
	L (Deflection)	73	118	133	78	132	147	83	147	163	87	163	180
18'-0"	D+L (Strength)	63	124	150	67	128	162	71	128	155	75	138	153
	D+L (Deflection)	63	100	118	67	115	133	71	128	151	75	138	153
	L (Deflection)	63	99	112	67	111	124	71	124	137	75	138	152
19'-0"	D+L (Strength)	54	108	131	57	108	138	60	108	132	64	117	130
	D+L (Deflection)	54	78	93	57	90	105	60	104	120	64	117	130
	L (Deflection)	54	78	93	57	90	105	60	104	116	64	117	129
20'-0"	D+L (Strength)	46	95	115	49	91	118	52	91	112	55	99	110
	D+L (Deflection)	46	60	72	49	70	83	52	82	95	55	95	109
	L (Deflection)	46	60	72	49	70	83	52	82	95	55	95	109
21'-0"	D+L (Strength)	40	84	101	42	77	101	45	76	96	47	83	94
	D+L (Deflection)	35	45	56	42	54	64	45	63	75	47	75	87
	L (Deflection)	35	45	56	42	54	64	45	63	75	47	75	87
22'-0"	D+L (Strength)	34	71	90	36	64	87	38	63	81	41	69	79
	D+L (Deflection)	24	33	42	31	40	49	38	48	58	41	58	68
	L (Deflection)	24	33	42	31	40	49	38	48	58	41	58	68
23'-0"	D+L (Strength)	29	60	79	31	54	74	33	52	68	35	58	66
	D+L (Deflection)	15	23	30	21	29	36	27	35	44	34	43	52
	L (Deflection)	15	23	30	21	29	36	27	35	44	34	43	52
24'-0"	D+L (Strength)	25	50	70	27	44	62	28	42	57	30	47	55
	D+L (Deflection)	8	14	21	12	19	26	18	25	32	23	31	39
	L (Deflection)	8	14	21	12	19	26	18	25	32	23	31	39
25'-0"	D+L (Strength)	21	41	60	23	35	52	24	34	47	26	38	45
	D+L (Deflection)	1	7	13	5	11	17	9	16	22	14	21	28
	L (Deflection)	1	7	13	5	11	17	9	16	22	14	21	28
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	11'-3"	13'-10"	16'-1"	11'-0"	13'-6"	15'-10"	10'-9"	13'-3"	15'-6"	10'-7"	13'-0"	15'-3"	
2span	13'-7"	16'-7"	18'-8"	13'-4"	16'-3"	18'-5"	13'-1"	16'-0"	18'-1"	12'-10"	15'-9"	17'-10"	
3span	14'-1"	17'-1"	18'-10"	13'-10"	16'-10"	18'-7"	13'-6"	16'-6"	18'-5"	13'-3"	16'-3"	18'-2"	
cantilever	5'-8"	7'-3"	8'-4"	5'-7"	7'-1"	8'-3"	5'-6"	7'-0"	8'-1"	5'-5"	6'-11"	8'-0"	
cy/100sf	1.43			1.50			1.58			1.66			

13'-0"	D+L (Strength)	145	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	145	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	145	← 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                       |     |   |

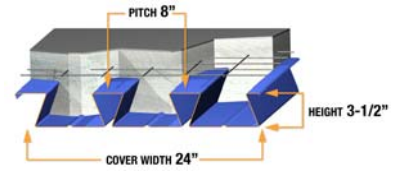
If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

## 115 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 (53.9)			6.75 (56.3)			7 (58.7)			7.25 (61.1)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	181	344	279	190	361	286	199	378	293	208	395	299
	D+L (Deflection)	181	344	279	190	361	286	199	378	293	208	395	299
	L (Deflection)	181	344	279	190	361	286	199	378	293	208	395	299
14'-0"	D+L (Strength)	151	294	213	159	309	216	166	323	220	174	338	222
	D+L (Deflection)	151	294	213	159	309	216	166	323	220	174	338	222
	L (Deflection)	151	294	213	159	309	216	166	323	220	174	338	222
15'-0"	D+L (Strength)	127	247	160	134	266	290	140	279	311	146	291	333
	D+L (Deflection)	127	247	160	134	266	290	140	279	311	146	291	333
	L (Deflection)	127	247	160	134	266	290	140	279	311	146	291	333
16'-0"	D+L (Strength)	108	208	229	113	224	246	119	241	264	124	253	283
	D+L (Deflection)	108	208	229	113	224	246	119	241	264	124	253	283
	L (Deflection)	108	208	229	113	224	246	119	241	264	124	253	283
17'-0"	D+L (Strength)	92	176	194	96	190	209	101	205	225	106	220	241
	D+L (Deflection)	92	176	194	96	190	209	101	205	225	106	220	241
	L (Deflection)	92	176	194	96	190	209	101	205	225	106	220	241
18'-0"	D+L (Strength)	79	149	165	83	161	178	86	174	192	90	187	206
	D+L (Deflection)	79	149	165	83	161	178	86	174	192	90	187	206
	L (Deflection)	79	149	165	83	161	178	86	174	192	90	187	206
19'-0"	D+L (Strength)	67	127	141	71	137	152	74	148	164	78	159	176
	D+L (Deflection)	67	127	141	71	137	152	74	148	164	78	159	176
	L (Deflection)	67	127	141	71	137	152	74	148	164	78	159	176
20'-0"	D+L (Strength)	58	107	120	61	116	130	64	126	140	67	136	151
	D+L (Deflection)	58	107	120	61	116	130	64	126	140	67	136	151
	L (Deflection)	58	107	120	61	116	130	64	126	140	67	136	151
21'-0"	D+L (Strength)	50	90	102	52	98	110	55	107	119	57	116	129
	D+L (Deflection)	50	90	102	52	98	110	55	107	119	57	116	129
	L (Deflection)	50	90	102	52	98	110	55	107	119	57	116	129
22'-0"	D+L (Strength)	43	76	86	45	83	94	47	90	102	49	98	110
	D+L (Deflection)	43	76	86	45	83	94	47	90	102	49	98	110
	L (Deflection)	43	76	86	45	83	94	47	90	102	49	98	110
23'-0"	D+L (Strength)	37	63	72	39	69	79	41	76	86	43	83	94
	D+L (Deflection)	37	63	72	39	69	79	41	76	86	43	83	94
	L (Deflection)	37	63	72	39	69	79	41	76	86	43	83	94
24'-0"	D+L (Strength)	32	52	60	33	58	66	35	63	73	34	69	79
	D+L (Deflection)	30	39	47	33	47	56	35	56	66	34	65	77
	L (Deflection)	30	39	47	33	47	56	35	56	66	34	65	77
25'-0"	D+L (Strength)	27	42	50	23	47	55	25	52	61	27	58	67
	D+L (Deflection)	20	28	35	23	34	43	25	42	51	27	50	60
	L (Deflection)	20	28	35	23	34	43	25	42	51	27	50	60
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	10'-5"	12'-9"	15'-0"	10'-2"	12'-6"	14'-9"	10'-0"	12'-3"	14'-6"	9'-11"	12'-1"	14'-3"	
2span	12'-7"	15'-6"	17'-6"	12'-4"	15'-3"	17'-3"	12'-1"	15'-0"	17'-0"	11'-11"	14'-10"	16'-9"	
3span	13'-0"	16'-0"	18'-0"	12'-9"	15'-9"	17'-10"	12'-7"	15'-6"	17'-7"	12'-4"	15'-4"	17'-4"	
cantilever	5'-4"	6'-9"	7'-11"	5'-3"	6'-8"	7'-9"	5'-2"	6'-7"	7'-8"	5'-2"	6'-6"	7'-7"	
cy/100sf	1.74			1.81			1.89			1.97			

13'-0"	D+L (Strength)	181	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	181	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	181	← 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

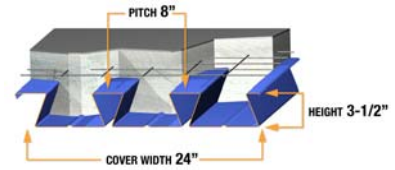
If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

## 115 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 (63.5)			7.75 (65.9)			8 (68.3)			8.25 (70.7)		
Span	Load Combinations	GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	D+L (Strength)	217	400	305	226	400	310	235	400	314	244	400	317
	D+L (Deflection)	217	400	305	226	400	310	235	400	314	244	400	317
	L (Deflection)	217	400	305	226	400	310	235	400	314	244	400	317
14'-0"	D+L (Strength)	182	352	223	189	367	400	197	382	400	204	396	400
	D+L (Deflection)	182	352	223	189	367	400	197	382	400	204	396	400
	L (Deflection)	182	352	223	189	367	400	197	382	400	204	396	400
15'-0"	D+L (Strength)	153	304	356	159	317	379	166	329	400	172	342	400
	D+L (Deflection)	153	304	356	159	317	379	166	329	400	172	342	400
	L (Deflection)	153	304	356	159	317	379	166	329	400	172	342	400
16'-0"	D+L (Strength)	130	264	302	135	275	323	140	286	344	146	297	366
	D+L (Deflection)	130	264	302	135	275	323	140	286	344	146	297	366
	L (Deflection)	130	264	302	135	275	323	140	286	344	146	297	366
17'-0"	D+L (Strength)	110	231	258	115	241	276	120	251	294	124	260	313
	D+L (Deflection)	110	231	258	115	241	276	120	251	294	124	260	313
	L (Deflection)	110	231	258	115	241	276	120	251	294	124	260	313
18'-0"	D+L (Strength)	94	201	221	98	213	236	102	221	252	106	230	269
	D+L (Deflection)	94	201	221	98	213	236	102	221	252	106	230	269
	L (Deflection)	94	201	221	98	213	236	102	221	252	106	230	269
19'-0"	D+L (Strength)	81	172	189	84	184	203	88	196	217	91	203	232
	D+L (Deflection)	81	172	189	84	184	203	88	196	217	91	203	232
	L (Deflection)	81	172	189	84	184	203	88	196	217	91	203	232
20'-0"	D+L (Strength)	70	147	162	73	158	174	76	169	187	79	181	200
	D+L (Deflection)	70	147	162	73	158	174	76	169	187	79	181	200
	L (Deflection)	70	147	162	73	158	174	76	169	187	79	181	200
21'-0"	D+L (Strength)	60	125	139	63	135	150	65	145	161	68	155	172
	D+L (Deflection)	60	125	139	63	135	150	65	145	161	68	155	172
	L (Deflection)	60	125	139	63	135	150	65	145	161	68	155	172
22'-0"	D+L (Strength)	52	106	119	54	115	129	56	124	138	58	133	149
	D+L (Deflection)	52	106	119	54	115	129	56	124	138	58	133	149
	L (Deflection)	52	106	119	54	115	129	56	124	138	58	133	149
23'-0"	D+L (Strength)	45	90	102	46	98	110	45	106	119	47	114	128
	D+L (Deflection)	45	90	102	46	98	110	45	106	119	47	114	128
	L (Deflection)	45	90	102	46	98	110	45	106	119	47	114	128
24'-0"	D+L (Strength)	35	76	86	37	83	94	38	90	102	40	97	110
	D+L (Deflection)	35	76	86	37	83	94	38	90	102	40	97	110
	L (Deflection)	35	76	86	37	83	94	38	90	102	40	97	110
25'-0"	D+L (Strength)	29	63	73	31	69	79	32	75	86	34	82	94
	D+L (Deflection)	29	63	73	31	69	79	32	75	86	34	82	94
	L (Deflection)	29	63	73	31	69	79	32	75	86	34	82	94
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	9'-9"	12'-0"	14'-1"	9'-8"	11'-10"	13'-11"	9'-7"	11'-9"	13'-10"	9'-6"	11'-7"	13'-8"	
2span	11'-8"	14'-7"	16'-7"	11'-6"	14'-5"	16'-4"	11'-4"	14'-3"	16'-1"	11'-2"	14'-1"	15'-11"	
3span	12'-1"	15'-1"	17'-1"	11'-11"	14'-11"	16'-11"	11'-9"	14'-8"	16'-8"	11'-7"	14'-6"	16'-5"	
cantilever	5'-1"	6'-5"	7'-6"	5'-0"	6'-4"	7'-5"	4'-11"	6'-3"	7'-3"	4'-11"	6'-2"	7'-2"	
cy/100sf	2.04			2.12			2.20			2.28			

13'-0"	D+L (Strength)	217	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	217	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	217	← 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.

## 115 PCF LIGHTWEIGHT CONCRETE TABLE