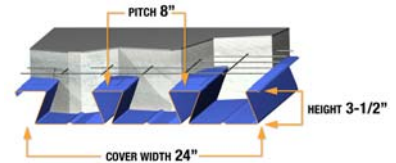


SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I <sub>D</sub>	S <sub>p</sub>	S <sub>n</sub>	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
20	3.33	1.959	0.767	0.820	1043	1195	1324	2138	2300	2446
18	4.40	2.664	1.109	1.190	1761	2006	2212	3554	3810	4041
16	5.54	3.394	1.504	1.540	2710	3070	3374	5412	5784	6120



MAXIMUM SUPERIMPOSED LRFD LOADS, (psf), NO STUDS ON BEAMS

Span	Load Combinations	5.5 (42.4)			5.75 (44.7)			6 (47.0)			6.25 (49.3)		
		GAGE											
GAGE													
20													
18													
16													
13'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	199	276	377	211	292	398	224	314	400	236	325	400
	D+L (Deflection)	199	276	377	211	292	398	224	314	400	236	325	400
	L (Deflection)	199	255	288	211	284	317	224	314	351	236	325	389
14'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	167	217	306	177	228	322	188	360	342	198	380	367
	D+L (Deflection)	167	217	306	177	228	322	188	329	342	198	370	367
	L (Deflection)	167	204	230	177	227	254	188	253	281	198	282	312
15'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	141	277	248	150	294	260	159	311	275	167	328	294
	D+L (Deflection)	141	202	248	150	228	260	159	258	275	167	291	294
	L (Deflection)	141	166	187	150	185	207	159	206	228	167	230	253
16'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	120	241	202	128	256	210	135	271	348	143	286	344
	D+L (Deflection)	120	158	202	128	179	210	135	203	230	143	230	258
	L (Deflection)	120	137	154	128	152	170	135	170	188	143	189	209
17'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	103	212	264	109	225	288	116	238	300	122	251	296
	D+L (Deflection)	103	124	145	109	141	162	116	161	183	122	183	206
	L (Deflection)	100	114	129	109	127	142	116	142	157	122	158	174
18'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	89	187	232	94	199	253	100	210	259	105	222	255
	D+L (Deflection)	81	97	115	94	111	129	100	127	146	105	146	165
	L (Deflection)	81	96	108	94	107	120	100	119	132	105	133	147
19'-0"	D+L (Strength)	77	166	204	81	176	223	86	182	224	91	195	220
	D+L (Deflection)	62	76	90	73	87	102	85	101	116	91	116	132
	L (Deflection)	62	76	90	73	87	102	85	101	112	91	113	125
20'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	66	148	181	71	158	198	75	157	195	79	168	191
	D+L (Deflection)	47	58	71	56	68	80	66	79	92	77	92	105
	L (Deflection)	47	58	71	56	68	80	66	79	92	77	92	105
21'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	58	132	160	61	140	176	65	135	169	69	145	165
	D+L (Deflection)	34	44	54	41	52	63	50	61	72	59	72	84
	L (Deflection)	34	44	54	41	52	63	50	61	72	59	72	84
22'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	50	118	143	53	121	155	57	116	147	60	125	143
	D+L (Deflection)	24	32	41	30	39	48	37	46	56	45	55	66
	L (Deflection)	24	32	41	30	39	48	37	46	56	45	55	66
23'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	44	105	128	46	104	136	49	100	128	52	108	124
	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"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	38	94	114	40	90	119	43	85	111	45	92	107
	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"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	33	84	102	35	77	103	37	73	96	40	79	92
	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

	11'-8"	14'-4"	16'-3"	11'-5"	14'-0"	16'-0"	11'-2"	13'-9"	15'-10"	11'-0"	13'-5"	15'-8"
1span	11'-8"	14'-4"	16'-3"	11'-5"	14'-0"	16'-0"	11'-2"	13'-9"	15'-10"	11'-0"	13'-5"	15'-8"
2span	13'-10"	17'-2"	19'-5"	13'-7"	16'-10"	19'-1"	13'-4"	16'-7"	18'-9"	13'-1"	16'-4"	18'-5"
3span	14'-4"	17'-9"	19'-0"	14'-1"	17'-5"	18'-9"	13'-9"	17'-2"	18'-7"	13'-6"	16'-10"	18'-4"
cantilever	6'-0"	7'-8"	8'-6"	5'-11"	7'-6"	8'-4"	5'-10"	7'-4"	8'-3"	5'-9"	7'-3"	8'-1"
cy/100sf		1.43			1.50			1.58			1.66	

13'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	199	← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)
	D+L (Deflection)	199	← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	199	← Max. superimposed LRFD unfactored L load (psf) (governed by deflection limitation of L/360)

- Wd Weight of deck (uncoated), psf
- I<sub>D</sub> Moment of inertia for deflection per foot of deck width (in<sup>4</sup>/ft)
- S<sub>p</sub> Section modulus for positive bending per foot of deck width, (in<sup>3</sup>)/ft
- S<sub>n</sub> Section modulus for negative bending per foot of deck width, (in<sup>3</sup>)/ft
- f<sub>c</sub> 3000 psi
- λ<sub>D</sub>, λ<sub>L</sub> Load factors for dead and live loads to be applied by Engineer in accordance with Building Codes.
- 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
- D Uniform dead load, psf
- L Uniform live load, psf

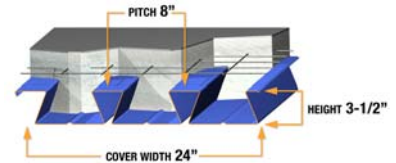
If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I <sub>D</sub>	S <sub>p</sub>	S <sub>n</sub>	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
20	3.33	1.959	0.767	0.820	1043	1195	1324	2138	2300	2446
18	4.40	2.664	1.109	1.190	1761	2006	2212	3554	3810	4041
16	5.54	3.394	1.504	1.540	2710	3070	3374	5412	5784	6120



MAXIMUM SUPERIMPOSED LRFD LOADS, (psf), NO STUDS ON BEAMS

Span	Load Combinations	6.5 (51.6)			6.75 (53.9)			7 (56.1)			7.25 (58.4)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	248	334	400	261	400	400	273	400	400	285	400	400
	D+L (Deflection)	248	334	400	261	400	400	273	400	400	285	400	400
	L (Deflection)	248	334	400	261	400	400	273	400	400	285	400	400
14'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	208	400	385	219	400	397	229	400	400	239	400	400
	D+L (Deflection)	208	400	385	219	400	397	229	400	400	239	400	400
	L (Deflection)	208	314	346	219	347	382	229	384	400	239	400	400
15'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	176	345	306	185	362	314	194	380	400	203	397	400
	D+L (Deflection)	176	327	306	185	362	314	194	380	400	203	397	400
	L (Deflection)	176	255	281	185	283	311	194	312	343	203	343	377
16'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	150	301	362	158	316	388	165	331	400	173	346	400
	D+L (Deflection)	150	259	290	158	291	325	165	325	362	173	346	400
	L (Deflection)	150	210	232	158	233	256	165	257	282	173	283	311
17'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	129	264	311	135	277	333	142	290	357	148	304	382
	D+L (Deflection)	129	207	232	135	233	261	142	261	291	148	291	324
	L (Deflection)	129	175	193	135	194	214	142	214	235	148	236	259
18'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	111	233	268	116	245	288	122	257	308	128	268	330
	D+L (Deflection)	111	165	187	116	187	210	122	210	236	128	235	263
	L (Deflection)	111	148	163	116	163	180	122	180	198	128	199	218
19'-0"	D+L (Strength)	96	207	232	101	218	249	105	228	267	110	238	287
	D+L (Deflection)	96	132	150	101	150	170	105	170	191	110	190	214
	L (Deflection)	96	126	138	101	139	153	105	153	169	110	169	186
20'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	83	182	201	87	195	216	92	204	232	96	213	249
	D+L (Deflection)	83	105	121	87	120	137	92	137	155	96	154	174
	L (Deflection)	83	105	119	87	119	131	92	132	145	96	145	159
21'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	72	157	174	76	170	188	80	183	202	83	191	217
	D+L (Deflection)	70	83	96	76	96	110	80	110	126	83	125	142
	L (Deflection)	70	83	96	76	96	110	80	110	125	83	125	137
22'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	63	136	151	66	147	163	69	159	176	73	171	189
	D+L (Deflection)	53	65	76	63	76	88	69	88	101	73	100	115
	L (Deflection)	53	65	76	63	76	88	69	88	101	73	100	115
23'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	55	117	131	58	127	142	61	138	153	63	149	165
	D+L (Deflection)	40	50	60	48	59	70	57	69	81	63	80	93
	L (Deflection)	40	50	60	48	59	70	57	69	81	63	80	93
24'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	48	101	113	50	110	123	53	119	133	55	129	144
	D+L (Deflection)	29	37	46	35	45	54	43	54	64	51	63	74
	L (Deflection)	29	37	46	35	45	54	43	54	64	51	63	74
25'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	42	86	98	44	94	106	43	103	115	45	111	125
	D+L (Deflection)	19	27	34	25	33	41	31	40	49	38	48	58
	L (Deflection)	19	27	34	25	33	41	31	40	49	38	48	58

MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS

	10'-9"	13'-2"	15'-6"	10'-7"	12'-11"	15'-2"	10'-4"	12'-8"	14'-11"	10'-2"	12'-6"	14'-8"
1span												
2span	12'-10"	16'-0"	18'-2"	12'-7"	15'-9"	17'-11"	12'-4"	15'-7"	17'-7"	12'-2"	15'-4"	17'-4"
3span	13'-3"	16'-7"	18'-2"	13'-0"	16'-4"	18'-0"	12'-9"	16'-1"	17'-10"	12'-7"	15'-10"	17'-8"
cantilever	5'-8"	7'-2"	8'-0"	5'-7"	7'-0"	7'-11"	5'-6"	6'-11"	7'-9"	5'-5"	6'-10"	7'-8"
cy/100sf		1.74			1.81			1.89			1.97	

13'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	248
	D+L (Deflection)	248
	L (Deflection)	248

← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)  
 ← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)  
 ← Max. superimposed LRFD unfactored L load (psf) (governed by deflection limitation of L/360)  
 Vertical load span (center to center spacing)

- Wd Weight of deck (uncoated), psf
- I<sub>D</sub> Moment of inertia for deflection per foot of deck width (in<sup>4</sup>/ft)
- S<sub>p</sub> Section modulus for positive bending per foot of deck width, (in<sup>3</sup>)/ft
- S<sub>n</sub> Section modulus for negative bending per foot of deck width, (in<sup>3</sup>)/ft
- f<sub>c</sub> 3000 psi
- λ<sub>D</sub>, λ<sub>L</sub> Load factors for dead and live loads to be applied by Engineer in accordance with Building Codes.
- 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
- D Uniform dead load, psf
- L Uniform live load, psf

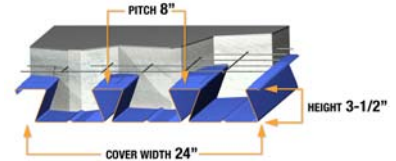
If welded wire fabric is not supplied per ACI requirements (0.00075\*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I <sub>D</sub>	Sp	S <sub>n</sub>	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
20	3.33	1.959	0.767	0.820	1043	1195	1324	2138	2300	2446
18	4.40	2.664	1.109	1.190	1761	2006	2212	3554	3810	4041
16	5.54	3.394	1.504	1.540	2710	3070	3374	5412	5784	6120



MAXIMUM SUPERIMPOSED LRFD 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"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	298	400	400	310	400	400	322	400	400	335	400	400
	D+L (Deflection)	298	400	400	310	400	400	322	400	400	335	400	400
	L (Deflection)	298	400	400	310	400	400	322	400	400	335	400	400
14'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	250	400	400	260	400	400	270	400	400	281	400	400
	D+L (Deflection)	250	400	400	260	400	400	270	400	400	281	400	400
	L (Deflection)	250	400	400	260	400	400	270	400	400	281	400	400
15'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	211	400	400	220	400	400	229	400	400	238	400	400
	D+L (Deflection)	211	400	400	220	400	400	229	400	400	238	400	400
	L (Deflection)	211	377	400	220	400	400	229	400	400	238	400	400
16'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	180	361	400	188	376	400	195	391	400	203	400	400
	D+L (Deflection)	180	361	400	188	376	400	195	391	400	203	400	400
	L (Deflection)	180	310	341	188	340	373	195	371	400	203	400	400
17'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	154	317	400	161	330	400	167	343	400	174	356	400
	D+L (Deflection)	154	317	360	161	330	397	167	343	400	174	356	400
	L (Deflection)	154	259	284	161	283	311	167	309	339	174	336	369
18'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	133	280	353	139	292	377	144	303	400	150	315	400
	D+L (Deflection)	133	262	292	139	290	324	144	303	357	150	315	393
	L (Deflection)	133	218	239	139	238	262	144	260	285	150	283	311
19'-0"	D+L (Strength)	115	249	307	120	259	328	125	269	350	130	280	372
	D+L (Deflection)	115	213	239	120	237	265	125	262	293	130	280	323
	L (Deflection)	115	185	203	120	203	222	125	221	243	130	241	264
20'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	100	222	267	104	232	286	108	241	305	113	250	325
	D+L (Deflection)	100	173	195	104	193	217	108	215	241	113	238	266
	L (Deflection)	100	159	174	104	174	191	108	190	208	113	207	226
21'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	87	199	233	91	208	250	94	216	267	98	224	285
	D+L (Deflection)	87	141	160	91	158	178	94	176	199	98	195	220
	L (Deflection)	87	137	151	91	150	165	94	164	180	98	178	196
22'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	76	180	204	79	187	218	82	195	234	86	202	250
	D+L (Deflection)	76	114	130	79	128	146	82	144	164	86	161	182
	L (Deflection)	76	114	130	79	128	143	82	143	156	86	155	170
23'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	66	160	178	69	169	191	72	176	205	71	183	219
	D+L (Deflection)	66	91	106	69	104	119	72	117	134	71	132	150
	L (Deflection)	66	91	106	69	104	119	72	117	134	71	132	149
24'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	55	139	155	57	150	167	59	160	179	62	166	192
	D+L (Deflection)	55	73	85	57	83	97	59	95	110	62	107	123
	L (Deflection)	55	73	85	57	83	97	59	95	110	62	107	123
25'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	47	121	135	49	131	146	51	141	157	54	151	169
	D+L (Deflection)	45	57	68	49	66	78	51	76	89	54	86	101
	L (Deflection)	45	57	68	49	66	78	51	76	89	54	86	101
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS													
1span	10'-1"	12'-4"	14'-6"	9'-11"	12'-2"	14'-4"	9'-10"	12'-0"	14'-2"	9'-9"	11'-11"	14'-0"	
2span	11'-11"	15'-1"	17'-1"	11'-9"	14'-11"	16'-11"	11'-7"	14'-8"	16'-8"	11'-5"	14'-6"	16'-5"	
3span	12'-4"	15'-7"	17'-6"	12'-2"	15'-5"	17'-4"	12'-0"	15'-2"	17'-3"	11'-9"	15'-0"	17'-0"	
cantilever	5'-4"	6'-9"	7'-7"	5'-3"	6'-8"	7'-6"	5'-2"	6'-7"	7'-5"	5'-2"	6'-6"	7'-4"	
cy/100sf	2.04			2.12			2.20			2.28			

13'-0"	λ <sub>p</sub> D+λ <sub>L</sub> L (Strength)	298
	D+L (Deflection)	298
	L (Deflection)	298

← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)  
 ← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)  
 ← Max. superimposed LRFD unfactored L load (psf) (governed by deflection limitation of L/360)  
 Vertical load span (center to center spacing)

- Wd Weight of deck (uncoated), psf
- I<sub>D</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
- S<sub>n</sub> Section modulus for negative bending per foot of deck width, (in<sup>3</sup>)/ft
- f<sub>c</sub> 3000 psi
- λ<sub>D</sub>, λ<sub>L</sub> Load factors for dead and live loads to be applied by Engineer in accordance with Building Codes.
- 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
- 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