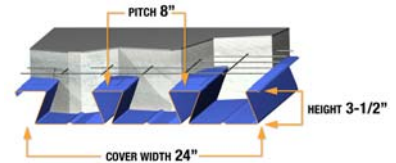


SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I _D	S _p	S _n	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 (46.3)			5.75 (48.8)			6 (51.3)			6.25 (53.8)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ _p D+λ _L L (Strength)	198	271	375	210	289	398	222	303	400	235	400	400
	D+L (Deflection)	198	271	375	210	289	398	222	303	400	235	400	400
	L (Deflection)	198	271	306	210	289	339	222	303	377	235	381	400
14'-0"	λ _p D+λ _L L (Strength)	166	319	302	176	339	319	186	359	341	197	378	361
	D+L (Deflection)	166	277	302	176	313	319	186	354	341	197	378	361
	L (Deflection)	166	219	245	176	244	271	186	273	302	197	305	336
15'-0"	λ _p D+λ _L L (Strength)	140	276	243	149	293	256	157	310	271	166	327	285
	D+L (Deflection)	140	216	243	149	245	256	157	278	271	166	314	285
	L (Deflection)	140	178	199	149	199	221	157	222	245	166	248	273
16'-0"	λ _p D+λ _L L (Strength)	119	240	310	126	255	314	134	264	305	141	285	313
	D+L (Deflection)	119	169	194	126	192	218	134	219	246	141	248	278
	L (Deflection)	119	146	164	126	164	182	134	183	202	141	204	225
17'-0"	λ _p D+λ _L L (Strength)	102	211	270	108	217	269	115	225	261	121	243	267
	D+L (Deflection)	102	132	153	108	151	173	115	173	196	121	197	222
	L (Deflection)	102	122	137	108	136	152	115	153	168	121	170	187
18'-0"	λ _p D+λ _L L (Strength)	87	186	236	93	185	231	98	191	223	104	207	229
	D+L (Deflection)	87	104	121	93	119	137	98	137	156	104	157	178
	L (Deflection)	87	103	115	93	115	128	98	129	142	104	144	158
19'-0"	D+L (Strength)	75	165	208	80	158	199	85	163	192	90	177	196
	D+L (Deflection)	67	80	95	79	93	108	85	108	124	90	125	142
	L (Deflection)	67	80	95	79	93	108	85	108	121	90	122	134
20'-0"	λ _p D+λ _L L (Strength)	65	143	184	69	135	172	74	139	165	78	151	168
	D+L (Deflection)	50	62	74	60	72	85	71	85	98	78	99	113
	L (Deflection)	50	62	74	60	72	85	71	85	98	78	99	113
21'-0"	λ _p D+λ _L L (Strength)	57	123	161	60	115	148	64	118	141	67	129	144
	D+L (Deflection)	36	46	57	45	55	66	54	66	77	64	77	90
	L (Deflection)	36	46	57	45	55	66	54	66	77	64	77	90
22'-0"	λ _p D+λ _L L (Strength)	49	105	139	52	98	128	55	101	121	59	110	124
	D+L (Deflection)	25	34	43	32	41	51	40	50	60	48	60	70
	L (Deflection)	25	34	43	32	41	51	40	50	60	48	60	70
23'-0"	λ _p D+λ _L L (Strength)	43	90	121	45	82	110	48	85	104	51	93	106
	D+L (Deflection)	16	23	31	22	29	37	28	37	45	35	45	54
	L (Deflection)	16	23	31	22	29	37	28	37	45	35	45	54
24'-0"	λ _p D+λ _L L (Strength)	37	76	105	39	69	94	42	71	88	44	78	90
	D+L (Deflection)	8	14	21	13	20	26	18	26	33	24	33	41
	L (Deflection)	8	14	21	13	20	26	18	26	33	24	33	41
25'-0"	λ _p D+λ _L L (Strength)	32	64	90	34	58	81	36	59	75	38	65	76
	D+L (Deflection)	1	7	13	5	11	17	10	16	23	15	22	29
	L (Deflection)	1	7	13	5	11	17	10	16	23	15	22	29

MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS

	11'-3"	13'-10"	15'-11"	11'-0"	13'-6"	15'-9"	10'-9"	13'-3"	15'-6"	10'-7"	12'-11"	15'-3"
1span	11'-3"	13'-10"	15'-11"	11'-0"	13'-6"	15'-9"	10'-9"	13'-3"	15'-6"	10'-7"	12'-11"	15'-3"
2span	13'-5"	16'-8"	18'-10"	13'-1"	16'-4"	18'-6"	12'-10"	16'-1"	18'-2"	12'-7"	15'-10"	17'-11"
3span	13'-10"	17'-3"	18'-8"	13'-7"	16'-11"	18'-5"	13'-4"	16'-7"	18'-2"	13'-0"	16'-4"	18'-0"
cantilever	5'-10"	7'-5"	8'-3"	5'-9"	7'-3"	8'-2"	5'-8"	7'-2"	8'-0"	5'-7"	7'-0"	7'-11"
cy/100sf		1.43			1.50			1.58			1.66	

13'-0"	λ _p D+λ _L L (Strength)	198	← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)
	D+L (Deflection)	198	← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	198	← Max. superimposed LRFD unfactored L load (psf) (governed by deflection limitation of L/360)

- Wd Weight of deck (uncoated), psf
- I_D Moment of inertia for deflection per foot of deck width (in⁴/ft)
- S_p Section modulus for positive bending per foot of deck width, (in³)/ft
- S_n Section modulus for negative bending per foot of deck width, (in³)/ft
- f_c 3000 psi
- λ_D, λ_L 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

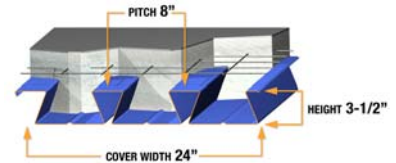
If welded wire fabric is not supplied per ACI requirements (0.00075*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

120 PCF LIGHTWEIGHT CONCRETE TABLE

SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I _D	S _p	S _n	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 (56.3)			6.75 (58.8)			7 (61.3)			7.25 (63.8)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ _p D+λ _L L (Strength)	247	400	400	259	400	400	272	400	400	284	400	400
	D+L (Deflection)	247	400	400	259	400	400	272	400	400	284	400	400
	L (Deflection)	247	400	400	259	400	400	272	400	400	284	400	400
14'-0"	λ _p D+λ _L L (Strength)	207	398	373	217	400	383	228	400	393	238	400	400
	D+L (Deflection)	207	398	373	217	400	383	228	400	393	238	400	400
	L (Deflection)	207	339	373	217	376	383	228	400	393	238	400	400
15'-0"	λ _p D+λ _L L (Strength)	175	344	395	184	361	400	192	378	400	201	395	400
	D+L (Deflection)	175	344	393	184	361	400	192	378	400	201	395	400
	L (Deflection)	175	276	303	184	305	335	192	337	370	201	371	400
16'-0"	λ _p D+λ _L L (Strength)	149	300	336	156	314	361	164	329	387	171	344	400
	D+L (Deflection)	149	280	313	156	314	350	164	329	387	171	344	400
	L (Deflection)	149	227	250	156	252	276	164	278	305	171	306	336
17'-0"	λ _p D+λ _L L (Strength)	127	262	287	134	276	309	140	289	331	146	302	355
	D+L (Deflection)	127	223	250	134	252	281	140	282	314	146	302	350
	L (Deflection)	127	189	208	134	210	230	140	232	254	146	255	280
18'-0"	λ _p D+λ _L L (Strength)	109	223	246	115	241	265	121	255	285	126	267	306
	D+L (Deflection)	109	179	201	115	202	227	121	227	254	126	254	284
	L (Deflection)	109	160	175	115	177	194	121	195	214	126	215	236
19'-0"	D+L (Strength)	95	191	212	99	206	228	104	223	245	109	237	264
	D+L (Deflection)	95	143	162	99	162	183	104	183	206	109	206	231
	L (Deflection)	95	136	149	99	150	165	104	166	182	109	183	200
20'-0"	λ _p D+λ _L L (Strength)	82	164	182	86	177	196	90	191	212	94	206	228
	D+L (Deflection)	82	114	130	86	130	148	90	148	167	94	167	188
	L (Deflection)	82	114	128	86	129	142	90	142	156	94	157	172
21'-0"	λ _p D+λ _L L (Strength)	71	140	156	75	152	169	78	164	183	82	177	197
	D+L (Deflection)	71	90	104	75	104	119	78	119	135	82	135	153
	L (Deflection)	71	90	104	75	104	119	78	119	135	82	135	148
22'-0"	λ _p D+λ _L L (Strength)	62	120	134	65	130	146	68	141	158	71	153	170
	D+L (Deflection)	58	70	82	65	82	95	68	95	109	71	108	124
	L (Deflection)	58	70	82	65	82	95	68	95	109	71	108	124
23'-0"	λ _p D+λ _L L (Strength)	54	102	115	56	111	125	59	121	136	62	131	147
	D+L (Deflection)	43	54	64	52	64	75	59	75	87	62	86	100
	L (Deflection)	43	54	64	52	64	75	59	75	87	62	86	100
24'-0"	λ _p D+λ _L L (Strength)	47	86	98	49	94	107	48	103	116	51	112	126
	D+L (Deflection)	31	40	49	38	49	58	46	58	69	51	68	80
	L (Deflection)	31	40	49	38	49	58	46	58	69	51	68	80
25'-0"	λ _p D+λ _L L (Strength)	38	72	83	40	79	91	42	87	99	44	95	108
	D+L (Deflection)	20	29	36	27	36	44	34	44	53	41	52	63
	L (Deflection)	20	29	36	27	36	44	34	44	53	41	52	63

MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS

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

13'-0"	λ _p D+λ _L L (Strength)	247	← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)
	D+L (Deflection)	247	← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	247	← 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_D Moment of inertia for deflection per foot of deck width (in⁴/ft)
- S_p Section modulus for positive bending per foot of deck width, (in³)/ft
- S_n Section modulus for negative bending per foot of deck width, (in³)/ft
- f_c 3000 psi
- λ_D, λ_L 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

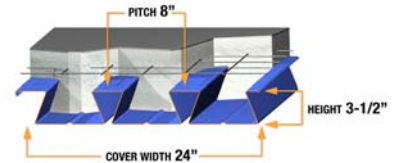
If welded wire fabric is not supplied per ACI requirements (0.00075*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

120 PCF LIGHTWEIGHT CONCRETE TABLE

SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I _D	S _p	S _n	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	7.5 (66.3)			7.75 (68.8)			8 (71.3)			8.25 (73.8)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ _p D+λ _L L (Strength)	296	400	400	308	400	400	321	400	400	333	400	400
	D+L (Deflection)	296	400	400	308	400	400	321	400	400	333	400	400
	L (Deflection)	296	400	400	308	400	400	321	400	400	333	400	400
14'-0"	λ _p D+λ _L L (Strength)	248	400	400	258	400	400	269	400	400	279	400	400
	D+L (Deflection)	248	400	400	258	400	400	269	400	400	279	400	400
	L (Deflection)	248	400	400	258	400	400	269	400	400	279	400	400
15'-0"	λ _p D+λ _L L (Strength)	210	400	400	218	400	400	227	400	400	236	400	400
	D+L (Deflection)	210	400	400	218	400	400	227	400	400	236	400	400
	L (Deflection)	210	400	400	218	400	400	227	400	400	236	400	400
16'-0"	λ _p D+λ _L L (Strength)	179	359	400	186	374	400	193	389	400	201	400	400
	D+L (Deflection)	179	359	400	186	374	400	193	389	400	201	400	400
	L (Deflection)	179	336	368	186	368	400	193	389	400	201	400	400
17'-0"	λ _p D+λ _L L (Strength)	153	315	380	159	328	400	166	341	400	172	354	400
	D+L (Deflection)	153	315	380	159	328	400	166	341	400	172	354	400
	L (Deflection)	153	280	307	159	306	336	166	335	366	172	354	399
18'-0"	λ _p D+λ _L L (Strength)	132	278	327	137	290	350	143	301	373	148	313	397
	D+L (Deflection)	132	278	316	137	290	350	143	301	373	148	313	397
	L (Deflection)	132	236	258	137	258	283	143	282	309	148	307	336
19'-0"	D+L (Strength)	114	247	283	118	258	302	123	268	323	128	278	344
	D+L (Deflection)	114	230	258	118	256	286	123	268	317	128	278	344
	L (Deflection)	114	201	220	118	220	240	123	240	262	128	261	286
20'-0"	λ _p D+λ _L L (Strength)	98	221	245	103	230	262	107	239	280	111	248	299
	D+L (Deflection)	98	187	211	103	209	235	107	232	260	111	248	288
	L (Deflection)	98	172	188	103	188	206	107	205	225	111	224	245
21'-0"	λ _p D+λ _L L (Strength)	85	191	212	89	205	227	93	214	243	96	223	260
	D+L (Deflection)	85	152	172	89	171	193	93	190	215	96	212	238
	L (Deflection)	85	149	163	89	163	178	93	177	194	96	193	211
22'-0"	λ _p D+λ _L L (Strength)	74	165	183	77	177	197	81	191	212	80	200	227
	D+L (Deflection)	74	123	140	77	139	158	81	156	177	80	174	196
	L (Deflection)	74	123	140	77	139	155	81	154	169	80	168	184
23'-0"	λ _p D+λ _L L (Strength)	65	142	159	64	153	171	67	165	184	69	177	197
	D+L (Deflection)	65	99	114	64	112	129	67	127	145	69	142	162
	L (Deflection)	65	99	114	64	112	129	67	127	145	69	142	161
24'-0"	λ _p D+λ _L L (Strength)	53	121	137	55	131	148	57	142	159	60	153	171
	D+L (Deflection)	53	79	92	55	90	105	57	103	118	60	116	133
	L (Deflection)	53	79	92	55	90	105	57	103	118	60	116	133
25'-0"	λ _p D+λ _L L (Strength)	46	104	118	48	113	128	50	122	138	51	132	149
	D+L (Deflection)	46	61	73	48	71	84	50	82	96	51	94	109
	L (Deflection)	46	61	73	48	71	84	50	82	96	51	94	109

MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS

	9'-10"	12'-0"	14'-1"	9'-8"	11'-10"	13'-11"	9'-7"	11'-9"	13'-10"	9'-6"	11'-7"	13'-8"
1span												
2span	11'-6"	14'-7"	16'-7"	11'-3"	14'-5"	16'-4"	11'-1"	14'-2"	16'-1"	10'-11"	13'-11"	15'-11"
3span	11'-11"	15'-1"	17'-1"	11'-8"	14'-11"	16'-11"	11'-6"	14'-8"	16'-8"	11'-4"	14'-5"	16'-5"
cantilever	5'-2"	6'-6"	7'-5"	5'-1"	6'-5"	7'-4"	5'-1"	6'-4"	7'-3"	5'-0"	6'-3"	7'-2"
cy/100sf		2.04			2.12			2.20			2.28	

13'-0"	λ _p D+λ _L L (Strength)	296	← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)
	D+L (Deflection)	296	← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	296	← Max. superimposed LRFD unfactored L load (psf) (governed by deflection limitation of L/360)

- Wd Weight of deck (uncoated), psf
- I_D Moment of inertia for deflection per foot of deck width (in⁴/ft)
- S_p Section modulus for positive bending per foot of deck width, (in³)/ft
- S_n Section modulus for negative bending per foot of deck width, (in³)/ft
- f_c 3000 psi
- λ_D, λ_L 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.

120 PCF LIGHTWEIGHT CONCRETE TABLE