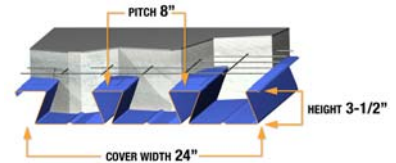


SECTION PROPERTIES

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 (44.3)			5.75 (46.7)			6 (49.1)			6.25 (51.5)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ _p D+λ _L L (Strength)	198	273	376	211	291	398	223	309	400	235	318	400
	D+L (Deflection)	198	273	376	211	291	398	223	309	400	235	318	400
	L (Deflection)	198	264	297	211	291	328	223	309	364	235	318	400
14'-0"	λ _p D+λ _L L (Strength)	166	213	304	177	340	320	187	359	342	197	379	367
	D+L (Deflection)	166	213	304	177	302	320	187	341	342	197	379	367
	L (Deflection)	166	211	238	177	236	263	187	263	291	197	294	324
15'-0"	λ _p D+λ _L L (Strength)	140	276	246	149	293	258	158	310	273	167	328	292
	D+L (Deflection)	140	209	246	149	236	258	158	268	273	167	302	292
	L (Deflection)	140	172	193	149	192	214	158	214	237	167	239	263
16'-0"	λ _p D+λ _L L (Strength)	120	241	198	127	256	335	134	270	326	142	285	325
	D+L (Deflection)	120	164	198	127	186	212	134	211	238	142	239	268
	L (Deflection)	120	142	159	127	158	176	134	176	195	142	197	217
17'-0"	λ _p D+λ _L L (Strength)	102	211	267	109	224	289	115	235	279	122	250	278
	D+L (Deflection)	102	128	149	109	146	168	115	167	189	122	190	214
	L (Deflection)	102	118	133	109	132	147	115	147	163	122	164	181
18'-0"	λ _p D+λ _L L (Strength)	88	186	234	94	198	249	99	201	240	105	217	239
	D+L (Deflection)	84	100	118	94	115	133	99	132	151	105	151	171
	L (Deflection)	84	99	112	94	111	124	99	124	137	105	138	152
19'-0"	D+L (Strength)	76	166	206	81	172	216	86	172	207	90	186	205
	D+L (Deflection)	64	78	93	76	90	105	86	104	120	90	120	137
	L (Deflection)	64	78	93	76	90	105	86	104	116	90	118	129
20'-0"	λ _p D+λ _L L (Strength)	66	148	182	70	148	187	74	147	179	78	160	177
	D+L (Deflection)	48	60	72	58	70	83	68	82	95	78	95	109
	L (Deflection)	48	60	72	58	70	83	68	82	95	78	95	109
21'-0"	λ _p D+λ _L L (Strength)	57	132	162	61	127	162	64	126	155	68	137	153
	D+L (Deflection)	35	45	56	43	54	64	52	63	75	62	75	87
	L (Deflection)	35	45	56	43	54	64	52	63	75	62	75	87
22'-0"	λ _p D+λ _L L (Strength)	50	117	144	53	109	141	56	108	134	59	117	131
	D+L (Deflection)	24	33	42	31	40	49	38	48	58	47	58	68
	L (Deflection)	24	33	42	31	40	49	38	48	58	47	58	68
23'-0"	λ _p D+λ _L L (Strength)	43	101	129	46	93	122	49	92	115	51	100	113
	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"	λ _p D+λ _L L (Strength)	37	87	115	40	79	106	42	78	99	45	85	97
	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"	λ _p D+λ _L L (Strength)	33	74	102	35	67	92	37	65	85	39	72	82
	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

	11'-6"	14'-1"	16'-1"	11'-3"	13'-9"	15'-10"	11'-0"	13'-5"	15'-8"	10'-9"	13'-2"	15'-6"
1span	11'-6"	14'-1"	16'-1"	11'-3"	13'-9"	15'-10"	11'-0"	13'-5"	15'-8"	10'-9"	13'-2"	15'-6"
2span	13'-7"	16'-11"	19'-2"	13'-4"	16'-7"	18'-10"	13'-1"	16'-4"	18'-6"	12'-10"	16'-0"	18'-2"
3span	14'-1"	17'-6"	18'-10"	13'-10"	17'-2"	18'-7"	13'-6"	16'-10"	18'-5"	13'-3"	16'-7"	18'-2"
cantilever	5'-11"	7'-6"	8'-4"	5'-10"	7'-5"	8'-3"	5'-9"	7'-3"	8'-1"	5'-8"	7'-2"	8'-0"
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

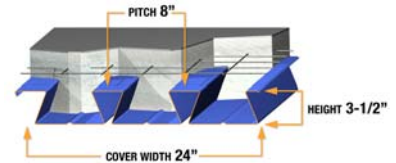
If welded wire fabric is not supplied per ACI requirements (0.00075*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

115 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 (53.9)			6.75 (56.3)			7 (58.7)			7.25 (61.1)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ _p D+λ _L L (Strength)	248	400	400	260	400	400	272	400	400	285	400	400
	D+L (Deflection)	248	400	400	260	400	400	272	400	400	285	400	400
	L (Deflection)	248	400	400	260	400	400	272	400	400	285	400	400
14'-0"	λ _p D+λ _L L (Strength)	208	399	379	218	400	391	228	400	400	239	400	400
	D+L (Deflection)	208	399	379	218	400	391	228	400	400	239	400	400
	L (Deflection)	208	326	359	218	362	391	228	399	400	239	400	400
15'-0"	λ _p D+λ _L L (Strength)	176	345	299	184	362	400	193	379	400	202	396	400
	D+L (Deflection)	176	340	299	184	362	400	193	379	400	202	396	400
	L (Deflection)	176	265	292	184	294	323	193	325	356	202	357	392
16'-0"	λ _p D+λ _L L (Strength)	149	300	349	157	315	374	164	330	400	172	345	400
	D+L (Deflection)	149	270	301	157	303	337	164	330	376	172	345	400
	L (Deflection)	149	219	241	157	242	266	164	267	294	172	294	323
17'-0"	λ _p D+λ _L L (Strength)	128	264	299	134	277	321	141	290	344	147	303	368
	D+L (Deflection)	128	215	241	134	242	271	141	271	303	147	303	337
	L (Deflection)	128	182	201	134	202	222	141	223	245	147	245	269
18'-0"	λ _p D+λ _L L (Strength)	110	233	257	116	244	276	121	256	296	127	268	318
	D+L (Deflection)	110	172	194	116	194	219	121	219	245	127	245	274
	L (Deflection)	110	154	169	116	170	187	121	188	206	127	207	227
19'-0"	D+L (Strength)	95	201	221	100	216	238	105	227	256	110	238	275
	D+L (Deflection)	95	137	156	100	156	177	105	176	199	110	198	223
	L (Deflection)	95	131	144	100	145	159	105	160	175	110	176	193
20'-0"	λ _p D+λ _L L (Strength)	82	173	191	87	187	206	91	201	222	95	212	238
	D+L (Deflection)	82	110	125	87	125	143	91	142	161	95	160	181
	L (Deflection)	82	110	123	87	124	136	91	137	150	95	151	165
21'-0"	λ _p D+λ _L L (Strength)	72	148	165	75	161	178	79	174	192	83	187	207
	D+L (Deflection)	72	87	100	75	100	115	79	114	131	83	130	148
	L (Deflection)	72	87	100	75	100	115	79	114	130	83	130	143
22'-0"	λ _p D+λ _L L (Strength)	62	127	142	66	138	154	69	150	167	72	162	180
	D+L (Deflection)	56	68	79	66	79	92	69	91	105	72	104	120
	L (Deflection)	56	68	79	66	79	92	69	91	105	72	104	120
23'-0"	λ _p D+λ _L L (Strength)	54	109	123	57	119	133	60	129	144	63	140	156
	D+L (Deflection)	42	52	62	50	62	73	59	72	84	63	83	96
	L (Deflection)	42	52	62	50	62	73	59	72	84	63	83	96
24'-0"	λ _p D+λ _L L (Strength)	47	93	105	50	102	115	52	111	125	51	120	135
	D+L (Deflection)	30	39	47	37	47	56	45	56	66	51	65	77
	L (Deflection)	30	39	47	37	47	56	45	56	66	51	65	77
25'-0"	λ _p D+λ _L L (Strength)	41	79	90	40	87	98	42	95	107	44	103	117
	D+L (Deflection)	20	28	35	26	34	43	32	42	51	39	50	60
	L (Deflection)	20	28	35	26	34	43	32	42	51	39	50	60

MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS

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

13'-0"	λ _p D+λ _L L (Strength)	248	← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)
	D+L (Deflection)	248	← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	248	← 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

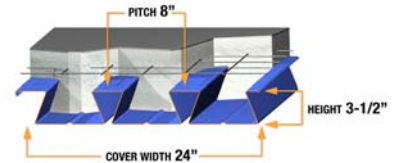
If welded wire fabric is not supplied per ACI requirements (0.00075*Ac), reduce loads by 10%. The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck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

115 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 (63.5)			7.75 (65.9)			8 (68.3)			8.25 (70.7)		
		GAGE											
		20	18	16	20	18	16	20	18	16	20	18	16
13'-0"	λ _p D+λ _L (Strength)	297	400	400	309	400	400	322	400	400	334	400	400
	D+L (Deflection)	297	400	400	309	400	400	322	400	400	334	400	400
	L (Deflection)	297	400	400	309	400	400	322	400	400	334	400	400
14'-0"	λ _p D+λ _L (Strength)	249	400	400	259	400	400	270	400	400	280	400	400
	D+L (Deflection)	249	400	400	259	400	400	270	400	400	280	400	400
	L (Deflection)	249	400	400	259	400	400	270	400	400	280	400	400
15'-0"	λ _p D+λ _L (Strength)	211	400	400	219	400	400	228	400	400	237	400	400
	D+L (Deflection)	211	400	400	219	400	400	228	400	400	237	400	400
	L (Deflection)	211	392	400	219	400	400	228	400	400	237	400	400
16'-0"	λ _p D+λ _L (Strength)	179	360	400	187	375	400	194	390	400	202	400	400
	D+L (Deflection)	179	360	400	187	375	400	194	390	400	202	400	400
	L (Deflection)	179	323	354	187	354	388	194	386	400	202	400	400
17'-0"	λ _p D+λ _L (Strength)	154	316	394	160	329	400	166	342	400	173	355	400
	D+L (Deflection)	154	316	374	160	329	400	166	342	400	173	355	400
	L (Deflection)	154	269	295	160	295	323	166	322	353	173	350	384
18'-0"	λ _p D+λ _L (Strength)	132	279	340	138	291	363	143	302	387	149	314	400
	D+L (Deflection)	132	272	304	138	291	337	143	302	372	149	314	400
	L (Deflection)	132	227	249	138	248	272	143	271	297	149	295	323
19'-0"	D+L (Strength)	114	248	294	119	258	315	124	269	336	129	279	358
	D+L (Deflection)	114	221	248	119	246	276	124	269	305	129	279	336
	L (Deflection)	114	193	212	119	211	231	124	230	253	129	251	275
20'-0"	λ _p D+λ _L (Strength)	99	222	256	103	231	274	108	240	292	112	249	312
	D+L (Deflection)	99	180	203	103	201	226	108	224	251	112	247	277
	L (Deflection)	99	165	181	103	181	198	108	198	217	112	215	236
21'-0"	λ _p D+λ _L (Strength)	86	199	222	90	207	238	94	215	255	97	224	272
	D+L (Deflection)	86	146	166	90	164	186	94	183	207	97	204	229
	L (Deflection)	86	143	157	90	156	171	94	171	187	97	186	204
22'-0"	λ _p D+λ _L (Strength)	75	174	193	78	186	208	81	194	222	85	201	238
	D+L (Deflection)	75	118	135	78	134	152	81	150	170	85	167	189
	L (Deflection)	75	118	135	78	134	149	81	148	163	85	162	177
23'-0"	λ _p D+λ _L (Strength)	65	151	168	68	163	181	68	175	194	70	182	208
	D+L (Deflection)	65	95	110	68	108	124	68	122	140	70	137	156
	L (Deflection)	65	95	110	68	108	124	68	122	140	70	137	155
24'-0"	λ _p D+λ _L (Strength)	54	130	146	56	141	157	58	152	169	61	163	182
	D+L (Deflection)	54	76	88	56	87	101	58	99	114	61	112	128
	L (Deflection)	54	76	88	56	87	101	58	99	114	61	112	128
25'-0"	λ _p D+λ _L (Strength)	46	112	126	48	121	137	50	131	147	53	141	158
	D+L (Deflection)	46	59	70	48	69	81	50	79	92	53	90	105
	L (Deflection)	46	59	70	48	69	81	50	79	92	53	90	105

MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS

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

13'-0"	λ _p D+λ _L (Strength)	297	← Max. superimposed LRFD factored D + L load (psf) (governed by strength limitation)
	D+L (Deflection)	297	← Max. superimposed LRFD unfactored D + L load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	297	← 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.

115 PCF LIGHTWEIGHT CONCRETE TABLE