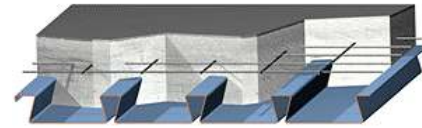


**SECTION PROPERTIES**

fy=40 ksi

GAGE	Wd	I <sub>b</sub>	Sp	Sn	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
22	2.22	0.422	0.306	0.273	976	1124	1248	1848	1993	2124
20	2.70	0.511	0.390	0.346	1390	1593	1765	2623	2822	3002
18	3.56	0.674	0.514	0.474	2315	2637	2909	4355	4668	4952
16	4.49	0.848	0.646	0.614	3530	3999	4395	6624	7079	7490



**SIMPLE SPAN - MAXIMUM SUPERIMPOSED LSD LOADS, (psf), NO STUDS ON BEAMS**

Span	h (Wc)	Load Combinations	4" (43.8)				4.25" (46.82)				4.5" (49.84)				4.75" (52.86)			
			GAGE															
			22	20	18	16	22	20	18	16	22	20	18	16	22	20	18	16
8' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	286	411	465	500	291	428	500	500	436	442	500	500	467	454	500	500
		L (Deflection)	286	400	400	400	291	400	400	400	400	400	400	400	400	400	400	400
		L (Deflection)	286	400	400	400	291	400	400	400	400	400	400	400	400	400	400	400
9' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	323	267	414	446	357	272	442	482	383	274	458	500	410	272	472	500
		L (Deflection)	323	267	400	400	357	272	400	400	383	274	400	400	400	272	400	400
		L (Deflection)	323	267	400	400	357	272	400	400	383	274	400	400	400	272	400	400
10' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	248	269	291	401	279	302	299	434	312	338	303	455	347	376	417	470
		L (Deflection)	248	269	291	400	279	302	299	400	312	338	303	400	347	376	400	400
		L (Deflection)	248	269	291	337	279	302	299	397	312	338	303	400	347	376	400	400
11' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	192	209	235	300	217	236	265	288	244	265	296	323	272	295	330	359
		L (Deflection)	192	209	235	300	217	236	265	288	244	265	296	323	272	295	330	359
		L (Deflection)	192	207	231	254	217	236	265	288	244	265	296	323	272	295	330	359
12' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	150	164	185	203	170	186	210	230	192	210	236	258	215	234	263	288
		L (Deflection)	150	164	185	203	170	186	210	230	192	210	236	258	215	234	263	288
		L (Deflection)	148	159	178	195	170	186	209	230	192	210	236	258	215	234	263	288
13' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	117	129	147	162	134	147	167	184	152	166	188	207	170	187	211	232
		L (Deflection)	117	129	147	162	134	147	167	184	152	166	188	207	170	187	211	232
		L (Deflection)	117	125	140	154	134	147	165	181	152	166	188	207	170	187	211	232
14' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	91	101	117	129	105	116	133	147	119	132	151	167	135	149	170	188
		L (Deflection)	91	101	117	129	105	116	133	147	119	132	151	167	135	149	170	188
		L (Deflection)	91	100	112	123	105	116	132	145	119	132	151	167	135	149	170	188
15' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	70	79	92	103	81	91	106	118	94	105	121	134	125	119	137	152
		L (Deflection)	68	76	89	102	81	91	106	118	94	105	121	134	125	119	137	152
		L (Deflection)	68	76	89	100	81	91	106	118	94	105	121	134	122	119	137	152
16' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	69	61	72	81	79	71	84	94	90	82	96	108	102	94	109	123
		L (Deflection)	48	54	65	75	62	69	82	94	78	82	96	108	95	94	109	123
		L (Deflection)	48	54	65	75	62	69	82	94	78	82	96	108	95	94	109	123
17' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	54	45	55	63	63	54	65	74	73	63	76	86	83	73	87	98
		L (Deflection)	32	37	46	55	43	50	60	70	56	63	75	86	70	73	87	98
		L (Deflection)	32	37	46	55	43	50	60	70	56	63	75	86	70	73	87	98
18' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	42	33	41	48	50	40	49	57	58	65	58	67	66	75	68	78
		L (Deflection)	20	24	32	38	29	34	43	51	39	45	55	65	51	58	68	78
		L (Deflection)	20	24	32	38	29	34	43	51	39	45	55	65	51	58	68	78
19' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	32	38	29	36	39	45	36	43	45	52	44	52	52	60	52	61
		L (Deflection)	10	14	20	25	17	21	29	35	25	30	39	47	35	41	51	60
		L (Deflection)	10	14	20	25	17	21	29	35	25	30	39	47	35	41	51	60
20' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	24	28	19	25	29	34	25	31	35	41	31	38	39	48	38	46
		L (Deflection)	2	5	10	15	8	11	17	23	14	19	26	32	22	27	35	43
		L (Deflection)	2	5	10	15	8	11	17	23	14	19	26	32	22	27	35	43

**MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS**

	8' - 3"	9' - 6"	10' - 5"	11' - 2"	8' - 1"	9' - 4"	10' - 2"	10' - 11"	7' - 11"	9' - 2"	10' - 0"	10' - 9"	7' - 9"	9' - 0"	9' - 9"	10' - 6"
1span	8' - 3"	9' - 6"	10' - 5"	11' - 2"	8' - 1"	9' - 4"	10' - 2"	10' - 11"	7' - 11"	9' - 2"	10' - 0"	10' - 9"	7' - 9"	9' - 0"	9' - 9"	10' - 6"
2span	7' - 11"	9' - 3"	11' - 2"	12' - 7"	7' - 9"	9' - 0"	10' - 11"	12' - 4"	7' - 7"	8' - 10"	10' - 8"	12' - 1"	7' - 5"	8' - 7"	10' - 6"	11' - 10"
3span	8' - 3"	9' - 6"	11' - 6"	13' - 0"	8' - 0"	9' - 4"	11' - 3"	12' - 9"	7' - 10"	9' - 1"	11' - 1"	12' - 6"	7' - 8"	8' - 11"	10' - 10"	12' - 3"
cantilever	2' - 10"	3' - 4"	4' - 3"	5' - 1"	2' - 9"	3' - 4"	4' - 2"	5' - 0"	2' - 9"	3' - 3"	4' - 1"	4' - 11"	2' - 8"	3' - 3"	4' - 0"	4' - 10"
cy/100sf	1.12				1.20				1.27				1.35			

8' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	286
	D+L (Deflection)	286
	L (Deflection)	286

- ← Max. superimposed LSD factored dead + live load (psf) (governed by strength limitation)
- ← Max. superimposed LSD unfactored dead + live load (psf) (governed by deflection limitation of L/240)
- ← Max. superimposed LSD unfactored 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)
- fc** 3000 psi

- Rbe** Allowable exterior web crippling value per foot of deck, pif
- Rbi** Allowable interior web crippling value per foot of deck, pif
- h** Total height of concrete slab, in
- Wc** Weight of concrete (neglecting deflection), psf
- D** Uniform dead load, psf
- L** Uniform live load, psf

α<sub>D</sub>, α<sub>L</sub> Load factors for dead and live loads, respectively, to be applied by Engineer in accordance with Building Codes

Construction spans shown based on 2" exterior bearing and 4" interior bearing width.

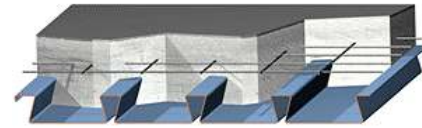
The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Canadian Sheet Steel Building Institute's Standard for Composite Steel Deck (CSSBI 12M-06), September 2006 and Criteria for the Design of Composite Slabs (CSSBI S3-2002), September 2003. The loads in these tables are based on a Simple Span Design Analysis.

**145 PCF CONCRETE**

**SECTION PROPERTIES**

fy=40 ksi

GAGE	Wd	I <sub>b</sub>	Sp	Sn	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
22	2.22	0.422	0.306	0.273	976	1124	1248	1848	1993	2124
20	2.70	0.511	0.390	0.346	1390	1593	1765	2623	2822	3002
18	3.56	0.674	0.514	0.474	2315	2637	2909	4355	4668	4952
16	4.49	0.848	0.646	0.614	3530	3999	4395	6624	7079	7490



**SIMPLE SPAN - MAXIMUM SUPERIMPOSED LSD LOADS, (psf), NO STUDS ON BEAMS**

Span	h (Wc)	Load Combinations	5" (55.89)				5.25" (58.91)				5.5" (61.93)				5.75" (64.95)			
			GAGE															
			22	20	18	16	22	20	18	16	22	20	18	16	22	20	18	16
8' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	497	463	500	500	500	469	500	500	500	473	500	500	500	473	500	500
		L (Deflection)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
		L (Deflection)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
9' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	437	459	484	500	463	487	492	500	490	500	498	500	500	500	500	500
		L (Deflection)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
		L (Deflection)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
10' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	384	408	445	482	412	433	472	492	436	458	500	498	460	484	500	500
		L (Deflection)	384	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
		L (Deflection)	384	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
11' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	302	327	365	398	332	361	403	438	365	396	442	481	398	432	474	500
		L (Deflection)	302	327	365	398	332	361	400	400	365	396	400	400	398	400	400	400
		L (Deflection)	302	327	365	398	332	361	400	400	365	396	400	400	398	400	400	400
12' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	239	260	292	319	264	288	323	352	290	316	355	387	318	346	388	424
		L (Deflection)	239	260	292	319	264	288	323	352	290	316	355	387	318	346	388	400
		L (Deflection)	239	260	292	319	264	288	323	352	290	316	355	387	318	346	388	400
13' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	190	208	235	258	211	231	261	286	233	255	287	315	255	279	315	345
		L (Deflection)	190	208	235	258	211	231	261	286	233	255	287	315	255	279	315	345
		L (Deflection)	190	208	235	258	211	231	261	286	233	255	287	315	255	279	315	345
14' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	151	167	190	209	169	186	211	233	197	206	233	257	210	226	257	282
		L (Deflection)	151	167	190	209	169	186	211	233	197	206	233	257	210	226	257	282
		L (Deflection)	151	167	190	209	169	186	211	233	197	206	233	257	210	226	257	282
15' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	140	134	154	170	150	149	171	190	160	166	190	210	170	183	210	232
		L (Deflection)	140	134	154	170	150	149	171	190	160	166	190	210	170	183	210	232
		L (Deflection)	140	134	154	170	150	149	171	190	160	166	190	210	170	183	210	232
16' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	113	106	124	138	121	120	139	155	129	134	155	172	138	171	171	191
		L (Deflection)	113	106	124	138	121	120	139	155	129	134	155	172	138	171	171	191
		L (Deflection)	113	106	124	138	121	120	139	155	129	134	155	172	138	171	171	191
17' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	91	104	99	112	97	116	112	126	104	129	125	141	111	142	140	157
		L (Deflection)	86	96	99	112	97	115	112	126	104	129	125	141	111	142	140	157
		L (Deflection)	86	96	99	112	97	115	112	126	104	129	125	141	111	142	140	157
18' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	72	85	78	89	77	95	89	102	83	106	101	114	88	118	113	128
		L (Deflection)	64	72	78	89	77	87	89	102	83	105	101	114	88	118	113	128
		L (Deflection)	64	72	78	89	77	87	89	102	83	105	101	114	88	118	113	128
19' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	56	69	61	71	61	78	70	81	65	87	80	92	69	98	90	104
		L (Deflection)	45	52	61	71	57	65	70	81	65	79	80	92	69	95	90	104
		L (Deflection)	45	52	61	71	57	65	70	81	65	79	80	92	69	95	90	104
20' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	43	55	46	55	46	63	54	63	50	71	85	73	53	80	95	83
		L (Deflection)	31	36	46	55	40	47	54	63	50	59	71	73	53	72	86	83
		L (Deflection)	31	36	46	55	40	47	54	63	50	59	71	73	53	72	86	83

**MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS**

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

8' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	497	← Max. superimposed LSD factored dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	400	← Max. superimposed LSD unfactored dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	400	← Max. superimposed LSD unfactored 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)
- fc** 3000 psi
- α<sub>D</sub>, α<sub>L</sub> Load factors for dead and live loads, respectively, to be applied by Engineer in accordance with Building Codes
- Rbe** Allowable exterior web crippling value per foot of deck, pf
- Rbi** Allowable interior web crippling value per foot of deck, pf
- h** Total height of concrete slab, in
- Wc** Weight of concrete (neglecting deflection), psf
- D** Uniform dead load, psf
- L** Uniform live load, psf

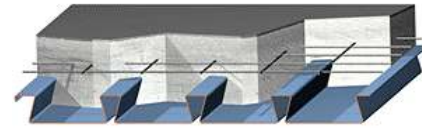
Construction spans shown based on 2" exterior bearing and 4" interior bearing width.  
 The section property table is based on 2001 AISI's Cold-Formed Steel Design Manual, 2004 Supplement. The live loads and unshored construction clear spans are based on the Canadian Sheet Steel Building Institute's Standard for Composite Steel Deck (CSSBI 12M-06), September 2006 and Criteria for the Design of Composite Slabs (CSSBI S3-2002), September 2003. The loads in these tables are based on a Simple Span Design Analysis.

**145 PCF CONCRETE**

**SECTION PROPERTIES**

fy=40 ksi

GAGE	Wd	I <sub>b</sub>	Sp	Sn	Rbe			Rbi		
					2"	3"	4"	4"	5"	6"
22	2.22	0.422	0.306	0.273	976	1124	1248	1848	1993	2124
20	2.70	0.511	0.390	0.346	1390	1593	1765	2623	2822	3002
18	3.56	0.674	0.514	0.474	2315	2637	2909	4355	4668	4952
16	4.49	0.848	0.646	0.614	3530	3999	4395	6624	7079	7490



**SIMPLE SPAN - MAXIMUM SUPERIMPOSED LSD LOADS, (psf), NO STUDS ON BEAMS**

Span	h (Wc)	Load Combinations	6" (67.97)				6.25" (70.99)				6.5" (74.01)				6.75" (77.03)			
			GAGE															
			22	20	18	16	22	20	18	16	22	20	18	16	22	20	18	16
8' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	D+L (Deflection)	500	470	500	500	500	463	500	500	500	500	500	500	500	500	500	500
		L (Deflection)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
		L (Deflection)	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400

**MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS**

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

8' - 0"	α <sub>D</sub> D+α <sub>L</sub> L (Strength)	500	← Max. superimposed LSD factored dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	400	← Max. superimposed LSD unfactored dead + live load (psf) (governed by deflection limitation of L/240)
	L (Deflection)	400	← Max. superimposed LSD unfactored 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)
- fc** 3000 psi
- α<sub>D</sub>, α<sub>L</sub> Load factors for dead and live loads, respectively, to be applied by Engineer in accordance with Building Codes
- Rbe** Allowable exterior web crippling value per foot of deck, pf
- Rbi** Allowable interior web crippling value per foot of deck, pf
- h** Total height of concrete slab, in
- Wc** Weight of concrete (neglecting deflection), psf
- D** Uniform dead load, psf
- L** Uniform live load, psf

Construction spans shown based on 2" exterior bearing and 4" interior bearing width.  
 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 Canadian Sheet Steel Building Institute's Standard for Composite Steel Deck (CSSBI 12M-06), September 2006 and Criteria for the Design of Composite Slabs (CSSBI S3-2002), September 2003. The loads in these tables are based on a Simple Span Design Analysis.

**145 PCF CONCRETE**