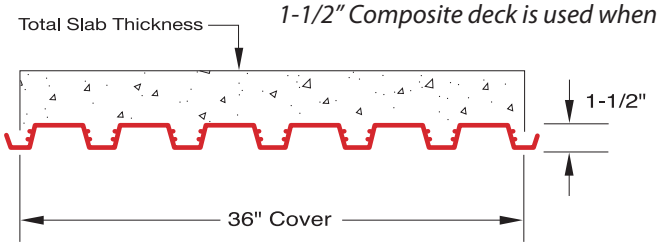
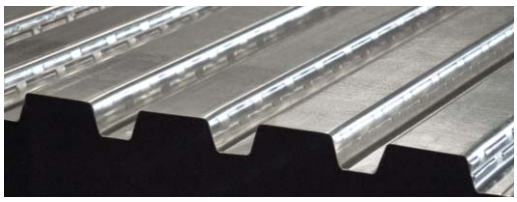
1-1/2" COMPOSITE DECK
(NORMAL WEIGHT CONCRETE - 145 PCF)

1-1/2" Composite deck is used when the slab and support-to-support distance are both moderate in size.



30" Cover and Integral Hangar Tabs also available



Section Properties and Flexural Resistance ($F_y = 40$ ksi)

Gage	Design Thickness	Weight (psf)	A_s (In^2)	I_p (In^4)	I_n (In^4)	S_p (In^3)	S_n (In^3)	Allowable Moment M_p/Ω inch-lbs	Allowable Moment M_n/Ω inch-lbs	Allowable Shear V_n/Ω lbs
22	0.0295	1.61	0.485	0.1500	0.1833	0.1744	0.1796	4177	4300	2243
20	0.0358	2.04	0.588	0.1933	0.2267	0.2228	0.2309	5337	5533	2714
18	0.0474	2.70	0.778	0.2833	0.3000	0.3037	0.3147	7270	7540	3572
16	0.0598	3.20	0.982	0.3800	0.3800	0.3900	0.3957	9340	9477	4479

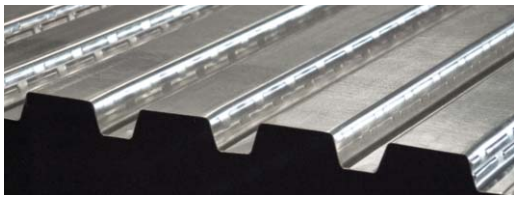
Notes:
1. All section properties and strengths are reported per foot of panel width.
2. All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI C-2011, Section 2.4.A.1; p = Property in positive bending; n = Property in negative bending.
3. Moments of Inertia are calculated at 0.60Fy.

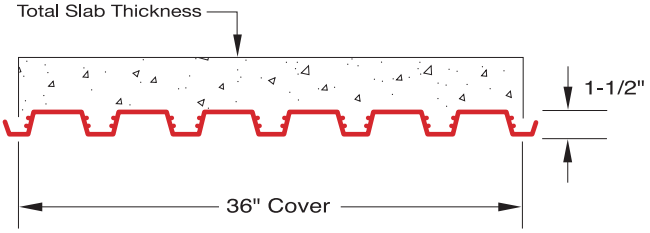
Slab Thickness	Gage	Allowable Superimposed Load (ASD) Clear Span (ft. - in.)														
		5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"
3-1/2" (t=2.00) 33 PSF	22	400	342	238	238	202	172	149	129	112	98	86	76	67	59	52
	20	400	400	341	286	244	209	181	157	138	121	107	95	84	75	67
	18	400	400	343	289	246	211	182	159	139	122	108	95	85	75	67
	16	400	400	333	280	238	204	177	154	134	118	104	92	82	73	65
4" (t=2.50) 39 PSF	22	400	400	354	298	253	216	187	162	141	124	109	96	85	75	67
	20	400	400	400	359	306	262	227	198	173	153	135	120	106	95	85
	18	400	400	400	363	309	266	230	200	176	155	137	121	108	96	86
	16	400	400	400	354	301	258	223	195	170	150	132	117	104	93	83
4-1/2" (t=3.00) 45 PSF	22	400	400	400	360	306	262	226	197	172	151	133	117	104	92	82
	20	400	400	400	400	371	318	276	240	211	186	164	146	130	116	104
	18	400	400	400	400	376	323	280	244	214	189	167	148	132	118	106
	16	400	400	400	400	367	315	273	238	209	184	163	144	128	115	103
5" (t=3.50) 51 PSF	22	400	400	400	400	361	309	267	232	203	178	157	139	123	110	98
	20	400	400	400	400	400	376	326	284	250	220	195	173	154	138	124
	18	400	400	400	400	400	383	332	290	254	224	199	177	158	141	126
	16	400	400	400	400	400	374	324	283	248	219	194	172	154	137	123
5-1/2" (t=4.00) 57 PSF	22	400	400	400	400	400	358	309	269	235	207	183	162	143	128	114
	20	400	400	400	400	400	400	377	329	289	255	226	201	179	161	144
	18	400	400	400	400	400	400	385	336	295	261	231	206	184	164	147
	16	400	400	400	400	400	400	377	329	289	255	226	201	179	160	144
6" (t=4.50) 63 PSF	22	400	400	400	400	400	400	352	306	268	236	208	184	164	146	130
	20	400	400	400	400	400	400	400	375	330	291	258	230	205	184	165
	18	400	400	400	400	400	400	400	384	337	298	264	235	210	188	169
	16	400	400	400	400	400	400	400	376	331	292	259	230	206	184	165

1-1/2" COMPOSITE DECK
(LIGHTWEIGHT CONCRETE - 110 PCF)

MIAMI METAL DECK

1-1/2" Composite deck is used when the slab and support to support distance are both moderate in size.



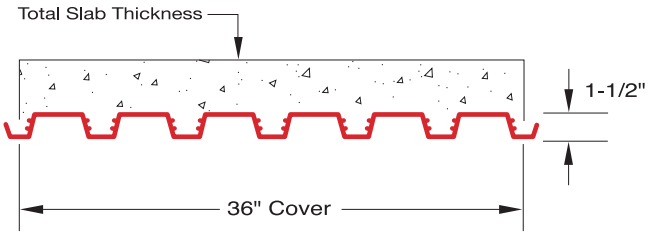


30" Cover and Integral Hangar Tabs also available

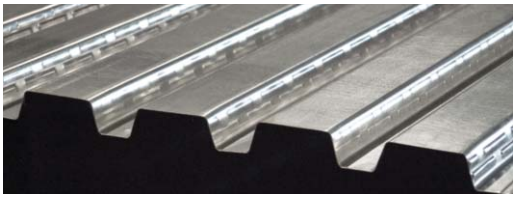
Slab Thickness	Gage	Allowable Superimposed Load (ASD) Clear Span (ft. - in.)														
		5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"
3-1/2" (t=2.00) 26 PSF	22	400	327	272	229	195	167	144	126	110	97	85	76	67	60	53
	20	400	390	324	273	233	201	174	152	133	118	104	93	83	74	66
	18	400	390	324	274	233	201	174	152	133	118	104	93	83	74	66
	16	400	376	313	264	225	193	167	146	128	113	100	89	79	71	64
4" (t=2.50) 30 PSF	22	400	400	342	288	245	211	183	159	140	123	109	97	86	77	69
	20	400	400	400	345	294	253	220	192	169	149	133	118	106	95	85
	18	400	400	334	282	240	206	178	155	136	120	106	94	84	75	67
	16	400	400	397	335	286	246	213	186	164	145	128	114	102	92	82
4-1/2" (t=3.00) 35 PSF	22	400	400	400	350	298	256	222	194	170	150	133	118	105	94	84
	20	400	400	400	400	358	308	268	234	206	182	162	144	129	116	104
	18	400	400	400	344	293	252	218	190	167	147	130	116	103	92	82
	16	400	400	400	400	350	301	261	229	201	178	158	141	126	113	102
5" (t=3.50) 39 PSF	22	400	400	400	400	353	304	263	230	202	178	158	141	126	112	101
	20	400	400	400	400	400	366	318	279	245	217	193	172	155	139	125
	18	400	400	400	400	349	300	260	227	199	176	156	139	124	111	99
	16	400	400	400	400	400	360	313	274	241	213	190	169	152	136	123
5-1/2" (t=4.00) 44 PSF	22	400	400	400	400	400	352	305	267	234	207	183	163	146	131	117
	20	400	400	400	400	400	400	369	323	285	252	224	200	180	162	146
	18	400	400	400	400	400	349	303	265	232	205	182	162	145	130	116
	16	400	400	400	400	400	400	365	319	281	249	221	198	177	159	144
6" (t=4.50) 49 PSF	22	400	400	400	400	400	400	348	304	267	236	209	186	167	149	134
	20	400	400	400	400	400	400	400	369	325	288	256	229	205	185	167
	18	400	400	400	400	400	399	346	303	266	235	209	186	166	149	134
	16	400	400	400	400	400	400	400	366	322	286	254	227	204	183	165

Notes:
1. Load tables are calculated using Section Properties based on the steel design thickness shown in the Steel Deck Institute (SDI) design manual.
2. Span length assumes clear spans. Center-to-center spacing of supports can be used for design as a conservative assumption.

1-1/2" Composite deck is used when the slab and support to support distance are both moderate in size.



30" Cover and Integral Hangar Tabs also available



Construction Span Table (F_y = 40ksi) - 20 psf Construction Load

Normal Weight Concrete (145 pcf)

Total Slab Depth	Gage	SDI Maximum Unshored Clear Span			Cantilever Span
		1 span	2 span	3 span	
3-1/2" (t=2.00) 33 PSF	22	5'-8"	6'-9"	6'-9"	2'-0"
	20	6'-9"	8'-0"	8'-0"	2'-5"
	18	8'-5"	9'-9"	9'-11"	3'-1"
	16	9'-11"	10'-11"	11'-3"	3'-9"
4" (t=2.50) 36 PSF	22	5'-5"	6'-5"	6'-5"	1'-11"
	20	6'-5"	7'-7"	7'-7"	2'-4"
	18	7'-11"	9'-3"	9'-4"	3'-0"
	16	9'-4"	10'-4"	10'-8"	3'-7"
4-1/2" (t=3.00) 45 PSF	22	5'-3"	6'-1"	6'-2"	1'-10"
	20	6'-2"	7'-3"	7'-3"	2'-3"
	18	7'-7"	8'-10"	8'-11"	2'-11"
	16	8'-11"	9'-10"	10'-2"	3'-6"
5" (t=3.50) 51 PSF	22	5'-0"	5'-11"	5'-11"	1'-10"
	20	5'-11"	6'-11"	6'-11"	2'-3"
	18	7'-3"	8'-5"	8'-6"	2'-10"
	16	8'-6"	9'-5"	9'-9"	3'-4"
5-1/2" (t=4.00) 57 PSF	22	4'-10"	5'-8"	5'-8"	1'-9"
	20	5'-8"	6'-8"	6'-8"	2'-2"
	18	6'-11"	8'-1"	8'-2"	2'-9"
	16	8'-2"	9'-1"	9'-4"	3'-3"
6" (t=4.50) 63 PSF	22	4'-8"	5'-6"	5'-6"	1'-9"
	20	5'-6"	6'-5"	6'-5"	2'-2"
	18	6'-8"	7'-9"	7'-10"	2'-8"
	16	7'-10"	8'-9"	9'-10"	3'-2"
7" (t=5.50) 75 PSF	22	4'-5"	5'-2"	5'-2"	1'-8"
	20	5'-2"	6'-0"	6'-1"	2'-0"
	18	6'-3"	7'-3"	7'-4"	2'-7"
	16	7'-4"	8'-2"	8'-5"	3'-0"

Lightweight Concrete (115 pcf)

Total Slab Depth	Gage	SDI Maximum Unshored Clear Span			Cantilever Span
		1 span	2 span	3 span	
3-1/2" (t=2.00) 26 PSF	22	6'-1"	7'-2"	7'-2"	2'-0"
	20	7'-3"	8'-7"	8'-7"	2'-6"
	18	9'-1"	10'-5"	10'-8"	3'-3"
	16	10'-9"	11'-9"	12'-1"	3'-11"
4" (t=2.50) 30 PSF	22	5'-10"	6'-11"	6'-11"	2'-0"
	20	7'-0"	8'-3"	8'-3"	2'-6"
	18	8'-8"	10'-0"	10'-2"	3'-2"
	16	10'-3"	11'-3"	11'-7"	3'-10"
4-1/2" (t=3.00) 35 PSF	22	5'-7"	6'-7"	6'-7"	1'-11"
	20	6'-8"	7'-10"	7'-10"	2'-5"
	18	8'-3"	9'-7"	9'-8"	3'-1"
	16	9'-9"	10'-9"	11'-1"	3'-8"
5" (t=3.50) 39 PSF	22	5'-5"	6'-5"	6'-5"	1'-11"
	20	6'-5"	7'-7"	7'-7"	2'-4"
	18	7'-11"	9'-3"	9'-4"	3'-0"
	16	9'-4"	10'-4"	10'-8"	3'-7"
5-1/2" (t=4.00) 44 PSF	22	5'-3"	6'-2"	6'-2"	1'-10"
	20	6'-2"	7'-3"	7'-4"	2'-4"
	18	7'-8"	8'-10"	8'-11"	2'-11"
	16	9'-0"	9'-11"	10'-3"	3'-6"
6" (t=4.50) 49 PSF	22	5'-1"	5'-11"	6'-0"	1'-10"
	20	5'-0"	7'-0"	7'-1"	2'-3"
	18	7'-4"	8'-6"	8'-7"	2'-10"
	16	8'-7"	9'-7"	9'-11"	3'-5"
7" (t=5.50) 57 PSF	22	4'-10"	5'-8"	5'-8"	1'-9"
	20	5'-8"	6'-8"	6'-8"	2'-2"
	18	6'-11"	8'-1"	8'-2"	2'-9"
	16	8'-2"	9'-1"	9'-4"	3'-3"

Minimum exterior bearing length required is 1.50 inches.
Minimum interior bearing length required is 3.00 inches.

Notes:
1. All construction load spans are calculated using loads and load combinations in accordance with ANSI/SDI C-2011, Section 2.4.A. The 20psf uniform load is the minimum required consturction load. Specific construction operations may require greater construction loads.
2. Bending Moment and Deflection formulae are in accordance with ANSI/SDI C-2011, Appendix A.