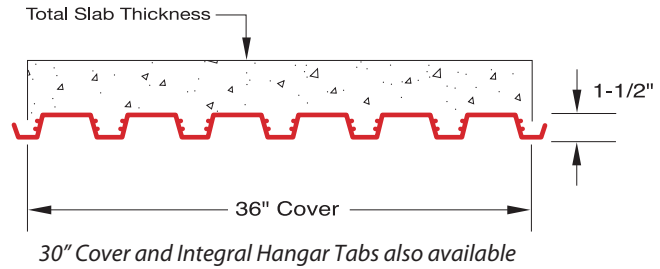
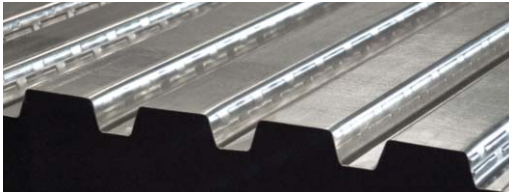


1-1/2" COMPOSITE DECK

(LIGHTWEIGHT CONCRETE - 110 PCF)



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

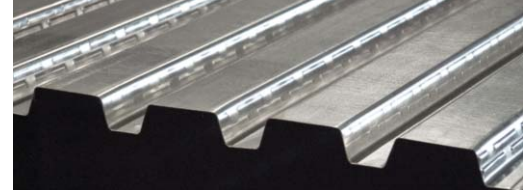
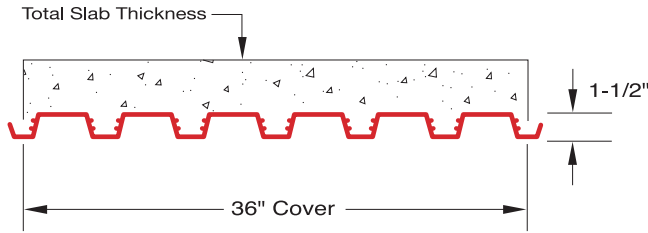


Slab Thickness	Gage	Allowable Superimposed Load (ASD) Clear Span (ft. - in.)														
		5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"
3-1/2" (t=2.00) 26 PSF	22	400	327	272	229	195	167	144	126	110	97	85	76	67	60	53
	20	400	390	324	273	233	201	174	152	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 ($F_y = 40\text{ksi}$) - 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:
- 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 construction load. Specific construction operations may require greater construction loads.
 - Bending Moment and Deflection formulae are in accordance with ANSI/SDI C-2011, Appendix A.

