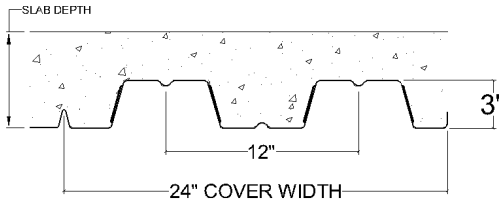


# TYPE "3.0CF" COMPOSITE FLOOR DECK

**SECTION  
PROPERTIES**

FY=50 KSI

ASD ( $\Omega=1.67$ )



DECK TYPE	DESIGN THICKNESS	WT PSF	I <sup>P</sup> IN. <sup>4</sup> PER FT.	I <sup>N</sup> IN. <sup>4</sup> PER FT.	S <sup>P</sup> IN. <sup>3</sup> PER FT.	S <sup>N</sup> IN. <sup>3</sup> PER FT.	M <sup>P</sup> /Ω IN.-BS PER FT.	M <sup>N</sup> /Ω IN.-LBS PER FT.
22	.0295 IN.	1.86	.733	.703	.393	.432	11754	12927
20	.0358 IN.	2.25	.923	.896	.521	.566	15585	16951
18	.0474 IN.	2.98	1.286	1.265	.779	.828	23308	24793
16	.0598 IN.	3.66	1.670	1.645	1.055	1.051	31584	31481

**GENERAL INFORMATION**

SLAB THICKNESS	5"	5 1/2"	6"	6 1/2"	7"	7 1/2"
Vol. Conc. Yds/100SF	1.08	1.23	1.39	1.54	1.70	1.85
nc. Wt. PSF (Light Wt.)	37	42	47	49	52	59
Recommended W.W.F. 6"x6"	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W2.1XW2.1	W2.1XW2.1	W2.1XW2.1

WHEN W.W.F. REINFORCEMENT IS NOT USED, THE SDI RECOMMENDS THAT THE LIVE LOAD VALUES BE REDUCED BY 10%

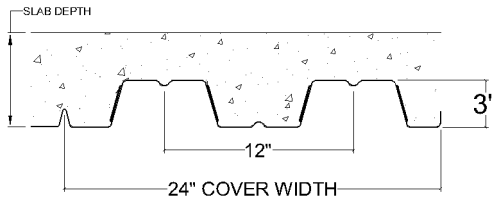
SLAB DEPTH	DECK TYPE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF															
		1 SPAN	2 SPAN	3 SPAN	CLEAR SPAN, FT.															
					8-0	8-6	9-0	9-6	10-0	10-6	11-0	11-6	12-0	12-6	13-0	13-6	14-0	14-6	15-0	
LIGHT WEIGHT CONCRETE (115 PCF)	5" (t=2)	22	11-1	12-4	12-9	309	271	240	213	190	170	153	139	126	114	104	95	87	79	73
		20	13-0	14-1	14-7	373	328	290	258	231	208	187	170	154	140	128	117	108	99	91
		18	14-6	17-0	17-7	*	*	381	340	304	274	248	225	205	187	172	158	145	134	124
	5 1/2" (t=2 1/2)	22	10-7	11-9	12-2	363	319	282	250	224	201	181	163	148	135	123	112	102	94	86
		20	12-5	13-6	13-11	*	385	341	303	271	244	220	199	181	165	151	138	127	116	107
		18	13-11	16-4	16-11	*	*	398	356	321	290	264	240	220	201	185	170	157	145	
	6" (t=3)	22	10-1	11-4	11-9	*	369	326	290	259	233	210	190	172	156	143	130	119	109	100
		20	12-5	14-6	14-11	*	*	394	351	314	283	255	231	210	191	175	160	147	135	125
		18	13-5	15-8	16-3	*	*	*	*	371	336	305	278	254	233	214	197	182	168	
	6 1/2" (t=3 1/2)	22	9-11	11-2	11-7	*	*	375	334	298	268	242	219	199	181	165	151	138	127	117
		20	11-10	12-10	13-3	*	*	*	*	361	325	293	266	242	221	202	185	170	157	145
		18	13-2	15-6	16-0	*	*	*	*	*	386	350	320	292	268	247	227	210	194	
7" (t=4)	22	9-9	10-11	11-4	*	*	*	378	338	304	274	248	226	206	188	172	158	145	134	
	20	11-7	12-6	12-11	*	*	*	*	*	368	333	302	275	251	230	211	194	179	165	
	18	12-11	15-2	15-8	*	*	*	*	*	*	397	362	331	304	280	258	239	221		
7 1/2" (t=4 1/2)	22	9-3	10-5	10-10	*	*	*	*	376	338	305	276	251	229	209	191	175	161	148	
	20	11-0	12-0	12-4	*	*	*	*	*	*	370	336	306	279	256	235	216	199	184	
	18	12-5	14-6	14-11	*	*	*	*	*	*	*	399	369	339	312	288	266	246		
16	13-6	16-4	16-10	*	*	*	*	*	*	*	*	*	*	391	361	334	300	278		

MINIMUM EXTERIOR BEARING LENGTH REQUIRED IS 2.5 INCHES.

MINIMUM INTERIOR BEARING LENGTH REQUIRED IS 5.0 INCHES.

LOAD TABLES AND SECTION PROPERTIES WERE GENERATED BY THE SDI. \* INDICATES LIVE LOADS IN EXCESS OF 400 P.S.F. UNDERWRITES LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF. ROLLED IN HANGER TABS ALSO AVAILABLE UPON REQUEST

## TYPE "3.0CF" COMPOSITE FLOOR DECK



**SECTION PROPERTIES**

FY=50 KSI

ASD ( $\Omega=1.67$ )

DECK TYPE	DESIGN THICKNESS	WT PSF	I <sup>P</sup> IN. <sup>4</sup> PER FT	I <sup>N</sup> IN. <sup>4</sup> PER FT.	S <sup>P</sup> IN. <sup>3</sup> PER FT	S <sup>N</sup> IN. <sup>3</sup> PER FT	M <sup>P</sup> /Ω IN.-LBS PER FT	M <sup>N</sup> /Ω IN.-LBS PER FT
22	.0295 IN.	1.86	.733	.703	.393	.432	11754	12927
20	.0358 IN.	2.25	.923	.896	.521	.566	15585	16951
18	.0474 IN.	2.98	1.286	1.265	.779	.828	23308	24793
16	.0598 IN.	3.66	1.670	1.645	1.055	1.051	31584	31481

**GENERAL INFORMATION**

SLAB THICKNESS	5"	5 1/2"	6"	6 1/2"	7"	7 1/2"
Vol. Conc. Yds/100SF	1.08	1.23	1.39	1.54	1.70	1.85
Conc. Wt. PSF	46	52	58	64	70	76
Recommended W.W.F. 6"x6"	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W2.1XW2.1	W2.1XW2.1	W2.1XW2.1

WHEN W.W.F. REINFORCEMENT IS NOT USED, THE SDI RECOMMENDS THAT THE LIVE LOAD VALUES BE REDUCED BY 10%

SLAB DEPTH	DECK TYPE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF															
		1 SPAN	2 SPAN	3 SPAN	CLEAR SPAN, FT.															
					8-0	8-6	9-0	9-6	10-0	10-6	11-0	11-6	12-0	12-6	13-0	13-6	14-0	14-6	15-0	
NORMAL WEIGHT CONCRETE (145 PCF)	5" (t=2)	22	10-2	11-5	11-10	317	278	245	217	193	173	155	140	126	114	104	94	86	78	71
		20	12-1	13-1	13-6	384	337	298	265	236	212	191	172	156	142	129	118	108	99	90
		18	13-6	15-10	16-4	*	*	394	351	314	282	255	231	210	192	175	160	147	136	125
		16	14-8	17-10	18-5	*	*	*	*	394	355	321	291	265	242	222	204	188	173	160
	5 1/2" (t=2 1/2)	22	9-9	10-11	11-4	372	326	288	255	228	204	183	165	149	135	122	111	102	93	85
		20	11-7	12-6	12-11	*	396	350	311	278	249	224	203	184	167	152	139	127	117	107
		18	12-11	15-2	15-8	*	*	*	*	368	331	299	271	246	225	206	188	173	159	147
		16	14-1	17-1	17-8	*	*	*	*	*	331	375	341	310	284	260	239	220	203	203
	6" (t=3)	22	9-4	10-6	10-10	*	378	333	296	264	236	212	191	173	157	142	130	118	108	99
		20	11-5	13-1	13-7	*	*	*	360	322	289	260	235	213	194	177	161	148	136	125
		18	12-6	14-7	15-1	*	*	*	*	*	383	346	313	285	260	238	218	201	185	171
		16	13-7	16-5	16-11	*	*	*	*	*	*	394	359	328	301	277	255	235	218	218
	6 1/2" (t=3 1/2)	22	8-12	10-2	10-6	*	*	380	338	301	270	243	219	198	180	163	149	136	124	114
		20	10-7	11-7	12-0	*	*	*	*	367	330	297	269	244	222	202	185	169	155	143
		18	12-1	14-0	14-6	*	*	*	*	*	*	395	358	326	297	272	250	230	212	195
		16	13-2	15-10	16-4	*	*	*	*	*	*	*	375	344	316	291	269	249	249	249
	7" (t=4)	22	8-8	9-9	10-1	*	*	*	381	340	305	274	247	224	203	185	168	154	141	129
		20	10-3	11-2	11-7	*	*	*	*	*	372	335	303	275	251	229	209	192	176	162
		18	11-9	13-7	14-0	*	*	*	*	*	*	372	335	303	275	251	229	209	192	176
		16	12-9	15-3	15-9	*	*	*	*	*	*	372	335	303	275	251	229	209	192	176
7 1/2" (t=4 1/2)	22	8-4	9-6	9-10	*	*	*	*	380	340	306	276	250	227	207	189	172	158	145	
	20	9-11	10-10	11-3	*	*	*	*	*	*	375	339	308	280	256	234	215	197	181	
	18	11-5	13-1	13-7	*	*	*	*	*	*	*	375	339	308	280	256	234	215	197	
	16	12-5	14-9	15-3	*	*	*	*	*	*	*	375	339	308	280	256	234	215	197	

MINIMUM EXTERIOR BEARING LENGTH REQUIRED IS 2.5 INCHES.

MINIMUM INTERIOR BEARING LENGTH REQUIRED IS 5.0 INCHES.

LOAD TABLES AND SECTION PROPERTIES WERE GENERATED BY THE SDI. \* INDICATES LIVE LOADS IN EXCESS OF 400 P.S.F. UNDERWRITES LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF. ROLLED IN HANGER TABS ALSO AVAILABLE UPON REQUEST

**SHEAR AND WEB CRIPPLING (BARE DECK) TYPE “3.0 CF” COMPOSITE FLOOR DECK AND  
“3.0 NCF” NON COMPOSITE FORM DECK (50 KSI)**

DECK TYPE	V <sup>N</sup> / $\Omega$ LBS PER FT	WEB CRIPPLING (R <sup>N</sup> / $\Omega$ ), LBS/FT. ONE FLANGE LOADING END BEARING			WEB CRIPPLING (R <sup>N</sup> / $\Omega$ ), LBS/FT. ONE FLANGE LOADING INTERIOR BEARING		
		2"	3"	4"	2"	3"	4"
22	1715	409	471	523	654	740	812
20	2488	588	674	747	944	1062	1162
18	4121	991	1129	1245	1601	1789	1949
16	5906	1523	1725	1895	2476	2751	2984

ALL SECTION PROPERTIES AND ASD FLEXURAL STRENGTHS ARE CALCULATED IN ACCORDANCE WITH  
ANSI/SDI C-2017, ANSI/SDI NC-2017, ANSI/SDI SD-2-22 AND AISI S100-2012 AND AISI S100-2016